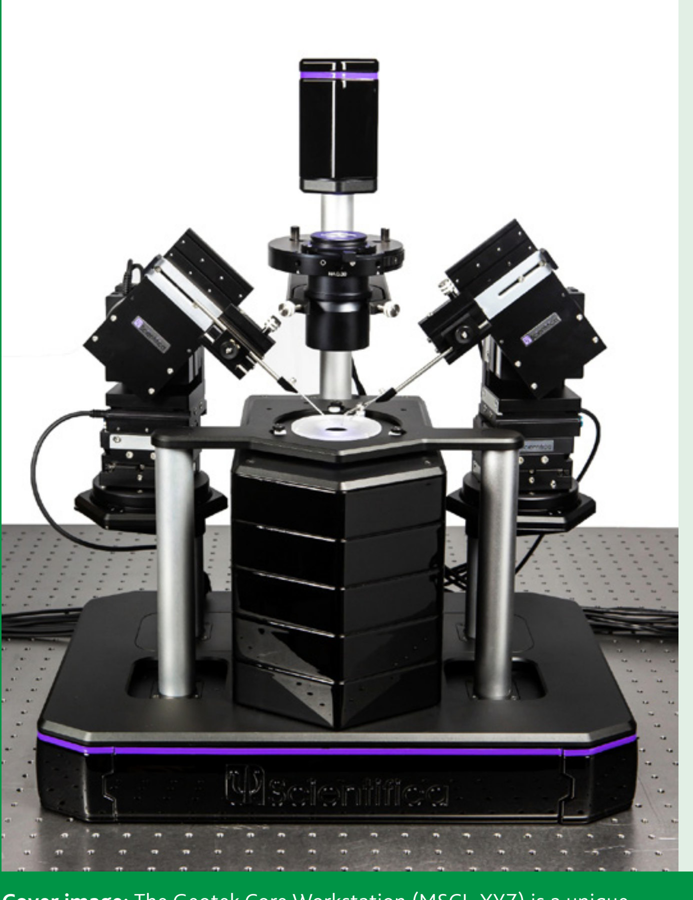
Judges Scientific plc

Annual Report and Accounts 2022

Building on our performance

Judges Scientific plc is an AIM-quoted group focused on acquiring and developing companies within the scientific instrument sector. Corporate expansion is being pursued, both through Organic growth within its subsidiary companies and through the acquisition of top-quality businesses with established reputations in worldwide markets.



Investment case

- Robust business model; pursued with discipline
- Large pool of targets, every acquisition is earnings enhancing; twenty acquisitions since May 2005
- Strong long-term growth drivers in higher education and process optimisation
- Well diversified by geography and by scientific application
- Management focused on shareholder value – profitability, cash generation, debt reduction, dividend growth and return on capital
- Dividend growth of 10+% for past 15 years, CAGR 23%

Cover image: The Geotek Core Workstation (MSCL-XYZ) is a unique automated multi-core logging system for XRF, core imaging and various other surface core measurements. Multiple core sections (up to six 1.5 m core sections), or core boxes are loaded into the workstation, which are then logged in a single operation. The core workstation uses a unique core tray which pulls out to the user to aid core loading, and a shielded screen protects the user whilst giving full visibility of the logging operation.

This page: The Scientifica PatchScope Pro is an integrated electrophysiology system specifically designed for patching with field stimulation and local perfusion in single cells or monolayers. Ideal for neuroscience, cardiac, and many other research areas.

Highlights

Financial highlights

- Revenues up 24% to a record £113.2 million (2021: £91.3 million), including 8% Organic* growth;
- Adjusted** operating profit up 60% to £30.1 million (2021: £18.8 million);
  - Statutory operating profit of £18.2 million (2021: £15.6 million);
- Adjusted** basic earnings per share up 53% to 363.8p (2021: 238.1p);
  - Statutory basic earnings per share of 196.1p (2021: 201.0p);
- Final dividend of 59.0p, totalling 81.0p for the year, an increase of 23%; covered 4.5 times by adjusted earnings;
- Organic* order intake up 0.5% compared with 2021;
- Organic* order book at 21.1 weeks (31 December 2021: 19.8 weeks); total order book 22.9 weeks***;
- Cash generated from operations of £24.0 million (2021: £19.6 million);
- Adjusted** net debt of 52.0 million as at 31 December 2022 (31 December 2021: adjusted net cash £1.4 million);
  - Statutory net debt of £34.8 million at 31 December 2022 (31 December 2021: £2.9 million); and
- Cash balances of £20.8 million as at 31 December 2022 (31 December 2021: £18.4 million).

* Organic describes the performance of the Group including businesses acquired prior to 1 January 2021.

** Adjusted earnings figures exclude adjusting items relating to amortisation of acquired intangible assets, acquisition-related costs, share-based payments and hedging of risks materialising after the end of the year. Adjusted net cash/debt includes acquisition-related liabilities and excludes IFRS 16 liabilities.

*** Order book (weeks) calculated by reference to Judges internal sales budget for the following year.

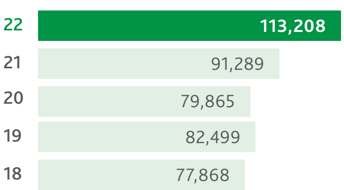
Strategic highlights

- Completed acquisition of Geotek on 23 May 2022 for a consideration of up to £80 million. Largest acquisition to date which has significantly enhanced full year earnings and achieved the maximum earn-out;
- New £100 million four-year bank facility provides additional capacity to support the Group's buy and build strategy; and
- Increased ownership of Bordeaux Acquisition Limited, the holding company of Deben UK and Oxford Cryosystems, from 88% to 100% for a consideration of £2.1 million.

113,208

Revenue (£000)

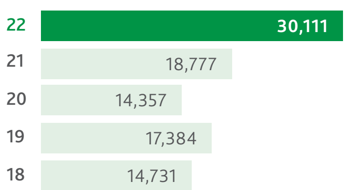
+24%



30,111

Adjusted operating profit (£000)

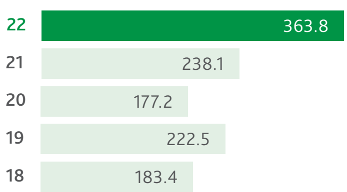
+60%



363.8

Adjusted basic earnings per share (pence)

+53%



Strategic report

Governance report

Financial statements

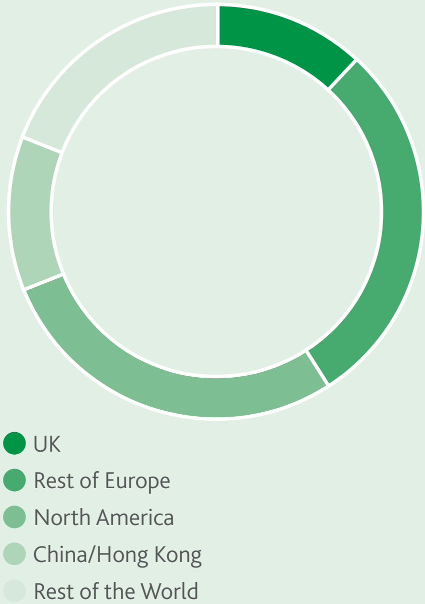
For more information visit: **www.judges.uk.com**

Specialist portfolio

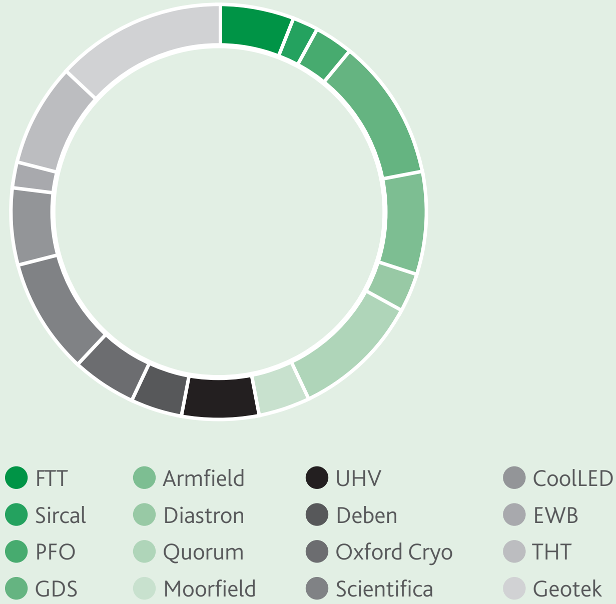
Judges Scientific plc is an AIM-quoted group focused on acquiring and developing companies within the scientific instrument sector. The Group consists of twenty businesses and maintains a policy of selectively acquiring businesses that generate sustainable profits and cash.

Key statistics

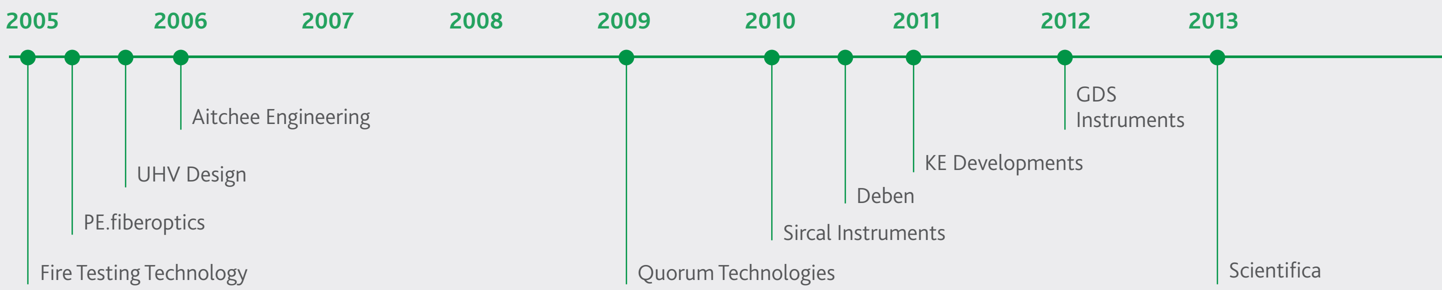
Group revenue by geography



Group revenue



Timeline of our acquisitions



Our businesses

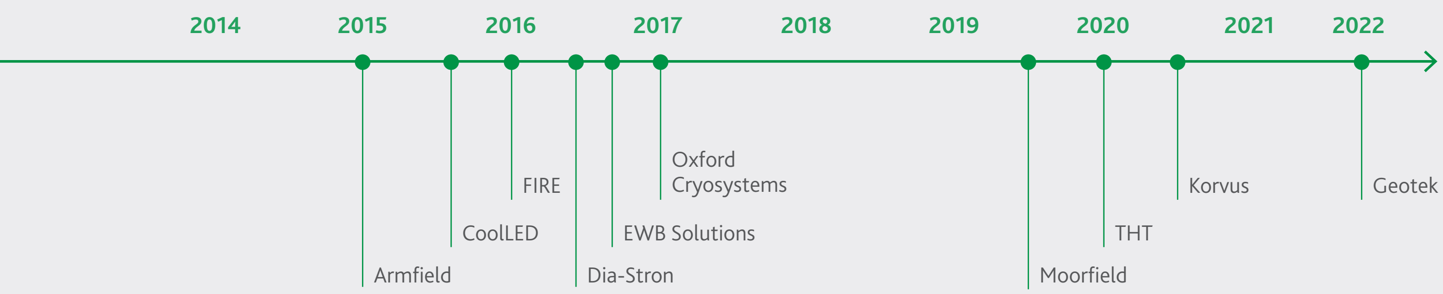
Geotek specialises in high-resolution, non-destructive analysis of geological cores. We have designed, built, and supplied our range of Multi-Sensor Core Logger (MSCL) systems for over 20 years, using a suite of geophysical and geochemical sensors primarily aimed at non-destructive core analysis. Geotek provides equipment sales and services to science and industry worldwide.

The Geotek Multi-Sensor Core Logger (MSCL) systems enable a suite of geophysical measurements to be obtained rapidly, accurately and automatically on sediment or rock cores. The rugged nature of the equipment makes it suitable for use in either an onshore laboratory/repository environment or on board survey and drilling vessels. Geotek design and manufacture a full range of cabinet-based digital 2D and 3D X-ray imaging systems for a variety of geoscience markets.

Geotek Coring offers customised services using its long term experience to collect cores (under full in situ pressures if required), to provide primary non-destructive formation data, and to conduct specialist laboratory testing. Acquiring geological cores is expensive; but the data locked within these samples determines the outcome of the oil and gas field development, research expedition, wind turbine location, foundation or tunnel design, pipeline and cable routes, or mineral exploration risk. Maximising the data recovered from every metre, centimetre and millimetre of core is therefore imperative in order to balance the cost of acquisition against the reward of development regardless of the industrial purpose.

Geotek's specialist core logging services team utilises non-destructive MSCL and X-ray CT core logging techniques to maximise the value of geological material for nearly any industry. Our specialist laboratories, located in the UK/Europe, North America, Australia and South America, give our team of geoscientists and engineers a worldwide presence regardless of whether the project is onshore or offshore.

Image: Geotek BoxScan, a modular field-deployed multi-sensor core scanner for geological cores, chips, soils and pulps.



Our businesses continued

Quorum

East Sussex-based Quorum Technologies manufactures market-leading scientific instruments primarily used for electron microscopy (EM) sample preparation.

Electron microscopy is a key research tool in almost every area of scientific endeavour, from the fight against coronavirus and other diseases such as cancer, through to food safety and the development of advanced microelectronics and new materials.

Key products:

- Q Series of vacuum coating systems; and
- PP3010T cryo preparation systems for SEM and FIB/SEM.

Image: Quorum has introduced the MiniQS, a standalone sputter coater aimed at the benchtop SEM market.

GDS www.gdsinstruments.com

GDS designs, develops and manufactures equipment and software used for the computer-controlled testing of soils and rocks.

This technology is used to evaluate the mechanical properties that are key in geotechnical and earthquake engineering design.

Services include:

- advanced systems for commercial soil and rock testing laboratories; and
- bespoke systems for university research in the engineering properties of soil and rock.

Image: The GDS Hydraulic Loading Frames are load frames with a hydraulic dynamic actuator mounted on the cross beam for axial stress/strain cyclic dynamic loading. This particular frame has our optional temperature controlled heating and cooling system.

UHVD

UHV Design, founded in 1993, specialises in the design, manufacture and supply of high precision motion, manipulation, heating and cooling (cryogenic) of samples for use in the high and ultra-high vacuum environments for materials research.

Globally, our products are essential in major big physics experiments including:

- high energy particle accelerators such as CERN and SLAC; and synchrotron light sources including PSI (Swiss), Argonne (USA) and the UK's own facility, Diamond.

They are also used routinely in laboratory-scale R&D instrumentation focused on new state-of-the-art materials in: semiconductors, photovoltaics, catalysis and bio-compatible materials.

Image: High performance beamline diagnostic device (Wire Scanner) for use in particle accelerators.

FTT is internationally recognised as the world's leading supplier of fire testing instrumentation and has supplied the majority of leading fire research groups and testing laboratories around the world.

Our directors and senior researchers participate in UK, ISO, CEN and ASTM standardisation committees to ensure that our instruments are always compliant. These include committees dealing with construction products, electro-technical products, furnishing products and transport applications for instruments such as the Cone Calorimeter, NBS Smoke Density Chamber, EN 50399 and SBI.

Image: FTT has now released the iCone 2+, marking the beginning of the next generation of the i-series. The iCone 2+ features the latest technology in control and automation, making it the most advanced, reliable and user-friendly cone calorimeter in the world.

Oxford Cryosystems specialises in the design and manufacture of world-class cryogenic devices.

Our first product launched in 1985 was the Cryostream cooler, which revolutionised the process of low temperature data collection in X-ray diffraction. Today the company has a broad range of products aimed at low temperature data collection in X-ray diffraction as well as a range of single-stage and two-stage GM cryocoolers and associated helium compressors. These are used in a range of applications from our own cryostats to use in radioastronomy and HTS magnets.

Image: Oxford Cryosystems PheniX Front Loader, enables fast change of powder samples in X-Ray diffraction experiments at temperatures as low as 40K.

Aitchee Engineering is a well-established precision engineering company that can offer high end sheet metalwork, laser cutting and CNC machining.

We use state-of-the-art software to take customers' drawings and turn them into manufactured goods in steel, aluminium, stainless steel, yellow metals or plastics. We can supply large batch-work, call off orders and R&D including prototypes; we can also offer manufacturing process assistance and value engineering.

EWB Solutions specialises in the design and manufacture of edge-welded metal bellows where a high integrity hermetic seal is required in the presence of an applied movement.

Supplied globally, EWB bellows are produced in a wide range of materials, meeting a variety of life and environmental constraints for applications within a diverse range of industries such as semiconductor processing, particle physics experimentation, material/surface analysis, oncology therapy and petrochemical processing.

Our businesses continued

armfield

Armfield Limited is a global supplier of equipment for engineering education and research and development systems for the food industry.

Typically, Armfield's engineering education and research products are sold into the tertiary education sector. Customers are institutes teaching disciplines in civil, chemical, mechanical and food engineering including vocational schools, technical institutes, specialised engineering universities and training establishments or government bodies such as the Ministry of Defence, Ministry of Education or Petroleum authorities.

Armfield's industrial food research products are for the development of beverages, dairy, ingredients, edible oils, flavours, fragrances, liquid foods and nutraceuticals and are sold into the food and pharmaceutical sectors. Customers include start-up companies, established businesses, multinationals and R&D centres of excellence.

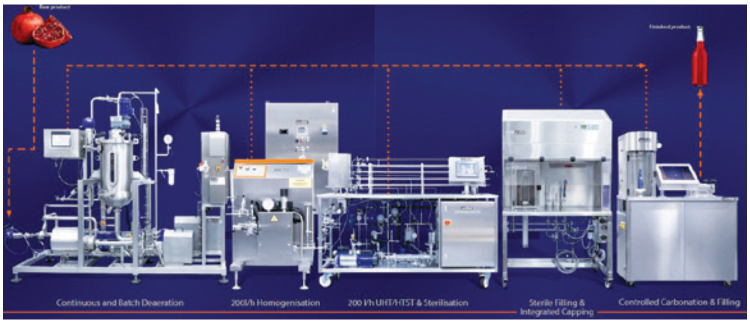


Image: The new FT102XA carbonator enables food research developers to experiment and test their beverage formulas at a variety of carbonation levels and then fill and seal into cans, glass and PET bottles and kegs. The Armfield Team will be presenting this unit at the Institute of Food Technologists (IFT) exhibition in Chicago this July, and we are excited to get this product out into the market.

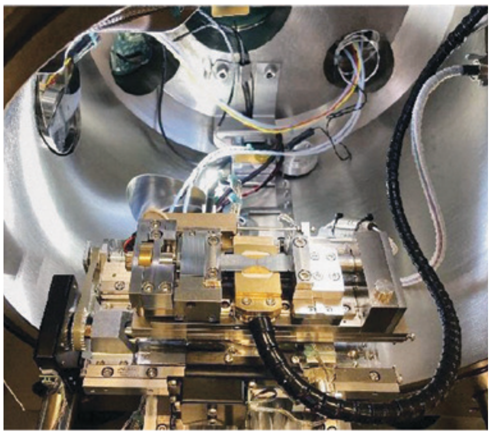
DEBEN

Deben provides innovative tensile testing solutions for in situ applications. Systems are used with SEM, X-ray CT, Optical Microscopes, AFM, XRD and Synchrotrons. Force measurement from 1mN to 20kN and torsion to 100Nm is available. Deben also manufactures SEM detectors and a range of SEM accessories including heating and cooling stages and beam blanking systems for E-Beam lithography.

Product groups:

- in situ tensile and compression testing systems;
- accessories for Scanning Electron Microscopes; and
- detectors for Scanning Electron Microscopes.

Image: Deben's MT200VT – a variable temperature 200N stage being fitted for use within an electron microscope vacuum chamber; Themo Fisher Scientific Apreo system, currently in use at Drexel University, USA.



CoolLED Simply Better Control

CoolLED designs and manufactures cutting-edge illumination systems for microscopy and other applications, pioneering the use of LEDs as controllable and sustainable replacements for inefficient halogen and mercury-based lamps.

Our expertise spans optical engineering and the life sciences, driving the development of our vast product range, which includes the:

- Powerful four-LED pE-400 Series for routine to advanced fluorescence;
- Ground-breaking pE-800 Series for live cell imaging;
- Award-winning triple-LED;
- pE-300 Series for everyday fluorescence microscopy;
- 16-wavelength pE-4000 Universal Illumination System for high-end research; and
- pE-340fura for calcium imaging.

We continue to push the boundaries with our OEM service and an exciting development plan.

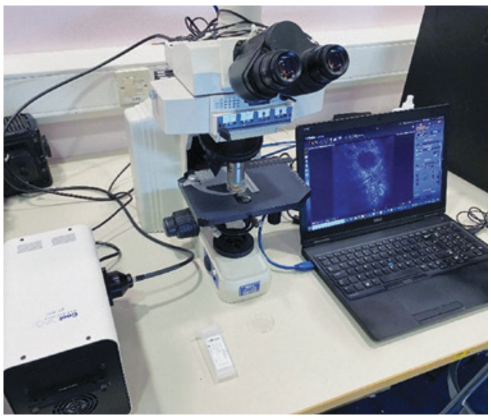


Image: CoolLED pE-800 Illumination System connected to a microscope with imaging software used in cell biology research.

THT is a world leader in the design, manufacture and supply of specialised calorimeters for use in the chemical and battery industries. With a full range of adiabatic, reaction, and isothermal calorimeters, application areas include process development, optimisation and safety of chemical reactions, and determining performance and safety characteristics of Lithium-Ion batteries.

THT's products allow measurement of heats of reaction, derivation of kinetic parameters, assessment of maximum safe temperatures, and pressure generation. THT's flagship product, the Accelerating Rate Calorimeter (ARC), is the world's benchmark adiabatic calorimeter and provides full adiabatic runaway information for both temperature and pressure events.

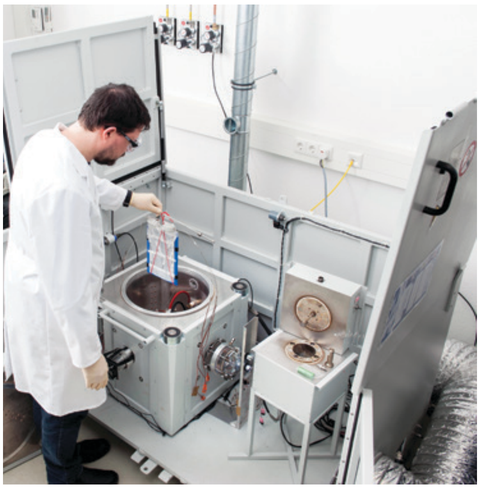


Image: Pouch cell battery being prepared for testing in THT EV+ ARC. Image courtesy of Dr Carlos Ziebert, Head of Battery Safety Centre, Karlsruhe Institute of Technology, Germany. © KIT/Almut Ochsman, Markus Breig.

Korvus Technology manufactures the HEX Series of benchtop thin film deposition systems. The fully interchangeable HEX system allows the User to construct and re-assemble their system in a modular fashion without requiring expert knowledge, specialist tools and/or expensive design resource.

Korvus offers a wide range of thin film deposition instruments to integrate/upgrade to within the HEX, including E-Beam Evaporators, RF and DC Sputtering Sources, Low Temperature Organic Evaporators and Thermal Evaporators. The HEX is used within Universities and Laboratories worldwide for applications including research into new materials for battery technology, OLED, nanomaterials, contact metallisation, coating of electrical contacts and EM sample preparation. Equally the HEX system's ease of use makes it the ideal tool for thin film teaching and training programmes.

Image: Korvus' HEX highly modular thin film deposition system.

Moorfield are a team of scientists and engineers specialising in the design, manufacture, supply, and support of vacuum deposition (PVD and CVD), etching and annealing systems. All tools are highly modular with a range of options to suit uses and budgets. Customisations are routine. The company also offers components, consumables, and coating services.

Moorfield systems are applied for research, product development and batch production. Applications include semiconductors, photovoltaics, superconductors, sensors, optics, graphene and 2D materials. Academic and industrial markets are served, worldwide.

Image: Moorfield MinLab125 magnetron sputtering system. MiniLab systems provide research-grade thin-film deposition for R&D applications in cutting-edge fields such as 2D materials, organic electronics and renewable energies.

Our businesses continued

DIA-STRON

Dia-Stron is the global leader in fibre testing instrumentation.

Our measurement systems provide scientific insights to our customers, being academia or industry, in the cosmetics and composite materials sectors. Our instruments determine fibre properties – mechanical deformations, dimensions, or at the interface – for natural, hair, and technical fibre applications. Dia-Stron automated testing systems serve as essential tools in assessing irregular fibre distributions.

Our purpose-built laboratory supports our customers through contract testing services and enables us to generate data to stay at the forefront of fibre research, connecting with scientific communities around the world.

Image: Dia-Stron's new fibra.one.stress accessory for the best-selling fibra.one instrument to measure dimensional and tensile properties of single fibres.

Sircal designs, manufactures and distributes rare gas purifiers typically for use in metal analysis utilising the Arc/Spark spectrometry technique.

This technique provides qualitative and quantitative analysis of a metallic sample for determination of its purity. The products are sold worldwide to OEM customers (spectrometer manufacturers that use such purifiers in conjunction with their own instruments) or directly to end users such as metal manufacturers and dealers, and test houses.

PE.fiberoptics is a leading manufacturer of test equipment that measures optical and physical properties of optical fibres and cables.

Optical fibres are the main medium for long-distance transmission of telecommunication data and form the backbone of the world's internet and telecommunications networks. Our products support the leading fibre and cable manufacturing companies around the world during production and in their quality assurance and R&D laboratories.

Scientifica

Scientifica is a globally trusted designer, manufacturer, and installer of market leading life science research equipment.

We develop pioneering equipment to enhance discoveries in electrophysiology, multiphoton imaging and optogenetics research within neuroscience, cardiology, and other areas. These discoveries lead to advancements the understanding and treatment of diseases. All our equipment is manufactured in the United Kingdom and exported to more than 40 countries worldwide. Our diverse team of experts brings experience from across the globe and from all levels of academic and professional backgrounds.

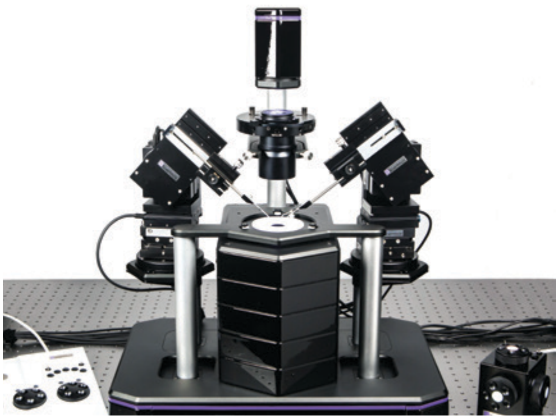


Image: Scientifica continue to develop their globally recognised portfolio with the PatchScope Pro range – these are fully integrated electrophysiology systems built for patching in single cells, cultures or cell monolayers.

Chairman's Statement

For the year ended 31 December 2022

Summary

- The Group has achieved new records in Organic order intake, revenue and adjusted operating profit, despite contending with a challenging environment.
- The resilience of the Group's businesses and the validity of its model have once again come to the fore and are reflected in these results.

"Generating attractive returns for our shareholders remains the core objective of the Group and as such the Board is pleased to be recommending a final dividend of 59p, making a total of 81p in respect of 2022, a 23% increase on the prior year."

The 2022 financial year started under promising auspices: order intake had rebounded past its pre-Covid-19 high watermark and the order book was at a record level. However, the existing supply chain issues were then further aggravated by the war in Ukraine and by successive lockdowns in China. Our teams worked very hard to overcome this challenge and consequently produced record Organic* order intake, Organic revenue and Organic adjusted** profits, which highlights the resilience of our businesses.

The year, whilst arduous from an operational perspective, was our most successful in M&A activity with the acquisition in May 2022 of Geotek, which was by far the largest and most earnings-enhancing transaction in Judges' history. Geotek delivered a strong contribution in the second half of the financial year, and this, together with the Organic performance, contributed to a 53% increase in adjusted EPS for 2022.

Generating attractive returns for our shareholders remains the core objective of the Group and as such the Board is pleased to be recommending a final dividend of 59p, making a total of 81p in respect of 2022, a 23% increase on the prior year (2021: 66p). Since the payment of the first dividend in respect of 2006, regular dividends have grown at a compound annual rate of 23% and total dividend distributions have aggregated to six and a half times the 2005 re-admission price of 100p.

Strategy

Your Group's strategy remains unchanged and is based on creating shareholder returns through highly selective and carefully structured acquisitions, underpinned by the diversified, solid and growing earnings and cashflows arising from our existing businesses.

The Group's acquisition model is to acquire small/medium-sized scientific instrument manufacturers, paying a disciplined multiple of earnings and to finance any acquisition, ideally, through existing cash resources and/or bank borrowings. We are highly selective in seeking to acquire businesses with a history of sustainable profits and cashflows, in order to obtain immediate and enduring earnings enhancement for our shareholders. It is paramount that acquisitions are completed only when the Directors are satisfied that the target business has sound underlying strength with robust and defensible margins and is acquired at a sensible multiple.

Post-acquisition, the Group provides a favourable environment for these businesses to continue to prosper. Much effort is invested into helping their autonomous management teams improve their operating metrics as Organic growth and operational optimisation is an ever-growing component of shareholder returns.

As a result of the dependable growth of your Group, it has been possible to promptly reduce debt, thereby generating the financial resources necessary to reinvest in further acquisitions and reward shareholders with a progressively increasing dividend, subject always to our prudent approach to gearing and earnings cover.

The underlying global market for scientific instrumentation remains robust and the sector's long-term growth drivers provide comfort that the Group will continue to deliver durable returns for our shareholders despite the potential for some short-term variability in performance. These long-term market drivers are rooted in the global expansion of higher education and the need for measurement tools to support the relentless worldwide search for optimisation and discovery across industry and science.

Our team

Once more, global events conspired to make life difficult for all our colleagues but they again proved themselves up to the task. I am sure our shareholders join the Board in appreciating their unremitting dedication to overcoming the challenges they encountered.

During the year we were pleased to welcome Peter Schultheiss, Tony Bosley, and the rest of the Geotek team, to the Judges Group.

Post year end, our Board was delighted to add Dr Tim Prestidge to the Executive team, as Group Business Development Director. Tim has significant and relevant experience having spent his career to date in senior roles at Renishaw plc and Halma plc. This appointment reinforces our executive team and we are certain that his strategic vision and business acumen will be of great value to your Group over the coming years. We wish him much success at Judges.

Alex Hambro
Chairman
21 March 2023

* Organic describes the performance of the Group including businesses acquired prior to 1 January 2021.

** Adjusted earnings figures exclude adjusting items relating to amortisation of acquired intangible assets, acquisition-related costs, share-based payments and hedging of risks materialising after the end of the year. Adjusted net debt includes acquisition-related cash payables that had yet to be settled at the balance sheet date and excludes IFRS 16 liabilities.

Chief Executive's Report

For the year ended 31 December 2022

Summary

- Our ability to deliver the Organic growth expected from the large opening order book was made more difficult by the challenges of sourcing the large variety of components, often highly specialised, that are needed to manufacture our instruments. Despite this, through our team's resourcefulness and determination, the Group still achieved new records in all essential measures of Organic performance.
- Our dedication to raising the operational bar across the Group has not wavered and throughout the year we have spent time promoting leadership skills, information systems and focusing on new product development to ensure that we remain well placed to create excellent new products to meet ever-evolving customer needs on tight deadlines.
- The long-term fundamentals supporting demand for scientific instruments remain positive. Market demand is being driven primarily by the strong worldwide growth in higher education and the enduring pursuit of optimisation across science and industry, and of course optimisation requires measurement.

At the turn of 2022, the Group had seen a strong rebound in Organic order intake and held a record order book; thanks to the vaccination campaign, restrictions on travel easing and our own factories returning towards normality. Supply chain difficulties had increased during 2021 and became a serious yet generally manageable problem throughout 2022, exacerbated by the war in Ukraine and the multiple Chinese lockdowns. Our ability to deliver the Organic growth expected from the large opening order book was made more difficult by the challenges of sourcing the large variety of components, often highly specialised, that are needed to manufacture our instruments. Despite this, through our team's resourcefulness and determination, the Group still achieved new records in all essential measures of Organic performance. The acquisition of Geotek in May ensured that our full year results were well ahead of our Organic records.

Whilst we all hoped and expected to experience a more consistent year in 2022, these continued challenges had a varied impact on each of our Group businesses. Once again, the pace of R&D fluctuated whilst others had to be nimble in the way in which they operated. Notwithstanding these challenges, several of our businesses still delivered all-time records, and many ended the year with significantly higher order books than historic norms, providing them with a good foundation for growth in 2023. Our dedication to raising the operational bar across the Group has not wavered and throughout the year we have spent time promoting leadership skills, information systems and focusing on new product development to ensure that we remain well placed to create excellent new products to meet ever-evolving customer needs on tight deadlines.

