Conference conveners

Daniel Jakubczyk (co-chair), IF PAN, Warsaw, Poland.
Maciej Kołwas (co-chair), IF PAN Warsaw, Poland.

Fabrice Onofri, IUSTI, CNRS, Marseille, France.
Gérard Gouesbet, CORIA, INSA de Rouen, France.

Secretariat and web site of the conference:

Dr. Mariusz Wozniak & Dr. Anastasiya Derkachova
Group of Optical Characterization of Micro- and Nanoobjects
Al. Lotnikow 32/46
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Mobile: (+48) 693-087-455

Email for the conference: contact@lip-conference.org

Web site of the conference: www.lip-conference.org

Host institution, sponsors & partners (Oct. 2019):

Important dates

Abstract submission opens ......................November 1st, 2019
Abstract submission ends.......................March 1st, 2020
Notification of abstract acceptance...........April 1st, 2020
Early registration opens.......................January 1st, 2020

Venue and accommodation

The conference venue is the Institute of Physics, Polish Academy of Sciences (IF-PAS). It is located in the south part of Warsaw in Mokotów district, within 15 minutes by car or bus from “Chopin Airport” – the main airport of Warsaw. Institute is also about 20 – 25 min by tram or bus from the city centre and about 15 min walking distance from the metro line 1 providing convenient connection across Warsaw.

(3) Al. Lotnikow 32/46, 02-668 Warsaw, Poland
GPS: 52°10'38.6''N ; 21°00'32.3''E

"Laser-light and Interactions with Particles"
**Background and Scope**

For more than three decades, this conference series has promoted state-of-the-art research and scientific exchange on laser-beams and interactions with particles and particle systems. The present edition follows the former Optical Particle Sizing (OPS) and Characterization (OPC) conferences held in Rouen in 1987; Tempe, 1990; Yokohama, 1993; Nürnberg, 1995; Minneapolis, 1998; Brightton, 2001; Kyoto, 2004; Graz, 2007 as well as the reformulated Laser-light and Particle Interactions (LIP) conference held in Rouen in 2012; Marseille, 2014; Xi’an, 2016; College Station (TX), 2018.

Papers, ranging from theory to practice, are invited with particular emphasis being placed on the following topics:

- Optical particle characterization methods (interferometric, holographic, polarimetric, spectral, static, dynamic, ...)
- Near-field, far-field and time-resolved scattering, plasmonics and other resonances,
- Complex shaped particles and aggregates,
- Multiple scattering and random media (dense, turbulent, ...)
- Mechanical effects of light (particle manipulation, force measurement, optical tweezer, ...)
- Laser beams description (contributions acoustical and quantum beams are also welcomed)...

Fields of application may range from multiphase flow characterization, to plasma and soft matter physics, nanosciences, aerosol science and atmospheric environment, biomedical optical engineering, etc.

**Keynotes Lectures**

Leonardo A. Ambrosio—University of São Paulo, Brazil—“Structured fields constructed from superpositions of nondiffracting beams”

Edouard Berrevoets—Lund University, Sweden—“High-contrast imaging through optically dense samples using Structured Illumination and two-photon excitation Fluorescence imaging”

David G. Grier—New York University, USA—“Holographic Particle Characterization: Revealing the Composition and Dynamics of Colloidal Dispersions with Holographic Video Microscopy”

Monika Ritsch-Marte—Medical University of Innsbruck, Austria—“Tailored optical and acoustic traps for organoid research”

Maciej Wojtkowski—Nicolaus Copernicus University & PAN, Poland—“In vivo imaging by Spatio-Temporal Optical Coherence techniques”

**Instructions to authors**

Abstracts, presentations & proceedings

Three formats are planned for presentations: keynote lectures, oral presentations and posters. For the two latter, papers are invited on the topics outlined and others falling within the scope of the conference.

To do so, authors are invited to submit an extended abstract via the conference web site. Selection will be based on two independent reviews. All selected abstracts will be published in the proceedings (with ISBN).

Special issue

A special issue paper is also scheduled in the Journal of Quantitative Spectroscopy & Radiative Transfer (JQST, Guest editors: G. Gouesbet, Onofri, D. Jakubczyk & M. Kolwas)