



**2nd International Summit on
Lasers, Optics and Photonics
&
2nd International Summit on
Graphene and 2D Materials**

April 22–23, 2024 | Munich, Germany

Day-1 | April 22, 2024

08:30-09:00

On Spot Registrations

Chair

Houssain Kettani, Professor & Chair of Computer Science,
Al Akhawayn University, Morocco

Co-Chair

Friedrich Grimm, MD at RES Institute, Germany

09:00-09:30

P

Title: AI based Machine Vision for Mass Inspection:
A Technical and Societal Challenge

Julius Lawson Daku, CEO & Founder of optoPartner, France

09:30-10:00

P

Title: Advancements of Shape Tolerance in Large ZERODUR®
Optics Production

Christian Reis, Head of Development & Application Advanced
Optics-SCHOTT, Germany

10:00-10:30

P

Title: Photonics in the Scope of Identity Access Management in
Heterogenous IT Infrastructures

Xenia Bogomolec, CEO & Founder-Quant-X Security &
Coding GmbH, Germany

10:30-10:45

Refreshment Break

10:45-11:15

P

Title: Advancing Precise Control of Electromagnetic Radiation:
An Innovative Multilayer Nanophotonic Structure for Mid-Infrared
Atmospheric Windows

Sarah S. Sharif, Director-QNETS Laboratory, The University
of Oklahoma, USA

11:15-11:45

P

Title: Design, Simulation and Applications of 3D-Printed
Micro-Optics

Alois Herkommer, University of Stuttgart, Germany

11:45-12:15	P	<p><i>Title:</i> Innovative Graphene-Ceramic Composites</p> <hr/> <p><i>Katalin Balazsi</i>, Centre for Energy Research, Hungary</p>
12:15-12:45	P	<p><i>Title:</i> Impacts of Mutual Phase Interactions on Crystal Polarity and Photocatalytic Hydrogen Production</p> <hr/> <p><i>Jrjeng Ruan</i>, National Cheng Kung University, Taiwan</p>
12:45-13:45		<p><i>Group Photo</i></p> <hr/> <p><i>Lunch Break</i></p>
13:45-14:10	K	<p><i>Title:</i> Topology and Symmetry Breaking in Polymer Emitters: A New Route to Electrically Driven Organic Lasing</p> <hr/> <p><i>David Carroll</i>, Wake Forest University, USA</p>
14:10-14:35	K	<p><i>Title:</i> Optimizing DWDM Communication Systems: SOA-Enhanced Fiber Loop Modulation for 50 GHz Optical Frequency Comb Generation</p> <hr/> <p><i>Mahrokh Avazpour</i>, Dublin City University, Ireland</p>
14:35-15:00	K	<p><i>Title:</i> Mathematical Modeling of Laser Beam Shaping and Basic Optical Systems</p> <hr/> <p><i>Martijn Anthonissen</i>, Eindhoven University of Technology, Netherlands</p>
15:00-15:25	K	<p><i>Title:</i> Towards TAMSELS: Tamm Assisted MetaSurface Emitting Lasers</p> <hr/> <p><i>Edmund Harbord</i>, University of Bristol, United Kingdom</p>
15:25-15:40		<p><i>Refreshment Break</i></p>
15:40-16:05	K	<p><i>Title:</i> Will be updated soon...</p> <hr/> <p><i>Jinlong Wei</i>, Peng Cheng Laboratory, China</p>

16:05-16:30	K	<p><i>Title:</i> Bio-Remote Sensing and Integrated Artificial Intelligence Systems</p> <hr/> <p><i>Kianoush Rassels</i>, Delft University of Technology, Netherlands</p>
16:30-16:55	K	<p><i>Title:</i> The Physical Layer Secure Communications and Quantum Key Distribution (QKD) Systems Using Photonics</p> <hr/> <p><i>Atilla Hasekioglu</i>, BILGEM, TUBITAK, Turkey</p>
16:55-17:20	K	<p><i>Title:</i> Optical Techniques for Biomedical Analysis</p> <hr/> <p><i>Paddy French</i>, Delft University of Technology, Netherlands</p>
17:20-17:45	K	<p><i>Title:</i> Hybrid Prism - A New kind of Lens for Light in the Visible Spectrum as well as for X-rays</p> <hr/> <p><i>Friedrich Grimm</i>, MD at RES Institute, Germany</p>
Sessions		3D Printing, Photonics and Applications, Optical Sensors, Quantum Optics & Information, Novel Laser Technologies & their Applications
Sessions Chair		<i>Julius Lawson Daku</i>, CEO & Founder of optoPartner, France
17:45-18:05	I	<p><i>Title:</i> Optical Wavefront Shaping for Mode-Division Multiplexed Transmission</p> <hr/> <p><i>Tomohiro Maeda</i>, Aoyama Gakuin University, Japan</p>
18:05-18:25	I	<p><i>Title:</i> Study of 405 nm Laser-Induced Time-Resolved Photoluminescence Spectroscopy on Spinel and Alexandrite</p> <hr/> <p><i>Wenxing Xu</i>, Independent Researcher, Switzerland</p>
18:25-18:45	I	<p><i>Title:</i> Effects of Laser and LED Irradiation on the Growth and Control of Normal and Malignant Cells in Cell Cultures</p> <hr/> <p><i>Efrain Solarte</i>, Universidad del Valle, Colombia</p>

18:45-19:05 |

Title: SLR Plan for Next Five Year at Shanghai Observatory

Zhongping Zhang, Shanghai Astronomical Observatory, Chinese Academy of Sciences, Shanghai, China

