



Post-Covid recovery enables record 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; nineteen 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 GDS Electro-mechanical Dynamic Cyclic Simple Shear Confined (EMDCSS-CON) is the premier device for simple shear testing. It is capable of carrying out dynamic cyclic tests ranging from small strain (0.005% shear strain amplitude) to large strain (10% shear strain amplitude), as well as a large range of extremely accurate quasi-static testing. This is the ultimate choice for a no-compromise simple shear machine with the greatest range of testing capabilities.

This page: The Oxford Cryosystems Cobra, delivers the same stable and effective cooling as the Cryostream 800 but without the need for liquid nitrogen.

Highlights

FINANCIAL HIGHLIGHTS

- Revenues up 14% to a record £91.3 million (2020: £79.9 million), including 10% Organic* growth;
- Adjusted** operating profit up 31% to £18.8 million (2020: £14.4 million);
 - Statutory operating profit of £15.6 million (2020: £10.2 million);
- Adjusted** basic earnings per share up 34% to 238.1p (2020: 177.2p);
 - Statutory basic earnings per share of 201.0p (2020: 131.1p);
- Final dividend of 47.0p, totalling 66.0p for the year, an increase of 20%; covered 3.6 times by adjusted earnings;
- Organic* order intake up 25% compared with 2020; and 9% up compared with record 2019***;

- Organic* order book at 22.6 weeks (31 December 2020: 14.7 weeks); total order book 23.0 weeks;
- Cash generated from operations of £19.6 million (2020: £14.6 million);
- Adjusted** net cash of £1.4 million as at 31 December 2021 (31 December 2020: adjusted net debt £5.7 million);
 - Statutory net cash of £1.4 million at 31 December 2021 (31 December 2020: statutory net debt £5.7 million);
- Cash balances of £18.4 million as at 31 December 2021 (31 December 2020: £15.5 million);
- New £60 million five-year bank facility to provide greater acquisition financing capability.

STRATEGIC HIGHLIGHTS

 Holding in Bordeaux Acquisition increased from 75.5% to 88%.

- Organic describes the performance of the Group including businesses acquired prior to 1 January 2020
- ** 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.
- *** For this measure only, Organic excludes the performance of Moorfield which was acquired in 2019.

91,289

Revenue (£000)

+14%

21	91,289
20	79,865
19	82,499
18	77,868
17	71,360

18,777

Adjusted operating profit (£000)

+31%

21	18,777
20	14,357
19	17,384
18	14,731
17	10,879

238.1

Adjusted undiluted basic earnings per share (pence)

+34%

21		23	8.1
20		177.2	
19		222.	5
18		183.4	
17	131.9		

STRATEGIC REPORT

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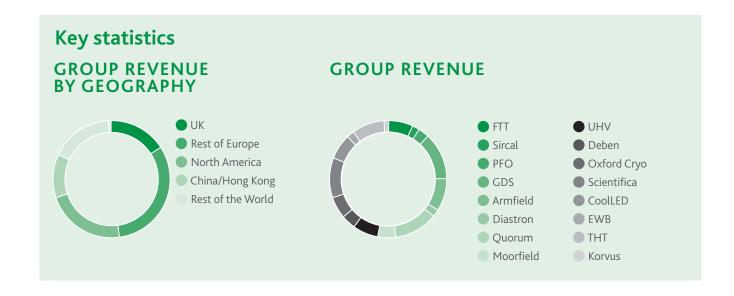


For more information visit: www.judges.uk.com

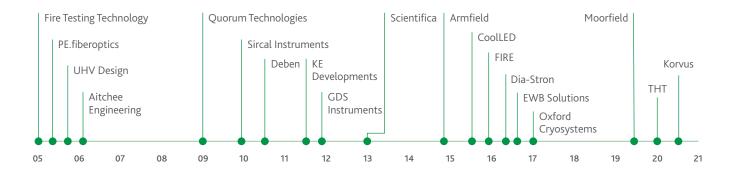
At a glance

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 nineteen businesses and maintains a policy of selectively acquiring businesses that generate sustainable profits and cash.



TIMELINE OF OUR ACQUISITIONS



OUR BUSINESSES



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.



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

PE.fiberoptics

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.



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.

UScientifica

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.



Scientifica's HoloStim-3D seamlessly integrates with the HyperScope, the award-winning multiphoton imaging system, to enable all-optical interrogation of neural networks with previously unachievable performance. This allows researchers to better understand the roles of neurons and brain circuits, and how they contribute to different behaviours.

At a glance continued

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.

Quorum adapted its GloQube glow discharge system to make an OEM component for use in a fully automated Cryo-EM vitrification instrument.





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.



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.

EWB Solutions Ltd

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.



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.



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.



Following a successful launch of the iCone plus in 2013 and iCone mini and classic in 2016, 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-rat 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.

Oxford Cryosystems flagship system, the Cryostream 800, offers stable and effective cooling for both single crystal and powder X-ray diffraction experiments.





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.

At a glance continued

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.



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.

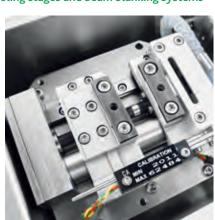
DEBEN"

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.

Deben's MT1000 Tensile Stage. Manufactured by Deben for Thermo Fisher Scientific, allowing tension, compression and bending of samples at high magnification inside the Phenom XL tabletop SEM.





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

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

- ground-breaking pE-800 Series for live cell imaging;
- award-winning triple-wavelength pE-300 Series for everyday fluorescence microscopy;
- 16-wavelength pE-4000 Universal Illumination System for high-end research; and
- pE-340fura for calcium imagings.

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

The pE-800 Series includes two sophisticated yet easy-to-use LED Illumination Systems, featuring eight individually controllable channels, industry-leading < 7 μs TTL switching and a host of advanced control options.





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 world benchmark battery calorimeter testing system.



MOORFIELD

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



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.



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.



Korvus' HEX benchtop thin film deposition system.

Chairman's Statement

For the year ended 31 December 2021



SUMMARY

- Throughout 2021 we still had to navigate numerous challenges as the uncertainty caused by the pandemic continued to impact the world.

 Despite this, the Group experienced progressive improvement enabling it to stage a solid recovery and to deliver, once again, record revenue, profit and cash generation supported by a record order intake.
- The resilience of the Group's business model and a good performance from recent acquisitions alongside the hard work by all our colleagues have supported the recovery.



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 47p, making a total of 66p in respect of 2021, a 20% increase on the prior year (2020: 55p)."

he Group demonstrated its resilience and adaptability in 2020 at the onset of the Covid-19 pandemic. Throughout 2021 we still had to navigate numerous challenges as the uncertainty caused by the pandemic continued to impact the world, with travel restrictions and new variants having to be managed. Despite this, the Group experienced progressive improvement enabling it to recover and to deliver, once again, record revenue, profit and cash generation supported by a record order intake. Notwithstanding the utterly deplorable events unfolding in Ukraine, we enter 2022 with cautious optimism as our business model has proven its resilience and the strength of our order book gives confidence

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 47p, making a total of 66p in respect of 2021, a 20% increase on the prior year (2020: 55p). Since the payment of the first dividend in respect of 2006, regular dividends have grown at a compound annual rate of 22.9% and total dividend distributions have aggregated to nearly six times the 2005 re-admission price of 100p.

Strategy

for further recovery.

The Group's strategy remains unchanged, based as it is 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 focus on 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.

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

As a result of the dependable growth of our 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.

The underlying 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

The Group's ability to deliver this record performance would not have been possible without our colleagues, all of whom have yet again worked very hard in a challenging environment in order to further develop our businesses and take full advantage of a gradual return toward normality. Whilst we remained impacted by the pandemic, our 500-strong team continued to exercise caution and discipline to protect their colleagues and keep each other safe. I am sure our shareholders join the Board in thanking them for their continued dedication.

Alex Hambro

Chairman 22 March 2022

Chief Executive's Report

For the year ended 31 December 2021



SUMMARY

- With the constant changes in the UK Covid situation, the year was particularly suited to devolved local tactical improvements that the Group's structure and culture promotes so effectively, and each of our businesses responded differently. The fact that six of our businesses recorded not just full recoveries but all-time record profits suggests that many emerged from the pandemic fundamentally stronger than they
- The Group was also not immune to the widely reported supply chain issues seen across the globe which surfaced as an increasing but still manageable headwind. Despite these challenges our Group showed its resilience, delivering a strong recovery and a record performance.
- 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.

hilst we started the 2021 financial year with renewed optimism looking forward to a more familiar environment as a consequence of the mass vaccination programmes, we still had to navigate external challenges throughout the year under review. The continued restrictions on travel were the biggest hurdle to overcome as our ability to visit customers and attend scientific conferences and trade conventions was hindered, as most were held virtually; and to a lesser extent, a number of our corporate customers retained freezes on capital expenditure. The Group was also not immune to the widely reported supply chain issues seen across the globe. These supply chain issues, which had been benign at the start of

the pandemic, surfaced as an increasing but still manageable headwind. Despite these challenges our Group showed its resilience, delivering a strong recovery and a record performance.

With the constant changes in the UK Covid situation, the year was particularly suited to devolved local tactical improvements that the Group's structure and culture promotes so effectively. With each business seeing a different market situation, a varied degree of staff availability and Covid resilience, and with differing building layouts influencing options, each of our businesses responded differently. Given market conditions, some found that R&D could be accelerated, while others had to pause; some were able to upgrade their online presence and impact (including remote installations) while some markets resisted this. The fact that six of our businesses recorded not just full recoveries but all-time record profits suggests that many emerged from the pandemic fundamentally stronger than they entered it. The businesses have also become better at constantly sharing their challenges and successes, so that best practice can be continually developed across the Group, a fundamental part of our strategy as we look to drive organic growth. 2022 began with the widely reported component shortages and delivery restrictions, so whilst life is not completely back to normal, we will continue with our dedication to raise the operational bar across the Group: seeking to improve the less advanced production processes, upgrade the less integrated IT systems, and focus R&D efforts to deliver fewer but more targeted innovations more quickly.

Order intake

Order intake is the main driver of our business. With the easing of restrictions, intake improved throughout the year: Organic* intake was up 25% year-on-year in the first half and accelerated to maintain its advance at 25% for the year as a whole, in spite of tougher comparatives in the second half (H1 2020 intake suffered the worst effect of Covid). Organic** order intake progressed 8.5% against 2019, our previous record.

The best performance was recorded in North America (up 39%, following a 26% decline in 2020) followed by the Rest of the World (up 31% following a 25% decline), the UK (up 27% after growing 8% in 2020) and the Rest of Europe (up 22% after growing 3% in 2020). China/Hong Kong, which had receded 22% in 2020, stabilised and was broadly flat. The largest year-on-year absolute progress was achieved in the USA, followed by the UK, the Czech Republic, Japan, France, Germany and Australia. The Netherlands and Belgium showed the largest absolute declines after strong progress in 2020. Order intake still varied considerably from business to business and between scientific disciplines; all businesses except one grew from 2020 and among those servicing large corporate customers enforcing capex freezes, one staged a strong revival and one only improved late in the year.

As a result of the accelerating order intake, the Organic order book progressed from 16.1 weeks of budgeted sales on 30 June to 22.6 weeks at the year end (31 December 2020: 14.7 weeks). The Group's total order book ended the year at 23.0 weeks.

Revenues

Although Covid continued to challenge our operations, disruptions were less prevalent than in 2020 and alleviated as the year progressed; the use of the furlough scheme shrank strongly and many of our colleagues were able to return to their offices, although a degree of flexibility will endure. Installations remained disrupted by travel restrictions and logistic difficulties slowed down the recognition of some revenue. Global supply chain issues became more challenging; they were successfully managed albeit with some impact in terms of management effort, purchase prices, excess inventory and product redesign.

Group revenues for the financial year ended 31 December 2021 progressed from £79.9 million to £91.3 million, including Organic* growth of 10% and the full year contribution from the two acquisitions completed

The Group continues to be a strong exporter and is well diversified across the globe, with 22% of the Group's revenues earned in North America, 32% in the Rest of Europe and 12% in China/Hong Kong. Organic revenues grew strongly in all regions except China/Hong Kong (down 28% after growing 18% in 2020). North America recovered 11% (down 32% in 2020), the Rest of the World grew 3% (down 18% in 2020), and the Rest of Europe 16% (down 3% in 2020); the UK, which had receded 6% in 2020, grew 43%. The most notable absolute swings were the UK (up £4 million), Germany (up £2 million), the USA (up £2 million) and the Czech Republic (up £1 million) whilst China/Hong Kong was down £3 million (up £2 million in 2020).

Profits

The most important driver of Judges' operating margins is volume. The strong

"Organic" in this report describes the performance of the Group excluding THT and Korvus as they were acquired since 1 January 2020.

** For this measure only, Organic excludes the performance of Moorfield which was acquired in 2019.

Chief Executive's Report continued

For the year ended 31 December 2020

recovery in Organic revenue, with some help from savings on travel and exhibitions still continuing, drove our EBITA margin before central costs to 25% (2020: 21.2%, 2019: 24%). Adjusted profit before tax and adjusting items progressed to a record £18.1 million (2020: £13.7 million, 2019: £17.0 million). All measures of profitability were flattered compared to previous years as, for the first time, £0.8 million of R&D expenditure was capitalised in compliance with IAS 38, with no meaningful amortisation to offset it. Organic operating contribution increased 28%. All the Group businesses increased their contribution except two, one of which had achieved its record in 2020; six companies achieved new record contribution in 2021. The operating subsidiaries combined produced a Return on Total Invested Capital of 28.3% (2020: 23.5%, 2019: 31.4%).

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 £6.2 million in 2021 (2020: £6.2 million), equivalent to 6.8% of Group revenue (2020: 7.7%).

The increase in pre-tax profits was replicated in earnings per share: Adjusted earnings per share progressed by 34% from 177.2p to 238.1p beating the 2019 record of 222.5p; adjusted fully diluted earnings per share similarly progressed to 234.9p (2020: 173.9p).

Corporate activity

The Group purchased a further 12.5% of interest in Bordeaux Acquisition (the holding company for Deben UK and Oxford Cryosystems) for £1.8 million, bringing our ownership to 88%.

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 cost 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.

The uncertainty caused by Covid didn't encourage owners to offer their businesses for sale and the Group didn't complete any acquisition during the year.

Cashflow

In spite of the build-up of precautionary stock, of logistical issues delaying revenue recognition and of receivables relating to outstanding installations, cash conversion was satisfactory at 104% (2020: 102%), with cash generated from operations of £19.6 million (2020: £14.6 million). As a result, year-end cash balances increased to £18.4 million from £15.5 million as at 31 December 2020. Adjusted net cash (excluding IFRS 16 lease liabilities but including sums still due in respect of acquisitions) at the year end amounted to £1.4 million (2020: £5.7 million net debt).

Dividends

Your Board is recommending a final dividend of 47p per share subject to approval at the forthcoming Annual General Meeting on 24 May 2022, which will make a total distribution of 66p per share in respect of 2021 (2020: 55p per share). The total dividend per share is 3.6 times covered by adjusted earnings per share (2020: 3.2 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 8 July 2022 to shareholders on the register on 10 June 2022 and the shares will go ex-dividend on 9 June 2022.

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 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.

