MAIN PROGRAM

- Opening Ceremony
- Keynote Addresses
- Tutorials
- Regular Sessions (Oral & Poster presentation)
- Young Leaders Conference
- Exhibition

KEY DATES

Paper Submission
March 31 (Wed.)

Acceptance Notification
May 26 (Wed.)

Author Registration
June 21 (Mon.) - July 31 (Sat.)

Pre-registration
June 14 (Mon.) - August 6 (Fri.)

AWARDS

IMID 2021 offers a variety of award opportunities such as **KIDS Award** sponsored by Samsung Display and LG Display, and **UDC Award** sponsored by Universal Display Corporation. For the poster presenter, there are **Best Poster Awards** which will be selected from online review. These awards are given to the presenting authors of IMID 2021 based on the quality of the presentation at the conference.

EXHIBITION

Date	August 25-27, 2021
Venue	COEX Hall C (3F), Seoul
Organized by	Korea Display Industry Association (KDIA)
Tel	+82-2-3014-5274

ABOUT SEOUL

Located to the west of the central region of the Korean Peninsula, Seoul, the capital city of the Republic of Korea, has been the center of the country for the long period of its own history from the prehistoric era to the present day. Now in its 600th year of official history, Seoul is a city where Korea's traditional and modern cultures coexist. Seoul has full of cultural heritages with unique stories, and you can find traditional architectures in their original forms on one side of the city and ultra-modern buildings on the other, existing in a perfect harmony. The city lies in a natural basin, surrounded by a series of mountains and hills, and its grandeur and magnificent scenic beauty makes the capital, one of the most attractive metropolitan cities of the world. Aside from bustling pace of life and modern architecture, a number of invaluable cultural assets bases their pride on the long history of Seoul.

IMID 2021 VENUE 'COEX'

COEX, well known for its shopping and cultural space, is the heart of international exchange among nations with various exhibitions and international seminars. COEX is the biggest convention center and exhibition space in Korea. Directly connected to the Samseong Station of subway line 2 and Bongeunsa Station of subway line 9, it includes a shopping center, a movie theater, a musical concert hall, exhibition halls and famous restaurants. It is also close to a casino, hotels, department stores, and other various amenities.

First Call for Papers

imid.or.kr

IMID 2021

ON/OFF-LINE Hybrid Event

The 21st International Meeting on Information Display

On Leap for Next 20;
Breakthrough in Display Technology & Science

August 25-27, 2021 / COEX, Seoul, Korea

Paper (1 page) Submission Deadline
→ March 31 (Wed.), 2021

ORGANIZED BY

The Korean Information Display Society (KIDS) KIDS

The Society for Information Display (SID) SID

SPONSORED BY

Korea Display Industry Association (KDIA) KDIA

ADMESY KONICA MINOLTA

On Leap for Next 20; Breakthrough in Display Technology & Science

WELCOME MESSAGE

On behalf of the 21st International Meeting on Information Display (IMID 2021) organizing committee, I would like to sincerely appreciate your attention to the IMID 2021, which will be held at COEX in Seoul, Korea, from August 25 to 27, 2021. Since everyone in the world is facing a difficult time with COVID-19, the IMID 2021 will also be available to participate both offline and online.

Last year, we held our first IMID in online conference format, which turned out very successful. With your continuous support, IMID has served as a premier conference for leading researchers and students from academia and industry to share their cutting-edge results and knowledge on the information display.

The IMID 2021 will include keynote addresses, invited talks, regular sessions (oral & poster presentations), tutorials, and 'young leaders conference (YLC)'. We sincerely hope all of our participants will use this opportunity to have deep and profound discussions on every field of information display and make lasting friendships with our prestigious researchers as well as those in early careers.

Most of all, the IMID 2021 will be held jointly with the huge display exhibition in the central part of the new downtown of Seoul. We are sure that the exhibition will offer companies and institutions great opportunities to expand their business and networking.

Even though there might be a probability that some of you still cannot meet in person due to COVID-19, we will be trying our best to communicate and connect our participants over the world to maximize benefits in participating in the hybrid type IMID 2021. We look forward to seeing you all in the IMID 2021.

Sincerely,

Byoungho Lee
General Chair of IMID 2021

CONFERENCE SCOPE

01. Special Session I: 20th Anniversary Special Session

02. Special Session II: 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.

03. Special Session III: 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.

04. Special Session IV: High Resolution Display
- Materials, Manufacturing processes and devices for High-Pixel-Density Displays, Image Quality, and Processing for High-Pixel-Density Displays; Human Factors and Visual Experiences for High-Resolution Displays (LCD, OLED, Micro-LED, Quantum dot, other emerging display type; for Mobile, Mid-size, Large-area, HUD, AR/VR/MR), Pixel Structures, Optics, and Driving Techniques, System Integration, Reliability, and Cost-Reduction Efforts, Content Generation, and Processing for High-Pixel-Density Displays.

05. 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.

06. 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.

07. AR/VR/MR and 3D Display Optics
- Display technologies for AR/VR/MR systems; 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.
- 3D and realistic display systems including stereoscopic, autostereoscopic, multi-view, super-multi-view, volumetric, holographic, aerial, hyper-realistic displays; 3D contents generation including 3D image capture and 2D-3D contents conversion; 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.

08. 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.

09. 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.

10. 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. 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.

11. Intelligent System for Interactive Display
- 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.

12. 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.

13. Medical/Bio-integrated Devices and Display
- Deformable or wearable devices and display; biointegrated or bioinspired optoelectronics; implantable medical devices with display; digital healthcare devices and robotics; skin-like display; biocompatible or biomimetic materials; bio-device interface; 3D optoelectronic scaffolds; integration processing strategies to address the profound mismatch between biology and optoelectronics; biomimetic functionalities such as bioresorption, self-healing, multifunctional responsiveness, breathability, and recyclability.

14. 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.

15. 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.

16. 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.

17. 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.