



**ICO-25 • 5 - 9 September 2022 • OWLS-16**

25<sup>th</sup> Congress of the International Commission for Optics (ICO) • 16<sup>th</sup> International Conference on Optics Within Life Sciences (OWLS)

## SECOND CALL FOR PAPERS

The World General Congress for Optics and Photonics of the International Commission for Optics (ICO) and the international society on Optics Within Life Sciences (OWLS) will be celebrated from **5<sup>th</sup> September to 9<sup>th</sup> September 2022 in Dresden, Germany**. The TU Dresden is proud to host the World Congress ICO-25-OWLS-16-Dresden-Germany-2022. The main theme is "Advancing Society with Light", emphasizing the importance of modern light technology for society. The 60+ years anniversary of the laser will be celebrated too. Light has the potential to recognize the origins of diseases, to prevent them, or to cure them early and gently. This is one of the central topics of OWLS, which was founded at the ICO-15 Congress in Garmisch-Partenkirchen in 1990. Therefore, a special commemorative event of the 30+ years anniversary of the foundation of OWLS in Germany will be organized.

The World Congress ICO-25-OWLS-16 is the most important scientific and technical meeting on all important topics of optics and photonics around the entire world. After 30+ years and continuing the success of the recent previous general congresses, it is our great honor to host the General Congress and Assembly of ICO in our country again. Due to the outbreak of the COVID-19 pandemic and the worldwide restrictions accompanied by it, the World Congress was postponed to September 2022. The final format of the conference will be decided upon the pandemic situation in summer 2022 and announced in time. Contributors who cannot attend the conference in person are given the opportunity to present their work as a video.

The pandemic outbreak has demonstrated, how quickly diseases can spread in our world. The World Congress ICO-25-OWLS-16 will support our society for progress in fighting against the corona virus. A new topic on "Optical Technologies Fighting Infectious Diseases" will be included.

The ICO, "*the Place where the World of Optics and Photonics Meets*", is an affiliated commission of the International Union of Pure and Applied Physics (IUPAP), and a scientific associate of the International Council of Science (ICS). Its objective is to contribute, on an international basis, to the progress and diffusion of knowledge in the fields of optics and photonics. The ICO is an umbrella organization with more than 50 territorial committee members and 7 international academic societies: OPTICA (The society advancing optics and photonic worldwide), SPIE (The International Society for Optics and Photonics - Connect Minds and Advance Light), EOS (European Optical Society), Photonics Society of IEEE (Institute of Electrical and Electronics Engineers), OWLS (International Society on Optics Within Life Sciences), LAM (African Laser, Atomic and Molecular Physics Network), and RIAO (The Iberian American Network on Optics). On behalf of ICO-25-OWLS-16, we hope everyone will have an exciting, fascinating and memorable time at this general meeting.

Juergen Czarske

General Chair of ICO-25-OWLS-16-Dresden-Germany-2022

Professor and Director at TU Dresden, Fellow of OPTICA, Fellow of SPIE, Fellow of EOS, Fellow of IET (former IEE), Senior Member of IEEE, Member of Saxon Academy of Sciences, Board Member of German Society of Applied Optics (DGaO) - The German Branch of the European Optical Society (EOS), Vice President of ICO – The International Commission for Optics

## Important Dates

Extended Deadline for papers  
**April 10, 2022**

Abstract acceptance / grants application  
**May 2022**

Program issue  
**June 2022**

Extended 1<sup>st</sup> Early bird registration deadline  
**May 1, 2022**

2<sup>nd</sup> Early bird registration deadline  
**August 1, 2022**

General Chair of ICO-25-OWLS-16  
**Juergen Czarske**

Int. Program Committee Chair of ICO-25  
**Wolfgang Osten**

Int. Program Committee Chair of OWLS-16  
**Alexander Heisterkamp**

Fundraising Committee Chair  
**Michael Pfeffer**

Honorary Chair  
**Gert von Bally**

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Organizer:



Sponsors:



INTERNATIONAL COMMISSION FOR OPTICS  
COMMISSION INTERNATIONALE d'OPTIQUE



International Society on  
Optics Within Life Sciences



TECHNISCHE  
UNIVERSITÄT  
DRESDEN

## TOPICS

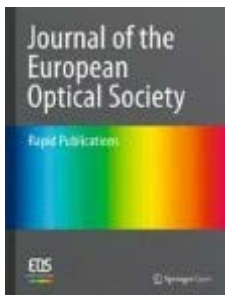
1. Optical Engineering, Material Processing, Design and Lithography
2. Display and Vision
3. Optical MEMS and Micro-Optics
4. Optical Sensing and Measurement Systems
5. Computational Metrology
6. Optical Information Processing and Imaging
7. Quantum and Nonlinear Optics
8. Ultrafast Phenomena and Ultrafast Optics
9. High Power Lasers, X-Ray and High-Energy Optics
10. Nano-Optics, Plasmonics and Metamaterials
11. Photonic Crystals, Nano Structures and Functions
12. Fiber Optics
13. Optical Communications and Photonic Network
14. Optoelectronics, Terahertz Photonics and Silicon Photonics
15. Microscopy, Biomedical Spectroscopy and Advanced Imaging
16. Biomechanics, Optical Elastography and Brillouin
17. Biomedical Optics
18. Nanobiophotonics, Optogenetics and Nanosensing
19. Optical Technologies Fighting Infectious Diseases

### ABSTRACT / PAPER SUBMISSION

Contributed summaries are limited to 2 pages including an abstract with 35-words. Authors and affiliations will be submitted online.

### REGISTRATION

Stay informed at [ico25.org](http://ico25.org)



### SPECIAL ISSUE

A Special Issue of the Journal of the European Optical Society – Rapid Publications (JEOS:RP) with papers from the General Congress ICO-25-OWLS-16-Dresden-Germany-2022 is planned. The general chair of the congress, Prof Juergen Czarske is associate editor of the JEOS:RP: [jeos.springeropen.com](http://jeos.springeropen.com)

### SUPPORT OF DEVELOPING COUNTRIES

- Scholarships/waiver of fee possible for Students paid by Co-Sponsors
- Grants for Scientists (Human development index and gross domestic product per capita are among the decision criteria)
- Application during submission procedure

### AWARDS

- Best Poster Prizes (sponsored by DGaO)
- Best Paper Prizes (sponsored by OPTICA and SPIE)
- Best Poster Prize (sponsored by OWLS)

**WEBSITE:** [www.ico25.org](http://www.ico25.org)

### Co-Sponsors:



### Technical Co-Sponsors:



European Optical Society



Coherence for Europe

