



Dear colleagues,

The **National Institute for Laser, Plasma and Radiation Physics ( INFLPR )** announces **The International Conference on Laser, Plasma and Radiation - Science and Technology** which will be held between 7-10 June 2022 at Palace of Parliament, Bucharest, Romania.

**The International Conference on Laser, Plasma and Radiation - Science and Technology (ICLPR-ST)** is organized by INFLPR with Laser, Plasma, Radiation-Science and Technology and Magurele Science Park participations. Our aim is to bring together researchers from the field of lasers, plasma, and radiation from Romania and abroad providing them a unique environment for sharing and promoting the latest scientific and technological developments.

**ICLPR-ST** will be held in hybrid format. There are scheduled lectures of distinguished invited speakers, oral and poster presentations presenting the newest advancements, an exhibitors' area and industrial workshop, as well as social activities.

**The International Conference on Laser, Plasma, and Radiation - Science and Technology (ICLPR-ST)** includes the following topics:

- **Fundamentals, diagnostics and modelling in laser, plasma and radiation physics**
- **Advances in optics, laser and photonics**
- **Interaction of radiation with matter under extreme conditions**
- **New trends in thin films and nanomaterials synthesis and processing**
- **Modern applications in environment, life sciences and energy**
- **Innovative technologies for sustainable future**

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## PROGRAMME

The Conference will combine plenary sessions (45') with invited (30') and oral (15') presentations and poster sessions. *Young scientist* prizes will be awarded for best oral and poster presentations. The preliminary programme is available at <https://iclpr-st.inflpr.ro/program/>.

Contributions can be published upon regular refereeing procedure in special issues of ISI journals, to be announced in the Final announcement.

## PLENARY SPEAKERS

- Prof. Peter BRUGGEMAN – University of Minnesota, USA – *Low temperature plasma science to advance human health and enable a sustainable future*
- Prof. Thomas LIPPERT – Paul Scherrer Institute, ETH Zurich, Switzerland – *PLD for preparing model samples using neutron and synchrotron techniques*
- Prof. Takunori TAIRA – RIKEN SPring-8, Hyogo, Japan – *Tiny integrated laser power chip for electron acceleration*

## INVITED SPEAKERS

- Prof. Sid Ahmed BELDJILALI – Université des Sciences et de la Technologie d'Oran, Algeria – *LIBS analysis for quality control in solar cell production: A theoretical and experimental approach*
- Prof. Annemie BOGAERTS – University of Antwerpen, Belgium – *Towards a sustainable future: Plasma technology for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub> conversion into value-added compounds or renewable fuels*
- Dr. Laurentiu BRAIC – King Abdullah University of Science and Technology, Saudi Arabia – *Deep-UV Photodetectors Based on Epitaxial  $\beta$ -polymorph Ga<sub>2</sub>O<sub>3</sub> fabricated by Pulsed Laser Deposition and Magnetron Sputtering*
- Prof. Hassan CHAMATI – Institute of Solid State Physics, Bulgarian Academy of Sciences, Sofia, Bulgaria – *Using photons to manipulate the magnetic properties of the XY spin chain*
- Prof. Traian DUMITRICA – University of Minnesota, USA – *Computationally Guided Design of Materials: From Microelectronics to Aerospace Applications*
- Prof. Jean-Paul GAUFILLET – IREPA LASER – Institut Carnot MICA, France – *PAMPROD PROJECT “Manufacture of large scale parts by DED, good on first try”*
- Dr. Christian GRISOLIA – CEA, Institut de Recherche sur la Fusion par Confinement Magnétique (IRFM), France – *Thermonuclear fusion: some open issues concerning tritium*
- Dr. Jan LANCOK – Institute of Physics, Prague, Czech Republic – *Pulsed Laser Deposited active films for chemical sensors*
- Prof. Sylvain LECLER – INSA Strasbourg, France – *Glass welding by ultrafast laser: how physics allow high throughput reducing micro-cracks*
- Prof. Selma MEDEDOVIC THAGARD – Clarkson University, USA- *Electrical Discharges in a Bubble Column Reactor: A Novel High Throughput Reactor Design for Water Treatment*
- Prof. Andrea MURARI – Institute of Ionized Gas IGI, Italian National Research Council, Italy – *Innovative data analysis tools: from causality detection to data driven theory*
- Prof. Gabriel POPESCU – University of Illinois at Urbana-Champaign, USA – *Phase imaging with computational specificity (PICS) for biomedical applications*
- Prof. Peter SCHAFF – Institute for Materials Science and Engineering and Institute for Micro and Nanotechnologies MacroNano® of TU Ilmenau, Germany – *Photon-Matter-interaction at the nanoscale: plasmonic nanosponges and plasma mediated defect engineering*
- Dr. Razvan STOIAN – Université Jean Monnet, Saint-Étienne, France – *Ultrafast non-diffractive beams with tunable dispersion; opportunities for smart laser material processing*
- Prof. Koji SUGIOKA – RIKEN Center for Advanced Photonics, Wako, Saitama, Japan – *Hybrid Femtosecond Laser Processing for Fabrication of 3D Microfluidic SERS Chips Enabling Attomolar Sensing*
- Prof. Murat ŞEN – Hacettepe University, Ankara, Turkey – *Modification of Silicone Elastomers by Ionizing Radiation*
- Prof. Calin UR – Extreme Light Infrastructure – Nuclear Physics, IFIN-HH, Bucharest-Magurele, Romania- *Status and Perspectives at ELI-NP*
- Prof. Stefan Ioan VOICU – Polytechnic University of Bucharest, Romania – *Polymeric membrane materials for biomedical applications*
- Prof. Lenka ZAJICKOVA – Masaryk University and Brno University of Technology, Czech Republic – *Surface Processing with Radio-Frequency Atmospheric Pressure Plasma*

## REGISTRATION

Registration can be done by filling in the Registration form available on the conference website <https://iclpr-st.inflpr.ro/registration/>. You will receive a confirmation of your registration by electronic e-mail.

Registration Fee\* for participations are as follows:

	ON SITE PARTICIPATION				ONLINE PARTICIPATION			
	Early registration (before 25 May 2022)		Late registration (after 25 May 2022)		Early registration (before 25 May 2022)		Late registration (after 25 May 2022)	
Currency	EUR	RON	EUR	RON	EUR	RON	EUR	RON
Regular	350	1750	400	2000	150	750	200	1000
Student	250	1250	300	1500	100	500	150	750

\*Conference fee covers conference bag, coffee breaks- every day, lunch- every day, icebreaker cocktail for Posters Session on June 7, guided tour at Parliament Palace June 9, and Gala Dinner on June 9.

## ACCOMMODATION

Special rates were arranged with hotels nearby the conference venue. Please check the conference site for booking details at <https://iclpr-st.inflpr.ro/accommodation/>

Updates are regularly posted on the conference web site: <http://iclpr-st.inflpr.ro/>.

We hope that all participants will enjoy the ICLPR-ST and will remember the visit in Bucharest!

We look forward to seeing you in Bucharest at Palace of Parliament,

Ion N. MIHĂILESCU, Valentin CRĂCIUN, Maria DINESCU, Bogdana MITU,  
Chairs of ICLPR-ST

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