Speakers Schedule

» Plenary Speakers

» Invited Speakers

Plenery Speakers

Day 1 - Wednesday, November 27 — Room 504bc

10:30-11:15 — **Prof. Gerd Leuchs**

» President, OPTICA
» Director Emeritus, Optics and Information Emeritus Group, Max Planck Institute, Germany

HOST
Chi-Kuang Sun / 孫啟光
(Taiwan Photonics Society)

Optics and the Quantum Vacuum

11:15-12:00 — **Prof. Yu-Chong Tai / 戴聿昌**

» Anna L. Rosen Professor, Electrical Engineering and Medical Engineering, Caltech, USA
» Academician, Academia Sinica, Taiwan

HOST
Pei-Kuen Wei / 魏培坤
(Academia Sinica)

Micro Eye Implants for Intraocular Optics

Day 2 - Thursday, November 28 — Room 504bc

09:00-09:45 — **Prof. Jennifer Kehlet Barton**

» President, SPIE
» Professor, Department of Biomedical Engineering, University of Arizona, USA

HOST
Chi-Kuang Sun / 孫啟光
(Taiwan Photonics Society)

Miniature endoscope design for early cancer detection

09:45-10:30 — **Prof. Ping Shum / 沈平**

» President, IEEE Photonics Society
» Chair Professor, Department of Electronics and Electrical Engineering, Southern University of Science and Technology (SUSTech), China

HOST
Ray-Hua Horng / 洪瑞華
(Taiwan Photonics Society)

Optical Fiber Based Technologies & Applications

16:15-17:00 — **Prof. Shangjr Gwo / 果尚志**

» Distinguished Chair Professor, Department of Physics, National Tsing Hua University, Taiwan
» Convener, Taiwan Quantum Program Office, Taiwan

HOST
Po-Tsun Liu / 劉柏村
(National Science and Technology Council)

Photonic and Optoelectronic Device Applications Based on Epitaxial Materials

Invited Speakers

S1.Nanophotonic Materials and Devices

Day 1 - Wednesday, November 27 — Room 507

13:30-14:00 — **Prof. Takuo Tanaka / 田中 拓男**

» Institute of Physical and Chemical Research (RIKEN), Japan

Metasurfaces for sensing applications

15:15-15:45 — **Prof. Kuniaki Konishi / 小西 邦昭**

» Institute for Photon Science and Technology, Graduate School of Science, University of Tokyo, Japan

Lightwave control using free-standing dielectric nanomembrane structures

Day 2 - Thursday, November 28 — Room 507

10:45-11:15 — **Prof. Joel Yang**

» Engineering Product Development, Singapore University of Technology and Design, Singapore

3D Printing With Light For Light

13:30-14:00 — **Prof. Yao-Wei Huang / 黃耀緯**

» Department of Photonics, National Yang Ming Chiao Tung University

Metasurface-based depth sensing and topology optimized high-Q metasurfaces

15:00-15:30 — **Dr. Ya-Lun Ho / 何亞倫**

» Research Center for Electronic and Optical Materials, National Institute for Materials Science, Japan

Membrane Nanophotonic Platform for Enhancing Light-Matter Coupling in 2D Transition Metal Dichalcogenides

Day 3 - Friday, November 29 — Room 507

10:00-10:30 — **Prof. Kuo-Ping Chen / 陳國平**

» Institute of Photonics Technologies, National Tsing Hua University

Enhancing Light-Matter Interactions in 2D Materials with Nanophotonics

Day 3 - Friday, November 29 — Room 503

10:30-11:00 — **Prof. Jer-Shing Huang / 黃哲勳**

» Research Department of Nanooptics, Leibniz Institute of Photonic Technology (Leibniz IPHT) in Jena (Germany)

Substrate Effect on the Whispering-Gallery Modes in π-Conjugated Polymer Microspheres

Invited Speakers

S2.Optical Waveguides and Communications

Day 1 - Wednesday, November 27 Room 506

13:30-14:00 **Prof. Christina Lim**

» Department of Electrical and Electronic Engineering, The University of Melbourne, Australia

Optical Wireless Convergence: Next-Generation Optical Crosshaul Networking

15:15-15:45 **Prof. Jiun-Yu Sung / 宋峻宇**

» Department of Electronics and Computer Engineering, National Taiwan University of Science and Technology

Overviews of Indoor Infrared Optical Wireless Communications (IR-OWC)

Day 2 - Wednesday, November 28 Room 506

10:45-11:15 **Dr. Chun-Wei Chen**

» Edward L. Ginzton Laboratory, Stanford University, USA

Taming the beasts: wavefront shaping to conquer nonlinear effects in multimode fiber amplifiers

