IMID 2019 Main Program

- Tutorials and Workshops
- Conference (Incl. Young Leaders Conference)
- Special Exhibition
- Keynote Addresses
- Welcome Reception
- Display Industry Forum
- Banquet

Keynote Speakers

TBD
Dr. Chang-Ho Oh
(LG Display Co., Ltd., Korea)

"Skin Electronics Connecting Cyberspace to Human Body"
Prof. Takao Someya
(Univ. of Tokyo, Japan)

Key Dates

- **Paper Submission**   March 31 (Sun.)
- **Acceptance Notification**   May 27 (Mon.)
- **Pre-registration**   June 17 (Mon.) ~ August 10 (Sat.)

Paper Submission

IMID 2019 cordially invites you to submit papers for oral and poster presentations. Papers received by **March 31, 2019** will be considered under the standard review procedure. Papers must be submitted via the official website (www.imid.or.kr). All authors accepted for presentation must register for the conference through the website before **August 10, 2019** in order to confirm their participation.

About Gyeongju

Gyeongju, located in the southeastern part of the Korean Peninsula, was the capital of the Silla Kingdom (BC 57-AD 935) for almost a thousand years. The entire city was designated a National Park by the government in honor of the historic temples, ruins, monuments and artifacts that can be found throughout the area. Most prominently, it is home to three UNESCO World Heritage Sites: Seokguram Grotto and Bulguksa Temple, Gyeongju Historic Areas, and the historic village of Yangdong.These days, Gyeongju is a popular tourist destination for visitors from Korea and abroad who flock to see the famed foliage in the fall or cherry blossoms in the spring. The city is also becoming increasingly popular as a convention city thanks to its combination of old world charm and high-tech facilities.

IMID 2019 Venue 'HICO'

The IMID 2019 will take place at the Hwabaek International Convention Center (HICO) in Gyeongju, Korea. The name comes from "Hwabaek," the Korean ancient system of joint sessions in the Silla Kingdom. As an official organization consisting of a panel of judges, Hwabaek made it a rule that a consensus can be reached only with unanimous agreement. It is also a culture of convention that showed the intrinsic nature of an assembly where participants gathered to discuss, share, and communicate in order to obtain the best result. Carrying the age-old spirit of communication, HICO today offers a modern and sophisticated system of exhibitions and conventions befitting contemporary needs.

iMiD 2019
International Meeting on Information Display

EXPLORING / EXPANDING / ENRICHING

August 27 - 30, 2019 / HICO, Gyeongju, Korea

1-Page Paper Submission Deadline:
March 31, 2019

ORGANIZED BY

The Korean Information Display Society(KIDS)   KIDS

The Society for Information Display (SID)   SID

Korea Display Industry Association (KDIA)   KDIA

Welcome Message

On behalf of the organizing committee of the 19th International Meeting on Information Display (IMID 2019), I would like to sincerely appreciate your attention on the IMID 2019 which will be held at Gyeongju Hwabaek International Convention Center (HICO) in Gyeongju, Korea from August 27 to 30, 2019.

IMID continues a series of the annual conference began in 2001, organized by the Korean Information Display Society (KIDS), the Society for Information Display (SID), and the Korea Display Industry Association (KDIA).

The IMID has become a premier conference for academic, industry, and business leaders to meet, publish results, and share knowledge in the information display.

The conference includes keynote addresses, regular sessions (oral&poster presentations), tutorials, workshops, a special exhibition, and young leaders conference (YLC). We sincerely hope that all of our participants will use this valuable time to produce deep and profound discussions on information display field and also make lasting friendships and future colleagues with all of our prestigious researchers.

Especially, Gyeongju, the host city of IMID 2019, served as the ancient capital of the Silla Kingdom (BC 57-AD 935) for 1,000 years during Korea's 5,000-year history, and it is a UNESCO world heritage city. It is considered an "open-ceiling museum" with its many historical sites rich in cultural artifacts. IMID 2019 will be held in this extraordinary place, where culture and technology co-exist today, and we hope you enjoy your staying in Gyeongju inspiring you in various ways.

All the members of the organizing committee are looking forward to meeting you at Gyeongju, Korea.

Sincerely,

Jae Soo Yoo
General Chair of IMID 2019

Conference Scope

01. Special Session I: Next-Generation OLED TVs - Organic vs Quantum Dots
Large area OLED-based TV display technology: State-of-art technologies and technical issues of high-resolution OLED TVs based on color-filer-array with white OLED and quantum dots with blue OLED technologies (invited speakers only from major panel makers, material companies, and academia).

02. Special Session II: 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.

03. Special Session III: Micro-LEDs
Micro-LEDs displays and covergence 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; and active device integration for bio-medical and automotive applications.

04. Special Session IV: AR/VR/MR
Emerging near-eye displays 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
Advancement in active-matrix backplane technology: Active-matrix devices for e-paper, LCD, OLED and micro-LED displays; bezel-less display technology; novel and high performance active-matrix devices and system-on-panel (SOP); backplane technologies for high performance LCD and conformable displays; micro & nano-crystal silicon, organic, and carbon nanomaterials based TFTs; oxide, oxynitride, quantum dot, perovskite, chalcogenide, 2D and other emerging semiconducting materials for TFTs; all aspects of solution processed & printed TFTs; new structures/processes and novel application of TFTs.

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, and various plasma applications; 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.

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, 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
Novel applications of display and lighting devices, emerging material and device technologies for light-emitting systems: 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. 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.

11. Lighting Materials and Applications
Advances in materials and devices for solid-state lighting application: New development of lighting materials; solid-state lighting, and LED/OLED lighting convergence applications including white LEDs; back-light units (BLUs); phosphor and quantum dots 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. Novel LC Technologies
Novel liquid-crystal technologies: Electro-optic effects; novel display modes; optical design and simulations; high performance LCD technology; chemical or physical studies of LC materials; LC alignment processes and characterization techniques; LCD manufacturing; measuring and evaluation techniques; LCD color filter technologies; LC technologies for flexible displays and electronic papers; LC photonic crystals and lasers; LC technologies for 3D and holographic displays; LC semiconductors; LC lens and sensor.

13. OLED Frontplanes
Advances in OLED technologies: OLED materials; device architecture for high-performance and reliable OLEDs; device physics and characterization; out-coupling enhancement technologies; device stability and degradation analysis; OLED manufacturing; OLED electrodes; OLED patterning process; white OLEDs for displays; encapsulation organic and inorganic material; encapsulation process; environment reliability; novel applications; standards and policy.

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

15. 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.