MAIN PROGRAM

- Opening Ceremony
- Keynote Addresses
- Tutorials / Workshops
- Conference
- Young Leaders Conference
- Exhibition

KEY DATES

Paper Submission
March 31 (Thu.)

Acceptance Notification
May 31 (Tue.)

Author Registration
June 13 (Mon.) - July 31 (Sun.)

Pre-registration
June 13 (Mon.) - August 5 (Fri.)

AWARDS

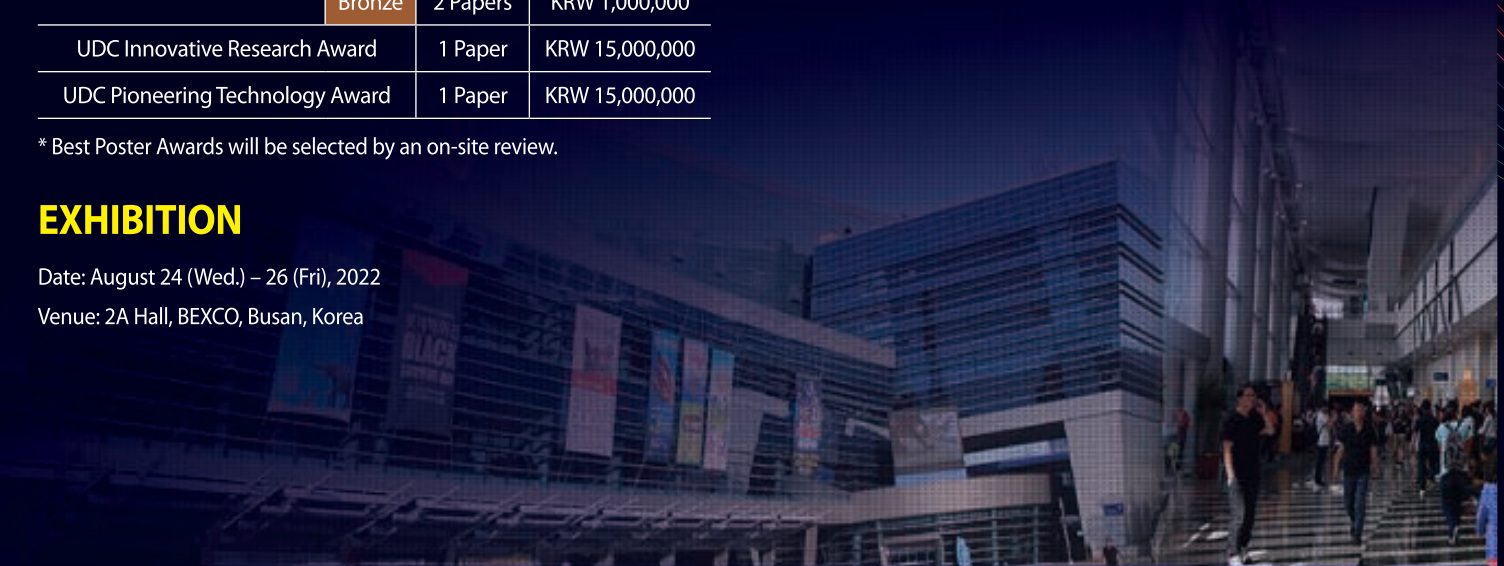
Name of Awards	Grade	Numbers	Prize (per paper)
Merck Award		1 Person	KRW 15,000,000
Merck Young Scientist Award		1 Person	KRW 5,000,000
KIDS Awards (Sponsored by LG Display & Samsung Display)	Gold	2 Papers	KRW 4,000,000
	Silver	2 Papers	KRW 2,000,000
	Bronze	2 Papers	KRW 1,000,000
UDC Innovative Research Award		1 Paper	KRW 15,000,000
UDC Pioneering Technology Award		1 Paper	KRW 15,000,000

* Best Poster Awards will be selected by an on-site review.

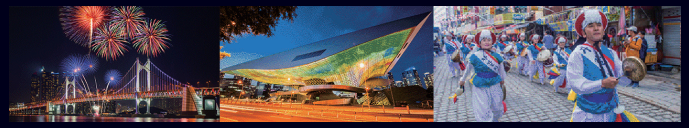
EXHIBITION

Date: August 24 (Wed.) – 26 (Fri), 2022

Venue: 2A Hall, BEXCO, Busan, Korea



ABOUT BUSAN



Located at the southern tip of the Korean peninsula, Busan is the second largest metropolis in Korea. It is home to the country's longest river, longest beach, and most significant port. Its geography includes a coastline featuring superb beaches and scenic cliffs, mountains that provide excellent hiking and extraordinary views with hot springs scattered throughout the city. Busan enjoys four distinct seasons and a temperate climate that never gets too hot or cold. For these reasons, Busan is becoming a world-class city for tourism and culture and a hot spot destination for international conventions.