S3.Quantum Photonics and Laser Technology

Day 1 - Wednesday, November 27 Room 505c

13:30-14:00 **Dr. Yu-Chen Chen / 陳俞辰**

» Research Center for Applied Sciences, Academia Sinica

Engineering and characterizing single spin defects in wide bandgap materials

15:15-15:45 **Prof. Wenchang Yeh / 葉文昌**

» Shimane University, Japan

Growth of crystal orientation controlled single crystal stripes in Si/Ge thin film on SiO_2 for Si photonics

Day 2 - Thursday, November 28 Room 505c

10:45-11:15 **Prof. OU Zheyu Jeff / 區澤宇**

» Department of Physics, City University of Hong Kong

Interferometry in the quantum age

13:30-14:00 **Prof. Saulius Juodkazis**

» Swinburne's Optical Sciences Centre, Swinburne University of Technology, Australia

High Intensity Laser Patterning: Nanoscale Resolution over Large Areas

Invited Speakers

S4.Information Photonics

Day 1 - Wednesday, November 27 — Room 505b

13:30-14:00 — **Dr. Yung-Hui Li / 栗永徽**

» AI Research Center, Hon Hai Research Institute (HHRI)

From Generative AI to Scientific Discovery: Foxconn's AI Innovation Journey and Future Vision

Day 2 - Thursday, November 28 — Room 505b

10:45-11:15 — **Prof. Vera Marinova**

» Bulgarian Academy of Sciences, Bulgaria

Integration of functional nanomaterials toward opto-electronic and photonic devices

13:30-14:00 — **Prof. Kestutis Staliunas**

» BarcelonaTech, Universitat Politècnica de Catalunya (UPC), Spain

Photonic Crystal Spatial Filters

15:30-16:00 — **Prof. Zhiwen Liu**

» School of Electrical Engineering and Computer Science, Penn State University, USA

Optical processing with reconfigurable liquid crystal based scattering media

Day 3 - Friday, November 29 — Room 505b

09:00-09:30 — **Prof. Jun Tanida / 谷田 純**

» University of Osaka, Japan

Computational Methods for Scatter Imaging

Invited Speakers

S5.Optical Design and Engineering

Day 2 - Thursday, November 28 Room 505a

10:45-11:15 **Prof. Daewook Kim**

» Wyant College of Optical Sciences, Arizona state university, USA

Optical Trilogy: Design, Fabrication, and Testing for Astronomical Telescopes

11:15-11:45 **Prof. Shizhuo Yin**

» Department of EECS, Penn State University, USA

Multifunctional crystalline materials and applications

13:30-14:00 **Dr. Upendra N. Singh**

» NASA Technical Fellow for Sensors and Instrumentation, NASA Engineering and Safety Center (NESC), NASA Langley Research Center, USA

NASA Sensors and Instrumentation: Driving Technologies to Enable an Innovative and Prosperous Future

14:00-14:30 **Prof. Silvano Donati**

» Department of Electronics, University of Pavia, Italy

Non-contact Vibration Measurements by Self-Mixing Interferometry

15:00-15:30 **Prof. Wen-Shing Sun / 孫文信**

» Department of Optics and Photonics, National Central University

Full of view 50-degree projection lens design for AR glasses waveguide system

Day 2 - Thursday, November 28 Room 505a

15:30-16:00 **Prof. Tsung-Xian Lee / 李宗憲**

» Graduate Institute of Color and Illumination Technology, National Taiwan University of Science and Technology

Laser White Light: The Next Breakthrough in Solid-State Lighting Technology

Day 3 - Friday, November 29 Room 505a

09:00-09:30 **Prof. Chun-Yuan Fan / 樊俊遠**

» Graduate Insitute of Electro-Optical Engineering, National Taiwan University of Science and Technology

From the Wave Optics to the Ray Tracing: A Novel Photonic Integrated Circuit with Broadband and High-Efficiency Focusing

Invited Speakers

S6.Biophotonics and Biomedical Imaging

Day 1 - Wednesday, November 27 Room 504a

13:30-14:00 Prof. Dalip Singh Mehta

» Department of Physics, Indian Institute of Technology Delhi

Optical Coherence Microscopy and Nanoscopy using Spatial Coherence Engineering: Speckle-free Quantitative Phase Imaging of Biological Cells with High Spatial and Temporal Phase Sensitivity and High Space Bandwidth Product

15:15-15:45 Prof. Tomomi Nemoto / 根本 知己

» Biophotonics Research Group, Exploratory Research Center on Life and Living Systems (ExCELLS), National Institute of Natural Sciences, Japan

Advancements in in vivo Two-Photon Microscopic Imaging in the Mouse Brain through Novel Optical Technologies

15:45-16:15 Prof. T. Tony Yang / 楊東霖

» Department of Electrical Engineering, National Taiwan University

Expansion localization microscopy unravels the molecular-resolution constitution of mammalian centrioles

Day 3 - Friday, November 29 Room 504a

09:00-09:30 Prof. George Barbastathis

» Department of Mechanical Engineering, Massachusetts Institute of Technology, USA

