

## Final Program

# AICOPL2026

April 13-14, 2026 | Jupiter Lisboa Hotel, Lisbon, Portugal



Prepared by

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# WHO WE ARE

Synergia Summits is a professional academic conference organizing company dedicated to fostering knowledge exchange, collaboration, and innovation across disciplines. We specialize in creating high-quality platforms where researchers, academicians, and industry experts come together to share ideas and advance global scholarship.

Our conferences have hosted over 700 participants, featured 500 high-quality research presentations, and welcomed 5 valued exhibitors, creating dynamic platforms for scholarly discussion, networking, and innovation. Each event is carefully designed to maintain high academic standards while fostering meaningful engagement among participants. We take pride in our ability to deliver well-structured, impactful conferences that support researchers at every stage of their academic journey. Through our growing conference portfolio, we continue to strengthen international research networks and contribute to the advancement of knowledge worldwide.

We warmly welcome you to be part of our future conferences and look forward to supporting your research and academic goals.



**BRINGING GLOBAL MINDS TOGETHER**

# OUR MISSION AND VISION

Our mission is to empower researchers by delivering high-quality academic conferences that foster collaboration, knowledge exchange, and meaningful global impact.

Our vision is to create a world where researchers are seamlessly connected through **impactful conferences** that inspire ideas and drive global progress.



- 08:00–08:45 Registrations and Badge Pickup  
 08:45–09:00 Welcome and Opening Remarks by Prof. Elvira Fortunato

#### Plenary Talks

Moderator: **Martina Kocijan**, University of Rijeka, Croatia

- 09:00–09:40 **Ute Kaiser**, Ulm University Germany  
 Title: Engineering and Discovering Matter at the Atomic Scale in 2D Materials
- 09:40–10:20 **Dieter Bimberg**, CIOMP of CAS, Changchun and TU Berlin, Germany  
 Title: Energy Efficient Multi Terabit Photonics: Quantum Dots at Work

10:20–10:40 Group Photograph & Networking and Coffee Break

#### Break Out Room: LISBOA

#### Plenary Talks

Moderator: **Ana Espinosa**, Institute of Materials Science of Madrid, Spain

- 10:40–11:20 **Huiyun Liu**, University College London, UK  
 Title: III-V quantum-dot lasers monolithically grown on Si platform for Si Photonics
- 11:20–12:00 **Daan Lenstra**, Eindhoven University of Technology, Netherlands  
 Title: Pragmatic Modelling Light Output from High-speed Organic Light-Emitting and Lasing Diodes for Visible Light Communication
- 12:00–12:40 **Halina Abramczyk**, Lodz University of Technology, Poland  
 Title: Laser optics and molecular spectroscopy in cancer research
- 12:40–13:20 **Leonid Glebov**, University of Central Florida, CREOL, USA  
 Title: Volume holographic elements in photo-thermo-refractive glass

13:20–14:20 Group Photograph followed by Lunch

#### Keynote Talks

Session Chair: **Salman Noah**, Jerusalem College of Technology, Israel

- 14:20–14:50 **Wenshan Cai**, Georgia Institute of Technology, USA  
 Title: Active Chiral Meta-optics
- 14:50–15:20 **Toyoshima Morio**, National Institute of Information and Communications Technology, Japan  
 Title: Recent Trends of Space Laser Communications for Beyond 5G/6G
- 15:20–15:50 **Salman Noah**, Jerusalem College of Technology, Jerusalem, Israel  
 Title: Novel Ablative 2um laser and its potential medical applications

15:50–16:10 Networking and Coffee Break

Moderator: **José Carlos Garcia Pereira**, Instituto Superior Técnico, Portugal

- 16:10–16:40 **Hervé Leblond**, Université d'Angers, France  
Title: Solitons, cnoidal waves and nonlinear index in a two-level medium
- 16:40–17:10 **Ana Espinosa**, Institute of Materials Science of Madrid, Spain  
Title: Photoactivated nanothermal therapies from light to local temperature in the tumour environment
- 17:10–17:40 **Jincheng Ni**, University of Science and Technology of China, China  
Title: Chiroptical helical dichroism by photonic orbital angular momentum

17:40–18:00 **POSTERS SESSION: Lisboa**

- P001 **Chien-Sheng Liu and Shuzhe Chen**, National Cheng Kung University, Taiwan  
Title: Structured-Light 3D Scanning Using Pseudo-Exposure Technology and Retinex Theory
- P002 **Jung-ChenTung**, National Taipei University of Technology, Taiwan  
Title: Vortex-antivortex dynamics of laser fields with intracavity second-harmonic generation under angle-dependent astigmatic transformation
- P003 **Szu-Cheng Cheng**, Chinese Culture University, Taiwan  
Title: Tunable Spin Multistability of Cavity Polaritons for Multichannel Optical Switching