Order intake

Order intake is the main driver of our business. Organic intake was up 0.5% year on year after surging 25% in 2021. This quasi stagnation, after the strong 2021 rebound, is 9% above the pre-Covid-19 2019 record, but that level of growth over three years shows that the post-Covid-19 recovery is still a work in progress.

The best performance was recorded in the Rest of the World (up 19%), followed by North America and China/Hong Kong (up 6% each); the Rest of Europe was down 2.5% and the UK receded 28% after its strong progress in 2021. The largest year-on-year absolute increase was achieved in Taiwan, South Africa, the USA and Sweden. The largest declines were in the UK, France and Germany. Order intake still fluctuated between our various businesses and the capital expenditure freezes by large corporations, previously seen through the pandemic, abated during the year. We believe Organic order intake was affected by supply shortages at our OEM (Original Equipment Manufacturer) customers and by the Chinese lockdowns which were only reversed shortly before year end.

Although our aim is to restore the growth of Organic intake to pre-Covid-19 levels, intake for 2022 was sufficient to deliver Organic revenue growth and also add to our already substantial order book; the Organic order book grew to 21.1 weeks at 31 December 2022 from 19.8 weeks at the end of 2021. The total order book at 31 December 2022 stood at 22.9 weeks.

Revenues

Converting a large order book into sales revenue was our main challenge in 2022 as a result of the deteriorating supply of components. The Group succeeded in satisfying orders although we were not immune to delays, extra costs, extra effort required and higher levels of inventory. This may imply slowed revenue growth, margin pressure, R&D effort diverted away from new projects and some balance sheet expansion; our mission however is to ensure that we keep progressing all key performance measures.

Group revenues for the financial year ended 31 December 2022 progressed from £91.3 million to £113.2 million, including Organic growth of 8% and the contribution from the Geotek acquisition completed in May 2022.

The Group continues to be a strong exporter and is well diversified across the globe, with 28% of the Group's revenues earned in North America, 28% in the Rest of Europe and 12% in China/Hong Kong. Organic revenues grew strongly in all regions except the UK (down 15% after growing 43% in 2021). North America advanced 21%, China/Hong Kong rebounded 15% (from minus 28% in 2021), the Rest of the World grew 10% and the Rest of Europe grew 6%. The highest absolute increases were the US, the Czech Republic and China/Hong Kong. The most notable decreases were the UK, France and Egypt.

Profits

The most important driver of Judges' operating margins is volume. The 8% growth in Organic revenue maintained our Organic EBITA margin before central costs at 25% (2021: 25%) and Organic operating contribution increased 8%. The increased procurement costs and inflationary pressures, combined with the delayed impact of our own price increases affected the EBITA margin in the second half of the year.

Adjusted profit before tax and adjusting items progressed to a record £28.3 million (2021: £18.1 million). The operating subsidiaries combined produced an Organic Return on Total Invested Capital ("ROTIC") of 28.7% (2021: 28.3%); total ROTIC (including Geotek) was 21.3%, reflecting the size and multiple paid for this acquisition. Statutory profit before tax was £16.0 million (2021: £14.9 million), influenced by significant adjusting items primarily arising from acquisition costs and amortisation of acquired intangible assets.

The Group continued to invest in the improvement of its existing products and the development of new products. Investment in research and development amounted to £6.8 million in 2022 (2021: £6.2 million), equivalent to 6.0% of Group revenue (2021: 6.8%).

The increase in pre-tax profits was replicated in earnings per share: adjusted earnings per share progressed by 53% from 238.1p to 363.8p; adjusted fully diluted earnings per share similarly progressed to 359.0p (2021: 234.9p). Statutory basic earnings per share were 196.1p (2021: 201.0p) and statutory diluted earnings per share were 193.5p (2021: 198.2p).

Corporate activity

On 23 May 2022, we completed the acquisition of Geotek. Geotek manufactures instruments used for the high-resolution, non-destructive analysis of geological cores and provides related services. The £80 million transaction (including a £35 million earnout and excluding excess cash) is by far the largest acquisition in the history of our Group. The full earnout is due as Geotek achieved its target EBIT of £11.4 million for the 2022 calendar year. The acquisition was financed under a new £100 million multi-bank facility led by Lloyds Banking Group plc alongside Santander UK plc and Bank of Ireland. The quality of Geotek's business and the size of its contribution to the Group's adjusted earnings make it a significant step forward for the Group.

During the year we acquired the remaining 12% shareholding of Bordeaux Acquisition, the holding company for Deben UK and Oxford Cryosystems for a consideration of £2.1 million. The price was 4.5 times historical adjusted EBIT and the payment was largely in new Judges shares valued at 6850p, the market price on the day the deal completed.

As a buy and build focused group, the acquisition of new businesses is a fundamental feature of Group strategy. Executing this effectively is key to ensure that long-term value is generated for shareholders. We retain a strict acquisition discipline and are highly selective in relation to both the acquisition multiple and long-term quality of any potential addition to our Group.

The industry in which we operate contains a multitude of small global niches, as illustrated by the diverse nature of the new entrants to our Group. The UK is recognised in this arena as a centre of excellence for product innovation and manufacturing with world-leading businesses. Our Group has built a strong reputation over the past decade as an ethical, experienced and well-financed buyer and a supportive home for businesses in our sector whose owners wish to sell. We are trusted to act decisively and to complete deals under the initial terms agreed. For the businesses we acquire, the Group offers advice and support wherever necessary, stimulates intra-group co-operation, participates in succession planning and implements robust financial controls. We trust subsidiary management teams with the day-to-day running of their businesses. This has been a successful operating model for the Group, as management teams are given responsibility for their own destinies, as well as an environment in which they can thrive.

Cashflow

Cash conversion, impacted by the supply chain difficulties and the measures taken to mitigate them, was lower than usual at 80% (2021: 104%), with cash generated from operations of £24.0 million (2021: £19.6 million). Year-end cash balances increased to £20.8 million from £18.4 million as at 31 December 2021. Adjusted net debt (excluding IFRS 16 lease liabilities but including sums still due in respect of acquisitions) at the year end amounted to £52.0 million (2021: £1.4 million net cash).

Dividends

Your Board is recommending a final dividend of 59p per share subject to approval at the forthcoming Annual General Meeting on 22 May 2023, which will make a total distribution of 81p per share in respect of 2022 (2021: 66p per share). The total dividend per share is 4.5 times covered by adjusted earnings per share (2021: 3.6 times). Our policy of increasing the dividend by a minimum of 10% per year remains sustainable as long as we have ample cover.

The proposed final dividend, if approved by shareholders, will be payable on 7 July 2023 to shareholders on the register on 9 June 2023 and the shares will go ex-dividend on 8 June 2023.

The Company's shareholders are reminded that a Dividend Reinvestment Plan ("DRIP") is in place to enable shareholders to automatically reinvest their dividends into additional Judges shares should they so wish.

Trading environment

The long-term fundamentals supporting demand for scientific instruments remain positive. Market demand is driven primarily by the strong worldwide growth in higher education and the enduring pursuit of optimisation across science and industry and, of course, optimisation requires measurement.

In parallel to these positive long-term trends, the markets across which Judges and its peers operate are characterised by a degree of shorter-term variability, influenced mostly by government spending, research funding, currency fluctuations and the business climate in major trading blocs, particularly the USA and China.

In the medium-term horizon, the competing goals in the various jurisdictions where the Group operates, of stimulating recovery and of reducing ballooning government deficits should increase uncertainty in worldwide research funding. It also appears that re-emerged inflation may not be as temporary as proclaimed and higher interest rates could accentuate government deficits and bring back austerity. At the same time, higher interest rates may also alter the competitive balance in larger M&A activity to the detriment of more highly geared participants.

As a large percentage of the Group's revenue is overseas, exchange rates have a significant influence on the Group's business. Judges' manufacturing costs are largely denominated in Sterling and most of the Group's revenue originates from countries where the standard of value is the US Dollar (approximately one half of total revenue) or the Euro (around one third of total revenue). The currency movements since the Brexit referendum vote in 2016 have had a positive influence on our margins and our competitiveness; exchange rates have continued to remain favourable to our Group.

Outlook

As we look ahead, the macro environment remains uncertain, with differing factors impacting our business both positively and negatively. Whilst we are encouraged that the market in China is more stable as Covid-19 restrictions are eased and we continue to see Sterling benefit UK exporters, we are cognisant of continued geopolitical uncertainty and supply chain challenges, alongside higher levels of inflation and interest rates. In addition, the increase in UK headline corporation tax from 19% to 25% from April 2023 will affect EPS going forwards. Despite these varied conditions across the globe, our sizeable order book, allied with the enduring long-term drivers of our business, allow us to remain confident in the Group's resilience and adaptability.

Our Group started the year with a record Organic order book and has since benefited from solid growth in Organic intake versus the first two months of 2022. With the significant addition of Geotek, Judges is well equipped to face the challenges of 2023.

David Cicurel
Chief Executive
21 March 2023

Buy and build model

Favourable market

Long-term Organic growth drivers + **Low capital use** + **Large deal pool**

Long-term Organic growth trends in science: global higher education and process optimisation

Low working capital and capex requirements

Large pool of potential acquisitions in global niches

Track record of successful acquisitions

- Fragmented market with over 2,000 privately held businesses in the UK
- The UK is a recognised worldwide centre of excellence for scientific instrument development and manufacture
- Strict acquisition discipline; buying sustainable businesses at sensible prices
- Judges has a strong reputation for being a good acquirer; twenty acquisitions since May 2005
- Organic growth; business autonomy and performance optimisation

Our acquisition strategy points

- Trusted to honour the terms agreed
- Trusted to act quickly with secured funding
- Treats vendors and staff with respect
- No micromanagement post-acquisition

Shareholder value

Diverse portfolio → Sustainable returns → Growing Dividends

A focused strategy

Develop the Group through a "buy and build" programme of carefully structured acquisitions, supported by long-term Organic individual business development.

1 Leverage expertise and capital

We use our knowledge of the scientific instrument sector to identify and progress suitable acquisition targets. Through longstanding relationships, we leverage our access to capital enabling us to act decisively and in a timely fashion.

2 Accumulate sustainable, established business

The companies we acquire have established reputations in worldwide niche markets. Target companies need to meet exacting performance criteria that support sustainable sales, profits and cash generation. We pay three to six times EBIT according to size and borrow up to 2.5 times EBITDA at 2–4% depending on the Group's level of gearing.

3 Create an environment where businesses can thrive

We buy successful businesses with long-term futures. Our approach is to create additional opportunities through guidance, business support, expertise and capital, under an umbrella of robust financial controls.

4 Repay debt and reinvest profits in further acquisitions

Core value is created through the repayment of debt used to acquire target companies and Organic sales growth.

As with all acquisitions Korvus, acquired in November 2020, has an established reputation in a worldwide niche market, and meets exacting performance criteria that support sustainable sales, profits and cash generation.

Engaging with our stakeholders

As required by section 172 of the Companies Act, a director of a company must act in the way he or she considers, in good faith, would likely promote the success of the company for the benefit of the shareholders.

In doing so, the director must have regard, amongst other matters, to the following issues:

- Likely consequences of any decisions in the long term;
- Interests of the company's employees;
- Need to foster the company's business relationships with suppliers/customers and others;
- Impact of the company's operations on the community and environment;
- The company's reputation for high standards of business conduct;
- Need to act fairly between members of the company.

The Group's ongoing engagement with stakeholders and consideration of their respective interests in its decision-making process is as described below.

How we engage

Our culture

Judges has always espoused a long-term perspective, from its first interaction with a prospective acquisition and thereafter on an ongoing basis. This is part of what makes the Group unique. Despite the continued challenges arising from the pandemic, the war in Ukraine and the supply chain challenges, no change was made to the strategic outlook and key decisions continued to be made only for the long-term benefit of the Group. Further detail is explained in the Sustainability Report on pages 16 to 23.

Shareholders

The primary mechanism for engaging with shareholders is through the Company's AGM and also through the annual cycle of investor meetings held alongside the publication of the Group's financial results for the half year and full year. Further information is disclosed in the Corporate Governance Statement on pages 32 to 34.

Customers and suppliers

Our companies operate in global niche markets and hence reputation is key to our ongoing success. Maintaining the strong reputation with our customer base for providing instruments and service of the highest quality is therefore of paramount importance. Likewise, we have long-standing close relationships with our locally situated suppliers, as evidenced via the payment terms on page 39 in the Directors' Report.

Employees

A key to the Group's success has been its engaged workforce. As well-regarded local employers within each of our businesses' respective communities, the Group's Directors, alongside our subsidiary management teams, work hard to provide a positive work environment with opportunities for all our staff to grow and achieve their potential. Our management teams remain focused on maintaining staff wellbeing and have created a safe environment for our staff. As disclosed in the Sustainability Report on pages 16 to 23, we are also proud that around forty percent of our staff are shareholders.

Community and environment

Our businesses are proud of their positive contribution to the wider, and more local, community both as low carbon-intensive businesses and as a well-respected local employer. More information can be found in the Sustainability Report on pages 16 to 23.

Building on our unique culture

"Corporate Social Responsibility is integral to our ongoing business success. It reminds us of the need to minimise our impact on the environment, encourages us to pay attention to the needs of our customers, employees, and other stakeholders, and to build engagement with local communities."

Judges Scientific is focused on acquiring and developing global niche companies within the scientific instrument sector. It selectively acquires businesses that generate sustainable profits and cash. We produce scientific instruments that enable our customers, to push the boundaries of science and also make a world a little safer. At the same time, Judges Scientific recognises that its operations have environmental and social impacts. Whilst these are relatively small, given that we operate a portfolio of low carbon-intensity manufacturing businesses, it is still imperative that we minimise our negative impact on the environment.

Given the structure of our Group, which consists of 18 small and medium-sized businesses, each of whom employ less than 75 staff, we also have to prioritise our time and resources into those areas that provide the most positive outcome or greatest reduction in negative impact.

This report is split into four main areas, Culture, Products, People and Environment because these are the core areas applicable to our business.

Providing a good working environment for our employees and maintaining an efficient use of resources have always been key features of the success of Judges Scientific' businesses. Transparency is important and this report goes beyond what we are required to disclose as we want to ensure stakeholders are well informed about our actions and continued progress across the key ESG areas.

We know that the focus on sustainability also opens up opportunities for us, for example in the application of our products and services in industries that will provide environmental or social impact, in the way we do business, and in how we interact with our employees, our suppliers, our communities and the wider society.

We expect to continually evolve this strategy, further reduce emissions at our businesses, continue to provide a fulfilling place of work, and provide our customers with even better products. Sustainability is becoming more and more important and our businesses will contribute.

We are committed to better communicate with our stakeholders as, over time, we gradually increase the volume of disclosure in this area. Whilst this is currently voluntary, we take due note of existing recommendations such as the UN's Sustainable Development Goals (SDGs) of which objectives 8 (Decent Work and Economic Growth) and 5/10 (Gender Equality/Reduced Inequalities) are most closely linked to our business. We will also update our reporting to reflect the requirements of the IASB's future standard on non-financial reporting in this area.

Culture

Judges Scientific's unique culture drives decision-making within the organisation.

Purpose

"Our purpose is to build a portfolio of businesses with longevity, within the scientific instrument sector, by selectively acquiring businesses that generate sustainable profits and cash."

The Group's strategy is based on creating shareholder returns through highly selective and carefully structured acquisitions, underpinned by the diversified, solid and growing earnings and cashflows arising from our existing businesses.

Judges Scientific's unique culture starts from when we first interact with the vendors of acquisition prospects. We believe that each company that joins our Group will remain for the long term, and therefore we must begin that relationship properly from our first contact with them. We acquire successful businesses and we expect them to remain successful, so it is very important that we treat the vendors with respect, and never seek to change the terms of a deal once heads of terms are agreed. We also treat their staff in the same manner as we treat our own, showing respect, openness, honesty and integrity in all our actions.

Whilst we do not manufacture products that directly create an impact on society or the planet, our products are used for research, for example in finding solutions to pressing global problems.

We take our role in the world seriously and recognise that how we do business is as important as what we do. Internally, we work to minimise the environmental footprint of our operations, while investing in our employees to keep them safe and help them develop their career. Externally, we focus on delivering on our purpose to support our customers in addressing some of the world's most difficult challenges, improving scientific understanding and enabling a greener economy.

Shared values

"Our employees share our long-term values, and we encourage all our employees to act like entrepreneurs and treat the company as if they are its owner."

Approximately forty percent of our team are Judges Scientific shareholders (240 staff at 31 December 2022), having acquired shares through the Judges Scientific Share Incentive Plan, an HMRC approved scheme, which enables our staff to acquire Judges Scientific shares from pre-tax earnings; Judges Scientific matches our staff's investment up to a certain level which ensures that all staff can benefit from Judges Scientific maximum matching contribution, not just the highest paid.

We value employee tenure and longevity and always encourage long-term decision-making above the short term as we expect that our businesses build for the future, not just for the present. Consequently we have many long-standing experienced staff happy to work with our businesses throughout their career.

Our businesses have all built a good reputation as a key employer in their local community, dealing fairly with their own staff, customers and suppliers. We expect them to continue to do this, understanding that as a public company we must continue to uphold high standards of behaviour.

Ethical Behaviour

"Our belief is that principles of honesty and fairness should apply to our relationships with all stakeholders, internal and external, across the entirety of our value chain."

Judges Scientific has a zero-tolerance policy on bribery and corruption in relation to all business transactions in which the Group is involved. This policy includes the offering or receiving of inappropriate gifts or making payments to influence the outcome of business transactions. We also require customers and suppliers who contract with the Group on our standard business terms to comply with anti-corruption and anti-bribery laws, and during 2021 we rolled out an updated Code of Conduct to ensure everyone in the Group, and all our suppliers and customers, are aware of and adhere to the code (https://www.Judges Scientific.uk.com/financial-performance/corporate-social-responsibility.html).

Judges Scientific' also supports the provisions set out in the Modern Slavery Act and endorses the core requirements of the Universal Declaration of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work. We do not tolerate practices which contravene these international standards. Additional information is included within the Judges Scientific Modern Slavery Statement on our website at https://www.judges.uk.com/PDF/Modern-Slavery-Act-statement-Judges-2023.pdf.

Products

Our products enable our customers to make the world healthier, cleaner and safer. We do this by helping our customers accelerate life sciences research, solve complex analytical challenges and increase laboratory productivity.

Purpose

"High quality products help our customers develop and enhance their own offerings, innovations or research."

Judges Scientific's portfolio businesses are diverse and provide varied products and services that contribute to making a positive societal and planetary impact, although not always directly on their end user.

A great example is at one of our subsidiaries, CoolLED, which manufactures LED illumination systems for fluorescence microscopy. Their technology, which uses a small LED as the light source for microscopy, is helping to eliminate mercury lamps, which were historically the light source of choice for light microscopes but are toxic. CoolLED's newer, safer non-toxic technology is also far superior to the mercury lamp, enabling researchers to generate a higher and more reliable volume of results together with reducing wastage of precious sample matter in their experiments. These products are also more energy efficient than mercury lamps which helps reduce the energy usage of the researchers and their laboratories.

Products continued

Product quality

"High standards of quality of products and services and ensuring global regulatory compliance."

Judges Scientific businesses design and manufacture highly engineered equipment with long-life applications, providing longer lifespan of products and parts.

Quality for our customers means they can rely on our products and services to consistently meet their specifications and requirements, and some of our businesses have customers with products greater than ten years old still working as well as the day they were purchased.

Quality for regulatory authorities means that we operate at the highest ethical standards and meet or exceed all applicable regulatory requirements, and a number of our businesses are ISO 9001 certified.

Quality for our colleagues means we take personal ownership to aim to ensure our work meets customer requirements and is error-free from design through use.

Quality for our company means we encourage a continuous improvement culture.

People

We believe that our people are fundamental to the success of the business. We invest in our people to help them develop the capabilities that they need to succeed in the long term.

Purpose

Our vision is that all employees are proud to work for businesses that are the best at what they do and understand the positive difference that their products make in the world. Simply put, well-motivated employees are more productive.

Our aim is to retain, attract and enable the best people, creating an inclusive environment for all, noting at the same time that recruitment for small companies is often more challenging than for blue-chip businesses.

Diversity, equity and inclusion

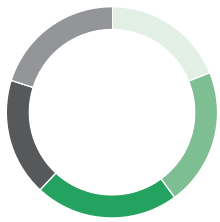
"Our employees share our values and we encourage all our employees to act like entrepreneurs and treat the company as if they are its owner."

Judges Scientific supports equal opportunity for all our employees and those that wish to join our Group. Our aim is to build a meritocratic work environment where everyone can make the most of their skills and talents throughout their career, without discrimination or harassment. In the event of a member of staff becoming disabled, every effort is made to ensure that they can continue their employment with the Group with suitable support.

It is the Group's policy that disabled people should have access to the same career path, training and promotion opportunities as all other employees. It is a Group policy to not discriminate against staff or candidates on the basis of age, disability, gender reassignment, marital or civil partner status, pregnancy or maternity, race, colour, nationality, ethnic or national origin, religion or belief, or sex or sexual orientation.

Our Group believes in providing a secure workplace with meaningful roles for all our staff which is evidenced through employee tenure and staff turnover rates. People who feel safe at work and enjoy their job, stay with their employer longer, it's as simple as that. Our average length of service is 6.4 years, with 5% of our team having worked for our businesses for more than 20 years. Staff turnover has always been fairly low and in 2022 was 14% of our workforce, close to the UK average (2021: 15%). We calculate this figure as the number of leavers in the year (excluding any retirements) divided by the average annual number of staff.

Employee length of service (years)

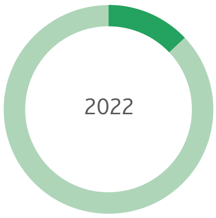


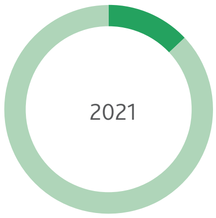
<1 year	19%
1-2 years	21%
2-5 years	22%
5-10 years	18%
10+ years	20%

The average age of our staff is 44.0 years old. As a niche engineering business that produces cleverly designed products that require skilled design, manufacture and assembly, we are happy to employ anyone with a good skillset together with a positive attitude. Often when recruiting, we find more experienced people applying, who sometimes have felt less welcome in other businesses and we are delighted to bring them into our team. We have 253 staff over the age of 50 and our oldest staff member is 81 years old. Our recruitment philosophy is that it doesn't matter what your age is, if you can do the job and want to do the job, you are welcomed. At the same time, we regularly recruit apprentices and younger staff into our Group, who bring in fresh knowhow on emerging technologies and the changing needs of our end-customers. This protects our subsidiaries' long-term viability, with 18% of the Group being under the age of 30 (2021: 16%).

Board diversity

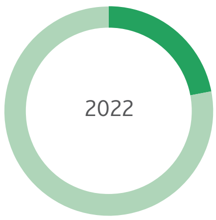
	2022	2021
Male	87	87
Female	13	13

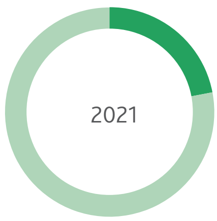




Senior management diversity

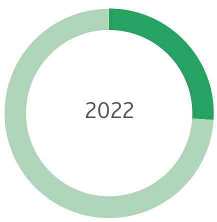
	2022	2021
Male	78	78
Female	22	22

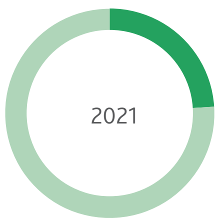




All employee diversity

	2022	2021
Male	74	75
Female	26	25





It is clear that there is an over-representation of males in our workforce. As an engineering group we are in an industry that has historically been male-dominated, so consequently for many years we have been challenged with recruiting from a largely male pool for a number of our roles. That having been said, 26% of our Group are female (2021: 25%). Over the past few years we have appointed Lushani Kodituwakku as a Non-Executive Director of the Board and we are also developing our own internal talent and have three female Directors on subsidiary boards.

Across the last decade, significant efforts have been made by governments around the world, including the UK, to encourage the study of STEM by females, but there is only a low flow of these graduates to smaller companies as so many of our blue-chip peers are their first choice. Additionally, we already have challenges in finding good shortlists of potential recruits for open roles, and so whilst we are keen to improve the diversity across all levels of our business, it is not easy for us to change this situation quickly.

At the same time, an important aspect of how we are trying to close the diversity gap and build greater inclusion is through flexible working, in a trusting environment, which we have been offering for a number of years to many of our staff. For example, we have a number of our finance team who are able to work the hours they wish in order to balance their personal and work lives. More recently, and reflective of some of the changes to working practices following the pandemic, we have wherever possible offered hybrid working, and we have accommodated the needs of many of our staff to work remotely.

	Male	%	Female	%
2022				
Judges Board	**7**	**87%**	**1**	**13%**
Senior management	**82**	**78%**	**23**	**22%**
Total workforce	**487**	**74%**	**168**	**26%**
2021				
Judges Board	7	88%	1	13%
Senior management	73	78%	20	22%
Total workforce	405	75%	135	25%

People continued

Gender Pay Gap Reporting

The Gender Pay Gap Regulations state that employers with more than 250 employees in Great Britain are required to report their Gender Pay Gap. Judges Scientific, with its group of smaller trading businesses, each below this level, is not required to report under this criteria, but has taken the decision to do so in order to provide stakeholders with greater transparency.

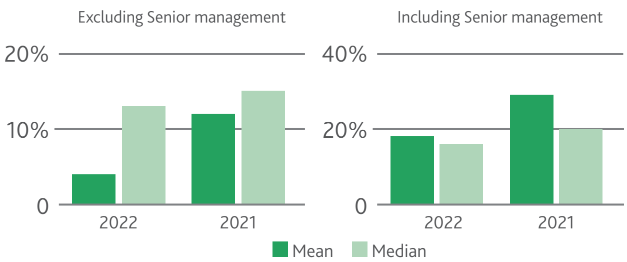
Having collected, and analysed our Group pay data, the overall result shows a 4% average gender pay gap between males and females across all employees excluding senior management.

This has decreased by 8% from 2021, whilst the median gap has reduced by 2%. If one also includes senior management (both Judges Scientific and subsidiary level directors), the mean pay gap becomes larger due to the majority male demographic of this group, but this gap reduced from 29% in 2021 to 18% in 2022, and the median gap reduced to 16% from 20%. In relation to bonuses, there is a larger gap due to bonuses paid to senior management and also from commissions payable to salespeople, who are predominantly male. In 2022 71.7% of women received a bonus with 64.8% of men (2021: 99.3% of women and 98.8% of men).

The pay gap is summarised in the following tables/graphs:

	Excluding Senior management		Including Senior management	
2022	**Mean**	**Median**	**Mean**	**Median**
Pay gap	**4%**	**13%**	**18%**	**16%**
Bonus pay gap	**-11%**	**-14%**	**45%**	**20%**
2021	Mean	Median	Mean	Median
Pay gap	12%	15%	29%	20%
Bonus pay gap	-1%	0%	37%	29%

Pay gap progress:



As our businesses are fairly small, we do not have a consistent staff structure across them all. It is therefore not straightforward to collate groups of staff in similar roles across all roles in order to benchmark pay between males and females to establish whether there were any significant differences. Where we have been able to do this, particularly in more senior roles, where is it is easier to compare like for like, e.g. non-executive directors, sales or operations director or finance managers of our subsidiary companies, we have not noted any significant variance in pay. That having been said, this does not exclude us from looking at opportunities to bridge any apparent gap.

The table below provides quartile hourly pay data, ordered from highest to lowest, into four equal groups. This provides a picture of where male and female employees are in the pay hierarchy.

	2022 Female	**2022 Male**	2021 Female	2021 Male
Upper	**20%**	**80%**	17%	83%
Upper middle	**24%**	**76%**	20%	80%
Lower middle	**19%**	**81%**	26%	74%
Lower	**38%**	**62%**	37%	63%

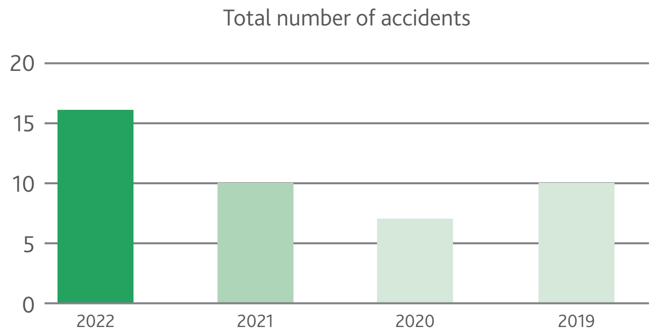
We know that a highly capable, diverse workforce will be important to Judges Scientific's long-term success. Having a diverse team enables the Company to better understand our different customers and markets, particularly as we sell to blue-chip universities and commercial businesses whose own demographics are changing quickly, together with having broader perspective to ensure we maximise our ability to make the right decisions and thereby deliver solutions to our customers that exceed their expectations. To achieve this, we must continue to make our workplace an environment that everyone looks forward to working in and to continue to offer career development so that all women and men realise they can develop their careers and be rewarded fairly at Judges Scientific.

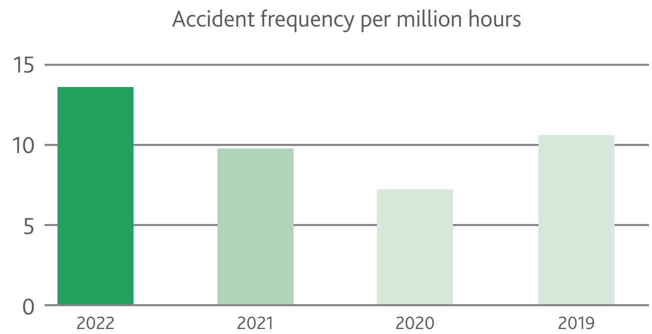
Health and safety

Health and safety is of paramount importance to the Judges Scientific Group and a key priority for our subsidiary management teams. Our employees must be and feel safe at work and we therefore aim to provide a safe and comfortable working environment for them. The Group encourages all of its subsidiary companies to seek continuous improvement and promote a strong health and safety culture.

The Group routinely monitors health and safety adherence across our trading subsidiaries. As we operate a decentralised autonomous operating structure, performance is monitored at a Group level with the board of each trading subsidiary directly responsible for compliance with local health and safety regulations. We have also instituted a Group-wide annual independent health and safety review which assesses compliance and provides local management with feedback to continually improve health and safety.

During 2022, we had 16 minor incidents and no significant injuries across all our businesses (2021: 10 minor incidents and no significant injuries). All incidents are followed up with changes to procedures and/or training of our employees as appropriate to prevent recurrence.





Employee engagement and training

"Only by fully engaging with our workforce, embedding our values across all that we do and developing progressive people management practices, will we achieve a culture that aims to allow employees to maximise their potential."

As seen over the past few years, the commitment and dedication of our people enables us to fulfil our Group's potential and successfully deliver on our business strategy. We strive to continuously improve Judges Scientific as a great place to work and to achieve personal goals. Having a sustained focus on engagement will help us retain our talent, which is crucial to our future success. Improving engagement also helps us to build on our core values, resulting in committed, hardworking and loyal employees.

Over 90% of our subsidiary leadership teams have attended our Judges Scientific leadership development programme. During 2022 we further continued our new management development course with another cohort of our most promising managers attending, which aids with their progression towards becoming the next generation of senior leadership. We will continue with both these types of course over the coming years, as this will ensure we continue to have the highest quality of junior and senior management across our businesses. We further encourage all our businesses to invest in other skills training for staff to enable everyone to become more proficient in their roles.

An added benefit in being part of a diversified group of companies is staff mobility. Where we have good employees, but where there may be structural barriers to their career advancement in a particular business or a change in their circumstances which stops them from performing their current role, we have the capacity for staff to join a sister company rather than continuing their career outside the Group and this has worked well for a number of our team during the past few years.

Environment

Judges Scientific recognises that concerns about the environment, including climate change, must be addressed by all its businesses.

Purpose

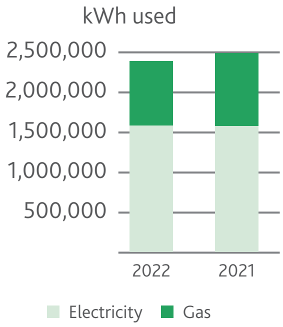
We work to minimise the environmental impact of our operations wherever possible. As a manufacturer of niche scientific instruments, we do not have carbon-intensive manufacturing facilities, instead the vast majority of our businesses are assembling instruments. Our niche instruments are largely used for research, to help progress scientific advancement.

