IMID 2020 PROGRAM

- Tutorials
- Conference
- Exhibition
- Business Forum
- Keynote Addresses
- Welcome Reception
- Banquet
- Young Leaders Conference

KEY DATES (UPDATE)

Paper Submission
March 31 (Tue) April 30 (Thu)

Acceptance Notification
May 28 (Thu) June 26 (Fri)

Author Registration
June 22 (Mon) ~ July 31 (Fri)

Pre-registration
June 15 (Mon) ~ August 7 (Fri) August 14 (Fri)

AWARDS & GRANTS

IMID 2020 offers a variety of award opportunities such as KIDS Award sponsored by Samsung Display and LG Display, Merck Award including Merck Young Scientist Award, and UDC award. For the poster presenter, there are Best Poster Awards which will be selected from on-site review. These awards are given to the presenting authors of IMID 2020 based on the quality of the presentation at the conference.

Also, IMID 2020 Organizing Committee is pleased to provide travel grant supports to students who present outstanding scientific or technical achievement at the conference. A considerable number of student travel grants, up to USD 500 each, will be given to the students.

IMID 2020 EXHIBITION

Date	August 26th (Wed) ~ 28th (Fri), 2020
Venue	COEX Hall B (1F), Seoul
Scale	8,010m^2 / 350 booths more than 120 companies from 6 countries
Organized by	Korea Display Industry Association

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 2020 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.

PAST 20, NEXT 20

iMiD 2020

Paper(1 page) Submission Deadline
→ April 30, 2020

With IMID Exhibition!

The 20th International Meeting on Information Display

AUGUST 25 – 28, 2020
COEX, SEOUL, KOREA

ORGANIZED BY
The Korean Information Display Society (KIDS) KIDS
The Society for Information Display (SID) SID

SPONSORED BY
Korea Display Industry Association (KDIA) KDIA

WELCOME MESSAGE

International Meeting on Information Display (IMID) 2020 will be held at COEX in Seoul, Korea from August 25 to 28, marking the 20th in its conference series. On behalf of the organizing committee, I sincerely appreciate your attention on the conference.

IMID has annually taken place since 2001 organized by the Korean Information Display Society (KIDS), the Society for Information Display (SID), and the Korea Display Industry Association (KDIA).

IMID has grown to be a prestigious conference where academic and business leaders share knowledge and latest technical issues on information displays. The conference includes keynote addresses, regular sessions (oral & poster presentations) and young leaders' conference.

The conference and an exhibition are especially held jointly in August 2020, to become the largest information display event in Asia. IMID 2020 is set to be more magnificent along with Conference and Exhibition in Seoul, a representing city of ICT powerhouse.

We sincerely hope that all the participants have valuable time to have profound and useful discussions on information displays and also make long-lasting friendships with other participants and renowned researchers.

All of the organizing committee members are looking forward to meeting you.

Sincerely,

Dong Hoon Lee
General Chair of IMID 2020

CONFERENCE SCOPE

01. Special Session I : 20th Anniversary Special Session
This Special Session first reviews key moments and technologies that made possible display technologies of today from both industry and academic standpoints, including the role of IMID that began 20 years ago. The state-of-the-art technologies are then presented by major players such as panel makers, equipment manufacturers, and material companies to discuss the core issues to make display technologies even more successful in the next 20 years or more and play a central role in the era of 4th Industrial Revolution. (invited speakers only)

02. Special Session II: AI for Display
Artificial intelligence and computational science with physical models for display :
All aspects of artificial intelligence and simulation technology for predicting, analyzing and designing characteristics of display: AI for display design / manufacturing / measurement; human vision perception; numerical algorithm; OLED device simulation; prediction of material / electrical / optical / mechanical properties of display.

03. Special Session III: Deformable Display Technologies: Flexible / Foldable / Stretchable
Enabling technology of deformable display and new product concepts :
All aspects of flexible, foldable 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: AR/VR/MR
Emerging display techniques for augmented, virtual, and mixed reality :
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.

05. Active-Matrix Devices
Advanced TFTs and active-matrix backplane technology :
Micro & nano-crystal silicon, organic, and carbon nanomaterials based TFTs; oxide, oxynitride, quantum dot, perovskite, chalcogenide, 2D and other emerging semiconducting materials for TFTs; solution processed & printed TFTs; new structures/processes and novel application of TFTs; active-matrix devices for LCD, OLED, LED, 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
Novel technology for color science and new visual experiences :
New display measurement methods based on both human vision and physical properties; mitigating the challenges by presenting comfortable and engaging 3D imagery (including autostereoscopic, AR, and VR form factors); 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. Display Electronics and Systems
Advanced driving electronics and systems for display and sensor :
AI algorithms for advanced driving technology; peripherals and display system 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; display-related AI technologies; neuromorphic system; all novel integrations of displays into specialized devices as well as system-level aspects of electronic displays.

08. Display Manufacturing and Equipment
Advances in process and equipment technologies for displays :
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. Display Optics - 3D Displays
Advances in 3D and Hyperrealistic Display Technologies :
3D and realistic display systems including stereoscopic, autostereoscopic, multi-view, super-multi-view, volumetric, holographic, aerial, hyperrealistic 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; signage, wearable/near eye displays; backlight units; transparent displays; and other novel display concepts.

10. Emerging Display Technologies
Emerging materials and device technologies for light-emitting systems and novel applications of display and lighting devices :
Emerging display materials and device architectures such as 2-dimensional (2D) materials, organic/inorganic perovskite materials, and light-emitting devices made thereof. Display elements or systems tailored to wearable 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. Lighting Materials and Applications
Advances in materials and devices for solid-state lighting application :
New development of lighting materials including hybrid lighting technologies; solid-state lighting, and LED/OLED lighting convergence applications including white LEDs; back-light units (BLUs); phosphors, quantum dots and other color-conversion techniques for lighting applications; light extraction optics; heat dissipation; LED/OLED lighting driving techniques; characterization and reliability; standardization and certification; photometry; technology for LED/OLED light mixing/driver IC; engine/cooling/optics; lighting modules; novel convergence technologies for ocean/agricultural/medical/IT/bio/smart/automotive applications.

12. Micro-LEDs
Micro-LEDs displays and convergence applications :
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; active device integration for bio-medical and automotive applications.

13. LC Technology and Electro-Optic Materials
Liquid Crystal Technology and Electro-Optic Materials for Display :
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;

14. OLED Frontplanes
Advances in OLED technologies :
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.

15. Touch and UI/UX Displays
Next-generation touch and interactive display technologies :
Touch and UI/UX sensor components; integration technology; touch gesture & motion controls; interactive in feedback actuators; next-generation tactile sensors and actuators; flexible and conformable tactile sensors and applications; soft haptics for interactive display; soft actuators and applications; human-interactive sensors.

16. Quantum Dots
Colloidal quantum dots for display applications :
Light generation; energy conversion; novel application concepts; 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; novel optoelectronic applications based on quantum dots.