Optical real-time monitoring of complex processes

S7.Display and Solid State Lighting

Day 1 - Wednesday, November 27 Room 503

13:30-14:00 Prof. Kun-Yu Lai / 賴昆佑

» Department of Optics and Photonics, National Central University

Detecting cancer by the plasmonic effect of InGaN quantum wells

15:15-15:45 Prof. Masahito Oh-e / 大江 昌人

» Institute of Photonics Technologies, Department of Electrical Engineering,National Tsing Hua University

Novel switching of liquid crystals for use in rapid THz modulation: Mastering liquid crystals beyond displays

Day 2 - Thursday, November 28 Room 503

10:45-11:15 Prof. Jiun-Haw Lee / 李君浩

» Graduate Institute of Photonics and Optoelectronics, National Taiwan University

Triplet management of blue organic light-emitting diode for higher efficiency and longest lifetime

13:30-14:00 Prof. Chun-Ta Wang / 王俊達

» Department of Photonics, National Sun Yat-sen University

Switchable Liquid Crystal Polarization Volume Gratings: Design and Applications

Day 3 - Friday, November 29 Room 503

09:00-09:30 Prof. Ryoto Kabe / 嘉部 量太

» Okinawa Institute of Science and Technology Graduate University, Japan

Persistent and stimulated luminescence of organic semiconductors

Invited Speakers

S8.Energy Photonics and Sustainable Technology

Day 1 - Wednesday, November 27 — Room 502

13:30-14:00 **Prof. Cheng-Liang Liu / 劉振良**

» Department of Materials Science and Engineering, National Taiwan University

Organic/Hybrid Thermoelectric Materials and Devices

15:15-15:45 **Prof. Chang-Hua Liu / 劉昌樺**

» Institute of Electrical Engineering, National Tsing Hua University

Advancing Sustainable Mid-Infrared Optoelectronics with Black Phosphorus-Based van der Waals Heterostructures

Day 2 - Thursday, November 28 — Room 502

10:45-11:15 **Prof. Yu-Ching Huang / 黃裕清**

» Department of Materials Engineering, Ming Chi University of Technology

Towards Highly Efficient 4-Terminal Perovskite/Si Tandem Solar Cells

14:00-14:30 **Prof. Wei-Hsuan Hung / 洪緯璿**

» Graduate College of Sustainability and Green Energy / Institute of Materials Science and Engineering (IMSE), National Central University (NCU)

(To be Determined)

15:00-15:30 **Prof. Chu-Chen Chueh / 闕居振**

» Chemical Engineering, National Taiwan University

Interface Design for Efficient Organic, Perovskite and Perovskite/Organic Tandem Solar Cells

S9.Optical Sensing

Day 1 - Wednesday, November 27 — Room 501

13:30-14:00 **Prof. Peng-Chun Peng / 彭朋群**

» Department of Electro-Optical Engineering, National Taipei University of Technology

Large-Scale and High-Capacity Sensing Systems Utilizing Free-Space Optics

15:15-15:45 **Dr. Fu-Liang Yang / 楊富量**

» Research Center for Applied Sciences, Academia Sinica

Outlook for pulse oximeter applications

Day 2 - Thursday, November 28 — Room 501

10:45-11:15 **Prof. Chengkuo Lee**

» National University of Singapore

CMOS Photonics Platform – Sensing and Computation

13:30-14:00 **Dr. Wanvisa Talataisong**

» School of Physics, Suranaree University of Technology, Thailand

Optical fiber sensing device: Future technology for environmental monitoring

Optical Society of Japan

Optical Society of Korea

Advanced Computational Techniques for Imaging and Display Technologies

Day 2 - Thursday, November 28 Room 505b

15:00-15:30 Prof. Manabu Sato / 佐藤 学

» Graduate School of Science and Engineering, Yamagata University, Japan

Super-frequency resolution using sub-bin in discrete Fourier transform and application

Day 3 - Friday, November 29 Room 505b

10:00-10:30 Prof. Wataru Watanabe / 渡邉 歷

» Department of Electrical & Electronic Engineering, College of Science and Engineering, Ritsumeikan University, Japan

HOST
Yuan Luo / 駱遠
(Taiwan Photonics Society)

Extraction of spectral features from speckle in imaging through diffusers

Day 3 - Friday, November 29 Room 505b

09:30-10:00 Prof. Seung Ah Lee

» Department of Electrical and Computer Engineering, Seoul National University, South Korea

HOST
Yuan Luo / 駱遠
(Taiwan Photonics Society)

Lensless computational cameras for smart imaging

10:30-11:00 Prof. Jae-Hyeung Park

» Department of Electrical and Computer Engineering, Seoul National University, South Korea

HOST
Yuan Luo / 駱遠
(Taiwan Photonics Society)

Focus cue and occlusion supporting AR near eye displays