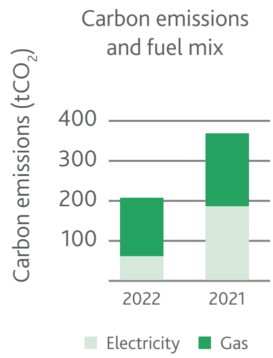
Through our culture of sustainable ownership, it's often our colleagues who identify areas for improvement to combat climate change. Best practices in individual businesses are shared across the Group, and implemented where feasible. This year, as part of our budgeting process, we also gave specific encouragement to all our businesses to invest in environmentally friendly initiatives wherever possible.

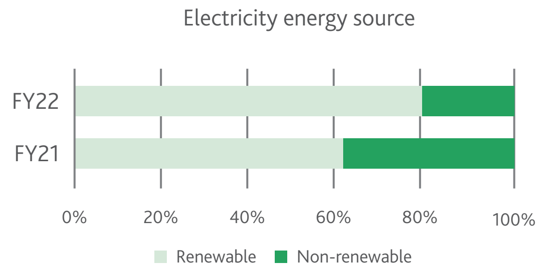
Energy use

"Efficient use of energy makes commercial sense."

Due to our low capital-intensive manufacturing processes, we use comparatively little fossil fuels. We are a business founded on technological innovation, and this mindset translates into our businesses adopting energy efficient technologies wherever sensibly achievable. The vast majority of our facilities have used energy efficient LED lighting for a number of years, and we have almost completed the conversion of the remainder. We have energy management technologies in many of our facilities; simple things like having motion-sensor lighting in low-footfall areas and making sure lights are turned off at the end of the day to ensure we keep a low-waste mindset. Further, as part of all new building acquired for our businesses, we encourage the addition of solar-panelling to help generate a portion of the energy required to operate, such as at Oxford Cryosystems' offices.







Energy use and GHG (Scope 1) emissions

	2022	2021	2020
Global energy usage (KWh)	**2,289,107**	2,442,838	2,195,777
Emissions Scope 1 (direct emissions) tCO_2e	**154.1**	182.0	164.8
Scope 2 (indirect emissions) tCO_2e	**63.1**	189.1	169.5
Normalised values Scope 1 (direct emissions) tCO_2e/£m revenue	**1.91**	4.06	4.18

Our businesses continue to seek ways of reducing energy and despite adding a further business into the Group this year, the Group's energy usage reduced by 6%, positively affected by relocations into more energy efficient buildings and our energy usage per £ of revenue has significantly improved. We continue to look at best practices across the Group, and seek to implement other innovations that may improve this performance. Almost 80% of the electricity we use comes from renewable sources and we will continue to encourage adoption across our businesses to renewable energy sources.

The UK's share of the Group's global energy usage was 96% for gas and 99% for electricity (2021: 98% and 99% respectively).

As mentioned in the Products section, much design effort also goes into reducing the energy requirements of our products such that our customers benefit from lower energy consumption per use.

Environmental accreditations

"We believe that it is important that our facilities are operating to the highest environmental standards."

We continue to look at new ways through certification to improve our environmental performance. Some of our facilities have achieved ISO 14001 certification, proving their facilities are in compliance with environmental laws and regulation in the UK and EU and one further subsidiary has a My Green Lab ACT Label Certification for sustainability.

Benefits of certification so far have included cost savings, energy use improvement and allowing us to align ourselves with the ethical values of our customers. We will seek to achieve ISO 14001 certification in other facilities as appropriate.

Other environmental concerns

"Climate change should not only include energy and carbon emissions."

We understand that concerns about the climate should not be confined to the remit of energy use and carbon, and are aware that water, waste and recyclability are other areas that must be addressed.

We continue to be at an early stage of our journey, but we are exploring ways to further improve, such as looking at how to measure our waste and water use, and how to further extend our use of eco-packaging wherever possible. As a Group, we continue to examine further ways to package our products more sustainably, particularly given the inevitable volume of packaging that we use in transporting our instruments to our customers around the world.

As noted at the start of this report, we have voluntarily provided this information in order to aid our stakeholders' understanding of our business and whilst our Group is a collection of small businesses with limited resources, we will continue to focus on the greatest opportunities to continue to improve our impact on society.

Brad Ormsby
Director
21 March 2023

Managing our risks

POLITICAL TENSIONS

Why is it important?

The tensions between the West and China may well degenerate into an open conflict; China is an important destination for our products and an open conflict or even a strict sanction regime would affect our sales to China and Taiwan but also profoundly disrupt the stability of industrial activity worldwide. The war in Ukraine has exacerbated the supply chain difficulties already triggered by Covid-19 and accentuated the impact on inflation and budget deficits. If the conflict extended to NATO countries, this would strongly impact businesses throughout the world. More generally, political tensions may have a detrimental effect on our ability to trade worldwide and divert government funding priorities away from research.

ACQUISITIONS

Why is it important?

A most significant risk for the Group is that an acquired company does not meet its expected profitability. As an important element of the Group's business strategy is development through acquisition, the Group's growth is also exposed to the risk of insufficient availability of target companies of requisite quality or available within the disciplined price range to which the Group adheres. The emergence of competing acquirers and the aggressive search for returns by private equity funds may increase competition for acquisition targets.

What are we doing to mitigate the risk?

The Group manages these risks by maintaining relationships with organisations that market appropriate targets and by performing detailed research into potential acquisitions; post-acquisition, the Group provides advice and support to entity management teams as appropriate, in order to facilitate their ongoing performance.

ECONOMIC CONDITIONS

Why is it important?

The Group's customers are internationally located and are often state owned or their liquidity is closely linked to government spending. The stress in the world economy and in public finances as a result of Covid-19, will affect the Group's prospects. In the short to medium term, individual countries are likely to oscillate between austerity and economic stimulation and this will affect research funding worldwide. The resurgence of inflation, gradually recognised not to be as fleeting as predicted, and unavoidably higher interest rates are likely to disrupt the stability of the Group's environment.

COVID-19

Why is it important?

The active pandemic has cooled down throughout the world, and its effect on order intake, deliveries, installations and supply chain ought to continue alleviating over time. Progress may however not be linear and setbacks are still possible.

KEY PERSONNEL

Why is it important?

The Group's future success is dependent on its senior management and key personnel and, given the small niche-serving nature of the Group's businesses, it is always a challenge to maintain back-up support in respect of key roles or to replace key staff should they leave our organisation. Finding quality executives in our sector is a challenge and it can take a long time to replace and/or to prove the suitability of any new executive.

What are we doing to mitigate the risk?

The Group encourages succession planning wherever possible and seeks to provide a positive work environment with opportunities for career growth coupled with appropriate remuneration and, where appropriate, longer-term rewards.

CURRENCY AND FOREIGN EXCHANGE

Why is it important?	What are we doing to mitigate the risk?
The Group exports the large majority of its products, hence it is exposed to fluctuations in exchange rates which may impact on its competitiveness. Rates are affected by macro-economic factors such as Brexit and the levels of government borrowings due to Covid-19 and the Ukraine invasion; should Sterling appreciate this may reduce the Group's competitiveness.	The Group seeks, so far as is practicable, to mitigate currency effects for the financial year via hedging foreign exchange rates. Additional detail is set out in note 27.

R&D AND PRODUCTS

Why is it important?	What are we doing to mitigate the risk?
The Group continues to invest in the development of new products to meet the needs of our end customers. There is a risk that our businesses may be unable to develop suitably commercial and technically reliable new products with which to maintain and drive revenue performance. There is also a risk that new developments in science will make certain of the Group's products obsolete.	The Group maintains a focus on ensuring there are ongoing R&D roadmaps for our businesses and that we continue to invest in well trained and qualified R&D and operations teams to deliver quality, well-engineered products for our customers.

COMPETITION

Why is it important?	What are we doing to mitigate the risk?
The Group faces competition across all its businesses and there can be no certainty that each business will achieve the market penetration it seeks. There is also no guarantee that there will be no new competition or new entrant to the market with better products.	The Group seeks to mitigate this through relevant analysis of market and scientific developments when considering acquisitions and seeks to acquire companies in small global niches. Additionally, the Group continues to listen carefully to its customers' aspirations for product development and, where possible, satisfy those product development aspirations.

CYBER SECURITY

Why is it important?	What are we doing to mitigate the risk?
The Group faces the risk of cyber-attacks which could compromise the confidentiality, integrity and availability of IT systems and data. This could impact our ability to respond and deliver to our customers and ultimately affect our reputation and financial performance, including potentially significant financial loss as a result of the effects of ransomware or breach of GDPR.	The Group is partnering with cyber security experts to monitor our resilience to cyber-attacks and also provide early warnings of risks or attempted intrusions.

On behalf of the Board

David Cicurel
Director
21 March 2023

Company registration number: 04597315

Finance Director's Report

For the year ended 31 December 2022

Brad Ormsby
Group Finance Director

"The Group has four Key Performance Indicators, and one non-financial KPI of Organic order intake, which are aligned with the ability to reduce acquisition debt and fund dividend payments to shareholders. All five KPIs delivered well in 2022 as the Group has delivered another strongly profitable performance."

The Group's strategy is based on acquiring companies within the scientific instruments sector and continued profitable performance at its existing subsidiary businesses.

Key Performance Indicators

The Group's financial Key Performance Indicators ("KPIs"), which are aligned with the ability to reduce acquisition debt and fund dividend payments to shareholders, are basic adjusted earnings per share, Organic operating margins, Organic Return on Total Invested Capital and cash conversion. We have a further non-financial KPI of Organic order intake which is the bellwether of future short-term financial performance. All five KPIs are commented on during this report.

	2022	2021
Adjusted basis earnings per share	363.8p	238.1p
Adjusted Organic operating profit margin	21%	21%
Return on Total Invested Capital	28.7%	28.3%
Cash conversion	80%	104%
Organic order intake	+0.5%	+25%

The Group considers that the use of adjusted figures rather than statutory figures provides users of the accounts a clearer picture of the Group's actual trading performance. Organic describes the performance of the Group including businesses acquired prior to 1 January 2021. Adjusted earnings figures exclude adjusting items. Return on Total Invested Capital and cash conversion are defined within the relevant sections of this report.

Revenue

Group revenues increased to £113.2 million, 24% ahead of 2021's £91.3 million. Organic revenues grew by 8% (2021: Organic growth of 10%) enabled by a strong order book and full year Organic order intake being ahead of prior year. The balance of the growth was provided by the Group's material acquisition of Geotek in May 2022.

Across our two segments, Vacuum revenues increased by £2.7 million to £53.3 million (2021: £50.6 million) and Materials Sciences total revenues grew by £19.2 million to £59.9 million (2021: £40.7 million) strongly influenced by Geotek, which sits within the Material Sciences segment.

Profits

Revenue growth supported growth in profits and profitability and adjusted operating profits surged by 60% to £30.1 million, an increase of £11.3 million (2021: £18.8 million). This strong growth reflects the material impact on profit from our recent acquisition, but also masks some effects of supply chain and inflationary issues on our Organic performance in the second half of the year and hence our full year Organic profit growth was only slightly ahead of Organic revenue growth, whereas over the longer-term, the level of Organic revenue growth would usually elicit a double-digit Organic profit uplift. This therefore resulted in Organic operating margins of 21% in line with last year (2021: 21%).

Whilst Sterling was on average stable against the Euro it weakened by 10% against the US Dollar, which benefited our competitiveness as a high exporter, and overall exchange rates continue to be helpfully aligned for the Group. Adjusted profit before tax was £28.3 million compared to £18.1 million in 2021, an increase of 57%.

Statutory operating profit increased to £18.2 million (2021: £15.6 million), and statutory profit before tax was £16.0 million compared to £14.9 million in 2021. Both figures were affected by significantly increased adjusting items, which are detailed further below.

Capitalisation of development costs

We capitalised £1.5 million (2021: £0.8 million) of our total R&D expense relating to development of new or significantly improved products. The related amortisation on these amounts capitalised is £0.1 million (2021: £0.0 million) as many of the projects we have worked on in 2021 and 2022 have not fully completed due to challenges in acquiring parts to complete prototypes and hence ensure that new products are ready for production.

Adjusting items

£12.4 million of pre-tax adjusting items were recorded in 2022 (2021: £3.2 million). This substantially increased from the prior year as a result of the acquisition of Geotek. The key constituents were amortisation of intangible assets recognised upon acquisition which totalled £8.4 million (2021: £2.6 million), acquisition costs of £3.0 million (2021: £nil) and a further £2.6 million interest charge arising from unwinding of the discount against the Geotek earn-out expected payment. As the earn-out was material and due ten months post-completion, we were required to discount the £35 million expected payment at the date of acquisition (to reflect the time value of money) and then unwind the discount as we approach the expected date of settlement in March 2023. These expenses were partially offset by a credit of £2.3 million which mainly arose from valuation of future interest rate hedging.

Finance costs

Net finance costs (excluding adjusting items) totalled £1.8 million (2021: £0.7 million). This increase arose from the Group's higher levels of external debt following the acquisition of Geotek and also due to the increasing UK base rates. The interest rates that our Group pays are based upon two factors; the floating interest rate of SONIA (the LIBOR replacement), plus an interest rate margin dependent upon the Group's level of gearing. Following the acquisition of Geotek, we saw the impending increases in interest rates and promptly entered into a further interest rate swap to fix any unhedged debt, such that we have basically fixed the maximum rate on the Group's existing debt at approximately 5%, ensuring that any risk of rising interest rates is mitigated for the duration of the Group's existing facilities.

Statutory net finance costs were £2.2 million (2021: £0.8 million). The two key differences between the adjusted and statutory figures are a £2.6 million expense for the unwinding of the discount on the Geotek deferred consideration and a £2.3 million credit relating to valuation of the interest rate hedging (both as explained above).

Taxation

The Group's tax charge arising from adjusted profit before tax was £4.9 million (2021: £2.8 million). The effective tax rate on adjusted profits is 17.2% compared with 15.2% in the prior year. This increase reflects the substantial growth in profits (both UK and US) this year compared with a similar level of benefit from research and development tax credits.

The effective tax rate is influenced by the wider regime of low UK and US corporate tax rates and by claims for UK research and development tax credits. The Group benefits from a tax rate lower than the standard UK corporation rate as we continue to invest heavily in R&D, although now that the Group exceeds 500 full-time equivalent employees, we are moving into the large companies R&D scheme which provides a lower level of credit. Further, the UK corporate tax rate is rising from 19% to 25% in April 2023, the Group's tax rate is set to significantly rise to closer to this prevailing rate.

Earnings per share

Adjusted basic earnings per share increased to 363.8p from 238.1p, an increase of 53%, and adjusted diluted earnings per share was 53% higher at 359.0p (2021: 234.9p).

Statutory basic earnings per share, after reflecting adjusting items which this year are heavily influenced by the amortisation of intangible assets arising from recent acquisitions, was 196.1p (2021: 201.0p) and statutory diluted earnings per share totalled 193.5p (2021: 198.2p).

Order intake

Organic order intake was slightly ahead of 2021's strong intake, and continued to be ahead of revenue. Your Board considers order intake and the resultant year-end order book as an important bellwether to the Group's ability to achieve its expected results, and this intake resulted in a closing Organic order book at 31 December 2022 of 21.1 weeks of budgeted sales (31 December 2021: 19.8 weeks). Total order book was 22.9 weeks, including Geotek, and we commence 2023 with a strong base.

Return on Capital

The Group closely monitors the return it derives on the capital invested in its subsidiaries. The annual rate of Return on Total Invested Capital ("ROTIC") at 31 December 2022 on an Organic basis reflected a small improvement during 2022 with Organic ROTIC rising to 28.7% (2021: 28.3%). There is still room to improve this, and is reflective of some inconsistency in the performance of our group of businesses.

The annual rate of ROTIC is calculated by comparing attributable earnings excluding central costs, adjusting items and before interest, tax and amortisation ("EBITA") with the amounts invested in plant and equipment, net current assets (excluding cash) and unamortised intangible assets and goodwill (as recognised at the initial acquisition date).

ROTIC is influenced by the overall performance of our businesses and the size of, and multiple paid for, acquisitions. Therefore the acquisition of Geotek, for a consideration for £80.0 million at a multiple of seven times EBIT, had a significant impact on the Group's total ROTIC. Partly because the multiple paid of seven times results in an opening ROTIC for Geotek of approximately 14.5%, substantially below the Group's prevailing ROTIC, and exacerbated by the fact that the acquisition cost of Geotek was close to the total value of the acquisition costs of all our previous businesses. Therefore the overall impact on total ROTIC was significant and resulted in a total ROTIC of 21.3%, down by 7.4% at 31 December 2022.

As mentioned in previous reports, this is the mechanical impact of acquiring businesses at higher multiples, but despite this we continue to strive to raise Group ROTIC through performance improvements across our businesses.

Dividends

For the financial year ended 31 December 2022 the Company paid an interim dividend of 22.0p per share in November 2022. Following a good performance in 2022, the Board is recommending a final dividend of 59.0p per share giving a 23% increase in the total dividend for the year of 81.0p per share (2021: 66.0p per share). Dividend cover is approximately 4.5 times earnings per share.

The Group's policy is to pay a progressively increasing dividend covered by earnings provided the Group retains sufficient cash and borrowing resources with which to pursue its longstanding acquisition strategy.

Headcount

The Group's full time equivalent (FTE) employees for 2022 stood at 595 (2021: 519). This growth reflects recruitment in support of the Group's long-term growth strategy coupled with the contribution from our 2022 acquisition of Geotek.

Share capital and share options

The Group's issued share capital at 31 December 2022 totalled 6,369,746 Ordinary shares (2021: 6,318,415). The shares issued during 2022 arose from the issue of shares to satisfy acquisition consideration for the final 12% purchase of Bordeaux, the exercise of share options by various members of staff during the year and settlement in Ordinary shares of a portion of the introduction fee payable to Charles Holroyd upon the acquisition of Geotek.

Share options issued during the year under the 2015 scheme totalled 4,735 (2021: 60,986) and the total share options in issue at the year end under both the 2005 and 2015 schemes amounted to 184,740 (2021: 201,460).

Defined benefit pension scheme

The Group has a defined benefit pension scheme which was acquired with Armfield in 2015. This scheme has been closed to new members from 2001 and closed to new accrual in 2006. The next triennial full actuarial valuation will be in 2023 and the current annual contributions to the scheme are £0.4 million. The Group accounts for post-retirement benefits in accordance with IAS 19 Employment Benefits. The Consolidated Balance sheet reflects the net surplus or deficit on the pension scheme, based on the market value of the assets of the scheme and the valuation of liabilities using year-end AA corporate bond yields. At 31 December 2022, the pension scheme was in a position of a £0.9 million surplus (net of deferred tax) (31 December 2021: £1.0 million net deficit). This significant swing from liability to surplus reflects the significant increase in discount rates, and the deficit reduction payment, partially offset by weaker fund asset performance.

Cashflow and net debt

The Group has an enduring track record of converting profits into cash and this year's profitable trading delivered a strong cash performance with cash generated from operations of £24.0 million (2021: £19.6 million), although only at a cash conversion rate of adjusted operating profit into cash of 80% (2021: 104%). This was lower than our usual expected 90+% conversion rate due to the requirement to increase our levels of inventory, in reflection of the continuing global supply chain issues and also by growth in our receivables as we ended the year strongly. The recent relaxation of Chinese lockdown rules should also help us this year to complete some long outstanding installations and collect the related receipts.

Total capital expenditure on property, plant and equipment amounted to £6.4 million (2021: £2.7 million). This figure is higher than usual; particularly influenced by the purchase and subsequent refurbishment of two factories for our trading businesses. Year-end cash balances totalled £20.8 million (2021: £18.4 million).

From a borrowings perspective, we started this year with £1.4 million of adjusted net cash and ended the year with £52.0 million of adjusted net debt. Adjusted net debt includes acquisition-related cash payables that had yet to be settled at the balance sheet date and excludes IFRS 16 liabilities. The Group uses adjusted net debt rather than statutory net debt, as this figure includes actual cash liabilities arising from acquisitions which are due within one year. Gearing, calculated as the proportion of adjusted net cash/debt compared to adjusted EBITDA, at 31 December 2022 was 1.6 times (2021: -0.1 times). We remain committed to maintaining a prudent gearing position whilst at the same time taking the opportunities of acquiring strong, sound businesses at disciplined multiples. The acquisition of Geotek added £62.5 million of debt (£45 million external debt plus £17.5 million earnout payable in March 2023) and we also paid £4.4 million of dividends to shareholders, £2.1 million to HMRC for our tax liabilities, and invested £6.4 million in capital expenditure; overall a £75.4 million outflow but only a £53.4 million increase in net debt, exhibiting the benefits to shareholders of the Group's cash-generating capability and its ability to de-leverage quickly.

As part of the acquisition of Geotek, the Group entered into a new £100 million multi-bank facility ("Facility") with Lloyds Banking Group plc, Santander UK plc and Bank of Ireland (the "Banks") which replaced its existing unilateral facility arranged with Lloyds Bank, which was for an aggregate £60.0 million. The new Facility will provide the Group, in support of its buy and build strategy, with greater acquisition capacity, both in terms of higher frequency and/or larger deals and the initial consideration for the acquisition of Geotek was financed from this Facility.

The Facility is for an aggregate £100 million consisting of a £25 million term loan ("Term Loan"), a committed £55 million revolving credit facility ("RCF") plus a £20 million uncommitted accordion facility, which can be drawn with the agreement of the Banks. The Facility replaced the Group's previous facilities of which £15.2 million was outstanding at the time of the acquisition of Geotek. The life of this new Facility is coterminous with the previous facility and therefore had, at its commencement, a term of four years until 25 May 2026 ("Borrowing Term").

The Term Loan amortises on a straight-line basis over the Borrowing Term by quarterly instalments. The RCF is repayable in a bullet at the end of the Borrowing Term.

The banking covenants have been adjusted from the previous banking arrangements, namely:

- Gearing no greater than 3.0 times adjusted EBITDA (an increase from 2.5 times in the previous arrangement);
- Interest cover no less than 3 times; and
- Minimum EBITDA covenant within the previous facilities is no longer required.

Interest rate margins are consistent with the previous facilities, save for an additional rate between 2.5 and 3.0 times gearing.

The existing lending facilities advanced via Bordeaux Acquisition ("Bordeaux"), the Group's majority-held subsidiary that owned two of the Group's trading subsidiaries, Deben UK and Oxford Cryosystems, were unchanged at the date of the refinancing. Following Judges' purchase of the remaining 12% of Bordeaux on 27 June 2022, Bordeaux repaid in full its outstanding loan of £0.4 million on 28 July 2022.

At the year end the Term Loan was £20.3 million (2021: £16.1 million) and the RCF was £35.3 million drawn (2021: undrawn), with £19.7 million available to drawdown for future acquisitions.

The ongoing long-term support of Lloyds Bank, who have been our cornerstone lender for the life of Judges, together with Santander and Bank of Ireland, our new long-term relationship banks, is greatly appreciated and continues to provide the Group with major capacity to capitalise on opportunities to support the Group's buy and build strategy.

Overall 2022 was therefore a positive year for the Group and resulted in a very different looking Judges. Thanks to the uncompromising efforts by all our team, we navigated through the myriad challenges and knock-on effects in the supply chain and Chinese lockdowns to deliver Organic growth and good cash generation, coupled with the material effect on earnings from the Group's acquisition of Geotek. The Group remains strongly positioned, with a healthy balance sheet which continues to deleverage following the Geotek acquisition, a substantial 2023 opening order book and significant available borrowing capacity, and is therefore well positioned to continue its strategy of achieving growth in earnings via selective, reasonably priced acquisitions of strong niche businesses in the scientific instruments sector, alongside the ongoing performance of its existing businesses.

Brad Ormsby
Group Finance Director
21 March 2023

Our Board

Providing a unique combination of international business, investor and financing experience across public and private markets.

Hon. Alexander Hambro
Chairman

N

Alex Hambro has been active in the small company investment sector both in the UK and the USA for some 30 years, during which time he acted as a principal investor, manager and sponsor of private equity and venture capital management teams.

In addition to his responsibilities at Judges Scientific plc, Alex is also Chairman of Falanx Group Ltd and IWP Holdings Ltd; and a Non-Executive Director of Oberon Investments Group plc, Octopus Apollo VCT plc, Whitley Asset Management Ltd and Time Partners Ltd.

Alex is a founder partner of Welbeck Capital Partners LLP, a specialist investment syndicate that creates secured convertible loan notes to finance growth opportunities primarily for small-cap listed companies.

David Cicurel
Chief Executive

E

David Cicurel founded Judges in 2002 having spent much of his career as a turnaround specialist and, subsequently, as an "active value" investor operating with his own funds.

He has been responsible for several corporate recovery exercises including two UK public companies, International Media Communications plc (later known as Continental Foods) and International Communication and Data plc.

Brad Ormsby
Group Finance Director

E

Brad Ormsby is a Chartered Accountant who has significant senior finance and operational experience acquired during nine years at PwC followed by six years at Eurovestech plc, the pan-European development capital fund, and associated companies.

Prior to joining Judges Scientific in 2015, Brad was Chief Financial Officer at Kalibrate Technologies plc where he led the company's IPO.

Brad is also a Non-Executive Director at Octopus AIM VCT 2 plc, a Venture Capital Trust which invests in AIM-quoted companies.

Tim Prestidge
Group Business Development Officer
(appointed 1 February 2023)

E

Tim joined Judges with significant experience in leadership and innovation, gained through 22 years in senior positions at FTSE 100 and FTSE 250 industrial businesses. Following the completion of his PhD, Tim was appointed as Divisional CEO and subsequently Executive Committee Director of Renishaw plc. Whilst there, he gained expertise in global markets, overseeing a sustained period of strong growth and expansion for the company. Tim also saw his division awarded five Queen's Awards for Enterprise in the Innovation category.

Most recently, Tim spent eight years as Divisional CEO with Halma plc, where he chaired portfolios of technology companies based in the UK, Europe, USA, and China, operating in a diverse range of scientific and industrial sectors. Throughout this period, Tim continued the trend of driving strong growth and gained direct experience in acquisitions and mergers.

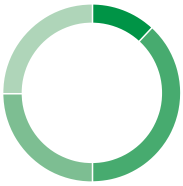
Tim holds degrees in Theoretical Physics from the University of Edinburgh and the University of Cambridge.

Mark Lavelle
Chief Operating Officer

E

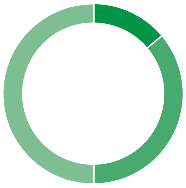
Mark Lavelle gained sales and marketing experience with PerkinElmer, and finance experience with Bank of America in London and the USA, then moved into Industrial general management. Before joining Judges as COO in 2017, Mark most recently spent 15 years at Halma plc where he was Managing Director of two separate businesses (in Medical Devices and Ion Beam Coating), ran Acquisitions for the group, and led two Divisions (Industrial Safety and Water Analysis & UV) comprising a total of 15 companies in the UK, Europe, the USA and Asia-Pacific. He also had responsibility for Innovation at Halma, and subsequently the group's Indian presence. He was also a Pension trustee for 12 years. Mark is a Chemistry graduate of the University of Cambridge and holds an MBA from INSEAD in France.

Board composition (as at 31 December 2022)



- Chairman 1
- Executive Directors 3
- Non-Executive Directors 2
- Independent Non-Executive Directors 2

Board tenure (as at 31 December 2022)



- 0–3 years 1
- 4–7 years 3
- 8+ years 4

Committee membership

- E Executive
- N Non-Executive
- I Independent
- A Audit Committee
- R Remuneration Committee
- Chair

Charles Holroyd
Non-Executive

N I A R

Charles Holroyd has a BSc in Electrical and Electronics Engineering from the University of Bristol and an MBA from INSEAD. He is a Chartered Engineer and a Fellow of the Institution of Engineering and Technology. Charles has held senior management positions within a number of publicly quoted companies. Most recently Charles worked at Oxford Instruments plc, which he joined in 1999 and where he served on the board from 2005 until 2013 and was responsible for group business development, including M&A activities.

He is the Senior Independent Director and is Chairman of the Remuneration Committee.

Lushani Kodituwakku
Non-Executive

N I R

Lushani is the founder and Managing Director of Luminii Consulting, a consulting firm specialising in strategy, Commercial Due Diligence ("CDD") and value creation. Lushani has over 20 years' experience in advising corporates, private equity and banks on their investments and growth strategy across UK, Europe, and USA. She founded Luminii in 2017 after setting up and heading the Grant Thornton Strategy and CDD practice in 2008 and holding various other senior roles with KPMG, Frost & Sullivan, PMSI and Neovian Partners.

Lushani holds a Bachelor of Science (BSc) in Economics with first-class honours, and a Master of Research (MRes) in Management and Organisational Behaviour.

She is an Independent Director and is a member of the Remuneration Committee.

Ralph Cohen
Non-Executive

N A

Ralph Cohen was the Finance Director of Judges Scientific plc for nearly ten years until his retirement in April 2015. He held various senior executive positions within the energy and water divisions of the Paris based Vivendi group between 1981 and 2001, including eight years as Finance Director of a listed subsidiary, followed by positions as Managing Director within that group.

He previously spent nine years at Ernst & Young. Latterly he was the founding partner of MC Consultancy Services, where he was closely associated with major projects, including electricity supply opportunities in Europe and M&A projects.

Ralph Elman
Non-Executive

N A R

Ralph Elman is a former Finance Director of quoted companies Paramount plc, Delyn plc and International Communication & Data plc and Finance Director of businesses within GUS plc and RR Donnelley.

Ralph was Senior Partner of accountancy firm Elman Wall and is a Non-Executive Director of a number of private companies. He is Chairman of the Judges Audit Committee.

Glynn Reece
Company Secretary

Glynn Reece is a graduate of Oxford University and a qualified solicitor. Since 1987, he has specialised in providing corporate finance deal origination and advisory services, working for (inter alia) Coopers & Lybrand, Arthur Andersen and CLB, a specialist AIM firm.

He is currently a Proprietor of Carl Reiss Meyer, a business that acts as an arranger of pre-flotation finance for small fast-growing companies.

Corporate Governance Statement

For the year ended 31 December 2022

Alex Hambro
Chairman

> "In accordance with the requirements of being AIM quoted we recognise that the application of sound corporate governance is essential in the Group's ongoing success."

Introduction

I have pleasure in introducing the Corporate Governance Statement. In accordance with the requirements of being an AIM-listed company we recognise that the application of sound corporate governance is essential to the Group's ongoing success and adopt the principal provisions of the QCA Corporate Governance Code for Small and Mid-Size Quoted Companies published in April 2018 ("QCA guidelines"). This report sets out our approach to Judges' corporate governance in accordance with AIM rule 26, also documented in the Investors section of the Judges website.

Board composition

The Board is responsible to the shareholders and sets the Group's strategy for achieving long-term success. It is also ultimately responsible for the management, governance, controls, risk management, direction and performance of the Group.

The year commenced with the Board comprising three Executive Directors, together with the Non-Executive Chairman and four further Non-Executive Directors, supported by the Company Secretary.

The Group has two independent Non-Executive Directors in accordance with the QCA guidelines. All other Non-Executive Directors are not considered independent under the QCA guidelines by virtue of the duration of their tenure, as they have served more than nine years from the date of their first election or were previously an Executive Director of the Company. Nevertheless, the Company considers that these Non-Executive Directors, in practice, act independently of the Executive management and police adherence to the Group's enduring buy and build strategy and act as guardians to the Group's culture, which continues to provide shareholders with long-term market-beating performance. They deliver value via their long association with the Company, enabling retention of an appropriate corporate memory, and together with their deep understanding of the Group's business model, ensures they appropriately challenge the Executive Directors.

The structure of the Board has been refreshed over the recent past, however wholesale change for the purpose of adopting perceived best practice is not considered beneficial for our shareholders. At the same time, the process of refreshing the composition of the Board continues, which will enable a balance between newer Non-Executive Directors and those that retain the strongest understanding of the Group's culture and history.

Board operation

The Board is responsible for the Company's strategy and for its overall management. The operation of the Board is documented in a formal schedule of matters reserved for its approval, which is reviewed annually. These include (although not exhaustively) matters relating to:

- the Group's strategic aims and objectives;
- the approval of significant acquisitions and expenditure;
- financial reporting, financial controls and dividend policy;
- the approval of the Group's annual budget;
- the structure, capital and financing of the Group;
- internal control, risk and the Group's risk appetite;
- effective communication with shareholders; and
- any changes to Board membership or structure.

Board decision making

The Board has a schedule of matters covering business, financial and operational matters ensuring that all areas of Board responsibility are addressed throughout the year. The Chairman, supported by the Company Secretary, is responsible for ensuring the Directors receive accurate and timely information. The Company Secretary compiles the Board papers which are circulated to Directors in advance of meetings. The Company Secretary prepares and provides minutes of each meeting and every Director is aware of the right to formally minute any concerns.

Board meetings

The Board meets monthly (except in August) in addition to any ad hoc Board meetings that may be required during the year. Non-Executive Directors communicate directly with Executive Directors between formal Board meetings as necessary.