POSTER P01

Title: Hopf-Boundary-Limited External-Cavity Modes and their Transition to Chaos in Semiconductor Lasers with Time-Delayed Optoelectronic Feedback

Qin Zou, SAMOVAR, TelecomSudParis, France

POSTER P02

Title: Effects of Optical Irradiation with Laser and Led Light Sources on Cell Cultures of Leu-kemia

Danielle Viviana Ochoa Arbeláez, Universidad del Valle, Santiago de Cali, Colombia

POSTER P03

Title: Design of Membrane of a Biocatalytic Device with Graphene Materials

Gulzat Demeuova, L.N. Gumilyov Eurasian National University, Kazakhstan

****Closing the Conference for Day 1****

Day-2 | April 23, 2024

08:30-09:00

On Spot Registrations

Chair

Katalin Balazsi, Head of Thin Film Physics Department, Centre for Energy Research, Hungary

Co-Chair

Fengge Gao, Director of Nanoscience Laboratory, Nottingham Trent University, United Kingdom

09:00-09:30

P

Title: Raman Spectroscopy in Biomedical Research and Diagnostics

Mads S Bergholt, King's College London, United Kingdom

09:30-10:00

P

Title: Cerabyte: Ultra Long-Term Sustainable Data Storage Solution for the Yotta Byte Era

Steffen Klewitz, COO-Cerabyte, Germany

10:00-10:30

P

Title: Structural Characterization of Carbon Materials and Semiconductor Devices using Tip Enhanced Raman and Scanning Near-field Raman Spectroscopy

Masanobu Yoshikawa, President-Toray Research Center, Inc., Japan

10:30-10:45

Refreshment Break

10:45-11:15

P

Title: Photonic Layers for Solar Cells

Hugo Aguas, NOVA University of Lisbon, Portugal

11:15-11:45

P

Title: Mid-infrared Laser-based Absorption Spectroscopy for Trace Gas Detection

Simona M. Cristescu, Head of the Life Science Trace Detection Laboratory, Netherlands

11:45-12:15

P

Title: Computing, Medicine, Mobility: How Optics Drive Mega Trends

Patrick Heissler, Chief Strategy Officer-SUSS MicroOptics, Germany

12:15-12:45

P

Title: A Vision outside the Quantum of Light

Jay Robles Pecharroman, CEO & Co-founder of JAYNSTEIN LLC, USA

12:45-13:45

Group Photo

Lunch Break

13:45-14:15

P

Title: Nanocarbon Added Ceramics: Current Status and Future Trends

Csaba Balazsi, Centre for Energy Research, Hungary

14:15-14:45

P

Title: A Theoretical Construction of Graphene by Applying Twin Physics

Anna Backerra, Director-Institute of Theoretical and Applied Micro Magnetism, Netherlands

14:45-15:15

P

Title: High Speed Roll to Roll CVD Graphene and Applications

Yongki Kim, CEO-Charmgraphene Co., Ltd., South Korea

15:15-15:45

P

Title: Graphene-like Materials in Tribological Applications

Andreas Kailer, Head of Wear Protection and Advanced Ceramics at Fraunhofer IWM, Germany

15:45-16:00

Refreshment Break

16:00-16:25

K

Title: Novel Fluorescent Optical Antennas for Visible Light Communication (VLC)

Jacopo Catani, Senior Researcher at CNR-INO, Italy

16:25-16:50	K	<p><i>Title:</i> Quantum Mechanical Device for the Permanent Enclosure of a Plasma Volume in a Stellarator Type Fusion Reactor</p> <hr/> <p><i>Friedrich Grimm</i>, MD at RES Institute, Germany</p>
16:50-17:15	K	<p><i>Title:</i> Advances in High Performance Computing</p> <hr/> <p><i>Houssain Kettani</i>, Professor & Chair of Computer Science, Al Akhawayn University, Morocco</p>
17:15-17:40	K	<p><i>Title:</i> Graphene / Boron Carbide Ceramic Composites Prepared by SPS and Flash Sintering</p> <hr/> <p><i>Pavol Hvizdos</i>, Director-IMR SAS, Slovakia</p>
17:40-18:05	K	<p><i>Title:</i> Will be updated soon...</p> <hr/> <p><i>Fengge Gao</i>, Nottingham Trent University, UK</p>
POSTER	P01	<p><i>Title:</i> Progress of Laser Time Transfer at Chinese Space Station</p> <hr/> <p><i>Zhibo Wu</i>, Shanghai Astronomical Observatory, Chinese Academy of Sciences, Shanghai, China</p>
POSTER	P02	<p><i>Title:</i> Application of an Industrial-Grade 100-Watt, 300-Kilohertz Picosecond Green Laser for Space Target Laser Ranging</p> <hr/> <p><i>Long Mingliang</i>, Shanghai Astronomical Observatory, Chinese Academy of Sciences, Shanghai, China</p>
POSTER	P03	<p><i>Title:</i> Advances in the Thermoelectric Measurements of 2D Superconductor Utilizing Contact Printed Circuit Boards</p> <hr/> <p><i>Sanaz Shokri</i>, Institute for Metallic Materials, IFW Dresden, Germany</p>

****Closing the Conference for Day 2****



NEXT EVENTS

3rd International Summit on
Lasers, Optics and Photonics

May 05-07, 2025 | Rome, Italy

&

3rd International Summit on
Graphene and 2D Materials

May 05-07, 2025 | Rome, Italy

Explore the Best of Rome's Attractions!