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 will increase uncertainty in worldwide research funding. It appears that re-emerging inflation may not be as temporary as proclaimed and higher interest rates could accentuate government deficits and bring back austerity, whilst higher interest rates may alter the competitive balance in 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 its revenue originates from countries where the standard of value is the US Dollar (one-half of total revenue) or the Euro (one-third of total revenue). The currency movements since the run-up to the Brexit referendum vote have had a positive influence on our margins and our competitiveness; the recent resolution of the Brexit uncertainty might have improved the outlook for Sterling but exchange rates have continued to remain favourable to our Group.

Outlook

The long-term drivers for our business are as strong as ever and we remain confident in the Group's resilience and adaptability. The expectation of a year less dominated by Covid has been overshadowed with Europe being shaken by the Russian leadership's invasion of Ukraine. Whilst our direct exposure to Russia and Ukraine is limited (0.4% of Group revenue over the past three years), the war is further exacerbating supply chain difficulties and may in future create competing claims for public funds across the world.

Nevertheless, the Group is starting the year with a record order book, order intake slightly ahead of the first 11 weeks of 2021 and a robust financial position, leaving it well equipped to pursue its unchanged strategy.

David Cicurel

Chief Executive 22 March 2022

Buy and build model

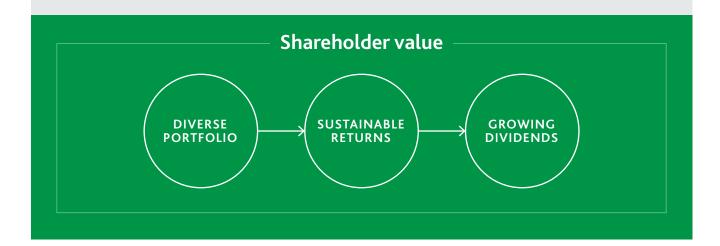
Favourable market LONG-TERM ORGANIC GROWTH DRIVERS + LOW CAPITAL USE + LARGE DEAL POOL Long-term Organic growth trends in science: global higher education and process optimisation Low working capital and capex requirements acquisitions in global niches

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
- Large pool of potential acquisitions; Judges is highly selective
- Judges has a strong reputation for being a good acquirer

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



Strategy

A focused strategy

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

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.

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.

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

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.

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.



Section 172 statement

For the year ended 31 December 2021

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; and
- 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, 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 14 to 21.

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 30 to 32.

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 38 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 have remained focused through the pandemic on maintaining staff wellbeing and have created Covid-secure environments for all our staff. As disclosed in the Sustainability Report on pages 14 to 21, we are also proud that around 40% 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 14 to 21.

Sustainability Report

For the year ended 31 December 2021

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 carbonintensity manufacturing businesses, it is still imperative that we minimise our negative impact on the environment.

Given the structure of our Group, which consists of 17 small and medium-sized businesses, each of whom employ less than 70 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.

Over the coming years we expect to continually evolve this strategy, further reduce emissions, 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."

"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."

Approximately 40% of our team are Judges Scientific shareholders (216 staff at 31 December 2021), 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 Scientific.uk.com/PDF/Modern-Slavery-Act-statement-Judges Scientific-2021.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 good 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.



Sustainability Report continued

For the year ended 31 December 2021

"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."

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.

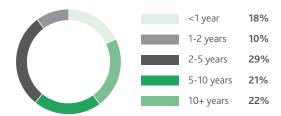
Our aim is to retain, attract and enable the best people, creating an inclusive environment for all, noting at the same time that recruitment for small companies is often more challenging than for blue-chip businesses.

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

Employee length of service (years)



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 6.5 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 2021 was 15% of our workforce, close to the UK average. We calculate this figure as the number of leavers in the year (excluding any retirements) divided by the average annual number of staff.



"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."



The average age of our staff is 44.4 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 201 staff over the age of 50 and our oldest staff member is 80 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 16% of the Group being under the age of 30.

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, 25% of our Group are female (2020: 24%). 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 now have three female Directors on subsidiary boards (including one Managing Director).

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 the changes to working practices due to Covid restrictions, we have wherever possible offered hybrid working, and we have accommodated the needs of many of our staff to work remotely.

Sustainability Report continued

For the year ended 31 December 2021

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 12% average gender pay gap between males and females across all employees excluding senior management. This has decreased slightly from 2020, although the median gap

has marginally increased. 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 reduced from 30% in 2020 to 29% in 2021, and the median gap reduced to 20% from 23%. 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 2021 99.3% of women received a bonus with 98.8% of men (2020: 65.6% of women and 58.0% of men).

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

	Excluding Seni	Excluding Senior management		Including Senior management	
2021	Mean	Median	Mean	Median	
Pay gap	12%	15%	29%	20%	
Bonus pay gap	-1%	0%	37%	29%	
2020	Mean	Median	Mean	Median	
Pay gap	13%	13%	30%	23%	
Bonus pay gap	27%	-15%	52%	-29%	

Pay gap progress:



As our businesses are fairly small, we do not have a consistent staff structure across them all. It was therefore not straightforward to collate groups of staff in similar roles across all role 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 the 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.

	2021 Female	2021 Male	2020 Female	2020 Male
Upper	37%	63%	36%	64%
Upper middle	26%	74%	24%	76%
Lower middle	20%	80%	21%	79%
Lower	17%	83%	15%	85%

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-chips 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.

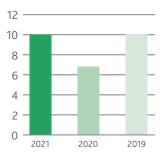
Health and Safety

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.

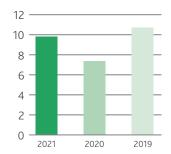
The Group routinely monitors health and safety adherence across our trading subsidiaries. As we operate a decentralised autonomous operating structure, performance is monitored at a Group level with the board of each trading subsidiary directly responsible for compliance with local health and safety 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 2021, we had ten minor incidents and no significant injuries across all our businesses (2020: seven 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.

To date 95% of our subsidiary leadership teams have attended our Judges Scientific leadership development programme. During 2021 we also implemented a new management development course that 36 of our most promising managers attended, to aid 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.

Sustainability Report continued

For the year ended 31 December 2021

"We work to minimise the environmental impact of our operations wherever possible. Our instruments are largely used for research, to help progress scientific advancement."

ENVIRONMENT

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

Purpose

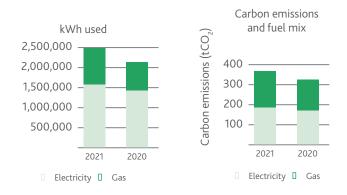
We work to minimise the environmental impact of our operations wherever possible. As a manufacturer of niche scientific instruments, we do not have carbon-intensive manufacturing facilities, instead the vast majority of our businesses are assembling instruments. Our niche instruments are largely used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

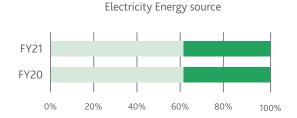
Through our culture of sustainable ownership, it's often our colleagues who identify areas for improvement to combat climate change. Best practices in individual businesses are shared across the Group, and implemented where feasible. This year, as part of our budgeting process, we also gave specific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





Energy use and GHG (Scope 1) emissions

	2021	2020
Global energy usage (KWh)	2,442,838	2,195,777
Emissions		
Scope 1 (direct emissions) tCO ₂ e	371.1	334.3
Normalised values		
Scope 1 (direct emissions)		
tCO ₂ e/£m revenue	4.06	4.18

Our businesses continue to seek ways of reducing energy; whilst the energy consumed this year increased 11% from 2020's Covid affected year, we have managed to reduce our energy usage per \pounds of revenue by 3%. We are looking at best practices across the Group, and seeking to implement other innovations that could improve this performance. Over 60% of the electricity we use comes from renewable sources and we will ensure this increases as business by business we switch to renewable energy sources.

The UK's share of the Group's global energy usage was 98% for gas and 99% for electricity (2020: 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 are looking 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 are at the start of the journey, but we are exploring ways to calculate our waste and water use, and for example, many of our subsidiaries already use eco-packaging wherever possible. As a Group, we are examining 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 22 March 2022

Principal risks and uncertainties

Managing our risks

ACQUISITIONS

Why is it important?

The 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, maybe not as fleeting as predicted, and unavoidably higher interest rates are likely to disrupt the stability of the Group's environment.

POLITICAL TENSION

Why is it important?

The war in Ukraine may exacerbate the supply chain difficulties already triggered by Covid. If the conflict extended to NATO countries, this would strongly impact businesses throughout the world. The tensions between the West and China may well degenerate into an open conflict; China is an important destination for our products. More generally, political tensions may have a detrimental effect on our ability to trade worldwide and divert government funding priorities away from research.

COVID-19

Why is it important?

The development of vaccines and the emergence of a more benign variant are progressively mitigating the economic impact of the Covid-19 pandemic; 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 possible.

KEY PERSONNEL

Why is it important?

What are we doing to mitigate the risk?

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.

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, longerterm 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 The Group seeks, so far as is practicable, to mitigate currency effects for exposed to fluctuations in exchange rates which may impact on the financial year via hedging foreign exchange rates. Additional detail is its competitiveness. Rates are affected by macro-economic set out in note 27. factors such as Brexit and the levels of government borrowings due to Covid-19; should Sterling appreciate this may reduce the

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 detailed market analysis 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 requests.	

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

Group's competitiveness.

David Cicurel

Director 22 March 2022

Company registration number: 04597315

Finance Director's Report

For the year ended 31 December 2021





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 2021 as the Group has delivered a strongly profitable performance in returning to normal after the effects of Covid-19 in 2020."

he 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, operating margins, 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 delivered well in 2021 as the Group has delivered a strongly profitable performance in returning to normal after the effects of Covid-19 in 2020.

Revenue

Group revenues increased to £91.3 million, up 14% on the £79.9 million in 2020. Organic revenues grew by 10% (2020: Organic decline of 12%) as much improved order intake enabled higher throughput. The balance of the growth was provided by full year contributions from THT and Korvus, the businesses acquired in May 2020 and October 2020, respectively.

Across our two segments, Materials Sciences total revenues improved by £7.5 million to £40.7 million (2020: £33.2 million) whilst Vacuum revenues rose by £3.9 million to £50.6 million (2020: £46.7 million).

Profits

The improvement in revenue supported strong growth in profits and profitability. Adjusted operating profits increased by £4.4 million to £18.8 million, a 31% uplift and, due to the operational gearing of the Group, this also meant that the Group achieved operating margins of 21%, up from 18% in 2020.

This shows the Group's good recovery from the challenges of the previous year and despite having to navigate the global supply chain challenges that the Group, amongst many others, faced in particular through the second half of this year.

Compared with the pre Covid-19 performance in 2019, on the face of it the results are better, with adjusted operating profit up £1.4 million. However it is important to appreciate a few items that affect this comparison. Firstly, we have acquired three businesses since December 2019; secondly we have incurred lower travel and marketing costs as a result of the inability to travel; and thirdly, this year, for the first time, we have also capitalised £0.8 million of internally generated development costs; all of which flatter any comparison to 2019.

Average Sterling rates strengthened in 2021, as an example by around 7% against the US Dollar, which was a minor drag on our performance, but overall rates remained at a beneficial level for the Group and we enter 2022 with the environment remaining fairly aligned with 2021. Adjusted profit before tax was £18.1 million compared to £13.7 million in 2020, an increase of 32%.

Statutory operating profit increased to £15.6 million (2020: £10.2 million), and statutory profit before tax was £14.9 million compared to £9.5 million in 2020.

	2021	2020
Adjusted basis earnings per share	238.1p	177.2%
Adjusted operating profit margin	21%	18%
Return on Total Invested Capital	28.3%	23.5%
Cash conversion	104%	102%
Organic order intake	+25%	-13%

Capitalisation of development costs

This year for the first time, in accordance with IAS 38, we were required to capitalise £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 £0.0 million. This has had the effect of artificially improving our result for the year by approximately 10 pence of earnings per share. As products are completed, their development costs will be amortised through the income statement over the next three years.

We are likely to have a materially similar run rate of capitalisation over the coming years, so whilst there has been a performance-enhancing effect on the results this year, this effect will diminish over the next two to three years.

Adjusting items

The total pre-tax adjusting items of £3.2 million were recorded in 2021 (2020: £4.2 million). The main constituents were amortisation of intangible assets recognised upon acquisition of £2.6 million (2020: £3.2 million), lower due to no acquisitions having completed in 2021 and hence also £nil of acquisition costs (2020: £0.6 million).

Finance costs

Net finance costs (excluding adjusting items) totalled £0.7 million (2020: £0.6 million) arising from the Group's existing debt. Given recent increases to Bank of England interest rates, this will likely mean that interest costs will remain relatively stable despite amounts being repaid. Statutory net finance costs were £0.8 million (2020: £0.7 million), the £0.1 million difference between the statutory and adjusted figures is attributable to the net finance cost arising from the defined benefit pension scheme acquired with Armfield in 2015.

Taxation

The Group's tax charge arising from adjusted profit before tax was £2.8 million (2020: £2.0 million). The effective tax rate on adjusted profits is 15.2% compared with 14.8% in the prior year and this increase reflects relatively stable benefits from research and development tax credits set against the significant growth in profits this year.

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 will in future move into the large companies R&D scheme which provides a lower level of credit against the standard UK corporate rate, which itself is also due to substantially rise in the coming years.

Earnings per share

Adjusted basic earnings per share increased from 177.2p to 238.1p, an increase of 34%, and adjusted diluted earnings per share was 35% higher at 234.9p (2020: 173.9p).

Statutory basic earnings per share, after reflecting adjusting items which are influenced by the amortisation of intangible assets arising from recent acquisitions, was 201.0p (2020: 131.1p) and statutory diluted earnings per share totalled 198.2p (2020: 128.7p).

Order intake

Organic order intake was pleasingly 25% ahead of the Covid-19 affected prior year and was strong throughout 2021. This allowed our businesses to finish rebuilding their order books and then deliver higher performance as we progressed through the year. 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 strong intake resulted in a closing Organic order book at 31 December 2021 of 22.6 weeks of budgeted sales (31 December 2020: 14.7 weeks). Total order book was 23.0 weeks, including THT and Korvus, giving a healthy platform to commence 2022.

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 2021 reflected a good recovery throughout 2021 and hence ROTIC improved to 28.3% (2020: 23.5%). There is still room to improve this, and it reflects that not all our businesses are back operating at their full potential following the pandemic.

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.

We always strive to improve Group ROTIC whilst accepting the inevitable downward pressure on overall returns that would arise from acquiring businesses at multiples higher than three times.

Finance Director's Report continued

For the year ended 31 December 2021

Dividends

For the financial year ended 31 December 2021 the Company paid an interim dividend of 19.0p per share in November 2021. Following a good performance in 2021, the Board is recommending a final dividend of 47.0p per share giving a 20% increase in the total dividend for the year of 66.0p per share (2020: 55.0p per share). Dividend cover is approximately 3.6 times earnings per share.

Your 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 2021 stood at 519 (2020: 499). This growth reflects the full year contribution from our 2020 acquisitions and also a return to recruitment to support the Group's long-term growth strategy.

Share capital and share options

The Group's issued share capital at 31 December 2021 totalled 6,318,415 Ordinary shares (2020: 6,299,163). The shares issued during 2021 arose from the exercise of share options by various members of staff during the year.

Share options issued during the year under the 2015 scheme totalled 60,986 (2020: 6,151) and the total share options in issue at the year end under both the 2005 and 2015 schemes amounted to 201,460 (2020: 160,026).