Directors are expected to attend all meetings of the Board, and the Committees on which they sit, and to devote sufficient time to the Company's affairs to enable them to fulfil their duties as Directors. In the event that Directors are unable to attend a meeting in person they will endeavour to attend via phone, Microsoft Teams or similar arrangement. In a normal year, Board meetings are held either at the Group's head office or rotated around the Group's operating companies so that the Board are able to meet local management, and during 2022 the Board was able to return to its more normal routine with 11 held in person, of which 4 were held at our subsidiaries, including one meeting held at Geotek, our 2022 acquisition.

When Directors cannot attend, their comments on papers to be considered at the meeting will be discussed in advance with the Chairman so that their contribution can be included in the wider Board discussion.

The Directors' attendance record at Board and Committee meetings during the year is disclosed in the table below:

	Board	Audit	Remuneration
Hon. AR Hambro	11/11	—	—
DE Cicurel	11/11	—	—
BL Ormsby	11/11	—	—
MS Lavelle	10/11	—	—
CJA Holroyd	11/11	5/5	2/2
LD Kodituwakku	11/11	—	2/2
RL Cohen	11/11	5/5	—
RJ Elman	11/11	5/5	2/2

Board Committees

The Board has delegated specific responsibilities to the Audit and Remuneration Committees, details of which are set out below. As the Board is small, there is no separate nominations committee and any consideration of recommendations for appointments to the Board is considered by a specific committee of Directors set up at that time. As part of the recruitment of Tim Prestidge, a committee of three Directors was set up to oversee the recruitment process, and his remuneration package was separately approved by the Remuneration Committee.

Each Committee has written terms of reference setting out its duties, authority and reporting responsibilities. Copies of all the Committee terms of reference are available on the Company's website (www.judges.uk.com) or on request from the Company Secretary. The terms of reference of each Committee are kept under continuous review to ensure they remain appropriate to the Group. Each Committee is comprised of three of the Non-Executive Directors of the Company. The Company Secretary is the secretary of each Committee.

Audit Committee

The Audit Committee is chaired by Ralph Elman and the other members are Ralph Cohen and Charles Holroyd. The Audit Committee has primary responsibility for monitoring the quality of internal controls and ensuring that the financial performance of the Group is properly measured and reported on. It receives and reviews information and reports from the Group's management, internal audit function and auditor relating to the annual financial statements and the accounting and internal control systems in use throughout the Group. It also advises the Board on the appointment of the auditor, reviews their fees and discusses the nature, scope and results of the audit with the auditor. The Audit Committee meets at least twice a year and has unrestricted access to the Group's auditor. The Executive Directors and the Chairman attend the Committee meetings by invitation as required.

The Audit Committee Report on page 35 contains more detailed information on the Committee's role.

Remuneration Committee

The Remuneration Committee is chaired by Charles Holroyd, the Senior Independent Non-Executive Director. The other members of this Committee are Ralph Elman and Lushani Kodituwakku. The Remuneration Committee reviews the performance of the Executive Directors and makes recommendations to the Board on matters relating to their remuneration and terms of employment. The Remuneration Committee also makes recommendations to the Board on proposals for the granting of share options and other equity incentives pursuant to any share option scheme or equity incentive scheme in operation from time to time. The remuneration and terms and conditions of appointment of the Non-Executive Directors of the Company are set by the Board. The Chief Executive and Group Finance Director are invited to attend for some parts of the Committee meetings where their input is required although they do not take part in any discussion on their own benefits and remuneration. The Remuneration Committee meets at least once per year.

The Remuneration Report on pages 36 to 38 contains more detailed information on the Committee's role and the Directors' remuneration and fees.

Board effectiveness

Biographies of the Board on pages 30 and 31 set out the skills, knowledge and experience of the Board. This mix of capabilities enables them to constructively challenge strategy and review performance. All Directors undertake ongoing training sessions to ensure they retain relevant skills to execute their roles.

Induction of new Directors

New Directors undergo a programme tailored to the existing knowledge and experience of the Director concerned and ensures they develop the requisite knowledge about the Group such that they can contribute fully from an early stage.

Time commitments

All Directors are aware of the time required to fulfil the role prior to appointment and have confirmed their ability to meet the required commitment prior to appointment. This requirement is also included in their letters of appointment or service contract. The Board is satisfied that the Chairman and each of the Non-Executive Directors is able to devote sufficient time to the Group.

Board Committees continued

Development

The Company Secretary ensures that all Directors are made aware of changes in relevant legislation and regulations, with the assistance of the Company's advisers where appropriate. Executive Directors are subject to the Company's performance development review process and will obtain additional professional training as appropriate.

External appointments

In the appropriate circumstances, the Board may authorise Executive Directors to take Non-Executive positions in other companies and organisations, provided the time commitment does not impact upon the Director's ability to perform their role, since such appointments should widen their experience. The Chairman will approve any such appointment.

Conflicts of interest

The Board regularly reviews any Directors' conflicts of interest. The Company's Articles of Association provide for the Board to authorise any actual or potential conflicts of interest.

Independent professional advice

Directors have access to independent professional advice at the Company's expense. In addition, they have access to the advice and services of the Company Secretary who is responsible to the Board for advice on corporate governance matters.

Directors' and Officers' liability insurance

The Company has obtained Directors' and Officers' liability insurance during the year as permitted by the Company's articles.

Election of Directors

In accordance with the Company's Articles of Association, David Cicurel will retire and offer himself for re-election at the Annual General Meeting. In addition, Dr Tim Prestidge, who was appointed by the Board on 1 February 2023, will offer himself for election at the Annual General Meeting. All Directors are offered up for re-election every three years.

Performance evaluation

The Chairman discusses with each of the Non-Executive Directors their ongoing effectiveness. He is also responsible for the Executive composition of the Board. The Chief Executive assesses each Executive Director and provides informal feedback on their performance on a timely basis.

Internal controls

The Board has ultimate responsibility for the Group's system of internal control and for reviewing its effectiveness. However, any such system of internal control can provide only reasonable, but not absolute, assurance against material misstatement or loss. The Board considers that the internal controls in place are appropriate for the size, complexity and risk profile of the Group.

The principal components of the Group's internal control system include:

- overview of the day-to-day activities of the Group by the Executive Directors;
- all proposed acquisitions are comprehensively reviewed by the Board;
- a comprehensive annual budgeting process which is approved by the Board;
- a decentralised organisational structure with defined levels of responsibility for all trading subsidiaries, to encourage principled entrepreneurial behaviour whilst minimising risks;
- rotational visits by the Board to the trading subsidiaries;
- detailed monthly reporting of performance against budget and forecast;
- central control over key areas such as cash/banking facilities; capital expenditure and cyber security; and
- an internal audit function which, on a rotational basis, reviews each of the Group's trading subsidiaries and seeks to ensure consistent application of the Group's policies.

The Group continues to assess and develop its internal control system to ensure compliance with best practice for a Group of its size.

Relations with shareholders

The Group maintains communication with institutional shareholders through individual meetings with Executive Directors, particularly following publication of the Group's interim and full year results. The Group's results presentations are recorded on video in a live webinar which all shareholders are able to attend, and are subsequently available on the Judges website. Additionally, the Group operates a twice-yearly site visit where a group of significant shareholders/potential shareholders are shown around a number of the Group's subsidiaries to view their operations and meet with the local management. One site visit was undertaken in 2022 as the Group exited its previous Covid-19 restrictions, and for 2023 a full return to normal shareholder interactions is timetabled.

The Group also returned to holding its Annual General Meeting in-person during 2022 and all shareholders are again encouraged to attend the upcoming Annual General Meeting which is due to be held on 22 May 2023 (full details in the Directors' Report on page 41). This is the main opportunity for all shareholders to meet with all the Executive and Non-Executive Directors and where the Group's activities are considered and questions answered.

General information about the Group is also available on the Group's website (www.judges.uk.com). This includes a Group overview, detailed information about our trading businesses (including short videos introduced by each subsidiary Managing Director), details of all recent Group announcements and other relevant investor information.

Whistleblowing

The Group has had in place for several years a whistleblowing policy which sets out the formal process by which any employee of the Group may, in confidence, raise concerns about possible improprieties in financial reporting or other matters. Whistleblowing is a standing item on the Board's agenda with updates provided at each meeting. During 2022 no matters were raised (2021: none).

Alex Hambro
Chairman
21 March 2023

Audit Committee Report

For the year ended 31 December 2022

Ralph Elman
Audit Committee Chair

On behalf of the Board, I am pleased to present the Audit Committee Report for the year ended 31 December 2022.

Composition of the Committee

The Committee consists of myself (as Chairman), Ralph Cohen and Charles Holroyd. The Group's Executive and other Non-Executive Directors may be invited to attend Committee meetings. During the year, the Committee met five times, to undertake our responsibilities as set out below and, in particular, review the audit and interim findings, approve the audit plan of the Group's new auditor, approve an internal audit approach for 2022 and consider internal audit findings. The Board is satisfied that I, as Chairman of the Committee, have recent and relevant financial experience. I am a Chartered Accountant; I have served as Finance Director in a number of quoted companies and as Non-Executive Director of a number of other companies. Glynn Reece acts as Secretary to the Committee. I report the Committee's deliberations at the next Board meeting and the minutes of each meeting are circulated to all members of the Board.

Responsibilities

The main duties of the Audit Committee are set out in its Terms of Reference, which are available on the Company's website (www.judges.uk.com) and are available on request from the Company Secretary.

The Committee's main duties are to:

- ensure the integrity of the financial statements (including annual and interim accounts and results announcements);
- review significant financial reporting judgements and the application of accounting policies thereon;
- ensure the Annual Report and Accounts are fair, balanced and understandable and recommend their approval to the Board;
- manage the relationship with the Group's external auditor and review their suitability and independence;
- negotiate and approve the external auditor's fee, the scope of their audit and terms of engagement;
- advise on the appointment of external auditor and to review and monitor the extent of the non-audit services undertaken by the Group's external auditor;
- review the risk management and internal control systems;
- review the assessment of going concern; and
- assess the approach of the internal audit function and review its reporting to the Committee.

Change of external auditor

As previously disclosed in the 2021 Audit Committee Report, the Committee carried out an extensive audit tender process during that year to replace the incumbent auditor, Grant Thornton UK LLP due to their tenure approaching 20 years. This culminated in the appointment of BDO LLP. Grant Thornton UK LLP resigned shortly after the approval of the 2021 accounts, and subsequently BDO LLP's appointment was ratified by the Group's shareholders at the 2022 AGM in May 2022.

Role of the external auditor

The Audit Committee monitors the relationship with the external auditor to ensure that auditor independence and objectivity are maintained. The Group adopts a policy to restrict work of the auditor to audit or audit-related services only. No non-audit fees were charged to the Group by either Grant Thornton UK LLP or BDO LLP. An analysis of fees charged by BDO LLP is disclosed in note 8 to the Group's financial statements. No material issues impacting upon the auditor's independence were observed or brought to the Committee's attention.

Audit process

The external auditor prepares an audit plan for its review of the full year financial statements. The audit plan sets out the scope of the audit, specific areas of risk to target and audit timetable. This plan is reviewed and agreed in advance by the Audit Committee. Following its review, the auditor presents their findings to the Audit Committee for discussion. No matters of significant concern relating to either the Group's internal controls or accounting practices were highlighted by either auditor during the year, however, possible areas of significant risk and other matters of audit relevance are regularly communicated.

Internal audit

The scope of the internal audit work performed by the Group's internal audit function in 2022 was determined following feedback from the 2021 audit, and also via selection of subsidiary undertakings chosen through a selective process. The scope of the internal audit work in 2022 focused on specific reviews at five of the Group's subsidiaries together with follow up visits to assess progress in relation to findings from the prior year's internal audits. No material issues for the Group were noted during any of the internal audit visits.

The Committee has continued to apply an agreed approach that every one of the Group's trading subsidiaries should receive an internal audit review at least once every four years, with each new material subsidiary receiving an internal audit within twelve months of joining the Judges Scientific Group. An internal audit of Geotek will be undertaken in April/May 2023.

The Committee considers that management is generally able to derive assurance as to the adequacy and effectiveness of internal controls and risk management procedures but that the internal audit work performed provides additional assurance.

Risk management and internal controls

As described in the Corporate Governance Statement on pages 32 to 34, the Group has established a framework of risk management and internal control systems and procedures. The Audit Committee is responsible for reviewing the risk management and internal control framework and ensuring that it operates effectively. The Committee has initiated a review procedure to be satisfied that the appropriate internal controls are in place. Comfort on the effective operation of the Group's internal control systems has been obtained via feedback from internal and external audits and through assessment of annual confirmation certifications from each of the Group's trading subsidiaries and the parent company.

Ralph Elman
Audit Committee Chair
21 March 2023

Remuneration Report

For the year ended 31 December 2022

Charles Holroyd
Remuneration Committee Chair

On behalf of the Board, I am pleased to present the 2022 Directors' Remuneration Report, which sets out the remuneration policy and the Directors' remuneration for the year. Whilst there is no statutory requirement for a report to be produced, the Remuneration Committee consider that providing a report is good practice, transparent and beneficial for shareholders, although not every disclosure required under the statutory requirements has been produced.

Composition of the Committee

The Committee consists of myself (as Committee Chairman), Lushani Kodituwakku and Ralph Elman. The Chief Executive and Group Finance Director may be invited to attend Committee meetings if required.

Executive Director remuneration policy

Our remuneration arrangements are designed to align the interests of the Executive Directors with shareholders over the short and longer term. The Committee is aware of recent developments in corporate governance and good practice in Executive remuneration and ensures that it is able to benchmark Executive remuneration against similar sized AIM-quoted businesses, in order to attract, motivate and retain high quality individuals who will, over time, contribute to the continuing success of the Group. No external remuneration consultants have been engaged to support the Committee's deliberations, instead the Committee has utilised publicly available remuneration benchmarking to assist its decision-making.

To achieve our goal of alignment between shareholders and the Executive Directors, the Group provides competitive pay, split between fixed and performance-related elements. Overall remuneration is reviewed annually, and the key elements are explained below:

Base salary

This is set to reasonably reflect the market value of the role and the individual's performance and contribution to the Group. Base salary is reviewed annually with any changes applied from 1 January.

Pension and other benefits

The Group provides a matching contribution of up to 5% of base salary, consistent with that offered to employees within the Group. Additionally, the Group may provide additional market-competitive benefits such as private healthcare, car allowance and life assurance.

Annual bonus

The annual bonus for the Executive Directors is set at up to 25% of base salary, which is based upon achieving annual earnings per share targets set within the annual budget. The Judges Scientific policy for achieving an annual bonus includes a preclusion to earning such bonus if earnings per share is below a historical high watermark.

Share options

Share options are issued to incoming Executive Directors and/or in the course of their employment in order to drive sustained long-term performance supporting the creation of shareholder value. Share options are issued at market value and vest over a period of three years. All share option awards to Executive Directors now have a performance condition of at least 6% compound annual growth of earnings per share over the three-year vesting period in order for them to be exercisable, with the Executive Directors being able to 'bank' one-third of the award each year subject to meeting this annual requirement.

Non-Executive Director fee policy

Non-Executive Director fees are set such that the Chairman and Non-Executive Directors receive a base fee for their respective roles designed to be comparable to similar AIM-quoted companies. Further fees are payable for additional services such as chairing any of the Board's Committees.

Fees payable to the Chairman and Non-Executive Directors are fixed and determined by the Board and are reviewed at least every three years.

Non-Executive Directors also have long-standing agreements in place which, should they introduce an acquisition to the Company, would result in the payment of a one percent introduction fee, a rate that is well below market rate for acquisition deal brokers. For good governance purposes and to ensure independence of process, any Non-Executive Director that introduces a potential acquisition to the Company is required to recuse themselves from any decision-making activities in relation to that acquisition.

Key Committee activities in 2022

The Remuneration Committee operates under the Group's agreed Terms of Reference and determines the Group's remuneration policy in respect of the terms of employment of Executive Directors and their remuneration packages.

During the year the Committee held two meetings for regular Committee business. Its main activities were:

- benchmarking of and review of Executive Director remuneration arrangements for 2023;
- review and update of the short-term annual bonus arrangements for Executive Directors;
- review of the longer-term incentive arrangements for Executive Directors and award of share options, inclusive of appropriate performance conditions;
- determining the performance target for the 2023 Executive Director annual bonus arrangements; and
- review of developments in corporate governance and best practice.

Service contracts

Executive Directors

The Executive Directors are all employed on service contracts. These are not of a fixed duration and are terminable by either party giving 12 months' written notice.

Executive Director	Date of service contract
DE Cicurel	24 December 2002
BL Ormsby	3 March 2015
MS Lavelle	15 November 2017

Non-Executive Directors

The Non-Executive Directors signed letters of appointment with the Company upon appointment for the provision of Non-Executive Directors' services, terminable by three months' written notice given by either party.

Non-Executive Director	Appointment date
Hon. AR Hambro	24 December 2002
RJ Elman	25 October 2005
RL Cohen	1 May 2015
CJA Holroyd	1 June 2018
L Kodituwakku	23 September 2020

Directors' remuneration (audited)

The remuneration paid to or receivable by each person who served as a Director during the year was as follows:

	Salary/fees £000	Bonus £000	Pension £000	Benefits £000	2022 total £000	Salary/fees £000	Bonus £000	Pension £000	Benefits £000	2021 total £000
Non-Executive Directors										
Hon. AR Hambro	40	—	—	—	40	40	—	—	—	40
CJA Holroyd[1]	35	—	—	—	35	35	—	—	—	35
RL Cohen	30	—	—	—	30	30	—	—	—	30
RJ Elman	35	—	—	—	35	35	—	—	—	35
LD Kodituwakku	30	—	—	—	30	30	—	—	—	30
Executive Directors										
DE Cicurel	230	58	—	17	305	200	50	—	5	255
BL Ormsby	200	50	2	7	259	180	45	3	11	239
MS Lavelle	236	59	—	21	316	220	55	—	17	292
Total	836	117	2	45	1,050	770	150	3	33	956

1 The acquisition of Geotek was originated by Charles Holroyd which entitles him to the payment of a fee amounting to 1% of the enterprise value of Geotek ("Introduction fee"). The Introduction Fee in relation to Geotek is payable at the same time and in the same proportion as the payments of the initial consideration and the earn-out to the sellers; £450,000 at completion and up to £350,000 on settlement of the earn-out in 2023 which is expected to be settled in full. Further detail is disclosed in note 32 to the accounts.

The 2022 annual bonus of 25% of base salary was awarded to the Executive Directors as a result of exceeding the earnings per share target (2021: 25% annual bonus was awarded). During 2022 one Director exercised options over the Ordinary shares of the Company realising a gain on exercise of £119,000 (2021: one Director with a gain of £107,000).

Implementation of remuneration policy for 2023

Base salary

During the year, the Committee reviewed the base salary of the Executive Directors and considered individual performance, experience and comparable market rates and also the average salary increases across Judges. In conclusion, the Committee approved a 9% increase in base salaries, which is in line with the average annual percentage increase for the Group's employees. The base salaries for 2023 are as follows:

	2023 £000	2022 £000
DE Cicurel	251	230
BL Ormsby	218	200
MS Lavelle	257	236

Pension and other benefits

Mark Lavelle receives 5% of his base salary as cash in lieu of contributions into a pension scheme. Brad Ormsby receives 5% of his base salary partly as matched pension contributions into a pension scheme and partly as cash in lieu of contributions.

Annual bonus

As part of a review of the Committee's review of the short-term incentivisation arrangements, and based upon external benchmarking evidence, the Committee elected to amend the scheme from 2023 such that the Executive Directors' are now able to earn up to 50% of base salary as a bonus, which more closely aligns the incentive with other similar companies. Half of the annual bonus remains based upon the achievement of annual earnings per share targets set within the annual budget and the other half is attainable through meeting certain individual performance-related objectives.

Share options

As part of the Committee's review of longer-term incentives, the Committee approved annual share option issues to each of the Executive Directors subject to the Group's performance. Options for 2023 were issued in January 2023 as noted in the Post Balance Sheet Events section of this report.

Implementation of remuneration policy for 2023 continued

Chairman and Non-Executive fees

The Chairman and Non-Executive Directors' fees were updated as of 1 January 2023 and fixed for three years as follows:

	£000
Chairman base fee	50
Non-Executive Director base fee	35
Fee for chairing Audit or Remuneration Committee	5

Chief Executive remuneration level

The pay ratio regulations for large UK listed companies came into force in 2019. Whilst we, as an AIM-quoted group, are not required to adhere to these regulations, the Remuneration Committee consider it valuable to provide additional disclosure to enable comparison of the Chief Executive's total remuneration for 2022.

	2022 £000	2021 £000
Chief Executive total remuneration	305	255
Upper quartile UK employee total remuneration	50	52
Median UK employee total remuneration	36	37
Lower quartile UK employee total remuneration	29	29

Directors' interests

At 31 December 2022, the Directors had the following beneficial interests in the Company's Ordinary shares of 5p each and options to subscribe for shares:

Ordinary shares of the Company

	31 December 2022		1 January 2022	
	Shares	Options	Shares	Options
Non-Executive Directors				
Hon. AR Hambro	49,500	—	62,000	—
RL Cohen	66,116	—	66,116	—
RJ Elman	62,923	—	62,860	—
LD Koditiwakku	325	—	325	—
CJA Holroyd	4,945	—	2,016	—
Executive Directors				
DE Cicurel*	711,302	28,500	709,496	30,275
BL Ormsby	3,873	21,000	3,815	21,000
MS Lavelle	1,235	81,000	331	81,000

* Includes non-beneficial interest in the 59,000 shares held by Shoftim Charitable Trust (2021: 55,000 shares).

Dividends paid in the year to Directors who hold shares amounted to £627,000 in aggregate (2021: £549,000).

In 2022, the Group continued to award a free "matching share" under the Judges Scientific Share Incentive Plan for every share purchased up to a maximum value of £600 per employee per tax year for all eligible employees. Shares acquired by Directors under this plan, including matching shares, were 31 shares acquired by David Cicurel (2021: 36 shares), 32 shares by Brad Ormsby (2021: 36 shares) and 32 shares by Mark Lavelle (2021: 36 shares).

Options over Ordinary shares in the Company

	Number of shares		
Date of option issue	DE Cicurel	MS Lavelle	BL Ormsby
2015 Option Scheme			
21 October 2015 at 1402.5p	7,500	—	—
23 November 2017 at 1935.0p	—	60,000	—
3 November 2020 at 5200.0p*	1,000	1,000	1,000
8 January 2021 at 6580.0p**	20,000	20,000	20,000
	28,500	81,000	21,000

* These share options were issued with a performance condition of 6% compound growth in adjusted earnings per share.

** These share options were issued with a performance condition achievement of adjusted earnings per share of 200p in 2021, with 10% compound growth in adjusted earnings per share above the 2021 target in 2022 and 2023 respectively.

Post balance sheet events

On 20 January 2023 each of Executive Directors were awarded by the Remuneration Committee 4,500 options at an exercise price of 8000p. Vesting of the options after three years is subject to the achievement of 10% compound growth in adjusted earnings per share over the vesting period.

On 1 February 2023, Dr Tim Prestidge was appointed to the Board. As part of Tim's appointment process, the Remuneration Committee considered and approved his remuneration package. He receives an annual base salary of £300,000 per annum. He will be eligible for the same short-term benefits as the other Executive Directors, and will be awarded 60,000 share options after the announcement of the 2022 final results, by way of longer-term incentive, consistent with the level of award given to Brad Ormsby and Mark Lavelle upon their appointments. The notice period in Tim's service agreement is six months during the first year of service and twelve months thereafter, terminable by either party, and consistent with all other Executive Directors' service agreements.

Charles Holroyd
Remuneration Committee Chair
21 March 2023

Directors' Report

For the year ended 31 December 2022

The Directors present their report and audited consolidated financial statements for the year ended 31 December 2022. Comparative information is provided for the year ended 31 December 2021.

Results and dividends

The results for the financial year to 31 December 2022 are set out in the Consolidated Statement of Comprehensive Income. The Company paid an interim dividend of 22.0p per Ordinary share on 4 November 2022 (2021: interim dividend: 19.0 pence). At the forthcoming Annual General Meeting, the Directors will recommend payment of a final dividend for the year of 59.0p (2021 final dividend: 47.0 pence) per Ordinary share to be paid on Friday 7 July 2023 to shareholders on the register on Friday 9 June 2023. The shares will go ex-dividend on Thursday 8 June 2023. The total dividend proposed for the 2022 financial year will aggregate to 81.0p, an increase of 22.7% (2021: 66.0p).

Going concern

The consolidated financial statements have been prepared on a going concern basis. The Directors have taken note of guidance issued by the Financial Reporting Council on Going Concern Assessments in determining that this is the appropriate basis of preparation of the financial statements. The Group ended 2022 with adjusted net debt of £52.0 million compared to adjusted net cash of £1.4 million at 31 December 2021. This £53.4 million increase in adjusted net debt arose following the Group's acquisition of Geotek for £80.0 million. This acquisition resulted in a direct increase in liabilities of £62.5 million (£45 million bank loan and £17.5 million acquisition payable) and the Group also made further outlays for dividends to our shareholders (£4.4 million), paying our fair share of tax (£2.1 million) and £6.4 million invested into capital expenditure, including the purchase and refurbishment of buildings for our businesses; all of which totalled £75.4 million. Importantly, for the long-term health of the Group, offsetting this was the Group's consistent strong cash generation which arises from good performance of the Group's principal operating companies (as supported by order intake above the level of revenue) and which will enable further reduction in net debt over the coming year. In addition, the Group also refinanced its borrowing facilities in May 2022 for a four-year term providing the Group with continued certainty over long-term liquidity (see note 21) and the Group subsequently entered into an interest rate swap to hedge the Group's gross borrowings so as to manage any risk of rising interest rates.

The Directors have considered the ongoing impact of the war in Ukraine and the Covid-19 pandemic, and a summary of the implications is included in the Strategic Report. The Group is in a strong financial position with high cash balances, sensible gearing and a solid future order book enabling it to face the challenge of the continued uncertain global economic and political environment. The Directors have planned for reasonably foreseeable worsening scenarios including a repetition of the same level of reduction in orders in 2023 as happened in 2020 at the start of the Covid-19 pandemic which would not cause any significant challenges to the Group's continued existence.

The Directors therefore have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. In making this assessment the Directors have considered the period until the end of March 2024 and therefore continue to adopt the going concern basis in preparing the Annual Report and Accounts.

Future developments

The Group will continue to execute its long-standing business model in the same manner it has done so every year, including acquiring sustainably profitable businesses, supporting them to continue to deliver profitable results and encouraging investment in their range of products.

Research and development

The Group spent £6.8 million in 2022 (2021: £6.2 million) on a mixture of development of new products, amendments to existing products and other routine activities such as updating products due to obsolescence of parts or faults. During the year £1.5 million of this expenditure was capitalised (2021: £0.8 million) with amortisation of £0.1 million (2021: £0.0 million).

Engagement with stakeholders

The Group engages with all its stakeholders as disclosed in the Section 172 Statement on page 15. The Group's payment policy is to agree terms and conditions with suppliers in advance and to pay agreed invoices in accordance with the agreed terms of payment. Creditor days of the Company at the end of the year represented 36 days (2021: 16 days).

Significant shareholders

The following are beneficial interests of 3% or more of the Company's issued Ordinary share capital, the only class of voting capital, of which the Directors have been notified at 21 March 2023:

	No. of shares held	% of total Share Capital
David Cicurel	711,302	11.1
Odin Global	407,726	6.1
Liontrust	295,984	4.9
Broadcrest	261,351	4.1
Interactive Investor	225,809	3.5
JP Morgan Asset Management	213,731	3.4
Hargreaves Lansdown	193,911	3.1

Advice and Insurance

This is disclosed in the Corporate Governance Statement on pages 32 to 34.

Financial risk management objectives and policies

The Group utilises financial instruments (see note 23), comprising borrowings, cash and cash equivalents and various other items such as trade receivables and payables that arise directly from its operations. The main purpose of these financial instruments is to raise finance for the Group's operations. The main risks arising from the Group's financial instruments relate to interest rates, liquidity, credit and foreign currency exposure. The Directors review and agree policies for managing each of these risks, which are described and evaluated in more detail in note 27 and which are summarised below. Except as stated, the policies have remained unchanged from previous years.

1. Interest rate risk

The Group finances its operations through a mixture of bank borrowings, equity and retained profits. With adjusted net debt of £52.0 million (31 December 2021: adjusted net cash of £1.4 million) (see note 21), exposure to interest rate fluctuations is a higher risk to the Group than in prior years; however, to mitigate this increased risk, the Group's loans have been hedged with interest rate swaps, as described in note 27.

2. Liquidity risk

The Group seeks to manage liquidity risk by ensuring that sufficient funds are available to meet foreseeable needs and to invest cash assets safely and profitably. Primarily this is achieved through loans arranged at Group level. Short-term flexibility is achieved through the significant cash balances that the Group currently holds. Additionally, where the Group has already repaid funds into its revolving credit facility, it is able to subsequently redraw these funds should the need arise.

3. Credit risk

The Group reviews the credit risk relating to its customers by ensuring, wherever possible, that it deals with long-established trading partners, agents and university/government-backed bodies, where the risk of default is considered low. Where considered appropriate, the Group will protect itself via requiring advance payment or letters of credit to be provided. The credit risk in relation to cash is considered immaterial due to holding banking facilities primarily with Lloyds Banking Group.

4. Currency risk

With exports representing a significant proportion of its sales, the main risk area to which the Group is exposed is that of foreign currencies (principally US Dollars and Euros). The Group adopts a strategy to hedge against this risk by entering into currency options/forward exchange contracts and/or by maintaining a proportion of its bank loans in these currencies as appropriate, although this strategy does not represent hedging under IFRS 9. The Directors review the value of this economic hedging on a regular basis. There remains, nevertheless, an ongoing threat to the Group's competitive position in international markets from any sustained period of Sterling strength. Forward and option contracts are entered into in both US Dollars and Euros maturing in the subsequent year, aimed at protecting the ensuing year's competitive position and margins from adverse currency movements.

5. Cashflow risk

The Group manages its cashflow through a mixture of working capital, bank borrowings, equity and retained profits. Following the Group's acquisition of Geotek, the year end adjusted net debt was £52.0 million (31 December 2021: adjusted net cash of £1.4 million) and with cash and cash equivalents of £20.8 million and strong consistent cash generation, the Group's cashflow risk is appropriately managed.

Streamlined energy and carbon reporting (SECR)

Whilst the Group and the parent company are not required to report under SECR as none of its subsidiary undertakings are large companies, and the parent company is a low energy user consuming less than 40MWh per annum, this information has been voluntarily presented in the Sustainability Report on pages 16 to 23 in order to provide stakeholders with useful information on the energy consumption of the Group.

Employee engagement

Please refer to the s172 Statement and the Sustainability Report on pages 15 and 16 to 23 respectively for further information.

Disabled employees

Applications for employment by disabled persons are given full and fair consideration for accordance with their particular aptitudes and abilities. In the event of employees becoming disabled, every effort is given to retrain them in order that their employment with the Group may continue. It is the policy of the Group that training, career development and promotion opportunities should be available to all employees.

Directors

The following Directors have held office during the year and until the date of signing this report:

Hon. AR Hambro – Non-Executive Chairman

DE Cicurel

BL Ormsby

MS Lavelle

T Prestidge (appointed 1 February 2023)

CJA Holroyd – Non-Executive

LD Kodituwakku – Non-Executive

RL Cohen – Non-Executive

RJ Elman – Non-Executive

Statement of Directors' responsibilities

The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have elected to prepare the Group consolidated financial statements in accordance with UK-adopted international accounting standards (IAS) and those parts of the Companies Act 2006 that applies to companies reporting under IAS and the parent in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law including FRS 101 'Reduced Disclosure Framework'). Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and the parent company and of the profit or loss of the Group for that period.

In preparing each of the Group and parent company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable UK-adopted IAS or UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and the parent company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent company's transactions and disclose with reasonable accuracy at any time the financial position of the parent company and the Group and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Group and for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for ensuring the Annual Report and the financial statements are made available on a website. Financial statements are published on the Company's website in accordance with legislation in the United Kingdom governing the preparation and dissemination of financial statements, which may vary from legislation in other jurisdictions. The maintenance and integrity of the Company's website is the responsibility of the Directors. The Directors' responsibility also extends to the ongoing integrity of the financial statements contained therein.

Provision of information to the auditor

The Directors confirm that:

- so far as each Director is aware, there is no relevant audit information of which the Company's auditor is unaware; and
- the Directors have taken all the steps that they ought to have taken as Directors in order to make themselves aware of any relevant audit information and to establish that the auditor is aware of that information.

Auditor

In accordance with section 489(4) of the Companies Act 2006, a resolution to appoint BDO LLP as auditor was approved at the Annual General Meeting during the year, following an extensive tender process. The auditor has expressed willingness to continue in office and in accordance with section 489(4) of the Companies Act 2006, a resolution to re-appoint BDO LLP will be proposed at the Annual General Meeting.

