





# DRIVING TECHNOLOGY THROUGH INNOVATION

UNIVERSAL DISPLAY CORPORATION

2007 ANNUAL REPORT



# **OLED** displays

Key customers began mass production of vibrant, full-color AMOLED displays using our high-efficiency PHOLED™ technology and materials.



# solid-state white OLED lighting

Our energy-efficient WOLED™ white OLED performance achievements earned us honors from the U.S. Department of Energy.



flexible AMOLED

Our team demonstrated the world's first high-resolution AMOLED on flexible metal foil using amorphous-Silicon technology — for next-generation display communications systems.

FROM INNOVATION TO COMMERCIALIZATION WE ARE AT THE FOREFRONT OF TRANSFORMING ORGANIC MOLECULES INTO LIGHT EMITTING DEVICES. SIGNIFICANT PERFORMANCE ADVANCES CONTINUE TO BE MADE IN OUR OLED TECHNOLOGIES.



REVENUE (\$ Millions)



NET LOSS / CASH USED IN OPERATIONS (\$ Millions)



CASH, EQUIVALENTS & INVESTMENTS (\$ Millions, at December 31)



TOTAL PATENTS ISSUED & PENDING WORLDWIDE (owned or controlled by Universal Display Corp.)



THIS PAST YEAR WAS ONE OF PROGRESS FOR BOTH OUR COMPANY AND OUR INDUSTRY. OUR OUTSTANDING TEAM MADE GREAT STRIDES IN ADVANCING OUR TECHNICAL AND BUSINESS OBJECTIVES. OUR COMMITMENT TO DRIVING TECHNOLOGY THROUGH INNOVATION CONTRIBUTED SIGNIFICANTLY TO A VARIETY OF ACTIVE-MATRIX OLED (AMOLED) DISPLAY PRODUCTS INTRODUCED IN 2007 BY LEADING MANUFACTURERS.

Early in the year, Samsung SDI Co., Ltd., one of our technology licensees and key materials customers, began shipping AMOLED displays using our proprietary PHOLED™ phosphorescent OLED technology and materials from their new half billion dollar manufacturing plant. By the fourth quarter, they reported that they were in mass production, and by year-end, products with Samsung SDI displays, including cell phones and personal media players from Hitachi, iriver, KDDI, Kyocera, Nokia, Sony Ericsson, and Toshiba, were in the market. To meet their growing production plans, we produced and sold increasing quantities of PHOLED materials and began to receive running royalties. Samsung SDI announced plans to double capacity in 2008 — to more than 3 million displays per month by year-end.

Chi Mei EL Corporation (CMEL), a subsidiary of Chi Mei Optoelectronics Corporation, a leading manufacturer of activematrix liquid crystal displays headquartered in Taiwan, also began shipping AMOLED displays in 2007, using our proprietary PHOLED materials and technology. Our PHOLEDs have the potential to be up to four times more power efficient than previously thought possible. Greater efficiencies, combined with lower heat generation, make our PHOLEDs important for high-performance portable applications, as well as for OLED TVs and future solidstate white OLED lighting.

We announced a multi-faceted relationship with LG.Philips LCD Co., Ltd., of South Korea, now known as LG Display Co., Ltd. (LGD). In addition to signing an agreement for their use of our PHOLED materials and technology, we began actively working with LGD, one of the world's largest flat panel display manufacturers, to develop flexible AMOLEDs on metallic foil.

Throughout 2007, we continued to drive technology through innovation, making excellent performance gains in our red, green and blue PHOLED systems. We also announced significant progress in the development of P<sup>2</sup>OLED<sup>™</sup> printable, phosphorescent OLEDs. This progress supported our joint work with Seiko Epson Corporation to create high-performance materials that are compatible with ink-jet printing for cost-effective, large-area OLED manufacturing. We also continued to collaborate with our longstanding research partners at Princeton University, the University of Michigan and the University of Southern California on OLED and next-generation organic electronics technologies.

Our partnership with PPG Industries, Inc., a leading global coatings and specialty products and services company, continues to thrive. As our exclusive supplier of Universal Display's proprietary PHOLED materials, PPG developed supply capabilities that supported the introduction of two new second-generation red PHOLED materials to our commercial PHOLED product line.

Universal Display continued its strategic relationships with leading OLED materials companies. We reported advances in PHOLED performance through the combination of our PHOLED emitters with new host materials from Nippon Steel Chemical Company. We also extended our collaboration with Idemitsu Kosan Co., Ltd. to combine our PHOLED emitters with their host materials. We believe it is important to OLED manufacturers that technology and material suppliers work together to help accelerate OLED commercialization.

Significant advances toward our vision for a flexible future were made throughout 2007. Our joint development with LGD and L-3 Communications Corporation, Display Systems, a leading military systems integrator, resulted in the demonstration of the world's first high-resolution AMOLED built on flexible metallic foil using an amorphous-Silicon backplane. In part supported through new funding from the U.S. Department of Defense, this development is paving the way for next-generation products that are very thin, lightweight, conformable and rugged.

As the world continues to seek energy conservation through innovation, our OLED technologies can play an important role in the development of "greener" lighting products. Through the use of our high-efficiency PHOLED technology, WOLED™ white OLEDs have the potential to achieve more than 150 lumens per Watt significantly better than incandescent and fluorescent lighting today. With additional U.S. Department of Energy funding in 2007, our team earned honors from them for our continued WOLED performance achievements.

Universal Display is in a financial position of strength with \$83.5 million of cash and cash equivalents on hand at year-end and no outstanding debt. This is, in part, the result of a \$40 million stock offering, which demonstrated continued support for the growth potential of our company. As our customers transition to increased commercial activities and the OLED industry continues to gain momentum, our talented team, our strong patent portfolio and our high-performance materials position us for growth in 2008 and beyond.

Sherwin I. Seligsohn Founder & Chairman of the Board

Steven V. Abramson President & Chief Executive Officer

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- Sony Toyota Industries University of Michigan University of Southern California U.S. Air Force Research Laboratory U.S. Army CERDEC U.S. Army Research Laboratory U.S. Navy Research Laboratory U.S. Department of Energy U.S. Display Consortium Vitex Systems

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