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 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 2021, the pension liability (net of deferred tax) was £1.0 million (31 December 2020: £2.7 million). This reduction to the net liability primarily resulted from the deficit reduction payments, good fund asset performance and an increase to the discount rates. Armfield takes its responsibility seriously to ensure the pension is adequately funded whilst also continuing to review appropriate deficit control strategies.

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 £19.6 million (2020: £14.6 million), and a high conversion rate of adjusted operating profit into cash of 104% (2020: 102%). This was achieved despite having to invest in our inventory levels following the growing challenges with global supply chain issues and still experiencing delays in collections due to ongoing restrictions which impacted on our ability to travel to customers to complete installations and training across the world and consequently be paid upon completion. Total capital expenditure on property, plant and equipment amounted to £2.7 million (2020: £1.3 million). This figure is higher than usual due to a £1.3 million property purchase to enable the relocation of Oxford Cryosystems from two small units into a single building, and from utilising the Government's special investment allowance. Year-end cash balances totalled £18.4 million (2020: £15.5 million).

The Group ended 2021 with net cash (excluding IFRS 16 liabilities) of £1.4 million compared with £5.7 million of adjusted net debt at the end of 2020. Gearing, calculated as the proportion of net cash/debt compared to adjusted operating profit, at 31 December 2021 was -0.07 times (2020: 0.40 times). We remain committed to maintaining a conservative gearing position whilst at the same time taking the opportunities of acquiring strong, sound businesses at disciplined multiples. The £7.1 million growth in net cash is a result of the strong 2021 performance offset partially by the investments in capital expenditure (£2.7 million), settling corporate taxes (£2.2 million), the continuation of our policy of paying progressively increasing dividends to shareholders (£3.6 million in 2021) and a £1.8 million outlay on acquiring additional shares in Bordeaux.

The Group's financial position continues to be a strength and we have suitable banking facilities to support inorganic growth. On 26 May 2021 the Group entered into new banking facilities ("Facility") with Lloyds Banking Group plc (the "Bank") for an aggregate £60.0 million, which replaced its previous £35.0 million banking arrangements. 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.

The Facility consists of a £19.0 million term loan ("Term Loan"), a committed £35.0 million revolving credit facility ("RCF") plus a £6.0 million uncommitted accordion facility, which can be drawn at the discretion of the Bank. 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 Facility has a five-year term ("Borrowing Term") with interest consistent with previous banking arrangements and likewise with banking covenants, namely:

- Gearing no greater than 2.5 times Adjusted EBITDA;
- Interest cover no less than three times; and
- Adjusted EBITDA cover of greater than £7.5 million plus 75% of any future acquired company's adjusted EBITDA.

The accordion increases by the amount paid off the Term Loan, keeping the overall Facility at £60.0 million throughout the Borrowing Term.

The existing lending facilities via Bordeaux Acquisition Limited the Group's 88% owned subsidiary remain unchanged. Bordeaux owns the trading companies of Deben UK Limited and Oxford Cryosystems Limited.

At the year end the Term Loan was £16.1 million (2020: £4.5 million) and the RCF was undrawn (2020: £15.0 million), with £35.0 million available to drawdown for future acquisitions. At 31 December 2021, repayments on the Bordeaux loan had reduced the outstanding balance to £0.9 million (2020: £1.7 million).

The ongoing long-term support of Lloyds Bank 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 2021 was a positive year for the Group. Thanks to the outstanding efforts by all our team, we achieved a strong performance with excellent cash generation despite having to battle through many problems caused by the global supply chain issues and the enduring uncertainty surrounding the Covid-19 pandemic and its many variants. The Group remains in a strong position, with a healthy balance sheet, robust opening order book with which to start 2022 and significant available borrowing capacity, and is therefore well positioned to continue its strategy of achieving growth in earnings via selective acquisitions of strong niche businesses in the scientific instruments sector, alongside the ongoing performance of its existing businesses.

Brad Ormsby

Group Finance Director
22 March 2022

Board of Directors

Our Board

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











Hon. Alexander Hambro Chairman

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 OTAQ plc, Falanx Group Ltd and IWP Holdings Ltd; and a Non-Executive Director of Octopus Apollo VCT plc, Oberon Investments Group 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

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 OrmsbyGroup Finance Director

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.

Mark Lavelle Chief Operating Officer

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.

Charles Holroyd Non-Executive

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

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 team 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

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

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**

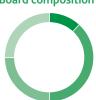
Glynn Reece is a graduate of Oxford University and a qualified solicitor. Since 1987, he has specialised in providing corporate finance deal origination and advisory services, working for (inter alia) Coopers & Lybrand, Arthur Andersen and CLB, a specialist AIM firm.

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

COMMITTEE **MEMBERSHIP**

- **E** Executive
- Non-Executive
- Independent
- **Audit Committee**
- Remuneration Committee

Board composition



- Chairman
- Executive Directors
- Non-Executive Directors
- Independent Non-Executive Directors

Board tenure

1

3

2

2



- 0–3 years
- 4–7 years 3

1

8+ years

Judges Scientific plc

Corporate Governance Statement

For the year ended 31 December 2021





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. At the same time, the Company considers that these Non-Executive Directors in practice act independently of the Executive management and that the value of their long association with the Company alongside their deep understanding of the Group's business model ensures that they are best placed to appropriately oversee adherence to the Group's enduring strategy, which continues to provide shareholders with long-term market-beating performance.

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, although over time, this process of Board composition refreshment will continue.

It is also key that the Non-Executive Directors, as a whole, retain a corporate memory of past events to ensure that decision making of Executive Directors is appropriately challenged.

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 at the Group's head office or rotated around the Group's operating companies so that the Board are able to meet local management, however due to the restrictions imposed by the Covid-19 pandemic, the majority of Board meetings in 2021 had to be held

remotely using Microsoft Teams although prior to the arrival of the Omicron variant, the Board were delighted to have been able to hold two in-person Board meetings at our subsidiaries.

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	11/11	_	_
CJA Holroyd	11/11	7/7	3/3
LD Kodituwakku	11/11	_	3/3
RL Cohen	11/11	7/7	_
RJ Elman	11/11	7/7	3/3

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.

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 33 and 34 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 35 to 37 contains more detailed information on the Committee's role and the Directors' remuneration and fees.

Board effectiveness

Biographies of the Board on pages 28 and 29 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.

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.

Corporate Governance Statement continued

For the year ended 31 December 2021

Board Committees continued

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.

As part of Brad Ormsby's appointment process as Non-Executive Director of Octopus AIM VCT 2 plc, the Board satisfied itself that he would be able to perform the additional role alongside his existing responsibilities and that the experience gained would also be beneficial for Judges Scientific.

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, Ralph Elman, Ralph Cohen and Charles Holroyd will retire and offer themselves for re-election at the Annual General Meeting.

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 and are available on the Judges website for all shareholders to view.

Additionally, the Group operates a twice-yearly site visit (although due to Covid-19 these were unable to be operated in both 2020 and 2021), 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. All shareholders are also encouraged to attend the Annual General Meeting which is on 24 May 2022 (full details in the Directors' Report on page 39). 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 2021 no matters were raised.

Alex Hambro

Chairman 22 March 2022

Audit Committee Report

For the year ended 31 December 2021



n behalf of the Board, I am pleased to present the Audit Committee Report for the year ended 31 December 2021.

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 seven times, to undertake our responsibilities as set out below and, in particular, review the audit and interim findings, approve the audit plan, oversee an audit tender process, approve an internal audit approach for 2021 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 Auditors 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.

Role of the external Auditor

The Audit Committee monitors the relationship with the external Auditor, Grant Thornton UK LLP, to ensure that auditor independence and objectivity are maintained. No non-audit fees were charged by Grant Thornton UK LLP to the Group as the Group adopted a policy to restrict work of the Auditor to audit or audit-related services only from 31 December 2020. An analysis of fees charged by Grant Thornton UK 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 the Auditor during the year, however, possible areas of significant risk and other matters of audit relevance are regularly communicated.

Audit tender process

Grant Thornton UK LLP has been the auditor to the Company since 2002. The Statutory Auditors and Third Country Auditors Regulations 2016, which the Group has followed as best practice, set out that no auditor's tenure be greater than 20 years, with transitionary provisions requiring that the Company change auditor no later than in 2023. The Board agreed, following recommendation of the Committee, that it was in the best interests of the Company to commence an external audit tender process during the second half of 2021. The incumbent auditor, due to their tenure approaching 20 years, was therefore excluded from this process.

The following process was carried out on behalf of the Committee:

- significant shareholders were canvassed for their opinions on the tender process and suitable audit firms;
- a desktop review of external audit providers to AIM was carried out. Based on the review and shareholder feedback, a number of UK top ten firms were invited to tender for the external audit;
- a Request for Proposal was issued which set out the timetable and tender process, scope of the work and the key assessment requirements;
- meetings were held between the audit partner from each firm and myself, as Audit Committee Chairman;
- meetings were held between each firm and Judges Scientific, including the Group Finance Director and Group Financial Controller; and
- submitted proposals were assessed by the Audit Committee focusing in particular on audit quality, strength and experience of the audit team and their fee proposal.

Audit Committee Report continued

For the year ended 31 December 2021

Audit tender process continued

Two audit firms were selected to present to Judges Scientific's Audit Committee and following these presentations, the Audit Committee recommended to the Board that their preferred new auditor was BDO UK LLP. The Board approved the recommendation in November 2021 and the Company is recommending to shareholders at the 2022 AGM the appointment of BDO UK LLP as auditor of the Company for the financial year commencing 1 January 2022.

The Audit Committee would like to thank Grant Thornton for their long-standing contribution to the Group over the life of Judges Scientific having generally enjoyed both a good working relationship and high-quality feedback throughout the past 20 years.

Internal audit

The scope of the internal audit work performed by the Group's internal audit function in 2021 was determined following feedback from the 2020 audit, and also via selection of subsidiary undertakings chosen through a selective process. The scope of the internal audit work in 2021 focused on specific reviews at six of the Group's subsidiaries (including Thermal Hazard Technology which was acquired in 2020) and a group-wide review of standard terms and conditions. No material issues for the Group were noted as part of this review.

The Committee agreed a new internal audit approach during 2020 with an expectation that every one of the Group's trading subsidiaries will 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.

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 30 to 32, 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 Chairman 22 March 2022

Remuneration Report

For the year ended 31 December 2021



n behalf of the Board, I am pleased to present the 2021 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 performancerelated elements. Overall remuneration is reviewed annually, and the key elements are explained below:

Base salary

This is set to 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 25% of base salary upon achieving annual earnings per share targets set within the annual budget. The Judges Scientific policy for achieving an annual bonus has historically included a preclusion to earning a bonus if earnings per share is below a historical high watermark. Whilst the Remuneration Committee had waived this requirement on an exceptional basis for 2021 due to the pandemic, the high watermark policy is fully reinstated for 2022.

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 1% introduction fee, a rate that is well below market rate for acquisition deal brokers. As at 31 December 2021, no Non-Executive Director had ever received remuneration of this nature. For good governance purposes and to ensure independence of process, any Non-Executive Director that introduced a potential acquisition to the Company would be required to recuse themselves from any decision-making activities in relation to that acquisition.

Key Committee activities in 2021

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 three meetings for regular Committee business. Its main activities were:

- review of the longer-term incentive arrangements for Executive Directors and award of share options, inclusive of appropriate performance conditions;
- benchmarking of and review of Executive Director remuneration arrangements for 2022;
- determining the performance target for the 2022 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

Remuneration Report continued

For the year ended 31 December 2021

Service contracts continued

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	2021 total £000	Salary/fees £000	Bonus £000	Pension £000	Benefits £000	2020 total £000
Non-Executive Directors										
Hon. AR Hambro	40	_	_	_	40	39	_	_	_	39
CJA Holroyd	35	_	_	_	35	34	_	_	_	34
RL Cohen	30	_	_	_	30	29	_	_	_	29
RJ Elman	35	_	_	_	35	34	_	_	_	34
LD Kodituwakku	30	_	_	_	30	8	_	_	_	8
Executive Directors										
DE Cicurel	200	50	_	5	255	195	_	_	5	200
BL Ormsby	180	45	3	11	239	175	_	3	8	186
MS Lavelle	220	55	_	17	292	214	_	_	17	231
Total	770	150	3	33	956	728	_	3	30	761

Note: The apparent increases in base salary/fees for 2021 are due to voluntary reductions in pay taken by Directors during 2020.

The 2021 annual bonus of 25% of base salary was awarded to the Executive Directors as a result of exceeding the earnings per share target (2020: no annual bonus was awarded). During 2021 one Director exercised options over the Ordinary shares of the Company realising a gain on exercise of £107,000 (2020: one Director with a gain of £1,084,000).

Implementation of remuneration policy for 2022

Base salary

During the year, the Committee reviewed the base salary of the Executive Directors and considered individual performance, experience and comparable market rates. This benchmarking exercise noted that the Executive Directors' base salaries were below their benchmark and given the Group's recovery in performance approved the following base salaries:

	2022 £000	2021 £000
DE Cicurel	230	200
BL Ormsby	200	180
MS Lavelle	236	220

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.

Share options

As disclosed in the 2021 Remuneration Report, 20,000 share options were awarded to each of the Executive Directors on 8 January 2021 to retain and incentivise them. No additional share options have been awarded for 2022.

Chairman and Non-Executive fees

The Chairman and Non-Executive Directors' fees were updated as of 1 January 2020 and fixed for three years as follows:

	£000
Chairman base fee	40
Non-Executive Director base fee	30
Fee for chairing Audit or	
Remuneration Committee	5

Chief Executive remuneration Level

The new 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 2021.

	2021 £000	2020 £000
Chief Executive total remuneration	255	200
Upper quartile UK employee total		
remuneration Median UK employee	52	51
total remuneration Lower quartile UK	37	38
employee total remuneration	29	29

Directors' interests

At 31 December 2021, 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 2021		1 January 2021	
	Shares	Options	Shares	Options
Non-Executive Directors				
Hon. AR Hambro	62,000	_	62,000	_
RL Cohen	66,116	_	64,341	1,775
RJ Elman	62,860	_	62,778	_
LD Kodituwakku	325	_	_	_
CJA Holroyd	2,016	_	2,016	_
Executive Directors				
DE Cicurel*	709,496	30,275	759,458	10,275
BL Ormsby	3,815	21,000	3,754	1,000
MS Lavelle	331	81,000	295	61,000

24.5

Dividends paid in the year to Directors who hold shares amounted to £549,000 in aggregate (2020: £492,000).

In 2021, 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, including matching shares, were 36 shares acquired by David Cicurel (2020: 47 shares), 36 shares by Brad Ormsby (2020: 47 shares) and 36 shares by Mark Lavelle (2020: 48 shares).

Options over Ordinary shares in the Company

	1	Number of shares		
Date of option issue	DE Cicurel	MS Lavelle	BL Ormsby	
2005 Option Scheme				
25 October 2013 at 1690p	1,775	_	_	
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	
	30,275	81,000	21,000	

^{*} These share options were issued with a performance condition of 6% compound growth in Adjusted Earnings Per Share.

Charles Holroyd

Remuneration Committee Chairman 22 March 2022

^{*} Includes non-beneficial interest in the 55,000 shares held by Shoftim Charitable Trust (2020: 50,000 shares).

^{**} 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.

Directors' Report

For the year ended 31 December 2021

The Directors present their report and audited consolidated financial statements for the year ended 31 December 2021. Comparative information is provided for the year ended 31 December 2020.