Annual General Meeting

The Annual General Meeting of the Company will be held on Monday 22 May 2023 at 12.00 noon at The Lansdowne Club, 9 Fitzmaurice Place, London W1J 5JD.

On behalf of the Board

Brad Ormsby
Director
21 March 2023
Company registration number: 04597315 (England and Wales)

Independent auditor's report

To the members of Judges Scientific plc

Opinion

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 December 2022 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with UK adopted international accounting standards;
- the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements of Judges Scientific plc (the "Parent Company") and its subsidiaries (the "Group") for the year ended 31 December 2022 which comprise the Consolidated Statement of Comprehensive Income, the Consolidated and Parent Company Balance Sheets, the Consolidated and Parent Company Statements of Changes in Equity, the Consolidated Cashflow Statement and notes to the financial statements, including a summary of significant accounting policies.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and UK adopted international accounting standards. The financial reporting framework that has been applied in the preparation of the Parent Company financial statements is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 101 Reduced Disclosure Framework (United Kingdom Generally Accepted Accounting Practice).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remain independent of the Group and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Our evaluation of the Directors' assessment of the Group and the Parent Company's ability to continue to adopt the going concern basis of accounting included the following procedures:

- We obtained the Directors' budgeted operating results, cashflow and covenant compliance covering the period to 31 March 2024 and checked that the information was arithmetically accurate;
- We critically reviewed these budgets and forecasts and assessed the achievability of the projections outlined within the Directors' model, specifically with reference to detailed performance and growth assumptions for those significant components and components subject to full scope audit procedures included within the scope of our Group audit. This included challenge of assumptions with reference to the current economic climate and current year and post-year-end performance against budget;
- We checked that budgets and forecasts included appropriate cash outflows for financing repayments per the loan documentation and deferred consideration as per the Geotek purchase agreement;
- We confirmed the arithmetic accuracy and appropriateness of sensitivity analysis performed and performed additional sensitivity testing to determine whether any variances would result in a risk to going concern including the impacts on forecast cashflows and covenant compliance;
- We confirmed the applicable financial covenants to relevant loan documentation to ensure inputs are consistent with the definitions within the financing arrangement and have been calculated correctly;
- We evaluated the Group's disclosures on going concern compliance against the requirements of IAS 1 'Presentation of financial statements' (IAS 1) and assessed the consistency with the going concern assessment performed by the Directors.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group and the Parent Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

Overview

Coverage	108% of Group profit before tax	
	80% of Group revenue	
	75% of Group total assets	
Key audit matters		2022
	Fraud risk in revenue recognition from sales of instruments and spares.	X
	Risk of fraud and error in revenue recognition from short-term material service contracts	X
	Business combination accounting	X
	Valuation of Group goodwill and non-current assets and valuation of Parent Company investment in subsidiaries	X
Materiality	Group financial statements as a whole	
	£960,000 based on 5% of adjusted profit before tax	

An overview of the scope of our audit

Our Group audit was scoped by obtaining an understanding of the Group and its environment, including the Group's system of internal control, and assessing the risks of material misstatement in the financial statements. We also addressed the risk of management override of internal controls, including assessing whether there was evidence of bias by the Directors that may have represented a risk of material misstatement.

For UK components, full scope procedures were performed where components contributed over 5% of revenue or 10% of adjusted profit before tax. Twelve components were captured by these criteria of which five, which included the Parent Company, were deemed significant.

We also performed specific scope audit procedures on the revenue and cost of sales of two US non-significant components, from which 12% of Group revenue was generated, to address the risks raised with regard to revenue recognition.

The remaining components of the Group, which include non-significant UK and overseas operating components, as well as non-significant holding companies, were principally subject to analytical review procedures performed by the Group audit team.

Components that were subject to full and specific scope audit procedures, accounted for 80% of the Group's revenue, 108% of the Group's profit before taxation and 75% of the Group's total assets. All work was completed by the Group audit team and local BDO LLP component teams.

Our involvement with component auditors

For the work performed by component auditors, we determined the level of involvement needed in order to be able to conclude whether sufficient appropriate audit evidence has been obtained as a basis for our opinion on the Group financial statements as a whole. Our involvement with component auditors included the following:

Component audit teams were initially briefed by the Group audit team and were involved in engagement team discussions held at the planning stage of the engagement. As part of our planning procedures, members of the Group audit team made a number of site visits and met local management teams of the significant components in person, in order to obtain an understanding of local operations. The Group audit team communicated to component audit teams through detailed instructions, the scope of the work to be performed, including component materiality and the planned audit approach in response to key risks, in accordance with applicable auditing standards.

Furthermore, detailed reviews of working papers were performed by the Group audit team with a focus on Group significant risk areas, to ensure that the Group audit opinion was supported by the underlying work of the component audit teams. Regular meetings were held between the Group and component audit teams which allowed for constant communication throughout the audit, ensuring that areas of interest for the Group audit were flagged in a timely manner. We discussed the proposed audit differences and improvement points identified by the component teams with both component and Group management.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit, and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

An overview of the scope of our audit continued

Key audit matters continued

Key audit matter	Group	How the scope of our audit addressed the key audit matter
Fraud risk in revenue recognition from sales of instruments and spares. The Group's accounting policy relating to Revenue Recognition is shown in note 2 with corresponding disclosures within note 3.	The amounts reported in relation to revenue represent information of significant interest to many users of the financial statements. This puts revenue at a greater risk of manipulation, bias and misstatement. Having regard to the potential for fraud in relation to revenue recognition, we identified the following as areas of significant risk of material misstatement: • A significant portion of the Group's sales are in international markets, which may drive complexities in revenue recognition. We therefore consider there to be a risk around compliance with IFRS 15 for key revenue contracts with overseas distributors. • There is an increased risk that revenue around the year end is recorded in the wrong period as the shipping incoterms may not have been complied with by the year-end date. This may particularly be the case where goods are shipped to US customers and invoiced through intercompany sales offices. For these reasons we considered this to be a key audit matter.	Our audit work included the following: • We obtained an understanding of the design and implementation of the controls and procedures operating over the delivery of goods and services and recognition of revenue within the Group's accounting systems. • We held discussions to obtain an understanding of any distributor relationships. We reviewed a sample of contracts and other relevant communications with distributors to check that revenue had been recognised in line with IFRS 15 and Group accounting policies. • We selected a sample of transactions from the revenue transaction listing for December 2022 and January 2023; for instrument and spares sales we agreed these through to purchase order, invoice and third-party dispatch note. For point in time service and installation sales we obtained confirmation that the service had been performed. • We reviewed sales patterns around year end to identify any instances of channel stuffing. This included testing a sample of post-year-end credit notes selected from the January 2023 transaction listing relating to revenue recognised in the year to identify any unusual reasons for sales being subsequently reversed in 2023. • Where UK components sell via a US entity, we evidenced delivery to the customer to verify that the revenue at a Group level is recognised in the correct financial year. **Key observations:** We did not identify any indicators to suggest that revenue recognition was inappropriate.

An overview of the scope of our audit continued

Key audit matters continued

Key audit matter	Group	How the scope of our audit addressed the key audit matter
Risk of fraud and error in revenue recognition from material short-term service contracts The Group's accounting policy relating to material service contract revenue is recognised based upon the cost inputs method as detailed in note 2.	Material short-term service contract revenue is a new revenue stream to the Group. The revenue recognition in relation to these service contracts is complex and requires material management judgement as to when the revenue recognition should commence, as well as the amount of revenue and related costs to be recognised. We therefore identified a significant risk of material misstatement with regards to correctly identifying costs that are considered to contribute towards the Company satisfying their performance obligations, and forecasting future costs where projects span the year end. For these reasons we considered this to be a key audit matter.	Our audit work included the following procedures covering a sample of contracts: • We have confirmed that management's calculation of total contract value is consistent with contractual terms and traced amounts received to bank. Where appropriate, we have confirmed the total contract value directly with the customer. • We have confirmed that the start date of revenue recognition for our contract sample is in line with the performance obligations agreed with the customer by obtaining third party evidence of the date of commencement. • We have tested the total costs (input costs and costs to complete) of the contract to determine that management have identified the correct profit margin on the contract and have appropriately applied that to the cost to complete. • We have tested the input costs incurred that have been used to calculate the revenue recognition on a percentage of completion basis by management to invoice or equivalent third party documentation to confirm amounts included, and reviewed the nature of the cost to check that it has been appropriately included within the input cost method calculation. • For in progress contracts, we obtained management's estimates of the costs to complete at year end and verified these estimates to supporting calculations or third party documentation. • For in progress contracts we obtained direct confirmation from the customer as to the elements outstanding at the year end. • We have recalculated expected recognised and deferred revenue based on the above inputs and compared to management's calculations. **Key observations:** We did not identify any indicators to suggest management's judgements in regards to the calculation of revenue generated from material short-term service contracts were materially inappropriate.

An overview of the scope of our audit continued

Key audit matters continued

Key audit matter	Group	How the scope of our audit addressed the key audit matter
Business Combination Accounting The Group's accounting policies and material estimates relating to the fair value assessment over business acquisitions are shown in note 2. Business combinations disclosures are outlined in note 28.	Judges Scientific plc completed the acquisition of the Geotek companies in the current year. Under IFRS 3, management are required to calculate the fair value of the consideration payable as a result of the acquisition, which involves material judgement in the calculation of the fair value of contingent consideration including an assessment of probability of meeting relevant earn out thresholds and consideration of the appropriate discount rate for the time value of money. Additionally management are required to calculate the fair value of acquired assets and liabilities, including the identification and valuation of separate intangible assets and goodwill. This involves selection of appropriate valuation techniques, calculation of an appropriate discount rate and forecasting revenue and profitability over a suitable timeframe. Due to the material judgements and estimation involved in this calculation, we considered there to be a significant risk of material misstatement relating to the accounting for the business combination. Therefore this was considered to be a key audit matter.	Our audit work included the following: Fair value of consideration: • We verified management's calculation of consideration paid to supporting third party documentation, including the share purchase agreement (SPA) and Group financing documentation. • We confirmed the calculation of surplus working capital consideration was arithmetically accurate and consistent with relevant definitions within the SPA and balances within the acquired group as appropriate. • We obtained management's calculation of fair value of the contingent earn out consideration, including confirming arithmetic accuracy and critical consideration of whether SPA defined targets will be met, with reference to relevant component financial information. • We confirmed the discount rate used by management to discount deferred contingent consideration to the report prepared by the management's expert. With the assistance of our internal valuation experts we reviewed management's valuation expert's report and considered whether the discount rate used was appropriately calculated, verifying inputs to supporting source data as appropriate. Fair value of assets and liabilities acquired: • We have reviewed the completion balance sheet alongside relevant audited accounts for key components and obtained supporting explanations and documentation for variances above a set threshold. • We have verified material adjustments made by management as part of the completion balance sheet process through to underlying calculations and supporting documentation. • We have reviewed the SPA agreement and checked that any specific balances referred to within the agreement have been appropriately accounted for within the acquisition balance sheet. • With regards to the valuation of acquired intangibles, we obtained the valuation report prepared by management's valuation expert and agreed the values included within to the completion balance sheet. • With the assistance of our internal valuation experts we reviewed management's valuation expert's report and considered whether the valuation methodologies used and the discount rate used were appropriate. • We considered the appropriateness of key assumptions included within the calculation with reference to our knowledge of the acquired business, including key customers and contracts, forecast revenues and operating margins. • We considered the completeness of acquired intangibles with reference to previous acquisitions made by the Group and other similar companies. **Key observations:** We did not identify any indicators to suggest that management judgements and estimates using within their treatment of the business combination accounting were materially inappropriate.

An overview of the scope of our audit continued

Key audit matters continued

Key audit matter	Group	How the scope of our audit addressed the key audit matter
Valuation of Group goodwill and non-current assets The Group's accounting estimates and policies relating to the impairment assessment and carrying value of goodwill and non-current assets are shown in note 2 with the supporting disclosures outlined in note 13. **Valuation of Parent Company investments in subsidiaries** The Group's accounting policies relating to investments are shown in Parent Company financial statements note 2 with the supporting disclosures outlined in note 5.	Management exercise significant judgement in determining the underlying assumptions used in the impairment review of the Group's cash-generating units (CGUs). These assumptions include the determination of the CGUs, the discount rate, CGU forecast performance including revenue growth, operating margins and the growth rate over the measurement period. The same CGU value in use calculation as used in the impairment assessment for the Group's goodwill and non-current assets is used for the impairment assessment of the Parent Company's investments in subsidiaries. Due to the judgements involved we considered this and the related disclosures to be a key audit matter.	We performed the following procedures over the impairment assessment applied by management across the valuation of goodwill and non-current assets on consolidation and the valuation of the Parent Company investments in subsidiaries: • We have assessed managements determination of each CGU against the criteria of IAS 38 and confirmed the allocation of goodwill and net assets through to the underlying consolidation, which we have performed detailed testing on. • We have obtained, reviewed and challenged the impairment models prepared by management including confirming their arithmetic accuracy and obtaining an understanding of assumptions included within the CGU forecasts. • With the assistance of our internal valuation experts we have reviewed and assessed the reasonability of the discount rate applied. We independently recalculated the Group discount rate, based on applicable gearing, risk and equity premiums and compared this to the rate used by management. • We challenged and assessed the reasonableness of the CGU level FY23 budgets and expected growth rate assumptions within the models through discussions with management, and, where appropriate, agreement to supporting documentation and historical trends. • Sensitivities that have been applied by management have been challenged and compared against sensitivities deemed reasonable by the audit team ensuring that the current economic environment has been taken into consideration. • We have reviewed relevant Group and Parent Company disclosures to confirm relevant assumptions and sensitivity conclusions have been correctly summarised by management based on their assessment performed. **Key observations:** We consider the judgements made by management when assessing impairment to be appropriate.

Our application of materiality

We apply the concept of materiality both in planning and performing our audit, and in evaluating the effect of misstatements. We consider materiality to be the magnitude by which misstatements, including omissions, could influence the economic decisions of reasonable users that are taken on the basis of the financial statements.

In order to reduce to an appropriately low level the probability that any misstatements exceed materiality, we use a lower materiality level, performance materiality, to determine the extent of testing needed. Importantly, misstatements below these levels will not necessarily be evaluated as immaterial as we also take account of the nature of identified misstatements, and the particular circumstances of their occurrence, when evaluating their effect on the financial statements as a whole.

Our application of materiality continued

Based on our professional judgement, we determined materiality for the financial statements as a whole and performance materiality as follows:

	Group financial statements	Parent Company Financial Statements
	2022 £	2022 £
Materiality	£960,000	£950,400
Basis for determining materiality	5% of Group Profit before Tax, as adjusted for acquisition costs and the fair value adjustment to deferred contingent consideration.	Capped at 99% Group Materiality
Rationale for the benchmark applied	Profit before tax was deemed the appropriate benchmark to calculate materiality as maximising shareholder return is a key objective for the Group. Profit before tax was adjusted to exclude items not reflective of the ongoing operations of the Group.	Capped at 99% Group Materiality given our assessment of component aggregation risk.
Performance materiality	60% - £576,000	60% - £570,240
Basis for determining performance materiality	Performance materiality was determined based on a number of factors including: • Our risk assessment • This is a first year audit. • The Group operates a decentralised management structure.	Performance materiality was determined based on a number of factors including: • Our risk assessment. • This is a first year audit.

Component materiality

We set materiality for each significant component of the Group based on a percentage of between 16% and 99% of Group materiality dependent on the size and our assessment of the risk of material misstatement of that component. Component materiality ranged from £153,700 to £950,400. In the audit of each component, we further applied performance materiality levels of 60% of the component materiality to our testing to ensure that the risk of errors exceeding component materiality was appropriately mitigated.

Reporting threshold

We agreed with the Audit Committee that we would report to them all individual audit differences in excess of £38,400. We also agreed to report differences below this threshold that, in our view, warranted reporting on qualitative grounds.

Other information

The Directors are responsible for the other information. The other information comprises the information included in the Annual Report and Accounts other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Other Companies Act 2006 reporting

Based on the responsibilities described below and our work performed during the course of the audit, we are required by the Companies Act 2006 and ISAs (UK) to report on certain opinions and matters as described below.

Strategic Report and Directors' Report	In our opinion, based on the work undertaken in the course of the audit: • the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and • the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements. In the light of the knowledge and understanding of the Group and Parent Company and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic Report or the Directors' Report.

Other Companies Act 2006 reporting continued

Matters on which we are required to report by exception	We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion: • adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or • the Parent Company financial statements are not in agreement with the accounting records and returns; or • certain disclosures of Directors' remuneration specified by law are not made; or • we have not received all the information and explanations we require for our audit.

Responsibilities of Directors

As explained more fully in the statement of Directors' responsibilities, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Extent to which the audit was capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below:

- We gained an understanding of the legal and regulatory framework applicable at both the Group and component level and the industry in which they operate, and considered the risk of acts by the Group or components that were contrary to applicable laws and regulations, including fraud. We determined that the following laws and regulations were most significant: UK-adopted international accounting standards for the Group and Financial Reporting Standard 101 'Reduced Disclosure Framework' for the Parent Company, Companies Act 2006 and UK tax compliance regulations which is the principal jurisdiction in which the Group operates.
- We discussed among the Group engagement team, component audit teams and relevant internal experts how and where non-compliance with laws and regulations and fraud might occur in the financial statements and any potential indicators of fraud. The engagement team has accumulated extensive knowledge of the industry through their work on the audit of similar entities over a number of years.
- We designed audit procedures to identify instances of non-compliance with such laws and regulations. Our procedures included:
  - reviewing the financial statement disclosures and agreeing to underlying supporting documentation where necessary;
  - with the assistance of our internal tax specialists to performing reviews for employment tax, sales tax and corporation tax for significant components and those components subject to full scope audits;
  - reviewing all Board and Committee meetings held throughout the year for any indicators of non-compliance; and
  - making enquiries of management and of the Directors as to the risks of non-compliance and any instances thereof.

We assessed the susceptibility of the financial statements to material misstatement, including fraud. Our risk assessment procedures included:

- enquiry with management, those charged with governance and the Audit Committee regarding any known or suspected instances of fraud;
- obtaining an understanding of the Group's policies and procedures relating to:
  - detecting and responding to the risks of fraud; and
  - internal controls established to mitigate risks related to fraud.
- review of minutes of meeting of those charged with governance for any known or suspected instances of fraud;
- discussion amongst the engagement team as to how and where fraud might occur in the financial statements;

Auditor's responsibilities for the audit of the financial statements continued

Extent to which the audit was capable of detecting irregularities, including fraud continued

- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud; and
- considering remuneration incentive schemes and performance targets and the related financial statement areas impacted by these.

Based on our risk assessment, we considered the areas most susceptible to fraud to be the risk of fraud in revenue recognition, management override of controls and, for the acquired business, the risk of overstatement relating to performance targets for deferred contingent consideration.

Our procedures in respect of the above included:

- We addressed the risk of management override of controls, considered to be in connection with the posting of inappropriate journals and bias in significant management estimates and judgements, through testing journal entries processed during the year and subsequent to the year end which met a specific criteria, including a review of unusual journal entries that benefited the profit before tax or cash position, consolidation journals and manual late adjustments. Where we identified journals that met our criteria as being unusual, we challenged management and verified these journals to supporting documentation. We also evaluated whether there was evidence of bias in setting significant estimates and judgements by the Directors that represented a risk of material misstatement due to fraud including those set out in the Key Audit Matters section of our report relating to the valuation of Group goodwill, non-current assets and the Parent Company investments in subsidiaries.
- We used data analytics to review the combinations of journals posted to revenue. Where the corresponding debit entries were outside of our expectations, we have obtained supporting documentation from management.
- In response to the risk of fraud in revenue recognition we have performed the procedures set out in the Key Audit Matters section of our report.
- In response to the risk of overstatement relating to performance targets for deferred contingent consideration we have:
  - obtained managements assessment of contingent consideration to be paid and confirmed arithmetic accuracy;
  - compared and confirmed inputs in the calculation to forecast results of the acquired business and the share purchase agreement; and
  - perform specific procedures in relation to journals that would improve the related component's performance against the targets outlined in the share purchase agreement by agreeing these to supporting documentation.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including component engagement teams who were all deemed to have appropriate competence and capabilities and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit. For component engagement teams, we also reviewed the result of their work performed in this regard.

Our audit procedures were designed to respond to risks of material misstatement in the financial statements, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery, misrepresentations or through collusion. There are inherent limitations in the audit procedures performed and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we are to become aware of it.

A further description of our responsibilities is available on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the Parent Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Parent Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Parent Company and the Parent Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Nigel Harker

Senior Statutory Auditor
For and on behalf of BDO LLP, Statutory Auditor
Gatwick, United Kingdom
21 March 2023
BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127), for and on behalf of BDO UK LLP

Consolidated statement of comprehensive income

For the year ended 31 December 2022

	Note	Adjusted £000	Adjusting items £000	2022 Total £000	Adjusted £000	Adjusting items £000	2021 Total £000
Revenue	3	113,208	—	113,208	91,289	—	91,289
Operating costs	3,4,5	(83,097)	(11,936)	(95,033)	(72,512)	(3,158)	(75,670)
Operating profit/(loss)		30,111	(11,936)	18,175	18,777	(3,158)	15,619
Interest income	9	170	—	170	2	—	2
Interest expense	4,9	(1,964)	(414)	(2,378)	(713)	(48)	(761)
Profit/(loss) before tax		28,317	(12,350)	15,967	18,066	(3,206)	14,860
Taxation (charge)/credit	4,10	(4,884)	1,692	(3,192)	(2,753)	797	(1,956)
Profit/(loss) for the year		23,433	(10,658)	12,775	15,313	(2,409)	12,904
Attributable to:							
Owners of the parent		23,076	(10,638)	12,438	15,027	(2,345)	12,682
Non-controlling interests	30	357	(20)	337	286	(64)	222
Profit/(loss) for the year		23,433	(10,658)	12,775	15,313	(2,409)	12,904
Other comprehensive income							
Items that will not be reclassified subsequently to profit or loss							
Retirement benefits actuarial gain				2,136			1,445
Deferred tax on retirement benefits actuarial gain				(534)			(206)
Items that may be reclassified subsequently to profit or loss							
Exchange differences on translation of foreign subsidiaries				87			22
Other comprehensive income for the year, net of tax				1,689			1,261
Total comprehensive income for the year				14,464			14,165
Attributable to:							
Owners of the parent				14,127			13,943
Non-controlling interests				337			222

		2022 Pence	2022 Pence	2021 Pence	2021 Pence
Earnings per share – adjusted					
Basic	12	363.8		238.1	
Diluted	12	359.0		234.9	
Earnings per share – total					
Basic	12		196.1		201.0
Diluted	12		193.5		198.2

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated balance sheet

As at 31 December 2022

	Note	2022 £000	2021 £000
ASSETS			
Non-current assets			
Goodwill	13	**51,436**	18,713
Other intangible assets	14	**44,430**	5,056
Property, plant and equipment	15	**15,873**	8,254
Right-of-use leased assets	16	**4,163**	4,186
Retirement benefit surplus	29	**1,206**	—
Deferred tax assets	17	**—**	3,081
		117,108	39,290
Current assets			
Inventories	18	**22,257**	14,133
Trade and other receivables	19	**25,595**	17,146
Cash and cash equivalents		**20,827**	18,408
		68,679	49,687
Total assets		**185,787**	88,977
LIABILITIES			
Current liabilities			
Trade and other payables	20	**(25,884)**	(19,373)
Payables relating to acquisitions	28	**(34,306)**	—
Borrowings	21	**(6,250)**	(4,657)
Right-of-use lease liabilities	22	**(977)**	(887)
Current tax liabilities		**(2,171)**	(1,726)
		(69,588)	(26,643)
Non-current liabilities			
Borrowings	21	**(49,392)**	(12,351)
Right-of-use lease liabilities	22	**(3,327)**	(3,420)
Deferred tax liabilities	17	**(9,023)**	(1,845)
Retirement benefit obligations	29	**—**	(1,324)
		(61,742)	(18,940)
Total liabilities		**(131,330)**	(45,583)
Net assets		**54,457**	43,394
EQUITY			
Share capital	24	**318**	316
Share premium account	24	**17,206**	16,667
Other reserves	26	**4,085**	1,999
Retained earnings		**32,629**	23,794
Equity attributable to owners of the parent company		**54,238**	42,776
Non-controlling interests	30	**219**	618
Total equity		**54,457**	43,394

The accompanying notes form an integral part of these consolidated financial statements.

The financial statements were approved by the Board on 21 March 2023.

David Cicurel
Director

Brad Ormsby
Director

Consolidated statement of changes in equity

For the year ended 31 December 2022

	Share capital £000	Share premium £000	Other reserves £000	Retained earnings £000	Total attributable to owners of the parent £000	Non-controlling interests £000	Total equity £000
At 1 January 2022	**316**	**16,667**	**1,999**	**23,794**	**42,776**	**618**	**43,394**
Dividends	**—**	**—**	**—**	**(4,372)**	**(4,372)**	**—**	**(4,372)**
Change in non-controlling interest	**—**	**—**	**1,999**	**(1,366)**	**633**	**(736)**	**(103)**
Issue of share capital	**2**	**539**	**—**	**—**	**541**	**—**	**541**
Purchase of own shares for Company reward scheme	**—**	**—**	**—**	**(85)**	**(85)**	**—**	**(85)**
Deferred tax on share-based payments	**—**	**—**	**—**	**(40)**	**(40)**	**—**	**(40)**
Share-based payments	**—**	**—**	**—**	**658**	**658**	**—**	**658**
Transactions with owners	**2**	**539**	**1,999**	**(5,205)**	**(2,665)**	**(736)**	**(3,401)**
Profit for the year	**—**	**—**	**—**	**12,438**	**12,438**	**337**	**12,775**
Retirement benefit actuarial gain	**—**	**—**	**—**	**1,602**	**1,602**	**—**	**1,602**
Foreign exchange differences	**—**	**—**	**87**	**—**	**87**	**—**	**87**
Total comprehensive income for the year	**—**	**—**	**87**	**14,040**	**14,127**	**337**	**14,464**
At 31 December 2022	**318**	**17,206**	**4,085**	**32,629**	**54,238**	**219**	**54,457**
At 1 January 2021	315	16,429	1,977	13,469	32,190	858	33,048
Dividends	—	—	—	(3,630)	(3,630)	—	(3,630)
Change in non-controlling interest	—	—	—	(1,371)	(1,371)	(462)	(1,833)
Issue of share capital	1	238	—	—	239	—	239
Purchase of own shares for Company reward scheme	—	—	—	(53)	(53)	—	(53)
Deferred tax on share-based payments	—	—	—	823	823	—	823
Share-based payments	—	—	—	635	635	—	635
Transactions with owners	1	238	—	(3,596)	(3,357)	(462)	(3,819)
Profit for the year	—	—	—	12,682	12,682	222	12,904
Retirement benefit actuarial gain	—	—	—	1,239	1,239	—	1,239
Foreign exchange differences	—	—	22	—	22	—	22
Total comprehensive income for the year	—	—	22	13,921	13,943	222	14,165
At 31 December 2021	316	16,667	1,999	23,794	42,776	618	43,394

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated cashflow statement

For the year ended 31 December 2022

	2022 £000	2021 £000
Cashflows from operating activities		
Profit after tax	12,775	12,904
Adjustments for:		
Financial instruments measured at fair value: hedging contracts	(2,286)	(190)
Share-based payments	658	635
Depreciation of property, plant and equipment	1,305	1,039
Depreciation of right-of-use leased assets	1,133	1,066
Amortisation of acquired intangible assets	8,440	2,638
Amortisation of internally generated intangible assets	94	11
Profit on disposal of property, plant and equipment	(22)	(37)
Interest income	(170)	(2)
Interest expense	1,791	516
Interest payable on right-of-use lease liabilities	173	197
Unwinding of discount on fair value of deferred consideration	2,600	—
Retirement benefit obligation net finance cost	26	48
Contributions to defined benefit plans	(420)	(574)
Tax expense recognised in the Consolidated Statement of Comprehensive Income	3,192	1,956
Increase in inventories	(4,167)	(1,548)
Increase in trade and other receivables	(3,112)	(2,806)
Decrease in trade and other payables	1,948	3,726
Cash generated from operations	23,958	19,579
Tax paid	(2,118)	(2,180)
Net cash from operating activities	21,840	17,399
Cashflows from investing activities		
Paid on acquisition of subsidiaries	(45,000)	—
Payment in respect of surplus working capital	(17,806)	—
Gross cash inherited on acquisition	19,610	—
Acquisition of subsidiaries, net of cash acquired	(43,196)	—
Purchase of property, plant and equipment	(6,435)	(2,652)
Capitalised development costs	(1,458)	(796)
Proceeds on disposal of property, plant and equipment	80	74
Interest received	170	2
Net cash used in investing activities	(50,839)	(3,372)
Cashflows from financing activities		
Proceeds from issue of share capital	316	239
Purchase of own shares for Company reward scheme	(85)	(53)
Finance costs paid	(1,791)	(516)
Repayments of borrowings*	(6,496)	(4,207)
Repayments of right-of-use lease liabilities	(1,279)	(1,164)
Proceeds from bank loans**	45,130	—
Equity dividends paid	(4,372)	(3,630)
Paid on acquisition of non-controlling interest in subsidiary	(102)	(1,833)
Net cash from/(used in) financing activities	31,321	(11,164)
Net change in cash and cash equivalents	2,322	2,863
Cash and cash equivalents at the start of the year	18,408	15,523
Exchange movements	97	22
Cash and cash equivalents at the end of the year	20,827	18,408

* On 23 May 2022, £15.2 million of outstanding loans were repaid and £60.3 million was simultaneously reborrowed as the Group renewed its banking facilities (see note 21).

** On 25 May 2021, £19.0 million of outstanding loans were repaid and simultaneously reborrowed as the Group renewed its banking facilities.

The accompanying notes form an integral part of these consolidated financial statements.

Notes to the consolidated financial statements

For the year ended 31 December 2022

1. General information

Judges Scientific plc is the ultimate parent company of the Group, whose principal activities comprise the design, manufacture and sale of scientific instruments.

Judges Scientific plc is incorporated and domiciled in the UK and its registered office is 52c Borough High Street, London SE1 1XN.

2. Summary of significant accounting policies

Basis of preparation

The consolidated financial statements have been prepared under the historical cost convention except for certain financial instruments which are carried at fair value.

Being quoted on the Alternative Investment Market of the London Stock Exchange, the Company has prepared its consolidated financial statements in accordance with UK-adopted international accounting standards (IAS) and those parts of the Companies Act 2006 that applies to companies reporting under IAS. Accordingly, these financial statements have been prepared in accordance with the accounting policies set out below which are based on the aforementioned IAS and in effect at 31 December 2021.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed under "Use of key accounting estimates and judgements."

Going concern

The consolidated financial statements have been prepared on a going concern basis. The Directors have taken note of guidance issued by the Financial Reporting Council on Going Concern Assessments in determining that this is the appropriate basis of preparation of the financial statements. The Group ended 2022 with adjusted net debt of £52.0 million compared to adjusted net cash of £1.4 million at 31 December 2021, after acquiring Geotek for a consideration of £80 million during the year (see note 28). The Group uses adjusted net debt rather than statutory net debt for this comparison, as this figure includes actual cash liabilities arising from acquisitions which are due within one year. The increase in net debt was only £53 million as a result of consistent cash generation arising from strong performance of the Group's principal operating companies, supported by Organic order intake greater than revenue. The net debt increase is after outlays for dividends to our shareholders (£4.3 million), paying our fair share of tax (£2.1 million) and ongoing investment into capital expenditure and properties for the businesses (£6.4 million). In addition the Group also refinanced its borrowing facilities in May 2022 for a further four-year term providing the Group with greater certainty over long-term liquidity (see note 21).

The Directors have considered the ongoing impact of the war in Ukraine, the Covid-19 pandemic and the recent increases in interest rates, and a summary of the implications is included in the Strategic Report. The Group is in a strong financial position with high cash balances, low gearing and a solid future order book enabling it to face the challenge of the continued uncertain global economic environment due to both the war in Ukraine and ongoing Covid-19 restrictions. The Directors have planned for reasonably foreseeable worsening scenarios including a repetition of the same level of reduction in orders in 2023 as happened after the first outbreak of Covid-19 in 2020, which would not cause any significant challenges to the Group's continued existence.

The Directors therefore have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. In making this assessment the Directors have considered the period until the end of March 2024 and therefore continue to adopt the going concern basis in preparing the Annual Report and Accounts.

Changes in accounting policies

Standards, amendments and interpretations to existing standards that are not yet effective

At the date of approval of these consolidated financial statements, certain new standards, amendments to and interpretations of existing standards have been published but are not yet effective. None of these pronouncements have been adopted early by the Group, and they have not been disclosed as they are not expected to have a material impact on the Group's financial statements. Management anticipates that all relevant pronouncements will be adopted for the first period beginning on or after their effective date.