**END OF DAY-01**

# DAY-2

**TUESDAY, APRIL 14, 2026**  
**BREAK OUT ROOM: Lisboa**

## Keynote Talks

Session Chair: **Yutaka Shikano**, University of Tsukuba, Japan

- 09:00–09:25 **Yutaka Shikano**, University of Tsukuba, Japan  
Title: Visualizing Quantum Polarized State
- 09:25–09:50 **Gian Luca Lippi**, Université Côte d'Azur, France  
Title: How Lasers Turn On: Unraveling the Initiation and Development of Coherent Emission
- 09:50–10:15 **Beata Brożek-Płuska**, Lodz University of Technology, Poland  
Title: Multimodal Investigation of Therapeutic Molecules Effects in Colon Cells via Raman Imaging, AFM, and Femtosecond Laser Spectroscopy

10:15–10:40 **Anhui Liang**, Yango University, China  
Title: My 40 Years of Research on Natural Biological Diodes, Natural Biological Transistors, and Natural Biological Optical Fibers

10:40–11:00 Networking and Coffee Break

Moderator: **Matthieu Bellec**, Université Côte d'Azur & CNRS, France

11:00–11:25 **Maurizio Burla**, Technical University of Berlin, Germany  
Title: Photonics and Plasmonics for Sub-THz Communications

11:25–11:50 **Tun Cao**, Dalian University of Technology, China  
Title: Non-Volatile Dynamically Switchable Color Display Via Chalcogenide Stepwise Cavity Resonators

11:50–12:15 **Wei Chen**, Nanjing University, China  
Title: Generation and Control of Complex Space–Time Structured Light Fields

12:15–12:40 **Toshiki Yamada**, National Institute of Information and Communications Technology, Japan  
Title: Terahertz Wave Detection by the Stark Effect and Pockels Effect of Electro-Optic Polymers and its Applications

12:40–13:05 **David Abookasis**, Ariel University, Israel  
Title: Integrated approach for determining the complex refractive index of biological tissues

13:05–14:00 Lunch Break

### Invited Talks

Moderators: **Thomas Wood**, INSA Lyon, France

14:00–14:20 **Tomoyoshi Shimobaba**, Chiba University, Japan  
Title: Deep Learning-Driven Holographic Pipeline

14:20–14:40 **Eric Larkins**, University of Nottingham, UK  
Title: Phonon and friends: A fresh look at heat dissipation processes in semiconductor devices at high injection densities

14:40–15:00 **Laurids Wardenberg**, Martin-Luther-Universität Halle-Wittenberg, Germany  
Title: Electric Field-Induced Second-Order Nonlinearity in Silicon-Rich Dielectrics

15:00–15:20 **Sheng-Lung Huang**, National Taiwan University, Taiwan  
Title: Segmentation and Translation of Nuclei and Skin Layers by AI-Empowered Cellular-Resolution Optical Coherence Tomography

15:20–15:40 **José Carlos Garcia Pereira**, Instituto Superior Técnico, Portugal  
Title: Computer Modelling of Optical Lens Systems by Ray Tracing, Monte-Carlo Techniques

15:40–16:00	<b>Laurent Gizon</b> , Max Planck Institute for Solar System, Germany Title: Helioseismic holography
16:00–16:20	Networking and Coffee Break Moderators: <b>David Abookasis</b> , Ariel University, Israel
16:20–16:40	<b>Thomas Wood</b> , INSA Lyon, France Title: Generation of Colour Centres in Silicon using Focused Ion Beam implantation: experimental and modelling approaches towards Single Photon Sources
16:40–17:00	<b>Matthieu Bellec</b> , Université Côte d'Azur & CNRS, France Title: Direct-laser-writing in glass chips and optical fibers
17:00–17:20	<b>Xi Wang</b> , Shanghai Jiao Tong University, China Title: Neural Absolute Testing for Sub-aperture Stitching
17:20–17:40	<b>José Nunes Ramalho Croca</b> , University of Lisbon, Portugal Title: The Sagnac and Michelson–Morley Interferometers Time Precision Evaluation
17:40–18:00	<b>Wenjie Chen</b> , Sun Yat-Sen University, China Title: Chiral valley edge states
18:00–18:30	<b>Closing Ceremony &amp; End of Conference</b>



**NEXT EDITION**

# **AICOPL2027**

Athens, Greece | April 26–28, 2027

<https://aicopl2027.synergiasummits.com/>