Results and dividends

The results for the financial year to 31 December 2021 are set out in the Consolidated Statement of Comprehensive Income. The Company paid an interim dividend of 19.0p per Ordinary share on 5 November 2021. At the forthcoming Annual General Meeting, the Directors will recommend payment of a final dividend for the year of 47.0p per Ordinary share to be paid on Friday 8 July 2022 to shareholders on the register on Friday 10 June 2022. The shares will go ex-dividend on Thursday 9 June 2022. The total dividend proposed for the 2021 financial year will aggregate to 66.0p, an increase of 20% (2020: 55.0p).

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 2021 with adjusted net cash of £1.4 million compared to adjusted net debt of £5.7 million at 31 December 2020. This increase in net cash was as a result of consistent cash generation arising from strong performance of the Group's principal operating companies, enabled by 25.0% growth in Organic order intake. The improvement in net cash is after outlays for dividends to our shareholders (£3.6 million), paying our fair share of tax (£2.2 million) and ongoing investment into capital expenditure (£2.7 million). In addition the Group also refinanced its borrowing facilities in May 2021 for a further five-year term providing the Group with greater certainty over long-term liquidity (see note 21).

The Directors have considered the ongoing impact of the Covid-19 pandemic, and a summary of the implications is included in the Chairman's Statement. 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 Covid-19 and more recently the events in Ukraine.

The Directors have planned for reasonably foreseeable worsening scenarios including a repetition of the same level of reduction in orders in 2022 as happened 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 2023 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 £6.2 million in 2021 (2020: £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 £0.8 million of this expenditure was capitalised (2020: £nil) with amortisation of £0.0 million (2020: £nil).

Engagement with stakeholders

The Group engages with all its stakeholders as disclosed in the Section 172 statement on page 13. 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 16 days (2020: 11 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 22 March 2022:

	No. of shares held	% of total Share Capital
David Cicurel	709,492	11.2
Liontrust	422,729	6.7
Odin Global	374,476	5.9
Hargreaves		
Lansdown	193,911	3.1
Stephen Upton and		
Jacqueline Upton	187,700	3.0

Advice and Insurance

This is disclosed in the Corporate Governance Statement on page 32.

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 cash of £1.4 million (31 December 2020: adjusted net debt of £5.7 million) (see note 21), exposure to interest rate fluctuations remains a low risk to the Group; however, the Group's loans are subject to interest rate hedges, 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 the 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.

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. With adjusted net cash of £1.4 million (31 December 2020: adjusted net debt of £5.7 million) (see note 21) and cash and cash equivalents of £18.4 million, the Group's cash position is considered to be a key strength.

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 14 to 21 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 13 and 14 to 21 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
CJA Holroyd – Non-Executive
LD Kodituwakku – Non-Executive
RL Cohen – Non-Executive

Statement of Directors' responsibilities

RI Elman – Non-Executive

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 and of the profit or loss of the Group and the parent company 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 IFRSs 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 the maintenance and integrity of the corporate and financial information included on the Company's website. Information published on the website is accessible in many countries and legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

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

Following an audit tender process (as explained on page 33 of the Audit Committee Report), we will be appointing a new auditor for the audit of the 2022 financial statements following an extensive tender process in the second half of 2021. The Auditor, BDO UK LLP, has expressed a willingness to be appointed. In accordance with section 489(4) of the Companies Act 2006, a resolution to appoint BDO UK LLP will be proposed at the Annual General Meeting.

Annual General Meeting

The Annual General Meeting of the Company will be held on Tuesday 24 May 2022 at 12.00 noon. The venue will be announced closer to the date of the meeting depending on the latest Government restrictions in place at that time.

On behalf of the Board

Brad Ormsby

Director

22 March 2022

Company registration number: 04597315 (England and Wales)

Independent auditor's report

To the members of Judges Scientific plc

Opinion

Our opinion on the financial statements is unmodified

We have audited the financial statements of Judges Scientific plc (the 'parent company') and its subsidiaries (the Group') for the year ended 31 December 2021, 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).

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 2021 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.

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 are 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. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We are responsible for concluding on the appropriateness of the Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the parent company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify the auditor's opinion. Our conclusions are based on the audit evidence obtained up to the date of our report. However, future events or conditions may cause the Group or the parent company to cease to continue as a going concern.

Our evaluation of the Directors' assessment of the Group's and the parent company's ability to continue to adopt the going concern basis of accounting included:

- Obtaining management's base case cashflow forecasts covering the period to 31 March 2023, assessing how these cashflow forecasts were compiled and evaluating supporting information, including budgets and order book;
- · Assessing the accuracy of management's historical forecasting by comparing management's forecasts for 2021 and 2020 to the actual results for those periods and considering the impact on the base case cashflow forecast;
- Performing an analysis on the base case forecasts, assessing the impact of changes in key assumptions on the cashflow forecasts and the headroom on debt covenants, including the sensitivity scenarios prepared by management. We considered whether the assumptions are consistent with our understanding of the business derived from other detailed audit work understaken;
- Performing a reverse stress test to identify the scenario which would result in a breach in covenants in the assessment period and assessing the probability of such a scenario and identifying the mitigating factors available to management if necessary;
- Assessing whether there are indicators of events and circumstances which may cast doubt on the Group's and parent company ability to continue as a going concern beyond management's period of assessment; and
- · Evaluating the Group's disclosures on going concern for compliance with the requirements of IAS 1 'Presentation of financial statements' (IAS 1).

In our evaluation of the Directors' conclusions, we considered the inherent risks associated with the Group's and the parent company's business model including effects arising from macro-economic uncertainties such as Brexit and Covid-19, we assessed and challenged the reasonableness of estimates made by the Directors and the related disclosures and analysed how those risks might affect the Group's and the parent company's financial resources or ability to continue operations over the going concern period.

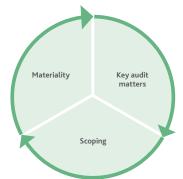
Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and the parent company's ability to continue as a going concern for a period of at least twelve months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

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.

The responsibilities of the Directors with respect to going concern are described in the 'Responsibilities of Directors for the financial statements' section of this report.

Our approach to the audit





Overview of our audit approach

Overall materiality:

Group: £775,500, which represents circa 5% of the Group's profit before tax.

Parent company: £728,000 which approximately 1% of the parent company's total assets.

Key audit matters were identified as:

- · Valuation of Goodwill (same as last year); and
- · Valuation of investments in the parent company (same as last year).

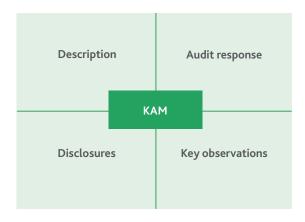
Our auditor's report for the year ended 31 December 2020 included two key audit matters that have not been reported as key audit matters in our current 31 December 2021 report. These relate to:

Going concern assumption – The going concern assumption was raised as a key audit matter for the year ended 31 December 2020. At the time of the 2020 reporting there was an unprecedented level of uncertainty in regards to Covid-19 and Brexit and the ultimate impact of these events on the Group. Going concern has not been identified as a significant risk for the current year due to the recovery of the business in the 2021 year and the decreased uncertainty surrounding the impact of Covid-19 and Brexit which has informed a lower risk assessment for this matter.

Valuation of intangibles arising on a business combination – the Group had no significant business combinations during the current period.

The Group engagement team have performed an audit of the parent company and component teams an audit of the financial information of three components using component materiality (full scope audit). Component teams performed specified audit procedures relating to nine components. The Group engagement team performed analytical procedures at a Group level for the remaining 17 components in the Group during the year.

Based on the procedures performed on the financial information of the Group, coverage of more than 75% of all identified significant risks has been achieved.



Key audit matters

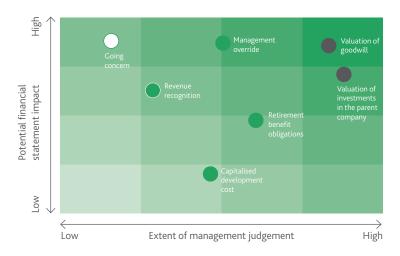
Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those that 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.

Independent auditor's report continued

To the members of Judges Scientific plc

Key audit matters continued

In the graph below, we have presented the key audit matters, significant risks and other risks relevant to the audit.





Key Audit Matter - Group

Valuation of goodwill

We identified the carrying value of goodwill as one of the most significant assessed risks of material misstatement due to error. We have pinpointed the significant risk in relation to certain cash generating units ("CGUs").

There is a risk that goodwill recognised on historical acquisitions may be impaired due to the current trading performance relating to these acquisitions. The process for assessing whether impairment of assets exists under IAS 36 is complex. Management prepare impairment models to assess the value in use. Calculating value in use, through forecasting cashflows related to CGUs and the determination of the CGUs, appropriate discount rate and other assumptions to be applied can be highly judgemental and subject to management bias or error. The selection of certain inputs into the cashflow forecasts can also significantly impact the results of the impairment assessment.

How our scope addressed the matter - Group

In responding to the key audit matter, we performed the following audit procedures:

- Assessed the accounting policy and disclosure to ensure it is in accordance with the financial reporting framework, including IAS 36;
- Updated our understanding of, and evaluated, the systems and controls over the year end impairment process and confirmed our understanding by performing a walkthrough;
- Obtained management's impairment assessment for each cash generating unit, which are based on discounted cashflow models:
- · Checked the mathematical accuracy of the impairment models;
- Evaluated the key assumptions using industry data and other external information to assess the reasonableness of management's assumptions. This included engaging our internal valuations specialists to review the discount rate and long-term growth rate;
- Tested the accuracy of management's historical forecasting through a comparison of budget to actual data and historical variance trends;
- Evaluated the sensitivity analysis performed by management on key assumptions made in calculations to determine whether a reasonably possible change in assumptions would trigger an impairment;
- Performed our own sensitivity analysis to understand the impact of any reasonably possible changes in assumptions, and evaluated the headroom available from different outcomes to assess whether goodwill could be impaired; and
- Evaluating the information included in management's impairment models through our knowledge of the business and discussions with management.

Relevant disclosures in the Annual Report and Accounts 2021

- Group financial statements:
- Note 2, Summary of significant account policies

 Goodwill
- Note 2, Summary of significant accounting policies
 Use of key accounting estimates and judgements
- Note 13, Goodwill

Key observations

Our audit work did not identify any material misstatements in the valuation of goodwill.

Key audit matters continued

Key Audit Matter - Parent company

Investments valuation

We identified the valuation of certain investments held by the parent company as one of the most significant assessed risks of material misstatement due to error.

There is a risk that investments in subsidiaries on historical acquisitions may be impaired. In accordance with International Accounting Standard (IAS) 36 'Impairment of Assets', assets should be considered for indicators of impairment annually, and if indicators exist, the valuation should be assessed by reference to the value in use of the relevant cash-generating units.

Management's assessment of the potential impairment of the parent company's investment in subsidiaries incorporates significant judgements in assumptions, such as timing and extent of future profits and cashflows and relevant income-generating units and an estimate of their values in use whilst applying an appropriate discount rate and is also subject to management bias.

How our scope addressed the matter-Parent company

In responding to the key audit matter, we performed the following audit procedures:

- Updated our understanding of, and evaluated, the systems and controls over the year end impairment process and confirmed our understanding by performing a walkthrough.
- Obtained management's impairment assessment and associated discounted cashflow forecasts and checked the mathematical accuracy of the model.
- Compared the carrying amount of the identified investment with the net assets and the expected value of the business based on discounted cashflow models prepared by management.
- Where impairment indicators existed, we evaluated the key assumptions using industry data and other external information to assess the reasonableness of management's assumptions. This included engaging our internal valuations specialists to review the discount rate and long-term growth rate.
- Performed sensitivity analysis on key assumptions made in calculations to determine whether a reasonable possible change in assumptions would trigger an impairment.
- Checked that management's models used to assess impairment of investments were consistent with the results of our audit over subsidiaries' profits and forecasts used for the impairment of goodwill and going concern assessment.

Relevant disclosures in the Annual Report and Accounts 2021

- · Parent company financial statements:
 - Note 2, Summary of significant accounting policies

 Investments
 - Note 2, Summary of significant accounting policies

 sources of estimation uncertainty
 - Note 5, Investments in subsidiaries

Key observations

Our audit work did not identify any material misstatements in the valuation of investments.

Our application of materiality

We apply the concept of materiality both in planning and performing the audit, and in evaluating the effect of identified misstatements on the audit and of uncorrected misstatements, if any, on the financial statements and in forming the opinion in the auditor's report.

Materiality was determined as follows:

Group	Group	Parent company
Materiality for financial statements as a whole	We define materiality as the magnitude of misstatements in the aggregate, could reasonably be expected to influfinancial statements. We use materiality in determining	ence the economic decisions of the users of these
Materiality threshold	£775,500, which represents circa 5% of the Group's profit before tax.	£728,000, which represents approximately 1% of the parent company's total assets.

Independent auditor's report continued

To the members of Judges Scientific plc

Our application of materiality continued

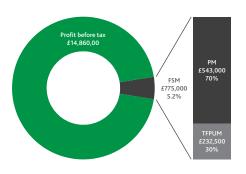
Group	Group	Parent company
Significant judgements made by the auditor in	In determining materiality, we made the following significant judgements:	In determining materiality, we made the following significant judgements:
determining the materiality	The selection of an appropriate benchmark;	• The selection of an appropriate benchmark;
	The selection of an appropriate percentage to apply to that benchmark; and	The selection of an appropriate percentage to apply to that benchmark; and
	• The consideration of other qualitative factors.	• The consideration of other qualitative factors.
	We have consistently used profit before tax as the most appropriate benchmark because maximisation of shareholder returns is a key measure used by management and the shareholders in assessing	We have consistently used total assets as the most appropriate benchmark because the parent company is primarily a holding company of investments and other assets.
	performance of the business. The chosen percentage applied to the benchmark is consistent with the previous year and in line with industry practice. We did not believe a reduction to the percentage was necessary based on consideration of	The chosen percentage applied to the benchmark is consistent with the previous year and in line with industry practice. We did not believe a reduction to the percentage was necessary based on consideration of other risk factors.
	other risk factors. Materiality for the current year is higher than the level that we determined for the year ended 31 December 2020 to reflect the increase in profit before tax.	Materiality for the current year is higher than the level that we determined for the year ended 31 December 2020 due to the increase in total assets and due to the fact that materiality was not capped at 75% of Group materiality.
Significant revisions of materiality threshold that were made as the audit progressed	We calculated materiality during the planning stage of the audit based on projected profit before tax and then during the course of our audit, we re-assessed initial materiality based on actual profit before tax for the year ended 31 December 2021 which resulted in an increase in materiality and adjusted our audit procedures accordingly.	We calculated materiality during the planning stage of the audit based on the Company's total assets and then during the course of our audit, we re-assessed initial materiality based on actual assets as at 31 December 2021 which resulted in an increase in materiality and adjusted our audit procedures accordingly.
Performance materiality used to drive the extent of our testing	We set performance materiality at an amount less than m reduce to an appropriately low level the probability that the misstatements exceeds materiality for the financial stater	he aggregate of uncorrected and undetected
Performance materiality threshold	£542,500, which is 70% of financial statement materiality.	£509,600, which is 70% of financial statement materiality.
Significant judgements made by auditor in	In determining performance materiality, we made the following significant judgements:	In determining performance materiality, we made the following significant judgements:
determining the performance materiality	Our experience with auditing the financial statements of the group; and	 Our experience with auditing the financial statements of the parent company; and
	The effect in the current year of previously identified and uncorrected misstatements.	 The effect in the current year of previously identified and uncorrected misstatements.
Significant revision(s) of performance materiality threshold that were made as the audit progressed	The performance materiality threshold percentage did not change during the course of the audit but the overall threshold increased as a result of an increase in materiality, as referred to above.	The performance materiality threshold percentage did not change during the course of the audit but the overall threshold increased as a result of an increase in materiality, as referred to above.
Specific materiality	We determine specific materiality for one or more particular disclosures for which misstatements of lesser amounts the whole could reasonably be expected to influence the econfinancial statements.	an materiality for the financial statements as a
Specific materiality threshold	We determined a lower level of specific materiality for the following areas:	We determined a lower level of specific materiality for the following areas:
	Directors' remuneration; and	Directors' remuneration; and
	Related party transactions.	Related party transactions.