Consolidation

The consolidated financial statements include those of the parent company and its subsidiaries. Subsidiaries are entities where the Group is exposed, or has rights, to variable returns from its involvement with the subsidiary and has the ability to affect those returns through its power over the subsidiary. The Group obtains and exercises control through voting rights. Income, expenditure, unrealised gains and intra-Group balances arising from transactions within the Group are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

The Group uses the purchase method of accounting for the acquisition of a subsidiary. Acquisition consideration is measured at the fair value of the consideration given, equity instruments issued and liabilities incurred or assumed at the date of exchange.

Business combination costs directly attributable to the acquisition are immediately written off through the Consolidated Statement of Comprehensive Income. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date irrespective of the extent of any non-controlling interest. The excess of the cost of acquisition over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill. If the cost of the acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognised directly in the Consolidated Statement of Comprehensive Income.

2. Summary of significant accounting policies continued

Consolidation continued

The parent company has taken the merger relief that is required by section 612 of the Companies Act 2006 in respect of the fair value of the consideration received in excess of the nominal value of the equity shares issued in connection with the acquisition of Fire Testing Technology Limited, UHV Design Limited, Scientifica Limited and Armfield Limited.

Goodwill

Goodwill is the difference between the fair value of the consideration paid and the fair value of the net identifiable assets and liabilities acquired in a business combination. Following recognition, it is not amortised; however, it is subject to impairment testing on an annual basis or more frequently if circumstances indicate that the asset may have become impaired and is carried at cost less accumulated impairment losses. Goodwill is allocated to cash-generating units for the purpose of impairment testing.

Revenue recognition

In accordance with IFRS 15 "Revenues from Contracts with Customers", revenue is measured by reference to the fair value of consideration received or receivable by the Group, excluding value added tax (or similar local sales tax), in exchange for transferring the promised goods or services to the customer. The consideration is allocated to each separate performance obligation that is identified in a sales contract, based on stand-alone selling prices. Sales of instruments and spares, and sales of services, such as material service contracts, non-specialised installation and training, extended warranty, maintenance and service, contract testing, software licences or consultancy, are assessed to be separate performance obligations.

Revenue is recognised when (or as) the Group satisfies the identified performance obligation. For sales of instruments, spares, installation, and one-off services, the performance obligation is satisfied at a point in time; for revenue from other services, the performance obligation is satisfied over time. As the period of time between payment and performance is less than one year, the Group does not adjust revenue for the effects of financing.

Revenue from sales of instruments and spares is recognised at the point at which the customer obtains control of the asset. This is usually on dispatch of the instrument; however, for sales of instruments from overseas subsidiaries, it is when the customer receives the goods. Revenue from installations and one-off services is recognised at the point at which the installation or service is completed. For large, complex instruments which require highly specialised installation, revenue from both the instrument and installation is recognised at the point at which installation is completed.

Revenue from material service contracts is recognised when the contractual obligation to be on site is fulfilled and spread over the term of the contract, based on the input cost method.

Revenue from extended warranty, maintenance and testing contracts and software licences is recognised rateably as the performance obligation to the customer is satisfied.

Receipts from customers for instruments, either part or in full, in advance of their date of shipping are recognised within accruals and payments-on-account within note 20.

Segment reporting

The Group's activities are predominantly in or in support of the design and manufacture of scientific instruments. The Group operates two main operating segments: Materials Sciences and Vacuum. No operating segments have been aggregated.

Operating segments are reported in a manner consistent with internal reporting provided to the Executive Directors, which is responsible for allocating and assessing performance of operating segments, and which is considered to be the Chief Operating Decision Maker. Each segment's range of instruments has its individual requirements in terms of design, manufacture and marketing.

Intangible assets acquired as part of a business combination

In accordance with IFRS 3 "Business Combinations", an intangible asset acquired in a business combination is deemed to have a cost to the Group of its fair value at the acquisition date. The fair value of the intangible asset reflects market expectations about the probability that the future economic benefits embodied in the asset will flow to the Group.

Amortisation charges are included as adjusting items in operating costs in the Consolidated Statement of Comprehensive Income. Amortisation is provided at rates calculated to write off the cost of each intangible asset over its expected useful life, as follows:

Acquired customer relationships	Between 3 and 5 years
Acquired non-competition agreements	2 years
Acquired distribution agreements	Between 2 and 5 years
Acquired technology	Between 5 and 7 years
Acquired sales order backlog	Upon recognition of the related revenue
Acquired brand and domain names	Between 1 and 5 years

Subsequent to initial recognition, intangible assets are stated at deemed cost less accumulated amortisation.

2. Summary of significant accounting policies continued

Research and development

Research and development expenditure is recognised in the Consolidated Statement of Comprehensive Income as an expense until it can be demonstrated that the conditions for capitalisation under IAS 38 Intangible Assets apply.

The criteria for capitalisation include demonstration that the project is technically and commercially feasible, the Group has sufficient resources to complete development and the asset will generate probable future economic benefit. Assets capitalised are amortised on a straight-line basis over three years from the start of the commercial sales life.

Property, plant and equipment

Property, plant and equipment is stated at historical cost, less accumulated depreciation.

Depreciation is provided at annual rates calculated to write off the cost less residual value of each asset over its expected useful life (with the exception of land which is held at cost and reviewed annually for impairment), within the following ranges:

Freehold buildings	50 years (excluding the estimated cost of land)
Plant and machinery	7 years
Fixtures, fittings and equipment	Between 3 and 10 years
Motor vehicles	4 years
Building improvements	Over the minimum term of the lease

Material residual value estimates and expected useful lives are updated as required but at least annually.

Where an asset is disposed, the gain or loss arising on the disposal is determined as the difference between the disposal proceeds and the carrying amount of the asset and is recognised in the Consolidated Statement of Comprehensive Income.

Impairment testing of goodwill, other intangible assets, property, plant and equipment and right-of-use assets

For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows (cash-generating units). As a result, some assets are tested individually for impairment and some are tested at cash-generating unit level. Goodwill is allocated to those cash-generating units that are expected to benefit from synergies of the related business combination and represent the lowest level within the Group at which management monitors goodwill.

Cash-generating units to which goodwill has been allocated are tested for impairment at least annually. All other individual assets or cash-generating units are tested whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

An impairment loss is recognised for the amount by which the asset's or cash-generating unit's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of fair value, reflecting market conditions less costs to sell, and value in use. Value in use is based on estimated future cashflows from each cash-generating unit, discounted at a suitable rate in order to calculate the present value of those cashflows. The data used for impairment testing procedures is directly linked to the Group's latest approved budgets, adjusted as necessary to exclude any future restructuring to which the Group is not yet committed. Discount rates are determined individually for each cash-generating unit and reflect their respective risk profiles as assessed by the Directors.

Impairment losses for cash-generating units reduce first the carrying amount of any goodwill allocated to that cash-generating unit. Any remaining impairment loss is charged pro rata to the other assets in the cash-generating unit. With the exception of goodwill, all assets are subsequently reassessed for indications that an impairment loss previously recognised may no longer exist. Impairment charges are included in operating costs in the Consolidated Statement of Comprehensive Income. An impairment charge that has been recognised is reversed if the cash-generating unit's recoverable amount exceeds its carrying amount.

Leases

Any contract entered into, which contains an identified asset, whose use the Group has the right to direct throughout the period of the lease, and the right to obtain substantially all of the economic benefits from, is accounted for as a lease. At the lease commencement date, the Group recognises a right-of-use leased asset and a right-of-use lease liability on the balance sheet. The lease liability is measured at the present value of the total lease payments due, discounted using the interest rate implicit in the lease if readily available, or at the Group's incremental borrowing rate. The right-of-use asset is measured at cost, being the lease liability, plus any initial direct costs incurred by the Group, the present value of any contractual provisions such as dilapidations, or lease payments made in advance of the commencement date.

Right-of-use assets are depreciated on a straight-line basis to the end of the lease term. The Group assesses the right-of-use asset for impairment when such indicators exist.

The lease liability is repaid over the life of the lease, through the lease payments, which includes interest which is accrued monthly at the same rate used to calculate the liability. Lease liabilities are remeasured to reflect any reassessment or modification of the lease – when the lease liability is remeasured, the corresponding adjustment is reflected in the right-of-use leased asset, or in the Consolidated Statement of Comprehensive Income if the asset is already reduced to zero.

2. Summary of significant accounting policies continued

Inventories

Inventories are recorded at the lower of cost and net realisable value. Costs of ordinarily interchangeable items are assigned using the first-in, first-out cost formula. Cost includes materials, direct labour and an attributable proportion of manufacturing overheads based on normal levels of activity.

Taxation

Current tax is the tax currently payable based on taxable profit for the year.

Deferred taxes are calculated using the liability method on temporary differences. Deferred tax is generally provided on the difference between the carrying amounts of assets and liabilities and their tax bases. However, deferred tax is not provided on the initial recognition of goodwill, nor on the initial recognition of an asset or liability unless the related transaction is a business combination or affects tax or accounting profit. Deferred tax on temporary differences associated with shares in subsidiaries is not provided if reversal of those temporary differences can be controlled by the Group and it is probable that reversal will not occur in the foreseeable future. In addition, tax losses available to be carried forward as well as other income tax credits to the Group are assessed for recognition as deferred tax assets.

Deferred tax liabilities are provided in full, with no discounting. Deferred tax assets are recognised to the extent that it is probable that the underlying deductible temporary differences will be able to be offset against future taxable income. Current and deferred tax assets and liabilities are calculated at tax rates that are expected to apply to their respective period of realisation, provided they are enacted or substantively enacted at the balance sheet date.

Changes in deferred tax assets or liabilities are recognised as a component of tax expense in the Consolidated Statement of Comprehensive Income, except:

- where they relate to items that are charged or credited directly to equity in which case the related deferred tax is also charged or credited directly to equity; or
- where items are recognised in other comprehensive income, in which case the related deferred tax is recognised in other comprehensive income.

Share-based employee compensation

The Group operates equity-settled share-based compensation plans for remuneration of its Directors and employees.

All employee services received in exchange for the grant of any share-based compensation are measured at their fair values. The fair value is appraised at the grant date and excludes the impact of any non-market vesting conditions (e.g. profitability or sales growth targets).

Share-based compensation is recognised as an expense in the Consolidated Statement of Comprehensive Income with a corresponding credit to retained earnings. If vesting periods or other vesting conditions apply, the expense is allocated over the vesting period, based on the best available estimate of the number of share options expected to vest. Non-market vesting conditions are included in assumptions about the number of share options that are expected to become exercisable. Estimates are subsequently revised if there is any indication that the number of share options expected to vest differs from previous estimates.

The proceeds received net of any directly attributable transaction costs are credited to share capital and share premium when the options are exercised.

Financial assets

Financial assets consist of cash and cash equivalents, trade and other receivables and derivatives.

Financial assets measured at amortised cost

Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and in hand and short-term deposits which are subject to an insignificant risk of changes in value.

Trade and other receivables

Trade receivables are recognised and carried at the original invoice amount less a provision for uncollectable amounts. An estimate of uncollectable amounts is made on initial recognition of each receivable based on any future expected risk of non-collection. This estimate is updated should collection of the amount become no longer probable. The Group uses historical experience and external information to determine the need for, and quantum of, any such provision. Uncollectable amounts are written off to the Consolidated Statement of Comprehensive Income when identified.

Financial assets measured at fair value

Interest rate swaps and foreign currency options are treated as derivative financial instruments and are accounted for at fair value through profit and loss.

2. Summary of significant accounting policies continued

Financial liabilities

Financial liabilities are obligations to pay cash or other financial assets and are recognised when the Group becomes a party to the contractual provisions of the instrument. Financial liabilities are recorded initially at fair value net of direct issue costs if they are not held at fair value through profit and loss. Derivatives are recorded at fair value through profit or loss. The fair value of derivative financial instruments is determined by reference to active market transactions or using a valuation technique where no active market exists.

All financial liabilities with the exception of out-of-the-money interest rate swaps and foreign currency options are recorded at amortised cost using the effective interest method, with interest-related charges recognised as an expense in finance cost in the Consolidated Statement of Comprehensive Income.

These financial liabilities include trade and other payables, accruals and external borrowings, including bank loans and right-of-use lease liabilities. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are charged to the Consolidated Statement of Comprehensive Income on an accruals basis using the effective interest method and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Interest rate swaps and foreign currency options are treated as derivative financial instruments and are accounted for at fair value through profit and loss. Contingent acquisition consideration is also accounted for at fair value through profit and loss.

A financial liability is derecognised only when the obligation is extinguished, that is, when the obligation is discharged or cancelled or expires.

Employee benefits – Defined contribution plans

The Group operates defined contribution pension schemes for employees and Directors. The assets of the schemes are held by investment managers separately from those of the Group. The contributions payable to these schemes are recorded in the Consolidated Statement of Comprehensive Income in the accounting period to which they relate.

Employee benefits – Defined benefit plans

The Group operates a funded defined benefit scheme, where payments are made to trustee administered funds. The asset or liability recognised in the Consolidated Balance Sheet is calculated as the present value of the defined benefit obligation less the fair value of the plan assets, as at the balance sheet date.

The defined benefit obligation is calculated at least triennially by independent actuaries using the projected unit credit method and is determined by discounting the estimated future cash outflows using interest rates of high quality corporate bonds, matched to the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation. The plan administration expenses and past service costs or credits are recognised as an operating expense in the Consolidated Statement of Comprehensive Income. There is no current service cost. The retirement benefits obligation net finance cost is the change during the year in the net defined benefit liability due to the passage of time and is recognised as an interest expense in the Consolidated Statement of Comprehensive Income. The interest rate is based on the yield on high quality corporate bonds. Actuarial gains and losses arising from changes in actuarial assumptions and experience adjustments are recognised in the Consolidated Statement of Comprehensive Income in the year which they arise.

Foreign currencies

Transactions in foreign currencies are translated at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities in foreign currencies are translated at the rates of exchange ruling at the balance sheet date. Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were initially recorded are recognised in the Consolidated Statement of Comprehensive Income in the period in which they arise. In respect of overseas subsidiaries on consolidation, assets and liabilities are translated at the closing rate and income and expenses are translated at the average rate over the reporting period. Exchange differences are recorded in other comprehensive income.

Interest income

Interest income is recognised using the effective interest method which calculates the amortised cost of a financial asset and allocates the interest income over the relevant period.

Dividends

Final dividend distributions payable to equity shareholders are included in trade and other payables when the dividends are approved in general meeting but not paid prior to the balance sheet date. Interim dividends are recognised in the period in which they are paid.

Equity

Equity comprises the following:

Share capital

Share capital represents the nominal value of equity shares.

Share premium

Share premium represents the excess over nominal value of the fair value of consideration received for equity shares, net of expenses of the share issue.

2. Summary of significant accounting policies continued

Equity continued

Capital redemption reserve

Capital redemption reserve represents amounts set aside from retained earnings on conversion of convertible redeemable shares equal to the reduction then arising in the overall nominal value of share capital of all classes.

Merger reserve

Merger reserve represents the fair value of the consideration received in excess of the nominal value of equity shares issued in connection with acquisitions where the Company has taken the merger relief that is required by section 612 of the Companies Act 2006.

Retained earnings

Retained earnings represents retained profits and losses, dividends and equity-settled share-based payment credits.

Non-controlling interests

Non-controlling interests represent retained profits and losses attributable to minority shareholders in subsidiary companies.

Adjusting items

Adjusting items (and their related tax impact) are those which by their size or nature the Directors consider should be disclosed separately for the purposes of presenting results and earnings per share figures so as to enable users of the financial statements to evaluate more effectively the underlying operating performance of the Group. Amortisation of intangible assets recognised following an acquisition is excluded from the underlying performance as these assets are not otherwise allowed to be recognised in the normal course of business. Acquisition costs are also considered to be a cost outside of normal trading and are therefore presented separately. Movements in the fair value of future hedging is also excluded from normal trading as the total cost of the hedge is recorded as a trading expense in the period to which the hedge relates. Share-based payments have consistently been treated as non-trading cost as these are non-cash and equity related, together with any corporation tax benefit arising from the exercise of share options. Normal costs of restructuring are treated as a trading expense, and not as an adjusting item as these are considered to be a normal cost of doing business.

Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of a past event, it is likely that an outflow of resource will be required to settle the obligation and that the amount of the probable outflow can be reasonably estimated. Where the Group expects all or some of the obligation to be reimbursed, the reimbursement is recognised as a separate asset to the extent that it is virtually certain to be reimbursed. The expense relating to any provision is presented in the Consolidated Statement of Comprehensive Income net of any reimbursement.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the year-end date. If material, provisions are determined by discounting the expected future cashflows using rates that reflect current market assessments of the time value of money.

Government grants

Government grants are recognised at their fair value in the Consolidated Statement of Comprehensive Income over the same period as the costs to which the grants relate, and is only recognised once there is a reasonable assurance that the Company has complied with the conditions of the grant and that the grant will be received.

Use of key accounting estimates and judgements

Many of the amounts included in the consolidated financial statements involve the use of judgement and/or estimation. These judgements and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to prior experience, but actual results may differ from the amounts included in the consolidated financial statements. Information about such judgements and estimation is contained in the accounting policies and/or the notes to the consolidated financial statements and the key areas are summarised below.

Judgements in applying accounting policies

- **Fair value assessment of a business combination:** Following an acquisition the Group makes an assessment of all assets and liabilities, inclusive of making judgements on the identification of specific intangible assets which are recognised separately from goodwill. These include items such as brand names and customer lists, to which value is first attributed at the time of acquisition. The valuation process for the intangible assets requires a number of judgements to be made regarding future performance of an acquisition, together with other asset-specific factors. In order to estimate the fair value of separately identifiable assets in business combinations certain judgements must be made about future trading performance, royalty rates and customer attrition rates. Where acquisitions are significant, appropriate advice is sought from professional advisers before making such allocations. The fair values of assets and liabilities acquired in business combinations are disclosed in note 28 and the carrying values of separately identifiable intangible assets initially measured at fair value are disclosed in note 14.
- **Capitalisation of development costs:** Expenditure incurred in the development of major new products is capitalised as internally generated intangible assets only when it has been judged that strict criteria are met, specifically in relation to the products' technical feasibility and commercial viability (the ability to generate probable incremental future economic benefits for the Group). The assessment of technical feasibility and future commercial viability of development projects requires significant judgement particularly around whether a product in development will have a sufficient appeal to its niche market and also the level of marketplace competition. During 2022 the Group capitalised £1,458,000 of expenditure on new or significantly improved products (2021: £796,000), as per note 14.

2. Summary of significant accounting policies continued

Use of key accounting estimates and judgements continued

Judgements in applying accounting policies continued

- **Fair value assessment of business combination consideration:** Following an acquisition the Group is required to determine the value of contractual contingent consideration. The Directors will therefore estimate the expected performance of the acquired business and the amount of contingent consideration that will therefore become payable. Additionally, where the value of such contingent consideration is material, the contingent consideration will be discounted to reflect the time value of money and the consideration will therefore be recorded at its present value at the date of the acquisition. Subsequently the discount will be unwound as the due date for payment approaches.
- **Revenue recognition on material service contracts:** Where the Company has a material service contract deliverable over a short-term period (usually less than six months) it used the input method in accordance with IFRS 15 to recognise revenue. This requires judgement in arriving at the expected total cost and margin attributable to the project and then matching the revenue with the forecast total cost incurred to date.

Sources of estimation uncertainty

- **Retirement benefits:** Determining the value of the future defined benefit obligation involves significant estimates in respect of the assumptions used to calculate present values. These include discount rates, future mortality and inflation. The Group uses previous experience and independent actuarial advice to select the values for critical estimates. See note 29 for additional information.
- **Carrying value of goodwill:** In carrying out impairment reviews of goodwill, a number of significant assumptions have to be made when preparing cashflow projections to determine the value in use of the asset or cash-generating unit (CGU). These include the future rate of market growth, discount rates, the market demand for the products acquired and the future profitability of acquired businesses or products. If actual results differ or changes in expectations arise, impairment charges may be required which may adversely impact the statutory results. Further information can be found in note 13.
- **Valuation of acquired intangible assets:** Following an acquisition the Group is required to make an assessment to identify and value separable intangible assets. The assumptions involved in valuing these intangible assets require the use of certain estimates. The estimates made in relation to valuing acquired intangible assets include future growth rates, expected inflation and discount rates. Further estimates are made in relation to the useful economic lives of the acquired intangible assets. Third party specialists are engaged to assist with this valuation. Further details on intangible assets are disclosed in note 14.

3. Segmental analysis

For the year ended 31 December 2022	Note	Materials Sciences £000	Vacuum £000	Head office £000	Total £000
Revenue		59,868	53,340	—	113,208
Adjusted operating costs		(41,619)	(38,178)	(3,300)	(83,097)
Adjusted operating profit		18,249	15,162	(3,300)	30,111
Adjusting items	4				(11,936)
Operating profit					18,175
Net interest expense					(2,208)
Profit before tax					15,967
Income tax charge					(3,192)
Profit for the year					12,775

For the year ended 31 December 2021	Note	Materials Sciences £000	Vacuum £000	Head office £000	Total £000
Revenue		40,716	50,573	—	91,289
Operating costs		(33,251)	(35,531)	(3,730)	(72,512)
Adjusted operating profit		7,465	15,042	(3,730)	18,777
Adjusting items	4				(3,158)
Operating profit					15,619
Net interest expense					(759)
Profit before tax					14,860
Income tax charge					(1,956)
Profit for the year					12,904

Head office items relate to the Group's head office costs.

3. Segmental analysis continued

Segment assets and liabilities

At 31 December 2022	Materials Sciences £000	Vacuum £000	Head office £000	Total £000
Assets	**54,684**	**38,373**	**92,730**	**185,787**
Liabilities	**(24,432)**	**(11,729)**	**(95,169)**	**(131,330)**
Net assets	**30,252**	**26,644**	**(2,439)**	**54,457**
Capital expenditure	**506**	**5,924**	**5**	**6,435**
Depreciation of property, plant and equipment	**589**	**660**	**56**	**1,305**
Depreciation of right-of-use leased assets	**691**	**386**	**56**	**1,133**
Amortisation of acquired intangible assets	**7,361**	**1,079**	**—**	**8,440**
Amortisation of internally generated intangible assets	**26**	**68**	**—**	**94**

At 31 December 2021	Materials Sciences £000	Vacuum £000	Head office £000	Total £000
Assets	27,087	35,671	26,219	88,977
Liabilities	(13,423)	(11,873)	(20,287)	(45,583)
Net assets	13,664	23,798	5,932	43,394
Capital expenditure	384	2,253	15	2,652
Depreciation of property, plant and equipment	362	624	53	1,039
Depreciation of right-of-use leased assets	536	474	56	1,066
Amortisation of acquired intangible assets	1,070	1,568	—	2,638

Head office items include borrowings, intangible assets and goodwill arising on acquisition, deferred tax, defined benefit obligations and parent company net assets.

Analysis of revenue by geographical areas

	Revenue		Non-current assets	
Geographic analysis	Year to 31 December 2022 £000	Year to 31 December 2021 £000	Year to 31 December 2022 £000	Year to 31 December 2021 £000
UK (domicile)	**13,255**	14,776	**116,322**	39,073
Rest of Europe	**32,264**	29,488	**—**	—
North America	**31,914**	20,034	**722**	217
China/Hong Kong	**13,948**	11,103	**—**	—
Rest of the World	**21,827**	15,888	**64**	—
	113,208	91,289	**117,108**	39,290

Segmental revenue is presented on the basis of the destination of the goods where known, otherwise the geographical location of customers is utilised.

Analysis of revenue by performance obligation

	2022 £000	2021 £000
Sale of goods, recognised at a point in time	**98,410**	87,622
Sale of services, recognised at a point in time	**3,702**	3,259
Sale of services, recognised over time	**11,096**	408
	113,208	91,289

No customer makes up more than 10% of the Group's revenues.

4. Adjusting items

	2022 £000	2021 £000
Amortisation of acquired intangible assets	8,440	2,638
Financial instruments measured at fair value: hedging contracts	(74)	(190)
Share-based payments (note 25)	658	635
Employment taxes arising from share-based payments	(119)	90
Acquisition costs (note 28)	3,031	(15)
Total adjusting items in operating profit	11,936	3,158
Unwinding of discount on fair value of deferred consideration (note 28)	2,600	—
Retirement benefits obligation net interest cost (note 29)	26	48
Financial instruments measured at fair value: interest rate swaps (note 23)	(2,212)	—
Total adjusting items	12,350	3,206
Taxation	(1,692)	(797)
Total adjusting items net of tax	10,658	2,409
Attributable to:		
Owners of the parent	10,638	2,345
Non-controlling interest	20	64
	10,658	2,409

5. Operating costs

	2022 £000	2021 £000
Raw materials and consumables	36,150	33,247
Staff costs	31,465	26,769
Other external charges	12,950	10,540
Government grants	—	(160)
Depreciation of property, plant and equipment	1,305	1,039
Depreciation of right-of-use leased assets	1,133	1,066
Amortisation of internally generated intangible assets	94	11
Other operating costs, excluding adjusting items	83,097	72,512
Amortisation of acquired intangible assets	8,440	2,638
Hedging contracts	(74)	(190)
Share-based payments	658	635
Employment taxes arising from share-based payments	(119)	90
Acquisition costs	3,031	(15)
Total operating costs	95,033	75,670

Research and development expenditure totalled £6,832,000 (2021: £6,221,000) of which £1,458,000 (2021: £796,000) was capitalised in the year. Income from government grants of £nil (2021: £160,000) relates to claims made under the UK Government's Coronavirus Job Retention Scheme.

6. Remuneration of key senior management

	2022 £000	2021 £000
Short-term employee benefits:		
Salaries including bonuses and social security costs	3,073	2,847
Share-based payments	558	531
Company car allowance and other benefits	86	82
Total short-term employee benefits	3,717	3,460
Post-employment benefits:		
Defined contribution pension plans	146	103
Total post-employment benefits	146	103
	3,863	3,563

6. Remuneration of key senior management continued

Key management personnel comprise Directors of the parent company and the Managing Directors of the principal operating companies and totalled 23 (2021: 22).

Remuneration of Directors is disclosed in the Remuneration Report on pages 36 to 38 and in the parent company note 13.

7. Employees

Employment costs

	2022 £000	2021 £000
Wages and salaries	**28,367**	23,802
Social security costs	**2,578**	2,319
Defined contribution pension costs	**1,441**	1,179
Capitalised development costs	**(921)**	(531)
	31,465	26,769
Share-based payments	**658**	635
	32,123	27,404

Average number of employees

	2022 No.	2021 No.
By function:		
Manufacturing	**317**	231
Sales and administration	**305**	309
	622	540
By operating segment:		
Materials Sciences	**315**	256
Vacuum	**294**	273
Head office (includes Non-Executive Directors in both years)	**13**	11
	622	540

8. Operating profit

	2022 £000	2021 £000
Operating profit is stated after charging:		
Fees payable to the Company's auditor:		
for the audit of the Company's annual accounts	**120**	100
Fees payable to the Company's auditor for other services:		
for the audit of the Company's subsidiaries, pursuant to legislation	**442**	287
for audit-related assurance services	**10**	5
for non-audit services	**—**	—
Depreciation of property, plant and equipment	**1,305**	1,039
Depreciation of right-of-use fixed assets	**1,133**	1,066
Amortisation of internally generated intangible assets	**94**	11
Amortisation of acquired intangible assets	**8,440**	2,638

9. Interest income and expense

	2022 £000	2021 £000
Interest income – short-term bank deposits	**170**	2
Interest expense – bank loans	**(1,791)**	(516)
Interest expense – payable on right-of-use lease liabilities	**(173)**	(197)
Net interest expense before adjusting items	**(1,794)**	(711)
Unwinding of discount on fair value of deferred consideration	**(2,600)**	—
Financial instruments measured at fair value: hedging contracts	**2,212**	—
Retirement benefits obligation net finance cost	**(26)**	(48)
Net interest expense	**(2,208)**	(759)

10. Taxation charge/(credit)

	2022 £000	2021 £000
UK corporation tax at 19% (2021: 19%)		
Current year charge	**3,201**	3,175
Adjustment in respect of prior years	**(1,078)**	(907)
Foreign tax suffered	**663**	99
	2,786	2,367

The prior year's current tax adjustments represent claims for UK Research and Development tax credits.

	2022 £000	2021 £000
Deferred tax – origination and reversal of temporary differences:		
Current year charge/(credit)	**300**	(542)
Adjustment in respect of prior years	**(2)**	(26)
Effect of changes in tax rates	**108**	157
	406	(411)
Tax on profit for the year – current year	**4,272**	2,889
Tax on profit for the year – prior years	**(1,080)**	(933)
	3,192	1,956
Factors affecting the tax charge for the year:		
Profit before tax	**15,967**	14,860
Profit before tax multiplied by standard rate of UK corporation tax of 19% (2021: 19%)	**3,034**	2,823
Share options	**(104)**	(219)
Provisions and expenditure not deductible for tax purposes	**1,172**	128
Changes in tax rates	**108**	157
Overseas tax	**62**	9
Utilisation of previously unrecognised losses	**—**	(9)
Tax on profit for the year – current year	**4,272**	2,889
Tax on profit for the year – prior years	**(1,080)**	(933)
Total net taxation charge	**3,192**	1,956

11. Dividends

	2022		2021	
	Pence per share	£000	Pence per share	£000
Final dividend for the previous year	**47.0**	**2,973**	38.5	2,430
Interim dividend for the current year	**22.0**	**1,399**	19.0	1,200
Total final and interim dividend	**69.0**	**4,372**	57.5	3,630

The Directors will propose a final dividend of 59.0p per share, amounting to £3,760,000, for payment on 7 July 2023. As the final dividend remains conditional on shareholders' approval at the Annual General Meeting, provision has not been made for this dividend in these consolidated financial statements.

12. Earnings per share

	Note	2022 £000	2021 £000
Profit attributable to owners of the parent			
Adjusted profit		**23,076**	15,027
Adjusting items	4	**(10,638)**	(2,345)
Profit for the year		**12,438**	12,682

	2022 Pence	2021 Pence
Earnings per share – adjusted		
Basic	**363.8**	238.1
Diluted	**359.0**	234.9
Earnings per share – total		
Basic	**196.1**	201.0
Diluted	**193.5**	198.2

	Note	2022 Number	2021 Number
Issued Ordinary shares at the start of the year		**6,318,415**	6,299,163
Movement in Ordinary shares during the year	24	**51,331**	19,252
Issued Ordinary shares at the end of the year		**6,369,746**	6,318,415
Weighted average number of shares in issue		**6,342,759**	6,310,608
Dilutive effect of share options		**85,077**	87,786
Weighted average Ordinary shares in issue on a diluted basis		**6,427,836**	6,398,394

Adjusted basic earnings per share is calculated on the adjusted profit, which excludes any adjusting items, attributable to the Company's shareholders divided by the weighted average number of shares in issue during the year.

Adjusted diluted earnings per share is calculated on the adjusted basic earnings per share, adjusted to allow for the issue of Ordinary shares on the assumed conversion of all dilutive share options and any other dilutive potential Ordinary shares. The calculation is based on the treasury method prescribed in IAS 33. This calculates the theoretical number of shares that could be purchased at the average middle market price in the period out of the proceeds of the notional exercise of outstanding options. The difference between this theoretical number and the actual number of shares under option is deemed liable to be issued at nil value and represents the dilution.

Total earnings per share are calculated as above whilst substituting total profit for adjusted profit.

13. Goodwill

	2022 £000	2021 £000
Cost		
1 January	**18,713**	18,713
Acquisitions (note 28)	**32,723**	—
31 December	**51,436**	18,713

£43,151,000 of goodwill resides in the Material Sciences segment and £8,285,000 resides in the Vacuum segment. There are nine CGUs within the Material Sciences segment and nine within the Vacuum segment. Goodwill is tested annually for impairment by reference to the value in use of each of the relevant cash-generating units it is allocated to and aggregated for disclosure purposes into the respective operating segments. The value in use is calculated on the basis of projected cashflows for five years together with the terminal value at the end of the five years, which is computed by reference to projected year six cashflows and discounted. There was no requirement for any impairment provision at 31 December 2022 (2021: £nil). The key assumptions in determining the value in use are:

13. Goodwill continued

Revenue and margins: These are derived from the detailed 2023 budgets which are built up with reference to markets and product categories with projected medium-term growth factors. Projected margins reflect historical performance and the expected impact of efforts to improve operational efficiency.

Discount rate: Cashflows are discounted using a pre-tax discount rate of 16.4% (2021: 13.8%) per annum, calculated by reference to year-end data on equity values and interest, dividend and tax rates. The increased discount rate in 2022 reflects the higher expected interest rate horizon.

Long-term growth rates: 2.1% long-term revenue growth rate takes into account both UK and overseas markets and the 2.1% cost growth broadly aligns with long-term inflation, and enables gross margins to be maintained (2021: 2.1%).

