

Program GREEN PHOTONICS Workshop (hybrid)

*Italic: online participation; *possibly also in person*

| Day 1 | Action Item / Speaker | Presentation |
|----------------------|--|---|
| 09:00 – 09:30 | Badge Pick Up / Registration | |
| 09.30 – 09:45 | Andreas Tünnermann (Fraunhofer IOF) | Opening Remarks |
| 09:45 – 09:55 | Ruth Houbertz (ThinkMade Engineering) | Workshop Scope and Goals |
| 09:55 – 10:35 | Stefan Träger (Jenoptik) | Keynote: Title tbd |
| 10:35 – 11:05 | Michael Kissner (Akhtronics) | Integrating Nonlinear Photonic Materials for Optical Computing |
| 11:05 – 11:35 | <i>Yating Wan (KAUST)</i> | <i>On-Chip Lasers in Silicon Photonics: Pathways to Integration and Applications</i> |
| 11:35 – 12:05 | Mario Chemnitz (Friedrich-Schiller University) | Towards sustainable AI with nonlinear optical wave dynamics for brain-inspired computing |
| 12:05 – 13:00 | Networking Lunch Break | |
| 13:00 – 13:30 | Antonia Schmalz (SPRIND) | Technical and commercial challenges for optical components in fusion power plants |
| 13:30 – 14:10 | Oliver Haupt (Coherent Laser Systems) | Keynote: UV-Lasers for Green Energy and Display Applications |
| 14:10 – 14:40 | Martin Spreemann (Corning) | Opto-Electronic Glass Substrates for Power-Efficient and High-Density Photonic Interconnects |
| 14:40 – 15:10 | Nataša Pavlović Tucaković (Fraunhofer IOF) | Towards Secure and Global Quantum-based Communication |
| 15:10 - 15:40 | Networking Break "Coffee2Talk" | |
| 15:40 - 16:10 | <i>Sandeep Razdan (Cisco)</i> | <i>Silicon photonic packaging and its integration for Tbps optical interconnects</i> |
| 16:10 - 16:50 | <i>Bernard Kress (Google)*</i> | Keynote: <i>Optics and Photonics as Key Enabling Technology for a Sustainable Future</i> |
| 16:50 - 16:55 | Closing Remarks Day 1 | |

| Day 2 | Action Item / Speaker | Presentation |
|--------------------|---|---|
| 9:00 - 9:40 | Paul Hartmann (Joanneum Research) | Keynote: Green Photonics and Photonics for Green: recent progress in Austria |
| 9:40 - 10:10 | Yolanda Stabel (Innocise GmbH) | Green Gripping – High Precision Manipulation for Photonic Applications |
| 10:10 - 10:40 | Frank Wippermann (mcd GmbH/Fabulens GmbH) | Scalable and energy-saving manufacturing approach for monolithic polymer components |
| 10:40 - 11:10 | Networking Break "Coffee2Talk" | |
| 11:10 - 11:40 | Tobias Schröter (Fluidect) | From photonics to sustainable industrial applications: the example of biosensors |
| 11:40 - 12:10 | Karim Ruvalcaba (ams Osram) | Multi-spectral sensing in VIS-NIR-SWIR for a sustainable and automated agriculture |
| 12:10 – 13:00 | Networking Lunch Break | |

| Day 2 (cont.'d) | Action Item / Speaker | Presentation |
|----------------------|--|--|
| 13:00 – 13:30 | Estefania Cervantes, Oliver Faehnle, Jens Bliedtner (Edmund Optics® Europe, Eastern Switzerland University of Applied Sciences, PanDao GmbH, EAH University of Applied Sciences) | Achieving Sustainable Practices in Optics Design and Manufacturing |
| 13:30 – 14:00 | Beate Hager (Jabil Optics Germany) | Sustainability requirements in optical industry - challenges or opportunities? |
| 14:00 – 14:45 | Panel Discussion (Moderator: Olga Raz, OPTICA) – Role of Photonics-Driven Solutions in Building Sustainable and Resilient Businesses (Panelists will be presented soon!) | |
| 14:45 – 15:05 | Networking Break "Coffee2Talk" | |
| 15:05 – 15:35 | Erik Beckert (Fraunhofer IOF) | Artificial Intelligence enhanced, energy efficient and sustainable growth of laser crystals |
| 15:35 – 16:05 | Falk Eilenberger (Fraunhofer IOF) | Nanophotonic Components as Enablers for Astronomy and Climate Science |
| 16:05 – 16:45 | <i>Henry Helvajian (Aerospace Corp.)</i> | Keynote: Photonics Technologies can Facilitate the Development of a Sustainable Eco-System in Outer Space |
| 16:45 – 16:50 | Closing Remarks Day 2 | |

| Day 3 | Action Item / Speaker | Presentation |
|----------------------|---|--|
| 08:30 – 10:00 | Fraunhofer IOF Tour | Exploring the Future: Photonics Touring |
| 10:00 – 10:30 | Miro Taphanel (Gixel) | Augmented reality: the invisible environmental impact of smart and immersive eyewear technology |
| 10:30 – 10:50 | Networking Break "Coffee2Talk" | |
| 10:50 – 11:20 | Alexander Kostenko (Photosynthetic) | Enabling production speed Additive Manufacturing at the microscale: dual-wavelength volume-tric microlithography |
| 11:20 – 11:50 | Martin Hermatschweiler (Nanoscribe GmbH) | Additive manufacturing of microoptics for a sustainable photonics industry |
| 11:50 – 12:20 | <i>Mangirdas Malinauskas (University Lithuania)</i> | <i>Non-photosensitized plant-based resins for green multi-photon 3D lithography</i> |
| 12:20 – 13:00 | Networking Lunch Break | |
| 13:00 – 13:30 | Jens Gottmann (Lightfab GmbH) | 3D High precision glass structuring by SLE and internal glass modification/welding for industrial applications |
| 13:30 – 14:00 | Andreas Storz (FusionBionic) | Unlocking sustainable surface solutions through high-speed laser technology |
| 14:00 – 14:20 | Joachim Hansen (Kubus Group) | Planning 4.0 – interfaces for the digital building (contributed) |
| 14:20 – 14:50 | Claudio Flores (Mimotype Technologies GmbH) | Jellyfish Do it Better: Ecologically Seamless Bio-Optical Materials for Photoconversion and Green Photonics |
| 14:50 – 15:15 | Closing Remarks Day 3 – Coffee 2 Go | |
| | End of Workshop | |