Our application of materiality continued

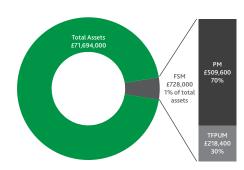
Group	Group	Parent company
Communication of misstatements to the Audit Committee	We determine a threshold for reporting unadjusted differ	rences to the Audit Committee.
Threshold for communication	£38,775 and misstatements below that threshold that, in our view, warrant reporting on qualitative grounds.	£36,400 and misstatements below that threshold that, in our view, warrant reporting on qualitative grounds.

The graph below illustrates how performance materiality interacts with our overall materiality and the tolerance for potential uncorrected misstatements.

Overall materiality - Group



Overall materiality – parent company



FSM: Financial statements materiality, PM: Performance materiality, TFPUM: Tolerance for potential uncorrected misstatements.

An overview of the scope of our audit

We performed a risk-based audit that requires an understanding of the Group's and the parent company's business and in particular matters related to:

Understanding the Group, its components, and their environments, including Group-wide controls

• Judges Scientific plc Group management are responsible for the consolidation, impairment consideration, treasury and the going concern assessment whilst each trading subsidiary has a decentralised local accounting function which reports to the local subsidiary management who are responsible for the operations and financial management of the subsidiary companies. We have tailored our audit response accordingly with audit work undertaken by the Group audit team and component audit teams. In assessing the risk of material misstatement of the Group financial statements we considered the account balances and transactions undertaken by each entity to identify the appropriate level of work to be performed by the Group and component audit teams.

Identifying significant components

- In order to address the risks identified at a Group level, the engagement team performed an evaluation of identified components to assess the significant components and to determine the planned audit response based on a measure of materiality, calculated by considering the component's significance as a percentage of the Group's total assets, revenue and profit before taxation.
- Of the Group's 30 components, we identified four which, in our view, required an audit of their financial information (full scope audit), either due to their size or their risk characteristics. As a result of this, the Group team performed an audit of the financial statements of the parent company and the component teams, under the direction and supervision of the Group team, audited the financial information of three other components, using component materiality.
- For a further nine components the component audit teams audited specific transactions and account balances under the direction and supervision of the Group audit team in order for the Group audit team to have sufficient appropriate audit evidence to support the Group opinion. For all other components the Group team performed analytical procedures to support the Group opinion.

Independent auditor's report continued

To the members of Judges Scientific plc

An overview of the scope of our audit continued

Performance of our audit

The Group audit team communicated with all component auditors performing full-scope audits and specific-scope audit procedures throughout the stages of their work, from planning, through fieldwork and as part of the concluding procedures per the approach in the table below:

	No. of components	% coverage Total assets	% coverage Revenue
Full-scope audit	4	46	33
Specific-scope audit	9	43	43
Analytical procedures	17	11	24

Communications with component auditors

During the planning stages of the Group audit, the Group team sent detailed instructions to the component audit teams that detailed the scope of the work, component materiality and planned audit approach on significant risk areas. The Group team also had a planning meeting with the component teams to discuss these instructions and provide direction to the component teams. During the fieldwork stage the Group team was in communication with the component teams and performed detail reviews of a selection of working papers that cover the significant risks at a Group level as well as working papers to ensure that the Group team have sufficient appropriate audit evidence to support the Group opinion.

Changes in approach from previous year

We have refined our approach to the determination of component significance since the prior year, ensuring that sufficient and appropriate audit evidence is obtained to support our opinion on the Group's financial statements.

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.

In connection with our audit of the financial statements, 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 audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. 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.

Our opinion on other matters prescribed by the Companies Act 2006 is unmodified

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.

Matter on which we are required to report under the Companies Act 2006

In the light of the knowledge and understanding of the Group and the 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.

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 for the financial statements

As explained more fully in the Directors' responsibilities statement, 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.

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

Explanation as to what extent the audit was considered 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. Owing to the inherent limitations of an audit, there is an unavoidable risk that material misstatements in the financial statements may not be detected, even though the audit is properly planned and performed in accordance with ISAs (UK).

The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below:

- We obtained an understanding of the legal and regulatory frameworks applicable to the parent company, the Group and industry in
 which they operate. We determined that the following laws and regulations were most significant: UK-adopted international accounting
 standards for the Group and Financial Reporting Standard 101 'The Financial Reporting Standard applicable in the UK and Republic of
 Ireland' for the parent company, Companies Act 2006 and tax compliance regulations which is the principal jurisdiction in which the
 Group operates.
- We understood how the parent company and the Group is complying with those legal and regulatory frameworks by making inquiries to Group management. We corroborated our inquiries through our review of Board minutes and papers provided to the Audit Committee.
- We assessed the susceptibility of the parent company's and Group's financial statements to material misstatement, including how fraud might occur. Audit procedures performed by the Group engagement team included:
 - · identifying and assessing the design effectiveness of controls management has in place to prevent and detect fraud;
 - · challenging assumptions and judgements made by management in its significant accounting estimates;
 - utilising a valuation specialist to assess management's impairment calculation;
 - · identifying and testing journal entries, in particular any journal entries posted with unusual account combinations; and
 - · assessing the extent of compliance with the relevant laws and regulations as part of our procedures on the related financial statement item.
- These audit procedures were designed to provide reasonable assurance that the financial statements were free from fraud or error. The risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error and detecting irregularities that result from fraud is inherently more difficult than detecting those that result from error, as fraud may involve collusion, deliberate concealment, forgery or intentional misrepresentations. Also, the further removed non-compliance with laws and regulations is from events and transactions reflected in the financial statements, the less likely we would become aware of it.
- The assessment of the appropriateness of the collective competence and capabilities of the engagement team included consideration of the engagement team's:
 - Understanding of, and practical experience with, audit engagements of a similar nature and complexity through appropriate training and participation; and
 - · Knowledge of the industry in which the client operates.
- Team communications in respect of potential non-compliance with laws and regulations and fraud included the potential for fraud in revenue and management override of controls.

Independent auditor's report continued

To the members of Judges Scientific plc

Explanation as to what extent the audit was considered capable of detecting irregularities, including fraud continued

- In assessing the potential risks of material misstatement, we obtained an understanding of:
 - the parent company's and the Group's operations, including the nature of its revenue sources, products and services and of its objectives and strategies to understand the classes of transactions, account balances, expected financial statement disclosures and business risks that may result in risks of material misstatement; and
 - the parent company's and the Group's control environment, including:
 - · The policies and procedures implemented to comply with financial reporting requirements, including the adequacy of the training to inform staff of financial reporting changes; and
 - · The adequacy of procedures for authorisation of transactions and internal review procedures over the parent company and the Group's transactions.

Use of our report

This report is made solely to the 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 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 Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Joanne Love

Senior Statutory Auditor for and on behalf of Grant Thornton UK LLP Statutory Auditor, Chartered Accountants London 22 March 2022

Consolidated statement of comprehensive income

For the year ended 31 December 2021

	Note	Adjusted £000	Adjusting items £000	2021 Total £000	Adjusted £000	Adjusting items £000	2020 Total £000
Revenue	3	91,289	_	91,289	79,865	_	79,865
Operating costs	3,4,5	(72,512)	(3,158)	(75,670)	(65,508)	(4,191)	(69,699)
Operating profit/(loss)		18,777	(3,158)	15,619	14,357	(4,191)	10,166
Interest income	9	2	_	2	14	_	14
Interest expense	9	(713)	(48)	(761)	(654)	(53)	(707)
Profit/(loss) before tax		18,066	(3,206)	14,860	13,717	(4,244)	9,473
Taxation (charge)/credit	10	(2,753)	797	(1,956)	(2,029)	1,204	(825)
Profit/(loss) for the year		15,313	(2,409)	12,904	11,688	(3,040)	8,648
Attributable to:							
Owners of the parent		15,027	(2,345)	12,682	11,108	(2,888)	8,220
Non-controlling interests		286	(64)	222	580	(152)	428
Profit/(loss) for the year		15,313	(2,409)	12,904	11,688	(3,040)	8,648
Other comprehensive income Items that will not be reclassified subsequently to profit or loss							
Retirement benefits actuarial gain/(loss)				1,445			(1,378)
Deferred tax on retirement benefits							
actuarial gain/(loss)				(206)			286
Items that may be reclassified subsequently to profit or loss							
Exchange differences on translation							
of foreign subsidiaries				22			(82)
Other comprehensive income for the year, net of tax				1,261			(1,174)
Total comprehensive income for the year				14,165			7,474
Attributable to:							
Owners of the parent				13,943			7,046
Non-controlling interests				222			428
		2021 Pence		2021 Pence	2020 Pence		2020 Pence
Earnings per share – adjusted							
Basic	12	238.1			177.2		
Diluted	12	234.9			173.9		
Earnings per share – total							
Basic	12			201.0			131.1
Diluted	12			198.2			128.7

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

Consolidated balance sheet

As at 31 December 2021

	Note	2021 £000	2020 £000
ASSETS			
Non-current assets			
Goodwill	13	18,713	18,713
Other intangible assets	14	5,056	6,909
Property, plant and equipment	15	8,254	6,678
Right-of-use leased assets	16	4,186	5,125
Deferred tax assets	17	3,081	2,153
		39,290	39,578
Current assets			
Inventories	18	14,133	12,585
Trade and other receivables	19	17,146	14,340
Cash and cash equivalents		18,408	15,523
		49,687	42,448
Total assets		88,977	82,026
LIABILITIES			
Current liabilities			
Trade and other payables	20	(19,373)	(15,828)
Borrowings	21	(4,657)	(3,857)
Right-of-use lease liabilities	22	(887)	(947)
Current tax liabilities		(1,726)	(1,539)
		(26,643)	(22,171)
Non-current liabilities			
Borrowings	21	(12,351)	(17,358)
Right-of-use lease liabilities	22	(3,420)	(4,209)
Deferred tax liabilities	17	(1,845)	(1,945)
Retirement benefit obligations	29	(1,324)	(3,295)
		(18,940)	(26,807)
Total liabilities		(45,583)	(48,978)
Net assets		43,394	33,048
EQUITY			
Share capital	24	316	315
Share premium account		16,667	16,429
Other reserves	26	1,999	1,977
Retained earnings		23,794	13,469
Equity attributable to owners of the parent company		42,776	32,190
Non-controlling interests	30	618	858
Total equity		43,394	33,048

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

The financial statements were approved by the Board on 22 March 2022.

David Cicurel Brad Ormsby

Director Director

Consolidated statement of changes in equity

For the year ended 31 December 2021

	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 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
At 1 January 2020	311	15,453	2,059	10,048	27,871	821	28,692
Dividends	_	_	_	(3,231)	(3,231)	_	(3,231)
Change in non-controlling interest	_	_	_	(680)	(680)	(391)	(1,071)
Issue of share capital	4	976	_	_	980	_	980
Deferred tax on share-based payments	_	_	_	(113)	(113)	_	(113)
Share-based payments	_	_	_	317	317	_	317
Transactions with owners	4	976	_	(3,707)	(2,727)	(391)	(3,118)
Profit for the year	_	_	_	8,220	8,220	428	8,648
Retirement benefit actuarial loss	_	_	_	(1,092)	(1,092)	_	(1,092)
Foreign exchange differences			(82)		(82)		(82)
Total comprehensive income for the year	_	_	(82)	7,128	7,046	428	7,474
At 31 December 2020	315	16,429	1,977	13,469	32,190	858	33,048

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

Consolidated cashflow statement

For the year ended 31 December 2021

	2021 £000	2020 £000
Cashflows from operating activities		
Profit after tax	12,904	8,648
Adjustments for:		
Financial instruments measured at fair value: hedging contracts	(190)	72
Share-based payments	635	317
Depreciation of property, plant and equipment	1,039	926
Depreciation of right-of-use leased assets	1,066	935
Amortisation of acquired intangible assets	2,638	3,179
Amortisation of internally generated intangible assets	11	_
Profit on disposal of property, plant and equipment	(37)	(4)
Interest income	(2)	(14)
Interest expense	516	464
Interest payable on right-of-use lease liabilities	197	190
Retirement benefit obligation net finance cost	48	53
Contributions to defined benefit plans	(574)	(236)
Tax expense recognised in the Consolidated Statement of Comprehensive Income	1,956	825
(Increase)/decrease in inventories	(1,548)	1,099
Increase in trade and other receivables	(2,806)	(1,232)
Increase/(decrease) in trade and other payables	3,726	(598)
Cash generated from operations	19,579	14,624
Tax paid	(2,180)	(2,377)
Net cash from operating activities	17,399	12,247
Cashflows from investing activities		
Paid on acquisition of subsidiaries	_	(8,857)
Payment of deferred consideration	_	(3,922)
Gross cash inherited on acquisition	_	1,363
Acquisition of subsidiaries, net of cash acquired	_	(11,416)
Purchase of property, plant and equipment	(2,652)	(1,268)
Capitalised development costs	(796)	_
Proceeds on disposal of property, plant and equipment	74	14
Interest received	2	14
Net cash used in investing activities	(3,372)	(12,656)
Cashflows from financing activities		
Proceeds from issue of share capital	239	980
Purchase of own shares for Company reward scheme	(53)	_
Finance costs paid	(516)	(468)
Repayments of borrowings*	(4,207)	(7,857)
Repayment of subordinated loan notes		(190)
Repayments of right-of-use lease liabilities	(1,164)	(1,108)
Proceeds from bank loans**	_	14,816
Equity dividends paid	(3,630)	(3,231)
Paid on acquisition of non-controlling interest in subsidiary	(1,833)	(1,071)
Net cash (used in)/from financing activities	(11,164)	1,871
Net change in cash and cash equivalents	2,863	1,462
Cash and cash equivalents at the start of the year	15,523	14,123
Exchange movements	22	(62)
Cash and cash equivalents at the end of the year	18,408	15,523

^{*} On 25 May 2021, £19.0 million of outstanding loans were repaid and simultaneously reborrowed as the Group renewed its banking facilities (see note 21).

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

^{**} On 29 June 2020, £5.0 million was borrowed as a working capital buffer, and was subsequently repaid in December 2020.

For the year ended 31 December 2021

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 IFRS 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 concerr

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 2021 with adjusted net cash of £1.4 million compared to adjusted net debt of £5.7 million at 31 December 2020. This increase in net cash was as a result of consistent cash generation arising from strong performance of the Group's principal operating companies, enabled by 25.0% growth in Organic order intake. The improvement in net cash is after outlays for dividends to our shareholders (£3.6 million), paying our fair share of tax (£2.2 million) and ongoing investment into capital expenditure (£2.7 million). In addition the Group also refinanced its borrowing facilities in May 2021 for a further five-year term providing the Group with greater certainty over long-term liquidity (see note 21).