The long-term growth rate and discount rate are consistent for all cash-generating units on the basis that the businesses operate in similar markets and are exposed to similar risks.

The Directors have considered the sensitivity of the key assumptions, including the discount rate and long-term growth rates, and have concluded that any possible changes that may be reasonably contemplated in these key assumptions would not result in the value in use falling below the carrying value of goodwill, given the amount of headroom available, and the conservative nature of the assumptions.

14. Other intangible assets

	Internally generated development costs £000	Acquired distribution agreements £000	Acquired technology £000	Acquired sales order backlog £000	Acquired brand and domain names £000	Acquired customer relationships £000	Total £000
Gross carrying amount							
1 January 2021	—	3,784	12,639	5,407	13,604	11,280	46,714
Additions	796	—	—	—	—	—	796
31 December 2021	796	3,784	12,639	5,407	13,604	11,280	47,510
Acquisitions (note 28)	—	—	22,750	5,400	1,800	16,500	46,450
Additions	1,458	—	—	—	—	—	1,458
31 December 2022	**2,254**	**3,784**	**35,389**	**10,807**	**15,404**	**27,780**	**95,418**
Amortisation							
1 January 2021	—	3,592	9,669	5,374	12,038	9,132	39,805
Charge for the year	11	100	964	33	648	893	2,649
31 December 2021	11	3,692	10,633	5,407	12,686	10,025	42,454
Charge for the year	94	92	2,677	2,180	613	2,878	8,534
31 December 2022	**105**	**3,784**	**13,310**	**7,587**	**13,299**	**12,903**	**50,988**
Carrying amount 31 December 2022	**2,149**	**—**	**22,079**	**3,220**	**2,105**	**14,877**	**44,430**
Carrying amount 31 December 2021	785	92	2,006	—	918	1,255	5,056
Carrying amount 31 December 2020	—	192	2,970	33	1,566	2,148	6,909

The key assumptions in valuing the acquired intangible assets of technology and customer relationships at the date of acquisition are:

Discount rate: Cashflows are discounted using a pre-tax discount rate ranging between 14.5% to 17% per annum.

Long-term growth rates: 2-2.9% long-term revenue growth rate takes into account both UK and overseas markets and 3% cost growth to maintain margin which broadly aligns with long-term inflation.

15. Property, plant and equipment

	Plant and machinery £000	Fixtures, fittings and equipment £000	Motor vehicles £000	Freehold land and buildings £000	Leasehold improvements £000	Total £000
Cost						
1 January 2021	2,114	3,262	315	4,356	1,172	11,219
Additions	440	625	6	1,464	117	2,652
Disposals	(120)	(48)	(110)	—	(11)	(289)
Exchange differences	—	1	1	—	—	2
31 December 2021	2,434	3,840	212	5,820	1,278	13,584
Additions	633	852	103	4,797	50	6,435
Acquisitions (note 28)	2,332	131	28	—	41	2,532
Disposals	(257)	(803)	(114)	(37)	(4)	(1,215)
Exchange differences	15	40	14	—	—	69
31 December 2022	**5,157**	**4,060**	**243**	**10,580**	**1,365**	**21,405**
Accumulated depreciation					—	
1 January 2021	1,255	2,030	205	571	480	4,541
Charge for the year	296	503	31	93	116	1,039
Disposals	(120)	(35)	(86)	—	(11)	(252)
Exchange differences	—	1	1	—	—	2
31 December 2021	1,431	2,499	151	664	585	5,330
Charge for the year	559	490	30	97	129	1,305
Disposals	(257)	(800)	(73)	(27)	—	(1,157)
Exchange differences	5	36	13	—	—	54
31 December 2022	**1,738**	**2,225**	**121**	**734**	**714**	**5,532**
Net book value – 31 December 2022	**3,419**	**1,835**	**122**	**9,846**	**651**	**15,873**
Net book value – 31 December 2021	1,003	1,341	61	5,156	693	8,254
Net book value – 31 December 2020	1,003	1,232	110	5,156	693	6,678

Included in Freehold land and buildings is land valued at £1,454,000 including £719,000 acquired during the year. During the year there was no impairment to this value (2021: £nil).

16. Right-of-use leased assets

	Plant and machinery £000	Fixtures, fittings and equipment £000	Motor vehicles £000	Property £000	Total £000
Cost					
1 January 2021	114	164	81	6,104	6,463
New leases	4	57	43	27	131
Exit from leases	—	(25)	—	(170)	(195)
Remeasurement of leases	—	—	—	66	66
Exchange differences	—	—	—	1	1
31 December 2021	118	196	124	6,028	6,466
New leases	174	24	87	172	457
Acquisitions (note 28)	—	—	—	647	647
Exit from leases	(65)	(94)	(15)	(635)	(809)
Remeasurement of leases	—	—	—	—	—
Exchange differences	—	—	—	31	31
31 December 2022	**227**	**126**	**196**	**6,243**	**6,792**
Accumulated depreciation					
1 January 2021	66	67	54	1,151	1,338
Charge for the year	38	36	26	966	1,066
Exit from leases	—	(21)	—	(104)	(125)
Exchange differences	—	—	—	1	1
31 December 2021	104	82	80	2,014	2,280
Charge for the year	33	38	46	1,016	1,133
Exit from leases	(65)	(94)	(14)	(635)	(808)
Exchange differences	—	—	—	24	24
31 December 2022	**72**	**26**	**112**	**2,419**	**2,629**
Net book value – 31 December 2022	**155**	**98**	**84**	**3,826**	**4,163**
Net book value – 31 December 2021	14	114	44	4,004	4,186

Right-of-use lease liabilities are disclosed in note 22.

17. Deferred tax

Deferred tax balances are presented in the balance sheet as follows:

	2022 £000	2021 £000
Deferred tax assets	**—**	3,081
Deferred tax liabilities	**(9,023)**	(1,845)
Net deferred tax (liabilities)/assets	**(9,023)**	1,236

17. Deferred tax continued

Deferred tax balances have been presented on a net basis on the balance sheet where the amounts relate to the same tax jurisdiction and the Group intends to settle the balances on a net basis. Deferred tax assets and liabilities are split as follows:

	2022 £000	2021 £000
Assets		
1 January	**3,081**	2,153
Acquisitions in the year (note 28)	**1,802**	—
Adjustments in respect of prior years	**45**	33
Movement in other comprehensive income – retirement benefits actuarial gain	**(534)**	(206)
(Charge)/credit to the Consolidated Statement of Comprehensive Income in the year	**(1,911)**	278
(Charge)/credit to equity in the year	**(40)**	823
31 December	**2,443**	3,081
Deferred tax balances relate to temporary differences as follows:		
Provisions allowable for tax in subsequent periods	**90**	241
Tax losses	**48**	48
Share options	**2,305**	2,461
Defined benefit obligation	**—**	331
	2,443	3,081
Liabilities		
1 January	**1,845**	1,945
Acquisitions in the year (note 28)	**11,081**	—
Adjustments in respect of prior years	**43**	7
Credit to the Consolidated Statement of Comprehensive Income in the year	**(1,503)**	(107)
31 December	**11,466**	1,845
Deferred tax balances relate to temporary differences as follows:		
Accelerated capital allowances	**853**	923
Defined benefit obligation	**302**	—
Intangible assets	**10,311**	922
	11,466	1,845

Finance Act 2021 which was substantively enacted on 24 May 2021 included provisions to increase the corporation tax rate further to 25% effective from 1 April 2023 and this rate has been applied when calculating the deferred tax at the year end.

18. Inventories

	2022 £000	2021 £000
Raw materials	**15,299**	10,212
Work in progress	**2,227**	2,356
Finished goods	**4,731**	1,565
	22,257	14,133

In 2022, a total of £36,150,000 of inventories was included in the Consolidated Statement of Comprehensive Income as an expense (2021: £33,247,000). This includes an amount of £364,000 (2021: £522,000) resulting from write-downs of inventories and an amount of £31,000 (2021: £nil) which is the reversal of previous write-downs. The carrying amount of inventories held at fair value less costs to sell is £805,000 (2021: £502,000). All Group inventories form part of the assets pledged as security in respect of bank loans.

19. Trade and other receivables – current

	2022 £000	2021 £000
Trade receivables	**19,033**	14,207
Other receivables	**1,962**	1,078
Interest rate swap receivable	**2,433**	220
Prepayments	**2,167**	1,641
	25,595	17,146

The fair value of receivables approximates to their carrying value. All trade and other receivables have been reviewed for expected credit losses with no significant provision being required as the Group has not experienced significant loss via unpaid overdue receivables. The interest rate swap balance is further detailed in note 23.

Trade receivables which were past due at the balance sheet date are analysed as follows:

	2022 £000	2021 £000
Not more than three months	**6,277**	4,820
More than three months but not more than six months	**916**	1,125
More than six months but not more than twelve months	**1,401**	545
Greater than one year	**1,051**	421
	9,645	6,911

Trade and other receivables are denominated in the following currencies:

	2022 £000	2021 £000
Sterling	**16,652**	10,531
US Dollars	**7,077**	5,154
Euros	**1,762**	1,461
Other	**104**	—
	25,595	17,146

20. Trade and other payables – current

	2022 £000	2021 £000
Trade payables	**8,031**	6,438
Social security and other taxes	**1,328**	1,023
Other payables	**1,241**	805
Accruals and payments-on-account	**15,284**	11,107
	25,884	19,373

The fair value of trade and other payables approximates to their carrying value. Payments-on-account, which relate to receipts from customers for instruments in advance of their shipment or for future contracted services, amount to £9,400,000 (2021: £5,068,000). All such payments-on-account are expected to be recognised as revenue within 12 months and £5,068,000 of the opening payments-on-account balance has been included in revenue in 2022 (£3,957,000 of the opening balances included in revenue in 2021).

21. Borrowings

	2022 £000	2021 £000
Current		
Bank loans	**6,250**	4,657
	6,250	4,657
Non-current		
Bank loans	**49,392**	12,351
	49,392	12,351

21. Borrowings continued

The movement in borrowings over the year was as follows:

	2022 £000	2021 £000
At 1 January	17,008	21,215
Proceeds from drawdown of loans*	45,130	—
Repayment of loans	(6,496)	(4,207)
Interest payable	1,791	516
Interest paid	(1,791)	(516)
At 31 December	**55,642**	17,008

* On 23 May 2022, £15.2 million of outstanding loans were repaid and £60.3 million was simultaneously reborrowed as the Group renewed its banking facilities.

On 23 May 2022, the Group entered into a new £100 million multi-bank facility ("Facility") with Lloyds Banking Group plc, Santander UK plc and Bank of Ireland (the "Banks") which replaced its existing unilateral banking arrangements with Lloyds Bank, which were for an aggregate amount of £60 million. The initial consideration for the acquisition of Geotek was financed from this Facility.

The Facility is for an aggregate £100 million consisting of a £25 million term loan ("Term Loan"), a committed £55 million revolving credit facility ("RCF") plus a £20 million uncommitted accordion facility, which can be drawn with the agreement of the Banks. The Facility replaced the Group's previous facilities of which £15.2 million was outstanding at the time of the acquisition of Geotek. The life of this new Facility is coterminous with the previous facility and therefore has a term of four years until 25 May 2026 ("Borrowing Term").

The Term Loan amortises on a straight-line basis over the Borrowing Term by quarterly instalments. The RCF is repayable in a bullet at the end of the Borrowing Term.

The banking covenants have been adjusted from the previous banking arrangements, namely:

- Gearing no greater than 3.0 times adjusted EBITDA (an increase from 2.5 times in the previous arrangement);
- Interest cover no less than 3.0 times; and
- Minimum EBITDA covenant within the previous facilities is no longer required.

Interest rates are consistent with the previous facilities, save for an additional rate between 2.5 and 3.0 times gearing. The Banks have a fixed and floating charge over the Group's UK assets.

The existing lending facilities via Bordeaux were unchanged at the date of the refinancing. Following Judges' purchase of the remaining 12% of Bordeaux (see note 28) on 27 June 2022, Bordeaux repaid in full its outstanding loan of £0.4 million on 28 July 2022.

As at 31 December 2022, the Group's loans that were refinanced in 2022 were as follows:

- The term loan outstanding was £20,312,500;
- The committed RCF was £35,329,501 drawn; and
- The accordion remained uncommitted.

Borrowings mature as follows:

31 December 2022	Bank loans £000
Repayable in less than six months	4,466
Repayable in months seven to twelve	4,426
Current portion of long-term borrowings	8,892
Repayable in years one to five	54,723
Total borrowings	63,615
Less: interest included above	(7,973)
Less: cash and cash equivalents	(20,827)
Add: right-of-use lease liabilities	4,331
Statutory net debt	39,146
Less: right-of-use lease liabilities	(4,331)
Add: accrued acquisition consideration payable in cash	17,153
Adjusted net debt	51,968

21. Borrowings continued

31 December 2021	Bank loans £000
Repayable in less than six months	2,504
Repayable in months seven to twelve	2,481
Current portion of long-term borrowings	4,985
Repayable in years one to five	12,810
Total borrowings	17,795
Less: interest included above	(787)
Less: cash and cash equivalents	(18,408)
Add: right-of-use lease liabilities	4,307
Statutory net debt	2,907
Less: right-of-use lease liabilities	(4,307)
Adjusted net cash	(1,400)

22. Right-of-use lease liabilities

The majority of the Group's right-of-use liabilities related to medium-term property leases, measured to the end of the agreed lease term, irrespective of any break clauses therein. The movement in the right-of-use lease liabilities over the year was as follows:

	2022 £000	2021 £000
At 1 January	**4,307**	5,156
New leases (note 16)	**457**	131
Lease liabilities acquired on acquisition (note 28)	**647**	—
Remeasurement of lease liabilities	**—**	67
Interest payable (note 9)	**173**	197
Exits from leases	**(1)**	(80)
Repayments of lease liabilities	**(1,279)**	(1,164)
At 31 December	**4,304**	4,307

Right-of-use lease assets are disclosed in note 16.

Lease liabilities mature as follows:

	2022 £000	2021 £000
Minimum right-of-use lease liabilities falling due		
Within one year – land and property	**1,011**	960
Within one year – vehicles	**33**	32
Within one year – plant and machinery	**68**	21
Within one year – fixtures, fittings and equipment	**32**	37
	1,144	1,050
Between one and five years – land and property	**2,897**	2,775
Between one and five years – vehicles	**54**	22
Between one and five years – plant and machinery	**123**	8
Between one and five years – fixtures, fittings and equipment	**62**	77
	3,136	2,882
Greater than five years – land and property	**523**	940
Total commitment	**4,803**	4,872
Less: finance charges included above	**(499)**	(565)
Net present value of lease liabilities	**4,304**	4,307
Current	**977**	887
Non-current	**3,327**	3,420

23. Financial instruments

The Group's policies on treasury management, capital management objectives and financial instruments are given in the Directors' Report commencing on page 39.

Fair value of financial instruments

The Group enters into derivative financial instruments in order to manage its interest rate and foreign currency exposure. The principal derivatives used include foreign currency options and interest rate swaps. Material changes in the carrying values of these instruments are recognised in the Consolidated Statement of Comprehensive Income in the periods in which the changes arise. Such recognition is treated as an adjusting item in the Consolidated Statement of Comprehensive Income where the foreign currency hedge was entered into in order to protect profits in later accounting periods, or if there is a gain or loss on the value of the interest rate swap. In such cases, the charge or credit will be reversed out of adjusting items in the accounting period for which the hedge was intended and will be shown in results before adjusting items. All financial instruments denominated in foreign currencies are translated at the rate of exchange ruling at the balance sheet date. The Directors believe that there is no material difference between the book value and fair value of all financial instruments.

Borrowing facilities

Financial instruments include the borrowings set out in note 21. The Group has a term loan, a committed revolving credit facility and an uncommitted accordion. See note 21 for further details.

Trade and other payables and accruals

All amounts are short-term (all payable within six months) and their carrying values are considered reasonable approximations of fair value.

Right-of-use lease liabilities

Right-of-use lease liabilities reflect the present value of the contracted lease liabilities. See note 22 for further details.

Fair value hierarchy

The fair value hierarchy has the following levels:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The interest rate swaps and foreign currency hedges (level 2) are measured at fair value, calculated as the present value of the estimated future cashflows based on observable yield curves.

23. Financial instruments continued

	2022 £000	2021 £000
Summary of financial assets and financial liabilities by category		
Financial assets – amortised cost		
Trade and other receivables	20,995	15,285
Cash and cash equivalents	20,827	18,408
Financial assets – fair value		
Derivative financial instruments	2,433	220
Total financial assets	44,255	33,913
Financial liabilities – amortised cost		
Trade payables	(8,031)	(6,438)
Accruals	(5,884)	(6,039)
Other payables	(1,241)	(805)
Right-of-use lease liabilities – current	(977)	(887)
Right-of-use lease liabilities – non-current	(3,327)	(3,420)
Borrowings – current	(6,250)	(4,657)
Borrowings – non-current	(49,392)	(12,351)
Financial liabilities – fair value		
Payables relating to acquisitions	(34,306)	—
Total financial liabilities	(109,408)	(34,597)
Net financial liabilities	(65,153)	(684)
Non-financial assets and liabilities		
Goodwill	51,436	18,713
Other intangible assets	44,430	5,056
Property, plant and equipment	15,873	8,254
Right-of-use leased assets	4,163	4,186
Inventories	22,257	14,133
Prepayments	2,167	1,641
Social security and other taxes	(1,328)	(1,023)
Retirement benefit surplus/(obligations)	1,206	(1,324)
Payments-on-account	(9,400)	(5,068)
Current tax payable	(2,171)	(1,726)
Deferred tax assets	—	3,081
Deferred tax liabilities	(9,023)	(1,845)
	119,610	44,078
Total equity	54,457	43,394

Financial assets

The Group's financial assets held at amortised cost (which are summarised above) comprise cash and cash equivalents and trade and other receivables.

The amounts derived from these assets and included as interest income in the Consolidated Statement of Comprehensive Income are £170,000 (2021: £2,000) (see note 9).

Cash and cash equivalents are principally denominated in Sterling and earn interest at floating rates.

Interest income from financial assets held at fair value through profit or loss (in-the-money derivatives) totalled £2,212,000 (2021: £271,000).

Financial liabilities

The Group's principal financial liabilities held at amortised cost are bank loans, trade and other payables and accruals. The Group also holds interest rate swaps and foreign currency forward contracts and options.

The costs attributable to these liabilities and included as interest expense in the Consolidated Statement of Comprehensive Income amounted to £1,979,000 (2021: £713,000) (see note 9).

Finance expense arising from financial liabilities held at fair value through profit or loss, being contingent acquisition consideration, totalled £2,600,000 (2021: £nil).

23. Financial instruments continued

Financial liabilities continued

Following the Group's acquisition of Geotek (see note 28), the Group entered into an interest rate swap over all of its unhedged debt. This swap fixed the element of floating SONIA rate debt for a fixed rate of 2.86% for the remainder of the term of the Group's bank facilities. The amount of the swap reduces in step with the quarterly repayments on the Group's term loan.

24. Share capital and share premium

	2022 £000	2021 £000
Allotted, called up and fully paid – Ordinary shares of 5p each		
1 January: 6,318,415 shares (2021: 6,299,163 shares)	316	315
Exercise of share options: 19,205 shares (2021: 19,252 shares)	1	1
Issue of shares as settlement of acquisition costs: 2,929 shares (2021: nil shares)	—	—
Issue of shares as consideration for shareholding in subsidiary company: 29,197 shares (2021: nil shares)	1	—
31 December: 6,369,746 shares (2021: 6,318,415 shares)	318	316

Allotments of Ordinary shares in 2022 were made to satisfy the exercise of 19,205 share options in aggregate on 18 occasions during the year when the share price was within the range 6800p to 8300p (2021: exercise of 19,252 share options when the share price was within the range 5900p to 7900p).

Throughout 2022, the Group continued to award a free "matching share" under the Judges Scientific plc Share Incentive Plan for every share purchased up to a maximum value of £600 per employee per tax year. During 2022, an average of 225 employees participated in the scheme each month (2021: 212 employees), purchasing 4,261 shares in total, including matching shares (2021: 5,049 shares). At 31 December 2022, there were 240 employee shareholders in this Share Incentive Plan.

The market price of the Company's Ordinary shares at 31 December 2022 was 8440p. The share price range during the year was 6090p to 8740p.

The cash-free issue of shares as settlement for acquisition costs (note 32) increased share premium by £225,000. The remaining increase in share premium results from the aforementioned share option exercises.

25. Share-based payments

Equity share options

At 31 December 2022, options had been granted and remained outstanding in respect of 184,740 Ordinary shares in the Company (2021: 201,460), all priced by reference to the mid-market price of the shares on the date of grant and all exercisable, following a three-year vesting period, between the third and tenth anniversaries of grant, as below:

	At 1 January 2022 Number	Granted Number	Lapsed Number	Exercised Number	At 31 December 2022 Number	Of which exercisable Number	Weighted average exercise price (p)
2005 Approved Option Scheme	11,475	—	(2,000)	(6,950)	2,525	2,525	1489.2
2005 Unapproved Option Scheme	700	—	—	(350)	350	350	2180.0
2015 Approved Option Scheme	20,780	3,891	—	(4,301)	20,370	11,430	1980.9
2015 Unapproved Option Scheme	168,505	844	(250)	(7,604)	161,495	96,921	1566.8
	201,460	4,735	(2,250)	(19,205)	184,740	111,226	
Weighted average exercise price (p)	3393.1	7700.0	1194.4	1642.7	3712.3	1950.2	1642.7

2005 Option Scheme

Exercise prices for the year ended 31 December 2022 ranged between 865.0p and 2180.0p per share (2021: between 470.0p and 1690.0p per share). The unexercised options have a weighted average remaining contractual life of 0.87 years (2021: 1.69 years).

2015 Option Scheme

Exercise prices for the year ended 31 December 2022 ranged between 1285.0p and 3735.0p per share (2021: between 1402.5p and 1935.0p per share). The unexercised options have a weighted average remaining contractual life of 5.91 years (2021: 6.7 years).

In accordance with IFRS 2, a Black Scholes valuation model has been used. The key assumptions used in the model are as follows:

- interest rate – 3.6%;
- historical volatility – 31.4%;
- dividend yield – 0.9%;
- expected life of option – 5.0 years; and
- employee leavers – 5.0%.

25. Share-based payments continued

Growth reward plan

The Group has an annual scheme for subsidiary management whereby upon achievement of certain compound growth targets they will receive Judges shares. Any award, which is accounted for as equity settled, is deferred for three years, consistent with the vesting of share options.

The total share-based payment charge for both of these plans for the year ended 31 December 2022 was £658,000 (2021: £635,000).

26. Other reserves

	Capital redemption reserve £000	Merger reserve £000	Translation reserve £000	Total £000
Balance at 1 January 2022	**23**	**1,968**	**8**	**1,999**
Issue of share capital	—	—	—	—
Change in non-controlling interest	—	1,999	—	1,999
Transactions with owners	**—**	**1,999**	**—**	**1,999**
Exchange differences on translation of foreign subsidiaries	—	—	87	87
Total comprehensive income	**—**	**—**	**87**	**87**
Balance at 31 December 2022	**23**	**3,967**	**95**	**4,085**

	Capital redemption reserve £000	Merger reserve £000	Translation reserve £000	Total £000
Balance at 1 January 2021	23	1,968	(14)	1,977
Issue of share capital	—	—	—	—
Transactions with owners	—	—	—	—
Exchange differences on translation of foreign subsidiaries	—	—	22	22
Total comprehensive income	—	—	22	22
Balance at 31 December 2021	23	1,968	8	1,999

The cash-free issue of shares as consideration for a shareholding in a subsidiary company (note 28) qualified for merger relief, and therefore increased the merger reserve by £1,999,000.

27. Risk management objectives and policies

The Group is exposed to market risks, arising predominantly from currency exposure resulting from its export activities, interest rate fluctuation on its loans and deposits and credit and liquidity risks. Risk management strategies are co-ordinated by the Directors.

Foreign currency risk

The Group exports a substantial proportion of its sales, frequently denominated in foreign currencies (principally in US Dollars and Euros). Exposure to currency rate fluctuations exists from the moment a sales order is confirmed through to the time when the related remittance is converted into Sterling. This exposure is computed monthly (along with offsetting exposure on purchases, generally of minimal amounts) and economically hedged, predominantly through the use of currency forward contracts and options. The net exposure to risk is therefore substantially reduced. This does not, however, represent a hedge under IFRS 9.

The table below summarises the foreign currency hedged at year end, and which is expected to be settled within the first four months of 2022. Residual exposure is the difference between the net exposure and the amounts of currency hedges, both translated into Sterling at each measurement date.

31 December 2022	Sterling equivalent of US$ £000	Sterling equivalent of € £000	Sterling equivalent of other £000
Amount of foreign currency hedged at year end	**6,500**	**3,500**	**—**
Residual exposure at year end – long/(short)	**1,837**	**(1,440)**	**2,431**
Impact on pre-tax profits of a 5% variation in exchange rate on year-end residual exposure	**92**	**(72)**	**122**
Impact on equity of a 5% variation in exchange rate on year-end residual exposure	**74**	**(58)**	**98**

27. Risk management objectives and policies continued

Foreign currency risk continued

31 December 2021	Sterling equivalent of US$ £000	Sterling equivalent of € £000
Amount of foreign currency hedged at year end	6,000	3,500
Residual exposure at year end – long/(short)	(309)	(1,542)
Impact on pre-tax profits of a 5% variation in exchange rate on year-end residual exposure	(15)	(7)
Impact on equity of a 5% variation in exchange rate on year-end residual exposure	(12)	(62)

In addition to the hedging of this foreign currency exposure, the Group seeks to mitigate the impact of currency fluctuations on future trading performance. This was achieved at 31 December 2022 by entering into currency options to sell €7.7 million and $14.3 million for the rest of 2023, at predetermined exchange rates.

The fair value of the hedging financial instruments is a liability of £73,000 (2021: £148,000).

Interest rate risk

The Group's interest rate exposure arises in respect of its bank loans, which are LIBOR linked for interest rate purposes, and its cash, which are bank base rate linked. To hedge this risk the Group is party to interest rate swaps at predetermined rates. The fair value of these financial instruments has been recognised in these accounts and the fair value of interest rate swaps is an asset of £2,433,000 (2021: liability of £220,000). The Group's sensitivity to interest rate changes is as follows:

	2022 £000	2021 £000
Unhedged bank loans outstanding at year end	—	11,150
Impact on pre-tax profits of a 1% change in SONIA	—	112
Impact on equity of a 1% change in SONIA	—	90
Cash at year end	20,827	18,408
Impact on pre-tax profits of a 1% change in bank base rates	208	184
Impact on equity of a 1% change in bank base rates	169	149

Credit risk

The Group's exposure to credit risk is limited to the carrying amounts of financial assets recognised at the balance sheet date, as follows:

	2022 £000	2021 £000
Cash and cash equivalents	20,827	18,408
Trade and other receivables	21,005	15,285
	41,832	33,693

The Group reviews the credit risk relating to its customers by ensuring wherever possible that it deals with long-established trading partners, distributors and government/university-backed bodies, where the risk of default is considered low. Where considered appropriate, the Group insists on upfront payment and requires letters of credit to be provided. The Directors monitor the ageing of trade receivables to identify balances where there is no reasonable expectation of recovery and no material provision is required. None of the financial assets are secured by collateral or other credit enhancements. For other receivables there is minimal credit risk in relation to these balances.

Where Group companies trade through overseas distributors, credit exposure to an individual distributor can be significant at times. At 31 December 2022, no counterparty owed more than 10% of the Group's total trade and other receivables (2021: none).

The credit risk for liquid funds and other short-term financial assets is considered small. The substantial majority of these assets are deposited with Lloyds Banking Group or other high quality financial institutions.

Liquidity risk

Longer-term finance is required to enable the Group to pursue its strategic goal of growing through acquisitions as well as through Organic development. This requirement for financing is satisfied for the foreseeable future by a £55.0 million revolving corporate facility (drawn to £35.3 million at 31 December 2022) together with a £20.0 million uncommitted accordion facility provided by Lloyds Banking Group, Santander UK plc and Bank of Ireland. Further the Group has a term loan repayable over four years with £20.3 million outstanding at 31 December 2022. Despite the increase in the Group's borrowings during 2022, the Group's strategy continues to envisage the servicing of this debt to be achieved from the cashflow arising from the businesses acquired. For short and medium-term financial needs, the Group regularly compares its projected requirements with available cash and borrowing facilities.

The periods of maturity of the Group's borrowings are set out in note 21 and the maturity of the Group's right-of-use lease liabilities are set out in note 22. The maturity of all trade and other payables is within the period of less than six months.

28. Acquisitions

Acquisition of Geotek Holding Limited and Geotek Coring Limited

On 23 May 2022, Judges Scientific acquired 100% of the entire issued share capital of Geotek Holding Limited and Geotek Coring Limited (together "Geotek" or the "Acquisition"), a world leading developer and manufacturer of instruments used to measure and log various characteristics of geological cores and a supplier of related services. The acquisition is well aligned with the Group's buy and build strategy within the scientific instrument market.

The purchase price of Geotek consisted of:

- The initial consideration, paid in cash at completion, of £45 million.
- Contingent consideration of up to a maximum £35 million ("earn-out") to be satisfied half in cash and half in new Judges Ordinary shares to be issued at a price of £76.80 per new Ordinary share, Judges' prevailing share price at the time of signing heads of terms with Geotek's vendors.
- The earn-out starts to become payable on achievement of a minimum adjusted EBIT of £6.4 million for the calendar year 2022 increasing pro rata on a 7:1 ratio until it reaches a cap when an adjusted EBIT of £11.4 million is achieved.
- An additional payment for excess cash (surplus working capital) at completion over and above the ongoing requirements of the business, covered by the cash inherited at completion.

The summary provisional fair value of the cost of this acquisition includes the components stated below:

Consideration	£000
Initial cash consideration	45,000
Earn-out	31,706
	76,706
Gross cash inherited on acquisition	19,610
Cash retained in the business	(1,804)
Payment in respect of surplus working capital	17,806
Total consideration	94,512
Acquisition-related transaction costs charged to operating costs	3,031

The maximum earn-out of £35 million is expected to be paid, however as the amount is likely to fall due around March 2023, it was discounted to £31.7 million upon initial recognition. The payment in respect of surplus working capital was settled in December 2022.

The estimated total fair value of the future liabilities relating to the Geotek acquisition as at 23 May 2022 and 31 December 2022 consists of the following:

	23 May 2022 £000	Non-cash item £000	31 December 2022 £000
50% of earn-out to be satisfied in cash	15,853	1,300	17,153
50% of earn-out to be satisfied in new Ordinary shares	15,853	1,300	17,153
Total payables relating to acquisitions	31,706	2,600	34,306

The non-cash item is the unwinding of the discount on the earn-out consideration.

28. Acquisitions continued

Acquisition of Geotek Holding Limited and Geotek Coring Limited continued

The summary provisional fair values recognised for the assets and liabilities acquired are as follows:

	Book value £000	Accounting policy alignments £000	Fair value adjustments £000	Fair value £000
Intangible assets	—	—	46,450	46,450
Property, plant and equipment	2,532	—	—	2,532
Right-of-use leased assets	—	647	—	647
Deferred tax assets	1,023	482	297	1,802
Current tax recoverable	317	—	—	317
Inventories	4,946	—	(989)	3,957
Trade and other receivables	2,976	91	(130)	2,937
Cash and cash equivalents	19,610	—	—	19,610
Total assets	**31,404**	**1,220**	**45,628**	**78,252**
Deferred tax liabilities	(8)	—	(11,073)	(11,081)
Trade and other payables	(1,802)	(2,822)	(70)	(4,694)
Right-of-use lease liabilities	—	(647)	—	(647)
Current tax liability	(41)	—	—	(41)
Total liabilities	**(1,851)**	**(3,469)**	**(11,143)**	**(16,463)**
Net identifiable assets and liabilities	29,553	(2,249)	34,485	61,789
Total consideration				94,512
Goodwill recognised				32,723

The intangible assets recognised reflect recognition of acquired customer relationships, the value of the acquired future committed order book, acquired technology together with brand names. A significant amount of the value of the acquired business is attributable to its workforce and sales knowhow and contributes to the goodwill recognised upon acquisition. This goodwill has been allocated to the Materials Sciences segment.

The majority of the deferred tax liabilities recognised represent the tax effect which will result from the amortisation of the intangible assets, estimated using the tax rate substantively enacted at the balance sheet date. Additional fair value adjustments include stock, doubtful debt, and warranty provisions together with the related deferred tax. Adjustments to recognition of revenue for certain contracts, and recognition of right-of-use assets and liabilities were made to align with Group accounting policies.