IMID 2022 VENUE 'BEXCO'

BEXCO, a landmark in the global maritime city of Busan, is a facilitator of a successful business that has a vast wealth of knowledge and expertise. The center implements a differentiated operation strategy based on its many years of successfully attracting and hosting highly acclaimed, large scale international events. BEXCO prides itself on being a world-leading exhibition and convention center that offers incomparable value to its clients. We are looking forward to seeing you in BEXCO, Busan.

First Call for Paper

imid.or.kr

Hybrid Event

IMID 2022

The 22nd International Meeting on Information Display

Driving Display to the Future

August 23-26, 2022

BEXCO, BUSAN, KOREA

1-Page Paper Submission Deadline:

March 31 (Thu.)

ORGANIZED BY

The Korean Information Display Society(KIDS)

The Society for Information Display (SID)

Korea Display Industry Association (KDIA)

SPONSORS

ADMESY · KONICA MINOLTA · LUKAS · DONGWOO FINE-CHEM · 태원과학(주)

Driving Display to the Future

WELCOME MESSAGE

On behalf of the organizing committee of the 22nd International Meeting on Information Display (IMID 2022), I would like to sincerely appreciate your kind attention to IMID 2022, which will be held at BEXCO in Busan, Korea from August 23 to 26, 2022 as an on/offline hybrid format.

With your outstanding support, IMID has served as the one of the most attractive technical conference and showcase on the information display, for leading researchers and students from academia and industry to share their cutting-edge results and knowledge. Even though we have been going through a difficult time with COVID-19 all over the world, the last IMID, which was held in an on/offline hybrid format for the first time, was very much successful.

IMID 2022 will include prestigious keynote addresses, invited talks, regular sessions (oral & poster presentations), tutorials, and young leaders conference (YLC). This year, three special sessions; AI & computational technologies for display, display with free form factor, and hyper-realistic display for metaverse will be featured as well as other traditional main topics of display and industrial forum linked with special exhibition. We sincerely hope that all of our participants take this opportunity to have deep and profound discussions on every field of information display and also make lasting friendship and new future colleagues with all of our outstanding researchers.

Even though there might be a probability that some of you still cannot meet in person due to COVID-19, we are trying our best to communicate and connect our participants over the world to maximize their benefits by participating the hybrid type IMID 2022. We are really looking forward to seeing you all in IMID 2022.

Sincerely,

Sang-Hee Ko Park
General Chair of IMID 2022

CONFERENCE SCOPE

01. Special Session I: AI & Computational Technologies for Display
- All aspects of AI computational technology for display design/manufacturing/measurement; human vision perception; numerical algorithm; OLED device simulation; Prediction of material/ electrical/ optical/mechanical properties of display; Enhancement of image quality.

02. Special Session II: Display with Free Form Factors
- Flexible, foldable, rollable, and stretchable display technologies, including deformable display materials (substrates, transparent conductors, TFTs, barrier layers); novel processes and manufacturing methods (printing, novel deposition techniques, R2R, lift-off); electro-optical effects; driving techniques and designs for deformable electronic devices; and device performance and reliability for all deformable display technologies.

03. Special Session III: Hyper Realistic Display for Metaverse
- Display technologies including materials, manufacturing processes, panels, devices and components of immersive and highly realistic experiments, especially for metaverse applications; high-pixel-density displays, human factors and visual experiences for realistic displays (super high resolution 2D displays, 3D displays, micro displays for AR/VR/MR), pixel structures, optic system/components, driving techniques/circuits/ICs, sensors, system integration, contents generation, and quality evaluation.

04. Active-Matrix Devices
- Micro & nano-crystal silicon, oxide, oxynitride, metal halide, organic, and carbon nanomaterials based TFTs; quantum dot, perovskite, chalcogenides, 2D layered materials, and other emerging semiconducting materials and gate dielectric materials for TFTs; solution processed & printed TFTs; new structures/processes and novel application of TFTs; active-matrix devices for LCD, OLED, LED, QLED, and micro displays; novel and high performance active-matrix devices and system-on-panel (SOP); backplane technologies for emerging displays.

05. Applied Vision/Human Factors
- Measurement methods based on both human vision and physical properties; autostereoscopic, AR, and VR form factors, etc; effective use of a display capability to create a more immersive and compelling experience; approaches to take advantage of limitations of the visual system to process or transmit display data more efficiently; novel methods of user interaction and HMI with display systems.

06. AR/VR/MR and 3D Display Optics
- Display technologies for AR/VR/MR systems; Near-to-eye display (NED) technologies; spatial tracking, localization, mapping, and navigation techniques; end-to-end system integration and latencies; inputs, interfaces, and interactions; human factors and user experience considerations; mapping and rendering of virtual objects onto the physical world; object, human, and scene capture; reconstruction, recognition, and understanding; biometrics and user authentication; AR/VR/MR applications; measurement and performance evaluation for AR/VR/MR systems.
- 3D and realistic display systems including (auto-) stereoscopic, (super-) multi-view, volumetric, holographic, aerial, hyper-realistic displays; 3D or holographic contents generation including 3D image capture, 2D-3D contents conversion and machine learning; user-interaction with 3D displays; 3D image formats and standards; 3D image compressions; measurement and performance evaluation for 3D displays; techniques for realistic and immersive experience; human factors; optical technologies for various display systems and devices including LCD and OLED.