The Directors have considered the ongoing impact of the Covid-19 pandemic, and a summary of the implications is included in the Chairman's Statement. 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 Covid-19 and more recently the events in Ukraine. The Directors have planned for reasonably foreseeable worsening scenarios including a repetition of the same level of reduction in orders in 2022 as happened 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 2023 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.

For the year ended 31 December 2021

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 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 despatch of the instrument; however, for sales 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 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 3 years Acquired non-competition agreements 2 years

Acquired distribution agreements Between 2 and 5 years

Acquired technology 5 years

Acquired sales order backlog On shipment (this is usually consumed within six months of initial recognition)

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, within the following ranges:

Property 50 years (excluding the estimated cost of land)

Plant and machinery 7 years

Fixtures, fittings and equipment Between 3 and 7 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 and property, plant and equipment

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 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, 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.

For the year ended 31 December 2021

2. Summary of significant accounting policies continued

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 loans, receivables and derivatives.

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 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 and 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 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.

2. Summary of significant accounting policies continued

Financial liabilities continued

All financial liabilities with the exception of 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 and borrowings, including bank loans, subordinated 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.

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.

Other 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. Dividend income is recognised when the shareholder's right to receive payment is established.

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 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.

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.

For the year ended 31 December 2021

2. Summary of significant accounting policies continued

Equity continued

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 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. 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 2021 the Group capitalised £796,000 of expenditure on new or significantly improved products (2020: £nil), as per note 14.

2. Summary of significant accounting policies continued

Use of key accounting estimates and judgements continued

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 future mortality, discount rate 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 would adversely impact the statutory results. Further information can be found in note 13.

3. Segmental analysis

For the year ended 31 December 2021	Note	Materials Sciences £000	Vacuum £000	Unallocated items £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					(2,061)
Profit for the year					12,799
		Materials		Unallocated	

For the year ended 31 December 2020	Note	Materials Sciences £000	Vacuum £000	Unallocated items £000	Total £000
Revenue Operating costs		33,210 (28,341)	46,655 (34,564)	(2,603)	79,865 (65,508)
Adjusted operating profit Adjusting items	4	4,869	12,091	(2,603)	14,357 (4,191)
Operating profit Net interest expense					10,166 (693)
Profit before tax Income tax charge					9,473 (825)
Profit for the year					8,648

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

Segment assets and liabilities

At 31 December 2021	Materials Sciences £000	Vacuum £000	Unallocated items £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

For the year ended 31 December 2021

3. Segmental analysis continued

Segment assets and liabilities continued

At 31 December 2020	Materials Sciences £000	Vacuum £000	Unallocated items £000	Total £000
Assets	23,566	31,713	26,747	82,026
Liabilities	(11,468)	(11,702)	(25,808)	(48,978)
Net assets	12,098	20,011	939	33,048
Capital expenditure	355	902	11	1,268
Depreciation of property, plant and equipment	285	591	50	926
Depreciation of right-of-use leased assets	465	413	57	935
Amortisation of acquired intangible assets	1,345	1,834	_	3,179

Unallocated items are borrowings, intangible assets and goodwill arising on acquisition, deferred tax, defined benefit obligations and parent company net assets. There are no material non-current assets outside the UK.

Analysis of revenue by geographical areas

	Revenue		Non-current assets	
Geographic analysis	Year to 31 December 2021 £000	Year to 31 December 2020 £000	Year to 31 December 2021 £000	Year to 31 December 2020 £000
UK (domicile)	14,776	10,167	38,862	39,288
Rest of Europe	29,488	24,784	_	_
North America	20,034	17,289	217	290
China/Hong Kong	11,103	13,721	_	_
Rest of the World	15,888	13,904	_	_
	91,289	79,865	39,079	39,578

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

	2021 £000	2020 £000
Sale of goods, recognised at a point in time	87,622	77,316
Sale of services, recognised at a point in time	3,259	2,338
Sale of services, recognised over time	408	211
	91,289	79,865

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

4. Adjusting items

	2021 £000	2020 £000
Amortisation of acquired intangible assets	2,638	3,179
Financial instruments measured at fair value: hedging contracts	(190)	72
Share-based payments	635	317
Employment taxes arising from share-based payments	90	64
Acquisition costs	(15)	559
Total adjusting items in operating profit	3,158	4,191
Retirement benefits obligation net interest cost	48	53
Total adjusting items	3,206	4,244
Taxation	(797)	(1,204)
Total adjusting items net of tax	2,409	3,040
Attributable to:		
Owners of the parent	2,345	2,888
Non-controlling interest	64	152
	2,409	3,040

5. Operating costs

	2021 £000	2020 £000
Raw materials and consumables	33,247	31,013
Staff costs	26,769	24,994
Other external charges	10,540	8,478
Government grants	(160)	(838)
Depreciation of property, plant and equipment	1,039	926
Depreciation of right-of-use leased assets	1,066	935
Amortisation of internally generated intangible assets	11	_
Other operating costs, excluding adjusting items	72,512	65,508
Amortisation of acquired intangible assets	2,638	3,179
Hedging contracts	(190)	72
Share-based payments	635	317
Employment taxes arising from share-based payments	90	64
Acquisition costs	(15)	559
Total operating costs	75,670	69,699

Research and development expenditure totalled £6,221,000 (2020: £6,185,000) of which £796,000 (2020: £nil) was capitalised in the year. Income from government grants of £160,000 (2020: £838,000) relates to claims made under the UK Government's Coronavirus Job Retention Scheme.

6. Remuneration of key senior management

	2021	2020
	£000	£000
Short-term employee benefits:		
Salaries including bonuses and social security costs	2,847	2,448
Share-based payments	531	212
Company car allowance and other benefits	82	92
Total short-term employee benefits	3,460	2,752
Post-employment benefits:		
Defined contribution pension plans	103	99
Total post-employment benefits	103	99
	3,563	2,851

For the year ended 31 December 2021

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 22 (2020: 23).

Remuneration of Directors is disclosed in the Remuneration Report on pages 35 to 37.

7. Employees

Employment costs

	2021 £000	2020 £000
Wages and salaries	23,802	21,898
Social security costs	2,319	2,049
Pension costs	1,179	1,047
Capitalised development costs	(531)	_
	26,769	24,994
Share-based payments	635	317
	27,404	25,311
Average number of employees		
	2021 No.	2020 No.
By function:		
Manufacturing	231	216
Sales and administration	309	296
	540	512
By operating segment:		
Materials Sciences	256	225
Vacuum	273	277
Head office (includes Non-Executive Directors in both years)	11	10
	540	512
8. Operating profit		
	2021 £000	2020 £000
Operating profit is stated after charging:		
Fees payable to the Company's auditor:		
for the audit of the Company's annual accounts	100	31
Fees payable to the Company's auditor for other services:		
for the audit of the Company's subsidiaries, pursuant to legislation	287	198
for audit-related assurance services	5	5
for other assurance services	_	9
for corporate finance services	_	40
for other non-audit services	_	_
Depreciation of property, plant and equipment	1,039	926

1,066

2,638

11

935

3,179

Depreciation of right-of-use fixed assets

Amortisation of acquired intangible assets

Amortisation of internally generated intangible assets

9. Interest income and expense

	2021 £000	2020 £000
Interest income – short-term bank deposits	2	14
Interest expense – bank loans	(516)	(464)
Interest expense – payable on right-of-use lease liabilities	(197)	(190)
Retirement benefits obligation net finance cost	(48)	(53)
	(761)	(707)
Net interest expense	(759)	(693)

10. Taxation charge/(credit)

	2021 £000	2020 £000
UK corporation tax at 19% (2020: 19%)		
Current year	3,175	1,907
Prior years	(907)	(565)
Foreign tax suffered	99	102
	2,367	1,444

The prior year's current tax adjustments represent claims for UK Research and Development tax credits which are primarily under the SME scheme.

	2021 £000	2020 £000
Deferred tax – origination and reversal of temporary differences:		
Current year	(542)	(607)
Prior years Prior years	(26)	(130)
Effect of changes in tax rates	157	118
	(411)	(619)
Tax on profit for the year – current year	2,889	1,520
Tax on profit for the year – prior years	(933)	(695)
	1,956	825
Factors affecting the tax charge for the year:		
Profit before tax	14,860	9,473
Profit before tax multiplied by standard rate of UK corporation tax of 19% (2020: 19%)	2,823	1,800
Share options	(219)	(468)
Provisions and expenditure not deductible for tax purposes	128	102
Changes in tax rates	157	118
Overseas tax	9	7
Utilisation of previously unrecognised losses	(9)	(39)
Tax on profit for the year – current year	2,889	1,520
Tax on profit for the year – prior years	(933)	(695)
Total net taxation charge	1,956	825

11. Dividends

	2021		2020	
	Pence per share	£000	Pence per share	£000
Final dividend for the previous year	38.5	2,430	35.0	2,195
Interim dividend for the current year	19.0	1,200	16.5	1,036
Total final and interim dividend	57.5	3,630	51.5	3,231

The Directors will propose a final dividend of 47.0p per share, amounting to £2,970,000, for payment on 8 July 2022. 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.

For the year ended 31 December 2021

12. Earnings per share

Not	2021 e £000	2020 £000
Profit attributable to owners of the parent		
Adjusted profit	15,027	11,108
Adjusting items	4 (2,345)	(2,888)
Profit for the year	12,682	8,220
	Pence	Pence
Earnings per share – adjusted		
Basic	238.1	177.2
Diluted	234.9	173.9
Earnings per share – total		
Basic	201.0	131.1
Diluted	198.2	128.7
Not	e Number	Number

Note	Number	Number
Issued Ordinary shares at the start of the year	6,299,163	6,226,291
Movement in Ordinary shares during the year 24	19,252	72,872
Issued Ordinary shares at the end of the year	6,318,415	6,299,163
Weighted average number of shares in issue	6,310,608	6,269,437
Dilutive effect of share options	87,786	117,551
Weighted average Ordinary shares in issue on a diluted basis	6,398,394	6,386,988

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

	2021 £000	2020 £000
1 January	18,713	15,265
Acquisitions (note 28)	_	3,448
31 December	18,713	18,713

£10,428,000 of goodwill resides in the Material Sciences segment and £8,285,000 resides in 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 2021 (2020: £nil). The key assumptions in determining the value in use are:

Revenue and margins: These are derived from the detailed 2022 budgets which are built up with reference to markets and product categories and projected margins reflect historical performance and the expected impact of efforts to improve operational efficiency, whilst reflecting the need to operate within the constraints of the Covid-19 pandemic and local government guidelines.

Discount rate: Cashflows are discounted using a pre-tax discount rate of 13.8% (2020: 11.5%) per annum, calculated by reference to year-end data on equity values and interest, dividend and tax rates.

13. Goodwill continued

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 inflation, and enables gross margins to be maintained.

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 2020	_	3,784	10,539	4,907	12,774	9,080	41,084
Acquisitions	_	_	2,100	500	830	2,200	5,630
31 December 2020	_	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
Amortisation							
1 January 2020	_	3,384	8,612	4,788	11,266	8,576	36,626
Charge for the year		208	1,057	586	772	556	3,179
31 December 2020	_	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
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
Carrying amount 31 December 2019		400	1,927	119	1,508	504	4,458

For the year ended 31 December 2021

15. Property, plant and equipment

	Plant and machinery £000	Fixtures, fittings and equipment £000	Motor vehicles £000	Property and building improvements £000	Total £000
Cost					
1 January 2020	1,910	2,591	263	5,035	9,799
Additions	231	563	84	390	1,268
Acquisitions	5	114	17	103	239
Disposals	(32)	_	(43)	_	(75)
Exchange differences		(6)	(6)	_	(12)
31 December 2020	2,114	3,262	315	5,528	11,219
Additions	440	625	6	1,581	2,652
Acquisitions (note 28)	_	_	_	_	_
Disposals	(120)	(48)	(110)	(11)	(289)
Exchange differences	_	1	1	_	2
31 December 2021	2,434	3,840	212	7,098	13,584
Accumulated depreciation					
1 January 2020	1,025	1,597	215	855	3,692
Charge for the year	252	439	39	196	926
Disposals	(22)	_	(43)	_	(65)
Exchange differences	_	(6)	(6)	_	(12)
31 December 2020	1,255	2,030	205	1,051	4,541
Charge for the year	296	503	31	209	1,039
Disposals	(120)	(35)	(86)	(11)	(252)
Exchange differences	_	1	1	_	2
31 December 2021	1,431	2,499	151	1,249	5,330
Net book value – 31 December 2021	1,003	1,336	61	5,849	8,254
Net book value – 31 December 2020	859	1,232	110	4,477	6,678
Net book value – 31 December 2019	885	994	48	4,180	6,107

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 2020	114	146	81	4,741	5,082
New leases	_	18	_	1,313	1,331
Acquisitions	_	_	_	319	319
Exit from leases	_	_	_	(265)	(265)
Remeasurement of leases	_	_	_	(3)	(3)
Exchange differences	_	_	_	(1)	(1)
31 December 2020	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
31 December 2021 Accumulated depreciation	118	196	124	6,028	6,466
	118	196 29	124 25	6,028 567	6,466 654
Accumulated depreciation				· · · · · · · · · · · · · · · · · · ·	·
Accumulated depreciation 1 January 2020	33	29	25	567	654
Accumulated depreciation 1 January 2020 Charge for the year	33	29	25	567 835	654 935
Accumulated depreciation 1 January 2020 Charge for the year Acquisitions	33	29	25 29 —	567 835 15	654 935 15
Accumulated depreciation 1 January 2020 Charge for the year Acquisitions Exit from leases	33 33 — —	29 38 — —	25 29 — —	567 835 15 (265)	654 935 15 (265)
Accumulated depreciation 1 January 2020 Charge for the year Acquisitions Exit from leases Exchange differences	33 33 — — —	29 38 — — —	25 29 — —	567 835 15 (265) (1)	654 935 15 (265) (1)
Accumulated depreciation 1 January 2020 Charge for the year Acquisitions Exit from leases Exchange differences 31 December 2020	33 33 — — — —	29 38 — — — —	25 29 — — — 54	567 835 15 (265) (1)	654 935 15 (265) (1)
Accumulated depreciation 1 January 2020 Charge for the year Acquisitions Exit from leases Exchange differences 31 December 2020 Charge for the year	33 33 — — — —	29 38 — — — — 67 36	25 29 — — — — 54 26	567 835 15 (265) (1) 1,151 966	654 935 15 (265) (1) 1,338 1,066
Accumulated depreciation 1 January 2020 Charge for the year Acquisitions Exit from leases Exchange differences 31 December 2020 Charge for the year Exit from leases	33 33 — — — — 66 38 —	29 38 — — — 67 36 (21)	25 29 — — — — 54 26	567 835 15 (265) (1) 1,151 966 (104)	654 935 15 (265) (1) 1,338 1,066 (125)
Accumulated depreciation 1 January 2020 Charge for the year Acquisitions Exit from leases Exchange differences 31 December 2020 Charge for the year Exit from leases Exchange differences	33 33 — — — — 66 38 — —	29 38 — — — 67 36 (21)	25 29 — — — — 54 26 —	567 835 15 (265) (1) 1,151 966 (104)	654 935 15 (265) (1) 1,338 1,066 (125)

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

For the year ended 31 December 2021

17. Deferred tax

	2021 £000	2020 £000
Assets		
1 January	2,153	1,873
Acquisitions in the year (note 28)	_	87
Adjustments in respect of prior years	33	_
Movement in other comprehensive income – retirement benefits actuarial (gain)/loss	(206)	286
Credit to the Consolidated Statement of Comprehensive Income in the year	278	20
Credit/(charge) to equity in the year	823	(113)
31 December	3,081	2,153
Deferred tax balances relate to temporary differences as follows:		
Provisions allowable for tax in subsequent periods	241	174
Tax losses	48	36
Share options	2,461	1,317
Defined benefit obligation	331	626
	3,081	2,153
Liabilities		
1 January	1,945	1,447
Acquisitions in the year (note 28)	_	1,097
Adjustments in respect of prior years	7	(130)
Credit to the Consolidated Statement of Comprehensive Income in the year	(107)	(469)
31 December	1,845	1,945
Deferred tax balances relate to temporary differences as follows:		
Accelerated capital allowances	923	632
Intangible assets	922	1,313
	1,845	1,945

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

	2021 £000	2020 £000
Raw materials	10,212	8,726
Work in progress	2,356	2,341
Finished goods	1,565	1,518
	14,133	12,585

In 2021, a total of £33,268,000 of inventories was included in the Consolidated Statement of Comprehensive Income as an expense (2020: £31,013,000). This includes an amount of £522,000 (2020: £557,000) resulting from write-downs of inventories and an amount of £nil (2020: £138,000) which is the reversal of previous write-downs. The carrying amount of inventories held at fair value less costs to sell is £502,000 (2020: £457,000). All Group inventories form part of the assets pledged as security in respect of bank loans.