This acquisition resulted in revenue of £14,988,000 and a profit after tax (before adjusting items) attributable to owners of the parent company of £7,342,000 in the period post-acquisition. After amortisation of intangible assets, the contribution to owners of the parent company's results amounted to a profit of £2,187,000 after tax.

If the acquisition had completed on 1 January 2022, revenue for the Group for the year ended 31 December 2022 would have increased by a further £5,012,000 and profit after tax (before adjusting items) attributable to the owners of the parent company would have increased by a further £2,100,000. After amortisation of intangible assets, the contribution to owners of the parent company's results would have amounted to a loss of £620,000 after tax.

Increased shareholding in Bordeaux Acquisition Limited

On 27 June 2022, Judges acquired 12.0% of the shares in Bordeaux Acquisition Limited ("Bordeaux") for a consideration of £2.1 million, increasing its shareholding from 88% to 100%. £2 million of the consideration was settled via the issue of 29,197 new Judges Ordinary shares issued at a price of £68.50 per share, equal to the mid-market price at close of business on Friday 24 June 2022, with the balance paid in cash.

29. Retirement benefit obligations

Defined benefit obligations

The Group's subsidiary, Armfield Limited, operates a defined benefit scheme for certain of its employees. A full actuarial valuation was carried out as at 31 March 2020 and the retirement benefit liability was independently revalued as at 31 December 2022. The scheme has been closed to new members from 2001 and closed to new accrual in 2006. The average duration of the plan's liabilities has been calculated to be approximately 14 years which has reduced from 18 years in 2021 due to the impact of significantly increased bond yields during 2022. The trustees are normally drawn partly from Armfield's employees and also from nominees of the Judges Group.

The full actuarial valuation carried out as at 31 March 2020 was in accordance with the scheme funding requirements of the Pensions Act 2004 and the funding of the plan is agreed between Armfield Limited and the pension trustees in line with those requirements. These in particular require the surplus/deficit to be calculated using prudent, as opposed to best estimate, actuarial assumptions. It was agreed with the trustees that annual contributions be increased to £400,000 with a 2.5% annual inflationary increase thereafter to eliminate the existing deficit over a period of nine years. An annual contribution of £420,000 was paid in 2022. The next full actuarial valuation will be carried out no later than 31 March 2023. The asset investment strategy is the responsibility of the trustees. There are four insured pensions which were separately valued at £180,000 as at 31 December 2022. These pensions do not affect the overall valuation as they are a liability with a fully insured offsetting asset.

Summary	31 December 2022 £000	31 December 2021 £000	31 December 2020 £000
Fair value of plan assets	7,001	7,936	6,874
Present value of defined benefit obligation	(5,795)	(9,260)	(10,169)
Surplus/(deficit) in scheme	1,206	(1,324)	(3,295)
Deferred tax	(302)	331	626
Net retirement benefit surplus/(obligation)	904	(993)	(2,669)

The retirement benefit surplus has been recognised as it meets the conditions for recognition as the scheme's trust deed allows for a refund of any remaining surplus upon closure of the scheme.

Changes in the fair value of plan assets	31 December 2022 £000	31 December 2021 £000
1 January	7,936	6,874
Interest income	148	95
Return on plan assets (excluding amounts in interest income)	(1,276)	569
Contributions by the Company	420	574
Expenses	(5)	(7)
Benefits paid	(222)	(169)
31 December	7,001	7,936

The actual return on plan assets for the year ended 31 December 2022 was a reduction of £1,128,000 (2021: increase of £664,000).

Changes in the fair value of defined benefit pension obligations	31 December 2022 £000	31 December 2021 £000
1 January	9,260	10,169
Current service cost	—	—
Past service cost	—	—
Expenses	—	—
Interest expense	174	136
Actuarial (gains)/losses due to scheme experience	(184)	(6)
Actuarial (gains)/losses due to changes in demographic assumptions	(4)	(72)
Actuarial (gains)/losses due to financial assumptions	(3,229)	(798)
Benefits paid	(222)	(169)
31 December	5,795	9,260

There were no plan amendments, curtailments or settlements in the above years. The estimated Guaranteed Minimum Pension ("GMP") equalisation impact, which would equalise for the different effects of GMPs between men and women, is expected to have no material impact on the defined benefit obligation above.

29. Retirement benefit obligations continued

Defined benefit obligations continued

Major categories of plan assets	31 December 2022 £000	31 December 2021 £000	31 December 2020 £000
Quoted equities	4,234	4,578	3,570
Bonds	2,726	3,086	2,598
Property	—	—	498
Cash and other assets	41	272	208
	7,001	7,936	6,874

Principal actuarial assumptions	31 December 2022 %	31 December 2021 %
Discount rate	4.75	1.90
Inflation rate (RPI)	3.30	3.50
Inflation rate (CPI)	2.70	2.80
In payment pension increases	3.50	3.55
In deferment pension increases	5.00	5.00

The mortality assumptions used in valuing the liabilities of the plan in 2021 and 2022 are based 100% on the standard tables S3PxA, projected using the CMI 2021 model with a 1.25% per annum long-term rate of improvement for males and a 1.00% per annum long-term rate of improvement for females. No allowance has been made for the effect of Covid-19 as this impact remains uncertain.

The life expectancies assumed are as follows:

	31 December 2022 Life expectancy at age 65 (years)	31 December 2021 Life expectancy at age 65 (years)
Male retiring in current financial year	22.2	22.1
Female retiring in current financial year	24.3	24.3
Male retiring in twenty years	23.5	23.4
Female retiring in twenty years	25.5	25.4

Sensitivity

The significant actuarial assumptions in determining the defined benefit obligation are the discount rate, the rate of mortality and the rate of inflation. Changes to these actuarial assumptions may impact this obligation as follows:

	31 December 2022 Change in liabilities £000	31 December 2021 Change in liabilities £000
Discount rate – decrease by 0.25% per annum	205	423
Inflation rate – increase by 0.25% per annum	38	42
Mortality rate – increase of one year in life expectancy	187	400

The above shows the impact on the defined benefit obligation if the assumptions were changed as shown (assuming all other assumptions remain constant). The sensitivity analysis may not be representative of the actual change in the obligation as it is unlikely that any change in assumption would happen in isolation.

Risk management

There is a risk that changes in discount rates, price inflation, asset returns and/or mortality assumptions could lead to a materially greater deficit. Given the long-term time horizon of the pension plan cashflows, the assumptions used are uncertain. The assumptions can also be volatile from year to year due to changes in investment market conditions. A higher pension deficit could directly impact the Group's equity valuation and credit rating and may lead to additional funding requirements in future years. Any deficit relative to the actuarial liability for funding purposes, which may differ from the funding position on an accounting basis, will generally be financed over a period that ensures the contributions are reasonably affordable to the Group and in line with local regulations.

30. Non-controlling interests

Summarised financial information of the Group's non-controlling interests is set out below:

	2022 £000	2021 £000
Non-current assets	**64**	2,225
Current assets	**1,688**	6,676
Total assets	**1,752**	8,901
Current liabilities	**(535)**	(3,738)
Non-current liabilities	**—**	(13)
Total liabilities	**1,217**	(3,751)
Total equity	**1,217**	5,150
Attributable to:		
Owners of the parent	**998**	4,532
Non-controlling interest	**219**	618

	2022 £000	2021 £000
Revenue	**7,048**	8,857
Profit for the year	**2,398**	1,651
Attributable to:		
Owners of the parent	**2,061**	1,429
Non-controlling interest	**337**	222

	2022 £000	2021 £000
Net cash from operating activities	**1,207**	2,914
Net cash from/(used in) investing activities	**149**	(1,545)
Net cash used in financing activities	**—**	(1,011)
Net cash inflow	**1,356**	358

31. Capital commitments

At 31 December the Group had capital commitments as follows:

	2022 £000	2021 £000
Contracted for but not provided in these financial statements	**290**	98

32. Related party transaction

The acquisition of Geotek was originated by Charles Holroyd, a Non-Executive Director of Judges. As with all Judges Scientific Non-Executive Directors, and as disclosed in the Group's Annual Report and Accounts, he is incentivised to originate acquisitions on behalf of the Group. Accordingly, at the time of his appointment to the Board of Judges Scientific in 2018, he entered into an introduction agreement entitling him to the payment of a fee amounting to 1% of the enterprise value of any business that he introduced to the Group and was subsequently acquired by the Group ("Introduction Fee"). Based on the experience of the Group, the level of the Introduction Fee is materially lower than the fees charged by independent brokers.

Mr Holroyd was not involved in any part of the decision-making process in relation to the Acquisition. The Introduction Fee in relation to Geotek is payable at the same time and in the same proportion as the payments of the Initial Consideration and the earn-out to the sellers; £450,000 at Completion and up to £350,000 on settlement of the earn-out in 2023. Mr Holroyd elected to receive one half of his entire fee in new Ordinary shares, valued at £76.80 per Ordinary share, the same level as the share component of the earn-out, and the other half in cash to enable him to pay the relevant taxation.

Dividends paid in the year to Directors who hold shares amounted to £627,000 in aggregate (2021: £549,000).

Parent company balance sheet

As at 31 December 2022

	Note	2022 £000	2021 £000
Fixed assets			
Tangible assets	3	**555**	587
Right-of-use leased assets	4	**123**	180
Investments in subsidiaries	5	**167,810**	66,550
		168,488	67,317
Current assets			
Debtors	6	**14,885**	4,377
Cash and cash equivalents		**1,608**	—
		16,493	4,377
Creditors: amounts falling due within one year	7	**(9,356)**	(6,808)
Creditors relating to acquisitions due within one year	7	**(34,306)**	—
Right-of-use lease liabilities falling due within one year	9	**(65)**	(62)
Net current liabilities		**(27,234)**	(2,493)
Total assets less current liabilities		**141,254**	64,824
Creditors: amounts falling due after more than one year	8	**(49,392)**	(12,351)
Right-of-use lease liabilities falling due after more than one year	9	**(58)**	(121)
Total net assets		**91,804**	52,352
Capital and reserves			
Called up share capital	11	**318**	316
Share premium	11	**17,206**	16,667
Capital redemption reserve		**23**	23
Merger reserve		**1,999**	—
Retained earnings		**72,258**	35,346
Shareholders' funds		**91,804**	52,352

The accompanying notes form an integral part of these financial statements.

In accordance with the exemptions permitted by section 408 of the Companies Act 2006, the Statement of Comprehensive Income of the parent company has not been presented. Profit for the year totalled £41,017,000 (2021: £6,824,000).

These parent company financial statements were approved by the Board on 21 March 2023.

David Cicurel
Director

Brad Ormsby
Director

Parent company statement of changes in equity

For the year ended 31 December 2022

	Share capital £000	Share premium £000	Other reserves £000	Retained earnings £000	Total equity £000
At 1 January 2022	**316**	**16,667**	**23**	**35,346**	**52,352**
Dividends	**—**	**—**	**—**	**(4,372)**	**(4,372)**
Issue of share capital	**2**	**539**	**—**	**—**	**541**
Purchase of own shares for Company reward scheme	**—**	**—**	**—**	**(85)**	**(85)**
Change in non-controlling interest	**—**	**—**	**1,999**	**—**	**1,999**
Adjustment to merger reserve	**—**	**—**	**600**	**—**	**600**
Deferred tax on share-based payments	**—**	**—**	**—**	**(306)**	**(306)**
Share-based payments	**—**	**—**	**—**	**658**	**658**
Transactions with owners	**2**	**539**	**2,599**	**(4,105)**	**(965)**
Profit for the year	**—**	**—**	**(600)**	**41,017**	**40,417**
Total comprehensive income for the year	**—**	**—**	**(600)**	**41,017**	**40,417**
At 31 December 2022	**318**	**17,206**	**2,022**	**72,258**	**91,804**
At 1 January 2021	315	16,429	23	31,008	47,775
Dividends	—	—	—	(3,630)	(3,630)
Issue of share capital	1	238	—	—	239
Purchase of own shares for Company reward scheme	—	—	—	(53)	(53)
Deferred tax on share-based payments	—	—	—	562	562
Share-based payments	—	—	—	635	635
Transactions with owners	1	238	—	(2,486)	(2,247)
Profit for the year	—	—	—	6,824	6,824
Total comprehensive income for the year	—	—	—	6,824	6,824
At 31 December 2021	316	16,667	23	35,346	52,352

The accompanying notes form an integral part of these financial statements.

Notes to the parent company financial statements

For the year ended 31 December 2022

1. Statement of compliance

The financial statements were prepared in accordance with FRS 101 Reduced Disclosure Framework.

2. Summary of significant accounting policies

Basis of preparation

As permitted by FRS 101, for both periods presented, the Company has taken advantage of the disclosure exemptions available under that standard in relation to financial instruments, capital management, presentation of a cashflow statement, share-based payments, fair value measurements, comparative reconciliations for tangible and intangible assets, standards not yet effective, related party transactions with other wholly owned members of the Group, and key management personnel compensation.

The financial statements have been prepared on the historical cost basis.

Equivalent disclosures and accounting policies are, where required, given in the publicly available Group financial statements of Judges Scientific plc.

The relevant accounting policies for the parent company financial statements that are disclosed in note 2 to the Group financial statements are as follows:

- Tangible fixed assets (Property, plant and equipment)
- Taxation
- Employee benefits – defined contribution plans
- Share-based employee compensation
- Foreign currencies
- Leases
- Equity
- Dividends
- Other income
- Financial assets and liabilities

The accounting policies relevant only for the parent company are as follows:

Investments

Fixed asset investments in subsidiaries are stated at cost less provision for impairment.

Financial assets and liabilities

Financial assets relevant to the parent company consist of cash and cash equivalents, amounts owed by Group companies, other debtors and derivatives. Except for amounts owed by Group companies, which are held at amortised cost and accounted for consistent with the Group's trade debtors, all other policies are included in the Group accounting policies.

Financial liabilities include creditors and borrowings, including bank loans, trade and other payables, amounts owed to Group companies, accruals, contingent consideration and lease liabilities. Except for amounts owed to Group companies, which are held at amortised cost and accounted for consistent with the Group's trade payables, all other policies are included in the Group accounting policies.

Use of key accounting estimates and judgements

Many of the amounts included in the financial statements involve the use of judgement and/or estimation. These judgements and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to prior experience, but actual results may differ from the amounts included in the financial statements. Information about such judgements and estimates is contained in the accounting policies and/or the notes to the financial statements, and the key areas are summarised below.

Key judgements

Fair value assessment of business combination consideration – disclosed in the Group accounting policies.

Sources of estimation uncertainty

The carrying value of investments is assessed based on the current trading performance, the expected future performance and net assets of the investment. If actual results differ or changes in expectations arise, impairment charges may be required which would adversely impact the parent company result. See note 13 to the Group accounts for a summary of the key assumptions for the value in use calculations.

3. Tangible assets

	Property and leasehold improvements £000	Fixtures, fittings and equipment £000	Total £000
Cost			
1 January 2022	797	94	891
Additions	14	11	25
31 December 2022	**811**	**105**	**916**
Depreciation			
1 January 2022	239	65	304
Charge for the year	30	27	57
31 December 2022	**269**	**92**	**361**
Net book value – 31 December 2022	**542**	**13**	**555**
Net book value – 31 December 2021	558	29	587

4. Right-of-use leased assets

	Land and property £000	Fixtures, fittings and equipment £000	Total £000
Cost			
At 1 January and 31 December 2022	329	18	347
Depreciation			
1 January 2022	160	7	167
Charge for the year	54	3	57
31 December 2022	**214**	**10**	**224**
Net book value – 31 December 2022	**115**	**8**	**123**
Net book value – 31 December 2021	169	11	180

5. Investments in subsidiaries

	2022 £000	2021 £000
Cost		
1 January	**66,550**	51,980
Additions	**94,512**	—
Increased shareholding in an existing Group subsidiary	**2,102**	1,833
Transfer of ownership of entity from a Group subsidiary	**6,026**	12,737
Increased investment in a Group subsidiary	**520**	—
Adjustment to merger reserve	**600**	—
Impairment of investment in a subsidiary	**(2,500)**	—
31 December	**167,810**	66,550

Additions relate to the acquisition of Geotek, see note 28 to the Group accounts for further details. During the year the Company acquired the remaining shareholding in Bordeaux (see note 28 to the Group accounts). Oxford Cryosystems Limited and Deben UK Limited were transferred from Bordeaux Acquisition Limited to the parent company during 2022 at book value. Scientifica Limited was transferred from Judges Capital Limited to the parent company during 2021 at book value.

The Company's subsidiaries at 31 December 2022, all of which are incorporated and domiciled in the United Kingdom (except as stated), are as follows:

Company	Principal activity	Class of shares	% held
Fire Testing Technology Limited	Design and manufacture of fire testing instruments	Ordinary £1	100%
PE.fiberoptics Limited	Design and manufacture of fibre-optic testing instruments	"A" and "C" Ordinary 1p	100%
UHV Design Limited	Design and manufacture of instruments used to manipulate objects in ultra-high vacuum chambers	Ordinary £1	100%
Aitchee Engineering Limited	Manufacture of engineering parts and finished products	Ordinary £1	100%

5. Investments in subsidiaries continued

Company	Principal activity	Class of shares	% held
Quorum Technologies Limited	Design, manufacture and distribution of instruments that prepare samples for examination in electron microscopes	Ordinary £1	100%
Moorfield Nanotechnology Limited*	Design, manufacture and distribution of instruments that prepare samples for examination in electron microscopes	Ordinary £1	100%
Sircal Instruments (U.K.) Limited*	Design, manufacture and distribution of rare gas purifiers for use in metals analysis	Ordinary £1	100%
Deben UK Limited	Design and manufacture of devices to enable observation of objects under a microscope	Ordinary £1	100%
Oxford Cryosystems Limited	Design, manufacture and marketing of products for crystallography and other markets	Ordinary £1	100%
Gatehouse Engineering Limited*	Manufacture of engineering parts and finished products	Ordinary £1	100%
Global Digital Systems Limited	Design and manufacture of instruments used to test the physical properties of soil and rocks	"A" and "B" Ordinary £1	100%
Scientifica Limited	Design and manufacture of instruments used in electrophysiology to enable or improve the observation of objects under a microscope	Ordinary £1	100%
Scientifica LLC (USA)*	Sale of instruments used in electrophysiology to enable or improve the observation of objects under a microscope	Common Shares	100%
Armfield Limited	Design and manufacture of research and training equipment	Ordinary £1	100%
RJ Lewis Limited*	Manufacture of engineering parts and finished products	Ordinary £1	100%
Armfield Inc. (USA)*	Sale of research and training equipment	Common Shares	100%
CoolLED Limited	Design and manufacture of illumination systems for fluorescence microscopy	Ordinary £1	100%
Dia-Stron Limited	Design and manufacture of systems to test the mechanical properties of fibres	Ordinary £1	100%
Dia-Stron Inc. (USA)*	Sale of systems to test the mechanical properties of fibres	Common Shares	100%
EWB Solutions Limited	Design and manufacture of edge-welded bellows	Ordinary £1	100%
Thermal Hazard Technology Limited	Design and manufacture of calorimeters	Ordinary £1	100%
Thermal Hazard Technology Inc. (USA)*	Sale of calorimeters	Common Shares	100%
Korvus Technology Limited	Design and manufacture of deposition systems	Ordinary £1	100%
Bordeaux Acquisition Limited	Holding company	Ordinary £1	100%
Crystallon Limited*	Holding company	Ordinary £1	100%
Geotek Holding Limited	Holding company	Ordinary £1	100%
Geotek Limited*	Design and manufacture of geotechnical instruments and supply of geotechnical services	Ordinary £1	100%
Spectra Map Limited*	Geotechnical service provider	Ordinary £1	100%
Geotek Do Brazil Ltda (Brazil)*	Geotechnical service provider	Ordinary £1	82%
Geotek Coring Limited	Geotechnical service provider	Ordinary £1	100%
Geotek Coring Inc. (USA)*	Geotechnical service provider	Ordinary £1	100%
Judges Capital Limited	Dormant	Ordinary £1	100%
Judges Scientific (Dublin) Limited (Ireland)	Dormant	Ordinary €1	100%
Judges Scientific (Shanghai) Co. Ltd.	Sale and manufacture of scientific instruments	Common Shares	100%
Heath Scientific Company Limited*	Dormant	Ordinary £1	100%
Armfield Technical Education Company Limited*	Dormant	Ordinary £1	100%
EM Technologies Limited*	Dormant	Ordinary £1	100%
FTT Scientific Limited*	Dormant	Ordinary £100	100%
GDS Instruments Limited*	Dormant	Ordinary £1	100%
Polaron Instruments Limited*	Dormant	Ordinary £1	100%
Stanton Redcroft Limited*	Dormant	Ordinary £1	100%

* Indirectly held.

The head office for each of the UK subsidiaries is 52c Borough High Street, London SE1 1XN. The address for each of the US subsidiaries is 9 Trenton–Lakewood Road, Clarksburg NJ 08510, USA, with the exception of Geotek Coring Inc., whose address is 3350 W Directors Row Suite 600, Salt Lake City, Utah 84194, USA. The address for Geotek do Brazil Ltda is 50, AV. Nilo Pecenha, Sala 2701, Centro, Rio De Janeiro, RJ, Brazil, and the address of Judges Scientific (Shanghai) Co. Ltd. Is Floor 1-2, Building 4, No. 1628 Lizheng Road, Lingang, FTZ, Shanghai, 201304, P.R. China.

6. Debtors

	2022 £000	2021 £000
Amounts owed by Group companies	**5,938**	1,943
Prepayments and accrued income	**4,229**	758
Deferred tax asset (note 10)	**1,499**	1,251
Corporation tax recoverable	**278**	102
Interest rate swap	**2,433**	220
Other debtors	**508**	103
	14,885	4,377

Except as stated, all amounts are recoverable in less than one year. In accordance with IFRS 9, expected credit losses for amounts due from subsidiaries has been determined at inception. There has been no significant increase in credit risk associated with the amounts due since initial recognition. All intercompany balances are expected to be recovered via the operating cashflows of the related subsidiary entities.

The Company enters into derivative financial instruments in order to manage its interest rate and foreign currency exposure. The principal derivatives used include interest rate swaps and foreign currency forward contracts and options. The fair value of these financial instruments is an liability of £73,000 (2021: £148,000), in addition to a fair value asset of £2,433,000 (2021: asset of £220,000) on interest rate swaps. These transactions have been recognised in these accounts and are held within other debtors.

7. Creditors: amounts falling due within one year

	2022 £000	2021 £000
Bank overdraft	**—**	951
Current portion of bank loans	**6,250**	3,800
Trade creditors	**620**	342
Amounts owed to Group companies	**482**	40
Social security and other taxes	**269**	313
Other creditors	**261**	44
Accruals and deferred income	**1,474**	1,318
	9,356	6,808

Creditors relating to acquisitions of £34,306,000 are disclosed in further detail in note 28 to the Group accounts.

8. Creditors: amounts falling due after more than one year

	2022 £000	2021 £000
Bank loans	**49,392**	12,351

The bank loans are detailed in note 21 of the consolidated financial statements of the Group.

The repayment profile of borrowings is as follows:

	Bank loans £000
Repayable in less than one year	8,892
Repayable in years one to five	54,723
	63,615
Less: interest included above	(7,973)
	55,642

The parent company guaranteed a bank loan advanced to its subsidiary, Bordeaux Acquisition Limited. The loan was repaid in full in 2022 (31 December 2021: loan of £857,000).

9. Right-of-use lease liabilities

The movement in the right-of-use lease liability over the year was as follows:

	2022 £000	2021 £000
At 1 January 2022	**183**	242
Interest payable	**3**	5
Repayments of lease liabilities	**(63)**	(64)
At 31 December 2022	**123**	183

Lease liabilities mature as follows:

	2022 £000	2021 £000
Minimum right-of-use lease liabilities falling due		
Within one year – land and property	**63**	63
Within one year – fixtures, fittings and equipment	**4**	4
	67	67
Between one and five years – land and property	**53**	116
Between one and five years – fixtures, fittings and equipment	**4**	8
	57	124
Total commitment	**124**	191
Less: finance charges included above	**(1)**	(8)
Net present value of lease liabilities	**123**	183
Current	**65**	62
Non-current	**58**	121

10. Deferred tax asset

	2022 £000	2021 £000
1 January	**1,251**	1,265
Adjustments in respect of prior years	**(46)**	29
Credit to the Consolidated Statement of Comprehensive Income in the year	**600**	(605)
Credit/(charge) to equity in the year	**(306)**	562
31 December	**1,499**	1,251
Deferred tax balances relate to temporary differences as follows:		
Provisions allowable for tax in subsequent periods	**(66)**	(69)
Share options	**1,565**	1,320
	1,499	1,251

Finance Act 2021 which was substantively enacted on 24 May 2021 included provisions to increase the corporation tax rate further to 25% effective from 1 April 2023 and this rate has been applied when calculating the deferred tax at the year end.

11. Share capital, share premium and share-based payments

Details relating to the parent company's share capital are set out in notes 24 and 25 to the consolidated financial statements.

12. Related party transactions

The Company is exempt under the terms of FRS 101.8 from disclosing transactions with its wholly owned subsidiaries.

Dividends paid in the year to Directors who hold shares amounted to £627,000 in aggregate (2021: £549,000).

See note 32 to the consolidated financial statements for disclosure on the related party transaction with Charles Holroyd, a Judges Non-Executive Director.

13. Directors and employees

	2022 £000	2021 £000
Staff costs (including Directors)		
Wages and salaries	1,484	1,327
Social security costs	178	163
Other pension costs	12	8
	1,674	1,498
Total Directors' emoluments		
Emoluments	1,048	953
Defined contribution pension scheme contributions	2	3
	1,050	956

During 2022 one Director exercised options over the Ordinary shares of the Company realising a gain on exercise of £119,000 (2021: one Director with a gain of £107,000).

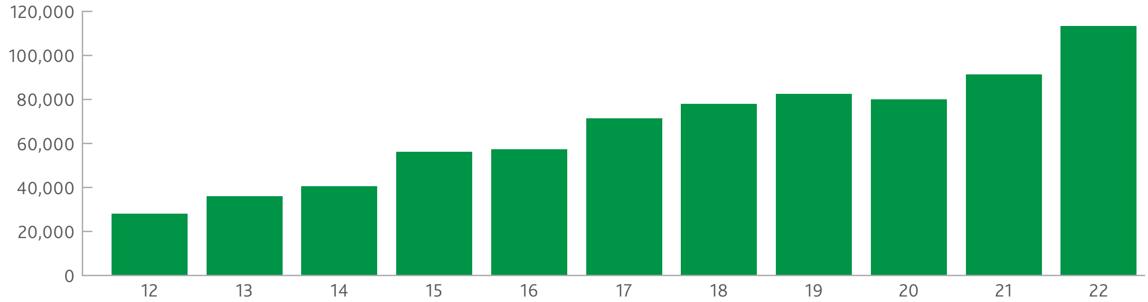
	2022 £000	2021 £000
Emoluments of the highest paid Director		
Emoluments	316	292

During the year, 1 Director participated in a defined contribution pension scheme (2021: one).

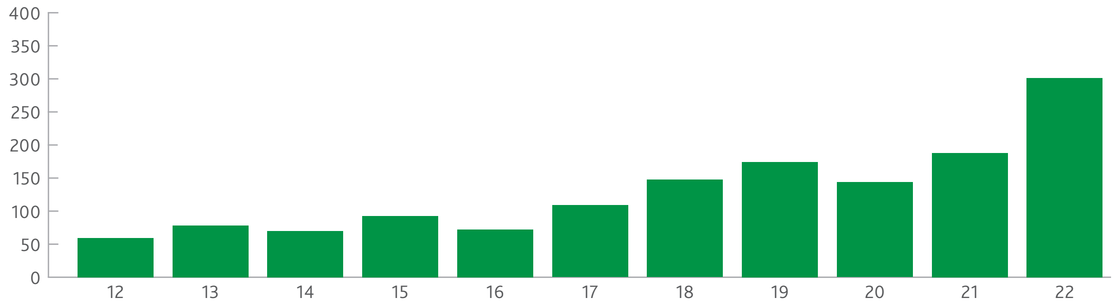
	2022 Number	2021 Number
Average number of persons employed		
Directors	8	8
Administrative staff	4	3
Total	12	11

Ten year financial history

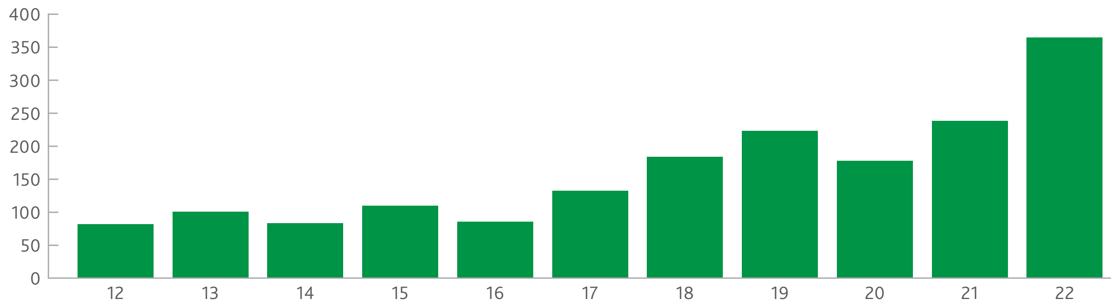
Revenue (£000)



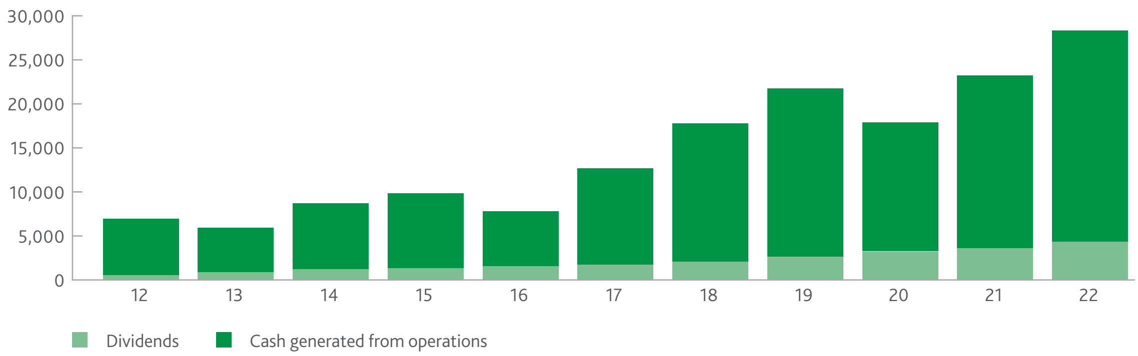
Adjusted operating profit (£000)



Adjusted basic EPS (pence)



Cash generated from operations and dividends (£000)



Company information

Directors

The Hon. Alexander Robert Hambro (Non-Executive Chairman)
David Elie Cicurel (Chief Executive)
Bradley Leonard Ormsby (Group Finance Director)
Mark Stephen Lavelle (Chief Operating Officer)
Tim Prestidge (Group Business Development Director) (appointed 1 February 2023)
Ralph Leslie Cohen (Non-Executive Director)
Ralph Julian Elman (Non-Executive Director)
Charles John Arthur Holroyd (Non-Executive Director)
Lushani Kodituwakku (Non-Executive Director)

Company Secretary

Glynn Carl Reece

Registered Office

52c Borough High Street
London SE1 1XN

Registrar

Link Group
Unit 10, Central Square
29 Wellington Street
Leeds LS1 4DL

Nominated Adviser

Shore Capital and Corporate Ltd
Cassini House
57 St. James's Street
London SW1A 1LD

Stockbrokers

Shore Capital Stockbrokers Ltd
Cassini House
57 St. James's Street
London SW1A 1LD

Liberum Capital Limited
Ropemaker Place
25 Ropemaker Street
London EC2Y 9LY

Investec Bank Plc
30 Gresham Street
London
EC2V 7QP

Auditor

BDO LLP
2 City Place
Beehive Ring Road
Gatwick RH6 0PA

Bankers

Lloyds Bank Corporate Markets
25 Gresham Street
London EC2V 7HN

Santander UK plc
1 Cornwall Street
Birmingham B3 2DX

Bank of Ireland
Bow Bells House
1 Bread Street
London EC4M 9BE

Solicitors

Sidley Austin LLP
70 St. Mary Axe
London EC3A 8BE

Registered in England and Wales, company no. 04597315

WORLD LAND TRUST™
www.carbonbalancedpaper.com
CBP018257

FSC www.fsc.org
MIX
Paper from responsible sources
FSC® C014999

Judges Scientific plc's commitment to environmental issues is reflected in this Annual Report, which has been printed on Symbol Freelife Satin, an FSC® certified material. This document was printed by Opal X using its environmental print technology, which minimises the impact of printing on the environment. Vegetable-based inks have been used and 99% of dry waste is diverted from landfill. Both the printer and the paper mill are registered to ISO 14001.

Produced by
designportfolio

Judges Scientific plc

Judges Scientific plc
52c Borough High Street
London SE1 1XN