07. Display Electronics and Systems
- Advanced algorithms for display driving technology such as AI; display system and peripheral designs; touch interface electronics; TFT circuits (driving methods and circuits for display devices and systems); driver ICs; image signal processors; display interface technologies; driving electronics of touch panels; image quality enhancement methodologies and systems; neuromorphic systems; all novel integrations of displays into specialized devices as well as system-level aspects of electronic displays.

08. Display Manufacturing and Processes
- Thin and thick film deposition, lithography, etching, cleaning, printing, coating and various plasma technologies; process & equipment technologies for new and emerging displays including flexible & wearable applications; manufacturing issues of breakthroughs in the displays such as performance, cost reduction, high throughput and flexibility; material issues in display process, including synthesis or deposition of emerging materials; process & equipment technology for display circuits and interfaces; process & equipment for printed electronics including display and sensors fabrication.

09. Emerging Materials and Devices for Display Technology
- Emerging display materials and device architectures such as 2-dimensional (2D) materials, organic/inorganic perovskite materials, perovskite quantum dot, graphene quantum dot, 2D layered material quantum dot, light-emitting devices, and metamaterials/metasurfaces made thereof. XR display and devices (virtual reality, augmented reality, extended reality, hologram, 3D display, etc). Transparent conducting electrode materials for display (Silver nanowire, metal mesh, graphene, conducting polymers, etc). Display elements or systems tailored to wearable and human-interfacial applications. Biomedical applications such as phototherapies or photo-biomodulation; electronic shelf labels or signages; automotive or aviation display applications; medical-grade high-contrast/high-definition displays, and/or interactive display applications.

10. LC Technologies and Electro-Optic Materials
- High image quality/resolution/dynamic range LCDs; QD-enhanced LCDs; automotive LCD applications; LC for AR/VR and 3D displays; molecular design/synthesis/new LC materials; LC alignment and characterization; LC elastomers and stimuli-responsive materials; LC for EL/PL components; LC for conformable displays; smart window applications; optical design and simulations; optical films for displays; foldable/stretchable films; LC photonic crystals and lasers; LC semiconductors; LC-based sensor; LC lens; up/down conversion LC materials; LC materials for GHz/THz wave modulation; nano-patterning LC template.

11. Lighting Materials and Applications
- New development of lighting materials including hybrid lighting technologies; solid-state lighting and LED/OLED, back-light units (BLUs); phosphors, quantum dots and other color-conversion techniques for lighting applications; light extraction optics; heat dissipation, standardization and certification; photometry, driver IC, novel lighting convergence technologies for ocean/agricultural/medical/IT/bio/smart/automotive applications.

12. Medical/Bio-integrated Optoelectronic Materials and Devices
- Skin-attachable or implantable soft materials, devices, and display; bio-integrated or bioinspired optoelectronics; implantable medical devices with display; digital healthcare devices and robotics; human-interactive sensors or actuators; biocompatible or biomimetic materials; transient electronics; 3D optoelectronic scaffolds; integration processing strategies to address the profound mismatch between biology and optoelectronics; biomimetic functionalities such as bio-resorption, self-healing, multifunctional responsiveness, breathability, and recyclability.

13. Micro-LEDs
- Advances in LED-based displays; epitaxial and chip processes for micro-LED pixels; the materials and manufacturing process technologies for transfer printing and bonding; phosphor and quantum dot materials for color conversion; frontplane modules; active and passive driving methods for backplanes; flexible and miniaturization technologies; flexible patterns and micro-LEDs in stretchable applications; and active device integration for bio-medical and automotive applications.

14. Multisensory Technology for Display and Beyond
- Camera under Display for Photo/Video Capture and Fingerprint Sensing; Sensor-in-Pixel (SIP) Techniques, Including Optical and Force Sensors, Touch and UI/UX sensor components; integration technology; touch gesture & motion controls; interactive in feedback actuators; next-generation tactile sensors and actuators; soft haptics for interactive display; soft actuators and applications; human-interactive sensors, other sensor technologies.

15. OLED Frontplanes
- OLED materials; device physics and characterization for high-performance OLEDs; enhancement of out-coupling efficiency; improvement of optical properties of OLEDs; device stability and degradation analysis; organic and inorganic interfaces in OLEDs; OLED electrodes; OLED manufacturing; OLED patterning process; solution-processed OLEDs; white OLEDs for displays; encapsulation materials and processes; environmental reliability; novel applications.

16. Quantum Dots
- Synthesis and characterization of quantum dots; optical and electrical properties of quantum dot materials; quantum dot-based photo-/electro-luminescence devices; quantum dot-based energy conversion devices and systems; various optical and electrical applications using quantum dots.