19. Trade and other receivables - current

	2021 £000	2020 £000
Trade receivables	14,207	11,843
Other receivables	1,298	1,196
Prepayments	1,641	1,301
	17,146	14,340

The fair value of receivables approximates to their carrying value. All trade and other receivables have been reviewed for expected credit losses with no material provision being required.

19. Trade and other receivables - current continued

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

	2021 £000	2020 £000
Not more than three months	4,820	3,595
More than three months but not more than six months	1,125	735
More than six months but not more than twelve months	545	219
Greater than one year	421	56
	6,911	4,605
Trade and other receivables are denominated in the following currencies:		
	2021 £000	2020 £000
Sterling	10,531	9,398
US Dollars	5,154	3,170
Euros	1,461	1,772
	17,146	14,340
20. Trade and other payables – current		
	2021 £000	2020 £000
Trade payables	6,438	5,907
Social security and other taxes	1,023	972
Other payables	805	1,436
Accruals and payments-on-account	11,107	7,513
	19,373	15,828

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, amount to £5,068,000 (2020: £3,957,000). All such shipments are expected to be fulfilled within 12 months and £3,957,000 of the opening payments-on-account balance has been included in revenue in 2021 (£3,541,000 of the opening balances included in revenue in 2020).

21. Borrowings

	2021 £000	2020 £000
Current		
Bank loans	4,657	3,857
Subordinated loans	_	_
	4,657	3,857
Non-current Non-current		
Bank loans	12,351	17,358
	12,351	17,358

The movement in borrowings over the year was as follows:

	2021 £000	2020 £000
At 1 January	21,215	14,450
Proceeds from drawdown of loans*	_	14,816
Repayment of loans*	(4,207)	(7,857)
Repayment of subordinated loans	_	(190)
Interest payable	516	464
Interest paid	(516)	(468)
At 31 December	17,008	21,215

^{*} On 25 May 2021, £19.0 million of outstanding loans were repaid and simultaneously reborrowed as the Group renewed its banking facilities (see below). On 29 June 2020, £5.0 million was borrowed as a working capital buffer, and was subsequently repaid in December 2020.

For the year ended 31 December 2021

21. Borrowings continued

On 25 May 2021, the Group entered into new banking facilities ("Facility") with Lloyds Banking Group plc (the "Bank") replacing its existing banking arrangements. The Facility was for an aggregate £60.0 million consisting of a £19.0 million term loan ("Term Loan"), a committed £35.0 million revolving credit facility ("RCF") plus a £6.0 million accordion facility, which can be drawn at the discretion of the Bank. The Facility replaced the previous facilities for which the Group had a total of £19.0 million outstanding. The Facility has a five-year term ("Borrowing Term") with covenants and interest consistent with the previous bank facilities. The Term Loan shall amortise 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 accordion facility increases by the amount paid off the Term Loan, keeping the overall Facility at £60.0 million throughout the Borrowing Term.

The existing lending facilities via Bordeaux Acquisition Limited ("Bordeaux"), the Group's 88% owned subsidiary, remain unchanged. Bordeaux was set up as a vehicle to acquire Deben UK Limited and was used in 2017 to acquire Crystallon, the parent of Oxford Cryosystems Limited.

At the year end, the Group's two bank loans are summarised as follows:

- The first loan of £16,150,000 (2020: £4,500,000 term loans plus £15,000,000 RCF) is repayable in quarterly instalments over the period ending 31 March 2026 and bears interest at 1.85% to 3.00% (depending upon gearing) above SONIA-related interest rates.
- The second loan of £858,000 (2020: £1,715,000) is repayable in quarterly instalments over the period ending 31 December 2022 and bears interest at 1.75% to 2.75% (depending upon gearing) above LIBOR-related rates.

The subordinated loans previously advanced by non-controlling shareholders in Bordeaux Acquisition Limited were repaid in full in December 2020.

Borrowings mature as follows:

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)
Total net cash	(1,400)
31 December 2020	Bank loans £000
Repayable in less than six months	2,115
Repayable in months seven to twelve	2,100
Current portion of long-term borrowings	4,215
Repayable in years one to five	17,704
Total borrowings	21,919
Less: interest included above	(704)
Less: cash and cash equivalents	(15,523)
Total net debt	5,692

22. Right-of-use lease liabilities

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

	2021 £000	2020 £000
At 1 January	5,156	4,446
New leases (note 16)	131	1,331
Lease liabilities acquired on acquisition (note 28)	_	302
Remeasurement of lease liabilities	67	(5)
Interest payable (note 9)	197	190
Exits from leases	(80)	_
Repayments of lease liabilities	(1,164)	(1,108)
At 31 December	4,307	5,156

22. Right-of-use lease liabilities continued

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

Lease liabilities mature as follows:

	2021 £000	2020 £000
Minimum right-of-use lease liabilities falling due		
Within one year – land and property	960	1,038
Within one year – vehicles	32	30
Within one year – plant and machinery	21	34
Within one year – fixtures, fittings and equipment	37	36
	1,050	1,138
Between one and five years – land and property	2,775	3,245
Between one and five years – vehicles	22	22
Between one and five years – plant and machinery	8	17
Between one and five years – fixtures, fittings and equipment	77	57
	2,882	3,341
Greater than five years – land and property	940	1,425
Total commitment	4,872	5,904
Less: finance charges included above	(565)	(748)
Net present value of lease liabilities	4,307	5,156
Current	887	947
Non-current	3,420	4,209

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 38.

Fair value of financial instruments

Financial instruments include the borrowings set out in note 21. 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. 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

The Group has a revolving acquisition facility of £35.0 million (2020: £25.0 million). At 31 December 2021 the Group had drawn £nil (2020: £15.0 million).

Trade payables

All amounts are short-term (all payable within six months) and their carrying values are considered reasonable approximations of fair value. The values are set out in note 20.

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 are measured at fair value in accordance with the fair value hierarchy and are classed as level 2.

Notes to the consolidated financial statements continued

For the year ended 31 December 2021

23. Financial instruments continued

Fair value hierarchy continued

	2021 £000	2020 £000
Summary of financial assets and financial liabilities by category		
Financial assets – amortised cost		
Trade and other receivables	15,285	13,039
Cash and cash equivalents	18,408	15,523
Financial assets – fair value		
Derivative financial instruments	220	_
Total financial assets	33,913	28,562
Financial liabilities – amortised cost		
Trade payables	(6,438)	(5,907)
Accruals	(6,039)	(3,556)
Other payables	(805)	(1,318)
Right-of-use lease liabilities	(4,307)	(5,156)
Current portion of long-term borrowings	(4,657)	(3,857)
Long-term borrowings	(12,351)	(17,358)
Financial liabilities – fair value		
Derivative financial instruments	_	(118)
Total financial liabilities	(34,597)	(37,270)
Net financial liabilities	(684)	(8,708)
Non-financial assets and liabilities		
Goodwill	18,713	18,713
Other intangible assets	5,056	6,909
Property, plant and equipment	8,254	6,678
Right-of-use leased assets	4,186	5,125
Inventories	14,133	12,585
Prepayments	1,641	1,301
Social security and other taxes	(1,023)	(972)
Retirement benefit obligations	(1,324)	(3,295)
Payments-on-account	(5,068)	(3,957)
Current tax payable	(1,726)	(1,539)
Deferred tax assets	3,081	2,153
Deferred tax liabilities	(1,845)	(1,945)
	44,078	41,756
Total equity	43,394	33,048

Financial assets

The Group's financial assets (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 £2,000 (2020: £14,000) (see note 9).

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

The Group's principal financial liabilities are bank loans, trade and other payables and derivative financial instruments. 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 £722,000 (2020: £654,000) (see note 9).

24. Share capital

	2021 £000	2020 £000
Allotted, called up and fully paid – Ordinary shares of 5p each		
1 January: 6,299,163 shares (2020: 6,226,291 shares)	315	311
Exercise of share options: 19,252 shares (2020: 72,872 shares)	1	4
31 December: 6,318,415 shares (2020: 6,299,163 shares)	316	315

Allotments of Ordinary shares in 2021 were made to satisfy the exercise of 19,252 share options in aggregate on 23 occasions during the year when the share price was within the range 5900p to 7900p (2020: exercise of 72,872 share options when the share price was within the range 4300p to 6300p).

Throughout 2020, 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 2021, an average of 212 employees participated in the scheme each month (2020: 163 employees), purchasing 5,049 shares in total, including matching shares (2020: 6,122 shares). At 31 December 2021, there were 216 employee shareholders in this Share Incentive Plan.

The market price of the Company's Ordinary shares at 31 December 2021 was 8400p. The share price range during the year was 5740p to 8640p.

25. Share-based payments

Equity share options

At 31 December 2021, options had been granted and remained outstanding in respect of 201,460 Ordinary shares in the Company (2020: 160,026), 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 2021 Number	Granted Number	Lapsed Number	Exercised Number	At 31 December 2021 Number	Of which exercisable Number	Weighted average exercise price (p)
2005 Approved Option Scheme	15,500	_	_	(4,025)	11,475	11,475	1253.3
2005 Unapproved Option Scheme	5,200	_	_	(4,500)	700	700	470.0
2015 Approved Option Scheme	27,816	_	(300)	(6,736)	20,780	14,089	1541.3
2015 Unapproved Option Scheme	111,510	60,986	_	(3,991)	168,505	95,257	1621.2
	160,026	60,986	(300)	(19,252)	201,460	121,521	

2005 Option Scheme

Exercise prices for the year ended 31 December 2021 ranged between 470.0p and 1690.0p per share (2020: between 470.0p and 1473.0p per share). The unexercised options have a weighted average remaining contractual life of 1.69 years (2020: 2.02 years).

2015 Option Scheme

Exercise prices for the year ended 31 December 2021 ranged between 1402.5p and 1935.0p per share (2020: between 1402.5p and 2025.0p per share). The unexercised options have a weighted average remaining contractual life of 6.7 years (2020: 6.49 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 1.19%;
- historical volatility 31.2%;
- · dividend yield 0.7%; and
- expected life of option 5.0 years.

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 2021 was £635,000 (2020: £317,000).

Notes to the consolidated financial statements continued

For the year ended 31 December 2021

26. Other reserves

	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

Balance at 31 December 2020	23	1,968	(14)	1,977
Total comprehensive income			(82)	(82)
Exchange differences on translation of foreign subsidiaries	_	_	(82)	(82)
Transactions with owners	_	_	_	_
Issue of share capital				_
Balance at 1 January 2020	23	1,968	68	2,059
	Capital redemption reserve £000	Merger reserve £000	Translation reserve £000	Total £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 sensitivity

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 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)

31 December 2020	Sterling equivalent of US\$ £000	Sterling equivalent of € £000
Amount of foreign currency hedged at year end	3,250	1,500
Residual exposure at year end – long/(short)	524	473
Impact on pre-tax profits of a 5% variation in exchange rate on year-end residual exposure	26	24
Impact on equity of a 5% variation in exchange rate on year-end residual exposure	21	19

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 2021 by entering into currency options to sell €6.0 million and \$12.3 million for the rest of 2022, at predetermined exchange rates.

The fair value of the hedging financial instruments is a liability of £148,000 (2020: £67,000).

27. Risk management objectives and policies continued

Interest rate sensitivity

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 £220,000 (2020: liability of £50,000). The Group's sensitivity to interest rate changes is as follows:

	2021 £000	2020 £000
Unhedged bank loans outstanding at year end	11,150	14,500
Impact on pre-tax profits of a 1% change in LIBOR	112	145
Impact on equity of a 1% change in LIBOR	90	117
Cash at year end	18,408	15,523
Impact on pre-tax profits of a 1% change in bank base rates	184	155
Impact on equity of a 1% change in bank base rates	149	126

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:

	2021 £000	2020 £000
Cash and cash equivalents	18,408	15,523
Trade and other receivables	15,598	13,039
	34,007	28,562

The Group reviews the credit risk relating to its customers by ensuring wherever possible that it deals with long-established trading partners, and agents 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 receivable to identify balances where there is no reasonable expectation of recovery (see note 19). None of the financial assets are secured by collateral or other credit enhancements.

Group companies generally trade through overseas agents and distributors, and credit exposure to an individual agent or distributor can be significant at times. At 31 December 2021, no counterparty owed more than 10% of the Group's total trade and other receivables (2020: 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.

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 £35.0 million revolving acquisition facility together with a £6.0 million uncommitted accordion facility provided by Lloyds Banking Group. The Group's strategy envisages 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. The maturity of all trade and other payables is within the period of less than six months.

28. Acquisitions

Increased shareholding in Bordeaux Acquisition Limited

On 16 February 2021, Judges acquired 12.5% of the shares in Bordeaux Acquisition Limited for a cash consideration of £1.8 million, increasing its shareholding from 75.5% to 88%. The transaction was financed from Judges' existing cash resources.

Acquisitions of Heath Scientific Company Limited and Korvus Technology Limited

No changes were made to the provisional acquisition accounting as presented in the 2020 Annual Report and Accounts.

Notes to the consolidated financial statements continued

For the year ended 31 December 2021

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 2021. 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 18 years. The trustees are 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. 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 £270,000 as at 31 December 2021. These pensions do not affect the overall valuation as they are a liability with a fully insured offsetting asset.

