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LG Chem, Ltd. and Universal Display Corporation Announce Collaboration to Accelerate Development of OLED Materials

PROGRAM TO COMBINE AND OPTIMIZE LG CHEM'S ELECTRON TRANSPORT AND HOLE INJECTION MATERIALS WITH UNIVERSAL DISPLAY'S HIGH-EFFICIENCY PHOSPHORESCENT OLED MATERIALS AND TECHNOLOGY

SEOUL, South Korea & EWING, N.J.--([BUSINESS WIRE](#))--LG Chem, Ltd. (KOSPI:051910) and Universal Display Corporation (NASDAQ:PANL) today announced that they have signed a non-exclusive joint development agreement to accelerate the commercialization of high-performance OLED materials for use in OLED displays and lighting products. The collaboration will focus on combining LG Chem's electron transport and hole injection materials with Universal Display's phosphorescent OLED emitter materials and technology.

"We are honored to be formalizing our collaboration with LG Chem, a world-class chemical company and leading supplier of OLED materials, to accelerate the development of new high-performance OLED materials"

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Universal Display's proprietary PHOLED technology offers up to four times higher efficiency than conventional OLED technology – a feature that is very important for today's battery-operated cell phones and other portable devices, as well as for tomorrow's large-area TV's and solid-state lighting products.

LG Chem has developed OLED transport materials that lead to reduced operating voltage. By combining LG Chem's transport materials with Universal Display's PHOLED emitters, high efficiency as well as low voltage can be achieved.

Based on previous work with LG Chem materials, Universal Display has demonstrated a red PHOLED device with a luminous efficiency of 17 cd/A, an operating voltage of 4.8 V and an operating lifetime of 150,000 hours to 50% of initial luminance (at 1,000 nits) and a green PHOLED with 64 cd/A, 3.9 V and 250,000 hours (at 1,000 nits). Through this new agreement, the companies plan to accelerate their collaboration to combine and optimize higher performance materials for OLED device manufacturers.

"We believe that this collaboration agreement with Universal Display Corporation will provide a great opportunity to accelerate the progress of OLED materials that has been pursued extensively. The significance of this agreement is evident as it is a collaboration of two companies that are committed to providing innovative solutions to their customers," said Dr. Jin-Nyoung Yoo, Executive Vice President and President of LG Chem, Ltd./Research Park. "Furthermore, we consider the development of the phosphorescent and high performance transport materials to be of a great importance not only for a more clear distinction of the OLED materials from the current flat panel displays, but also for a future entry of such materials in the high efficiency lighting product market."

"We are honored to be formalizing our collaboration with LG Chem, a world-class chemical company and leading supplier

of OLED materials, to accelerate the development of new high-performance OLED materials,” said Steven V. Abramson, President and Chief Executive Officer of Universal Display. “We believe it is important to OLED manufacturers that technology and material suppliers work together to provide the optimal material systems and technology to help accelerate the commercialization of OLEDs.”

Universal Display is currently marketing and selling its PHOLED emitter materials and licensing its PHOLED technology for commercial use and evaluation. LG Chem is also selling a line of OLED materials including electron transport and hole injection materials for use with PHOLEDs. The OLED materials that result from this collaboration are expected to become available from Universal Display and LG Chem for evaluation and commercial use in the future.

About LG Chem Ltd.

LG Chem, Ltd. has been the face of Korea’s chemical industry for nearly 60 years as the nation’s first and largest vertically integrated chemical corporation. It is the mother company of LG Corp., which began with cosmetics business in 1947, and has now expanded its area into electronics, chemicals and telecommunication & services, with 36 companies overall. LG Chem, Ltd. manufactures a wide range of products from petrochemical goods to high-value added plastics and high performance industrial materials. It also extends its chemical expertise to high-tech materials for electronics and information technology; it sells rechargeable lithium-ion and lithium-ion polymer batteries, optical materials such as LCD polarizers, color filter photoresists as well as electronic materials such as toners and novel OLED materials to a client list that includes some of the world’s biggest electric and electronic manufacturers. Ongoing investment in R&D, innovative products and progressive marketing continues to make the IT&E Materials sector as one of the fastest growing business area of the company.

For further information about LG Chem, Ltd., visit the website: <http://www.lgchem.com>.

About Universal Display Corporation

Universal Display Corporation is a world leader in developing and commercializing innovative OLED technologies and materials for use in flat panel displays, solid-state lighting products, electronic communications and other opto-electronic devices. Universal Display is working with a network of world-class organizations, including Princeton University, the University of Southern California, the University of Michigan, and PPG Industries, Inc. Universal Display has also established numerous commercial relationships with companies such as Chi Mei EL Corporation, DuPont Displays, Inc., Konica Minolta Technology Center, Inc., LG.Philips LCD Co., Ltd., Samsung SDI Co., Seiko Epson Corporation, Sony Corporation, Tohoku Pioneer Corporation and Toyota Industries Corporation. Universal Display currently owns or has exclusive, co-exclusive or sole license rights with respect to more than 825 issued and pending patents worldwide.

Universal Display is located in the Princeton Crossroads Corporate Center in Ewing, New Jersey, minutes away from its research partner at Princeton University. Universal Display’s state-of-the-art facility is designed to further technology and materials development, technology transfer to manufacturing partners and work with customers to develop OLED products that meet their needs. Visit Universal Display on the Web at www.universaldisplay.com.

All statements in this document that are not historical, such as those relating to Universal Display Corporation’s technologies and potential applications of those technologies, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. You are cautioned not to place undue reliance on any forward-looking statements in this document, as they reflect Universal Display Corporation’s current views with respect to future events and are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated. These risks and uncertainties are discussed in greater detail in Universal Display Corporation’s periodic reports on Form 10-K and Form 10-Q filed with the Securities and Exchange Commission, including, in particular, the section entitled “Risk Factors” in Universal Display Corporation’s annual report on Form 10-K for the year ended December 31, 2007. Universal Display Corporation disclaims any obligation to update any forward-looking statement contained in this document.

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