	31 December	31 December	31 December
	2021	2020	2019
Summary	£000	£000	£000
Fair value of plan assets	7,936	6,874	6,349
Present value of defined benefit obligation	(9,260)	(10,169)	(8,449)
Deficit in scheme	(1,324)	(3,295)	(2,100)
Deferred tax	331	626	357
Net retirement benefit obligation	(993)	(2,669)	(1,743)

	31 December 2021	31 December 2020
Changes in the fair value of plan assets	£000	£000
1 January	6,874	6,349
Interest income	95	134
Return on plan assets (excluding amounts in interest income)	569	322
Contributions by the Company	574	236
Expenses	(7)	(1)
Benefits paid	(169)	(166)
31 December	7,936	6,874

The actual return on plan assets for the year ended 31 December 2021 was £664,000 (2020: £456,000).

Changes in the fair value of defined benefit pension obligations	31 December 2021 £000	31 December 2020 £000
1 January	10,169	8,449
Current service cost	_	_
Past service cost	_	10
Expenses	_	_
Interest expense	136	176
Actuarial losses due to scheme experience	(6)	136
Actuarial losses/(gains) due to changes in demographic assumptions	(72)	211
Actuarial losses due to financial assumptions	(798)	1,353
Benefits paid	(169)	(166)
31 December	9,260	10,169

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 2021 £000	31 December 2020 £000	31 December 2019 £000
Quoted equities	4,578	3,570	3,423
Bonds	3,086	2,598	2,421
Property	_	498	495
Cash and other assets	272	208	10
	7,936	6,874	6,349

Principal actuarial assumptions	31 December 2021 %	31 December 2020 %
Discount rate	1.90	1.35
Inflation rate (RPI)	3.50	3.10
Inflation rate (CPI)	2.80	2.30
In payment pension increases	3.55	3.35
In deferment pension increases	5.00	5.00

The mortality assumptions used in valuing the liabilities of the plan in 2020 and 2021 are based 100% on the standard tables S3PxA, projected using the CMI 2019 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.

The life expectancies assumed are as follows:

	31 December	31 December
	2021	2020
	Life expectancy	Life expectancy
	at age 65 (years)	at age 65 (years)
Male retiring in current financial year	22.1	22.1
Female retiring in current financial year	24.3	24.2
Male retiring in twenty years	23.4	23.4
Female retiring in twenty years	25.4	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	31 December
	2021	2020
	Change in	Change in
	liabilities	liabilities
	£000	£000
Discount rate – decrease by 0.25% per annum	423	500
Inflation rate – increase by 0.25% per annum	42	91
Mortality rate – increase of one year in life expectancy	400	456

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.

Notes to the consolidated financial statements continued

For the year ended 31 December 2021

30. Non-controlling interests

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

	2021 £000	2020 £000
Non-current assets	2,225	425
Current assets	6,676	6,184
Total assets	8,901	6,609
Current liabilities	(3,738)	(2,135)
Non-current liabilities	(13)	(972)
Total liabilities	(3,751)	(3,107)
Total equity	5,150	3,502
Attributable to:		
Owners of the parent	4,532	2,644
Non-controlling interest	618	858
	2021	2020
	2021 £000	2020 £000
Revenue	8,857	8,901
Profit for the year	1,651	1,747
Attributable to:		
Owners of the parent	1,429	1,319
Non-controlling interest	222	428
	2021	2020
	£000	£000
Net cash from operating activities	2,914	2,346
Net cash used in investing activities	(1,545)	(79)
Net cash used in financing activities	(1,011)	(1,026)
Net cash inflow/(outflow)	358	1,241
31. Capital commitments		
At 31 December the Group had capital commitments as follows:		
	2021	2020
	£000	£000
Contracted for but not provided in these financial statements	98	69

Parent company balance sheet

As at 31 December 2021

		2021	2020
	Note	£000	£000
Fixed assets			
Tangible assets	3	587	632
Right-of-use leased assets	4	180	233
Investments in subsidiaries	5	66,550	51,980
		67,317	52,845
Current assets			
Debtors	6	4,377	18,362
Cash and cash equivalents		_	_
		4,377	18,362
Creditors: amounts falling due within one year	7	(6,808)	(6,690)
Right-of-use lease liabilities falling due within one year	9	(62)	(59)
Net current (liabilities)/assets		(2,493)	11,613
Total assets less current liabilities		64,824	64,458
Creditors: amounts falling due after more than one year	8	(12,351)	(16,500)
Right-of-use lease liabilities falling due after more than one year	9	(121)	(183)
Total net assets		52,352	47,775
Capital and reserves			
Called up share capital	11	316	315
Share premium		16,667	16,429
Capital redemption reserve		23	23
Retained earnings		35,346	31,008
Shareholders' funds		52,352	47,775

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 £6,824,000 (2020: £2,918,000).

These parent company financial statements were approved by the Board on 22 March 2022.

David Cicurel Brad Ormsby Director Director

Parent company statement of changes in equity

For the year ended 31 December 2021

	Share capital £000	Share premium £000	Capital redemption reserve £000	Retained earnings £000	Total equity £000
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
At 1 January 2020	311	15,453	23	31,117	46,904
Dividends	_	_	_	(3,231)	(3,231)
Issue of share capital	4	976	_	_	980
Deferred tax on share-based payments	_	_	_	(113)	(113)
Share-based payments	_	_	_	317	317
Transactions with owners	4	976	_	(3,027)	(2,047)
Profit for the year	_			2,918	2,918
Total comprehensive income for the year				2,918	2,918
At 31 December 2020	315	16,429	23	31,008	47,775

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

Notes to the parent company financial statements

For the year ended 31 December 2021

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. Equivalent disclosures are, where required, given in the publicly available Group accounts of Judges Scientific plc.

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

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.

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.

Tangible fixed assets

Tangible fixed assets are 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 at the following rate:

Leasehold improvements

Over the minimum term of the lease

Fixtures, fittings and equipment

Between three and seven years

Taxation

Current tax is provided at amounts expected to be paid or recovered either directly or through Group relief arrangements.

Deferred tax assets and liabilities are calculated at rates that are expected to apply to their respective period of realisation, provided they are enacted or substantively enacted at the balance sheet date.

Employee benefits – defined contribution plans

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

Share-based employee compensation

The Company 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 Statement of Comprehensive Income with a corresponding credit to other reserves. 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 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.

Foreign currencies

Monetary assets and liabilities denominated in foreign currencies are translated into Sterling at the rates of exchange prevailing at the balance sheet date. Transactions in foreign currencies are recorded at the rate of exchange prevailing at the date of transaction. All differences are taken to the Statement of Comprehensive Income.

Financial assets

Financial assets consist of loans, debtors, derivatives and investments in subsidiaries.

Notes to the parent company financial statements continued

For the year ended 31 December 2021

2. Summary of significant accounting policies continued

Financial assets continued

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.

Debtors

Debtors are recognised and carried at the original invoice amount less an allowance for uncollectable amounts. An estimate of uncollectable amounts is made upon initial recognition of the debtor, and also when collection of the amount is no longer probable. Uncollectable amounts are written off to the Statement of Comprehensive Income when identified.

Investments

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

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 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 Statement of Comprehensive Income.

These financial liabilities include creditors and borrowings, including bank loans, subordinated loans and hire purchase commitments. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are charged to the 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.

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

Any contract entered into, which contains an identified asset, whose use the Company 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 lease commencement date, the Company recognises a right-of-use leased asset and a 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, 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.

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.

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.

Retained earnings

Retained earnings represents retained profits and losses.

2. Summary of significant accounting policies continued

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. Dividend income is recognised when the shareholder's right to receive payment is established.

3. Tangible assets

	Property and leasehold improvements £000	Fixtures, fittings and equipment £000	Total £000
Cost			
1 January 2021	797	87	884
Additions	_	7	7
31 December 2021	797	94	891
Depreciation			
1 January 2021	210	42	252
Charge for the year	29	23	52
31 December 2021	239	65	304
Net book value – 31 December 2021	558	29	587
Net book value – 31 December 2020	587	45	632

4. Right-of-use leased assets

	Land and property £000	Fixtures, fittings and equipment £000	Total £000
Cost			
At 1 January and 31 December 2021	329	18	347
Depreciation			
1 January 2021	111	3	114
Charge for the year	49	4	53
31 December 2021	160	7	167
Net book value – 31 December 2021	169	11	180
Net book value – 31 December 2020	218	15	233

5. Investments in subsidiaries

	2021 £000	2020 £000
Cost		
1 January	51,980	40,611
Transfer of ownership of entity from a Group business*	12,737	_
Increased shareholding in existing Group business	1,833	_
Additions	_	11,953
Repayment of subordinated debt in Bordeaux Acquisition Limited	_	(584)
31 December	66,550	51,980

^{*} Scientifica Limited was transferred from Judges Capital Limited to the parent company during 2021 at book value.

Notes to the parent company financial statements continued

For the year ended 31 December 2021

5. Investments in subsidiaries continued

The Company's subsidiaries at 31 December 2021, 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 assembly of fire testing instruments	Ordinary £1	100%
PE.fiberoptics Limited	Design and assembly 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%
Quorum Technologies Limited	Design, manufacture and distribution of instruments that prepare samples for examination in electron microscopes	Ordinary £1	100%
Moorfield Nanotechnology Limited*		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	88%
Oxford Cryosystems Limited*	Design, manufacture and marketing of products for crystallography and other markets	Ordinary £1	88%
Global Digital Systems Limited	Design and manufacture of instruments used to test	"A" and "B"	100%
	the physical properties of soil and rocks	Ordinary £1	
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		100%
Bordeaux Acquisition Limited	Holding company	Ordinary £1	88%
Crystallon Limited*	Holding company	Ordinary £1	88%
Armfield Limited	Design and supply of research and training equipment	Ordinary £1	100%
RJ Lewis Limited	Manufacture of engineering parts and finished products	Ordinary £1	100%
Armfield Technical Education Company Limited*	Dormant	Ordinary £1	100%
Armfield Inc. (USA)*	Supply 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)		Common Shares	100%
Korvus Technology Limited	Design and manufacture of deposition systems	Ordinary £1	100%
Judges Capital Limited	Holding company	Ordinary £1	100%
Judges Scientific (Dublin) Limited	Holding company	Ordinary €1	100%
Heath Scientific 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.

6. Debtors

	2021 £000	2020 £000
Amounts owed by Group companies	1,943	16,440
Prepayments and accrued income	758	657
Deferred tax asset (note 10)	1,251	1,265
Corporation tax recoverable	102	_
Other debtors	323	_
	4,377	18,362

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. Included in amounts owed by Group companies were unsecured loans totalling £15,422,000 which were all settled in full during 2021. All other intercompany balances are expected to be recovered via the operating cashflows of the related subsidiary entities.

7. Creditors: amounts falling due within one year

	2021 £000	2020 £000
Bank overdraft	951	1,868
Current portion of bank loans	3,800	3,000
Trade and other payables	342	333
Amounts owed to Group companies	40	82
Corporation tax	_	63
Social security and other taxes	313	309
Other creditors	44	417
Accruals and deferred income	1,318	618
	6,808	6,690

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

	2021	2020
	£000	£000
Bank loans	12,351	16,500

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	4,113
Repayable in years one to five	12,810
	16,923
Less: interest included above	772
	16,151

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 a liability of £148,000 (2020: £67,000), in addition to a fair value asset of £220,000 (2020: liability of £50,000) on interest rate swaps. These transactions have been recognised in these accounts and are held within other creditors and other debtors respectively.

The parent company guarantees a bank loan advanced to its 88.0% owned subsidiary, Bordeaux Acquisition Limited, amounting to £857,000 at 31 December 2021 (2020: £1,715,000).

Notes to the parent company financial statements continued

For the year ended 31 December 2021

9. Right-of-use lease liabilities

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

	2021 £000	2020 £000
At 1 January 2021	242	281
New leases	_	18
Interest payable	5	10
Remeasurement of lease liabilities	_	(4)
Repayments of lease liabilities	(64)	(63)
At 31 December 2021	183	242
Lease liabilities mature as follows:		

	2021 £000	2020 £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	116	178
Between one and five years – fixtures, fittings and equipment	8	12
	124	190
Total commitment	191	257
Less: finance charges included above	(8)	(15)
Net present value of lease liabilities	183	242
Current	62	59
Non-current	121	183

10. Deferred tax asset

	2021 £000	2020 £000
1 January	1,265	1,364
Adjustments in respect of prior years	29	(22)
Credit to the Consolidated Statement of Comprehensive Income in the year	(605)	36
Credit/(charge) to equity in the year	562	(113)
31 December	1,251	1,265
Deferred tax balances relate to temporary differences as follows:		
Provisions allowable for tax in subsequent periods	(69)	(52)
Share options	1,320	1,317
	1,251	1,265

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 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 £549,000 in aggregate (2020: £492,000).

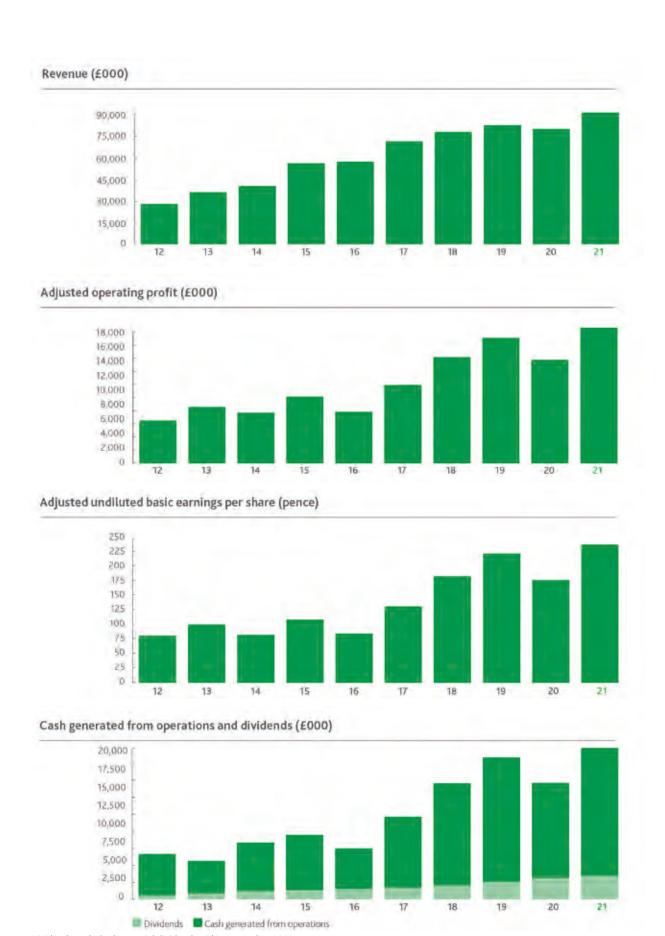
13. Directors and employees

	2021 £000	2020 £000
Staff costs (including Directors)		
Wages and salaries	1,327	943
Social security costs	163	104
Other pension costs	8	10
	1,498	1,057
Total Directors' emoluments		
Emoluments	953	758
Defined contribution pension scheme contributions	3	3
	956	761
Emoluments of the highest paid Director		
Emoluments	292	231

During the year, one Director participated in a defined contribution pension scheme (2020: one).

	2021 Number	2020 Number
Average number of persons employed		
Directors	8	7
Administrative staff	3	3
Total	11	10

Ten year financial history



Dividends exclude the special dividend paid in December 2019.

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)
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

Auditor

Grant Thornton UK LLP

Statutory Auditor Chartered Accountants 30 Finsbury Square London EC2A 1AG

Bankers

Lloyds Bank Corporate Markets

25 Gresham Street London EC2V 7HN

Solicitors

Sidley Austin LLP

70 St. Mary Axe London EC3A 8BE

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