



Programme

International Student Conference on Photonics 2012

*Sinaia, Romania, 8-11 May
2012*

International Student Conference on Photonics

2012



Monday May 07, 2012		
	16.00	Opening of the Registration Desk
	19.30	Welcome Party/Dinner

Tuesday May 08, 2012		
	09.30	Opening Ceremony Gen. Dir. INFLPR Dr. Ion Morjan, Gen. Dir. IFIN-HH Prof. Dr. Nicolae Zamfir
Micro and nano technologies		
INVITED LECTURE	10.00	“Challenges in nanoparticles synthesis by laser pyrolysis”, Dr. Catalin Luculescu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	10.30	“Laser near-field processing using photopolymer microstructures”, Jipa Florin , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	10.45	“Laser-based polymerization of ormosils for bio-applications”, Andreea Matei , Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
Oral communication	11.00	“Properties of $Ba_xSr_{1-x}TiO_3$ thin films obtained by pulsed laser deposition”, Valentin Ion , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
	11.15	Coffee Break
Oral communication	11.30	“Periodical structures induced by femtosecond laser on Tungsten in air and liquid environments”, Albu Catalina , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
INVITED LECTURE	11.45	“Investigation of the mechanism of quasi-periodical surface nanostructures formation by “pump and probe” experiments”, Dr. Marian Zamfirescu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	12.15	“Optical and electrical properties of $YBa_2Cu_3O_{7-\delta}$ thin films deposited by radio -frequency assisted pulsed laser deposition”, George Stanciu , University Politehnica of Bucharest, Faculty of Applied Chemistry and Material Science, Bucharest, Romania
	12.30	Lunch
INVITED LECTURE	14.15	“The Centre for Advanced Laser Tehnologies (CETAL) opportunity for cutting-edge research in

		<i>Photonics</i> ", Dr. Constantin Grigoriu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Photonics and Optics		
Oral communication	14.45	<i>"Simple modeling of optical feshbach resonances"</i> , Dariusz Swierad , Copernicus University, Torun, Poland
Oral communication	15.00	<i>"Transversal strain induced birefringence effects on Fiber-Bragg-Gratings"</i> , Andre Heßke , Institute for Measurement Systems and Sensor Technology, Technical University Munich, Theresienstr, Germany
Oral communication	15.15	<i>"Classification of Gear-Oil Raman Spectra by Support Vector Machine"</i> , Daniel Dorigo , Institute for Measurement Systems and Sensor Technology, Technical University Munich, Theresienstr, Germany
Oral communication	15.30	<i>"In-band Pumped Nd:LuVO₄ Laser Mode Locked by $\div^{(2)}$-Lens Formation in an LBO Nonlinear Crystal"</i> , Veselin Aleksandrov , Department of Physics, University of Sofia, Sofia, Bulgaria
Oral communication	15.45	<i>"Study of combustion process for a methane-air mixture using a microlaser system"</i> , Gabriela Salamu , Laboratory of Solid-State Quantum Electronics, National Institute for Lasers, Plasma and Radiation Physics, Magurele, Bucharest, Romania
Oral communication	16.00	<i>"Analysis of polarization state losses in optical fibers "</i> , Avram Ioana , The Technical University of Cluj Napoca, Cluj Napoca, Romania
	16.15	Coffee Break
Oral communication	16.30	<i>"Analysis of the inscription process of FBGs in a Panda-type-high birefringent fiber"</i> , Bianca Berrang , University of Applied Sciences Munich, Laboratory of Photonics, Munich, Germany
Oral communication	16.45	<i>"Optical spectrum of a coupled chaotic system"</i> , Ionut Relu Andrei , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	17.00	<i>"Laser Induced Damage Threshold Test Station: Development and measurements - preliminary results"</i> , Alexandru Zorila , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
	17.15	End of session
	19.00	Dinner

Wednesday May 9, 2012		
Advanced Materials		
INVITED LECTURE	09.00	<i>“Phase relation, dielectric and ferroelectric properties of lead-free ferroelectric thin films obtained by PLD and RF-PLD”</i> , Dr. Nicu Scarisoreanu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	09.30	<i>“Numerical analysis of non-linear cavity modes in a silicon hole-array photonic crystal “</i> , Camelia Daniela Sold , Faculty of Physics, West University of Timisoara, Timisoara, Romania
INVITED LECTURE	09.45	<i>“Advanced nonlinear optic crystals for high efficiency visible and UV laser sources based on frequency conversion processes”</i> , Dr. Gheorghe Lucian , National Institute for Laser, Plasma and Radiation Physics, Solid-State Quantum Electronics Laboratory, Romania
Oral communication	10.15	<i>“Characterization of a low pressure expanding RF plasma jet generated in Ar/H₂/C₂H₂ admixture used for carbon nanowalls synthesis”</i> , Daniel Stoica , National Institute for Laser, Plasma and Radiation Physics, Plasma and Radiation Physics, Solid-State Quantum Electronics Laboratory, Romania
INVITED LECTURE	10.30	<i>“Laser processing of soft materials”</i> , Prof. Dr. Maria Dinescu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
	11.00	Coffee Break
Laser History		
INVITED LECTURE	11.15	<i>“50 years of laser research in Romania (Department of LASERS)”</i> , Prof. Dr. Dan Dumitras , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Spectroscopy. Lasers in Life Science		
Oral communication	11.45	<i>“Miniaturized Mid-IR-Spectrometer for On-line and On-Site Condition Monitoring of Stationary Biogas Engines.”</i> , Benjamin Wiesent , Institute for Measurement Systems and Sensor Technology, Technical University Munich, Theresienstr, Germany
Oral communication	12.00	<i>“Laser beams interaction with pharmaceutical foams: Aethoxysklerol case”</i> , Adriana Smarandache , National Institute for Laser,

		Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	12.15	<i>“Quantitative analysis of surgical smoke by laser photoacoustic spectroscopy”</i> , Ana Bratu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	12.30	<i>“Temperature distribution analysis in laser irradiated tissue by numerical analysis and experimental data”</i> , Mioara Petrus , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	12.45	<i>“Calibration and artefact minimization in a CW Diffuse Optical Tomography system”</i> , Mihai Patachia , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
	13.00	Lunch
INVITED LECTURE	14.15	<i>“Progress in 3rd and 4th generation of photovoltaic cells at Research and Development Centre for Materials and Electronic & Optoelectronic Devices (MDEO)”</i> , Prof. Dr. Stefan Antohe , Dean of Faculty of Physics, University of Bucharest, Romania
INVITED LECTURE	14.45	<i>“Studies about the laser radiation interaction with beads of microliter volumes”</i> , Prof. Dr. Mihai Lucian Pascu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	15.15	<i>“Study of the properties of micro- and nano-droplets by using the interaction with laser radiation”</i> , Viorel Nastasa , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	15.30	<i>“Measurements of Raman Spectra induced by laser beams on droplets”</i> , Mihai Boni , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	15.45	<i>“Exposure of Chlorpromazine to 266 nm laser beam generates new species with antibacterial properties”</i> , Tatiana Alexandru , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
INVITED LECTURE	16.00	<i>“Laser induced breakdown spectroscopy: stratigraphy on painted mock-ups”</i> , Dr. Angela Staicu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest,

		Romania
	16.30	Coffee Break
Poster Session	16.45	
	19.00	Dinner

Thursday May 10, 2012		
INVITED LECTURE	09.00	<i>“Why and how to communicate your research“</i> , Prof. Dr. Frank Burnet , United Kingdom (Part I)
	11.00	Coffee Break
	11.15	<i>“Why and how to communicate your research“</i> , Prof. Dr. Frank Burnet , United Kingdom (Part II)
	13.00	Lunch
Presentations by the sponsoring companies		
	14.00	<i>“High repetition rate PetaWatt level Titanium Sapphire laser system for laser wakefield acceleration“</i> , Dr. Olivier Chalus , Laser Solution Department, Thales Optronique, France
	14.30	<i>“High performance spectrometry“</i> , Dan Bulik , BERD Trading, Bucharest, Romania
	14.45	<i>“Photonics solutions: Lasers and Spectroscopy“</i> Chiricuta Bogdan , APEL Laser, Bucharest, Romania
High power lasers		
INVITED LECTURE	15.00	<i>“High-peak power passively Q-switched Nd:YAG/Cr⁴⁺:YAG lasers“</i> , Dr. Nicolaie Pavel , Laboratory of Solid-State Quantum Electronics National Institute for Laser, Plasma and Radiation Physics, Bucharest, Romania
Oral communication	15.30	<i>“28-mJ, single frequency, sub-nanosecond Nd-MOPA system, at kHz repetition rate“</i> , Bozhidar Oreshkov , Department of Physics, Sofia University, Sofia, Bulgaria
Oral communication	15.45	<i>“Simple method for synchronization of pulses in GRIP x-ray laser scheme“</i> , Romeo Banici , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
	16.00	Coffee break
Oral communication	16.15	<i>“Progress at the multi-PW ELI-NP laser facility“</i> , Liviu Neagu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	16.30	<i>“Study of high harmonics generation at the interaction of an ultrashort and intense laser pulse with an overdense plasma layer“</i> , Andreea Mihalescu , National Institute for Laser, Plasma and Radiation Physics, Laser Department,

		Bucharest, Romania
Oral communication	16.45	“ <i>Operation of Mo XRL in ultra-low pumping regime</i> ”, Gabriel Cojocaru , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	17.00	“ <i>Simulation of spatio-temporal distortions in ultra-short laser pulses</i> ”, Razvan Ungureanu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
	17.15	End of session
	19.00	Dinner

Friday May 11, 2012

INVITED LECTURE	09.00	“ <i>Project LASERLAB EUROPE: The Integrated Initiative of European Laser Research Infrastructure</i> ”, Prof. Dr. Traian Dascalu , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Physics of Plasma		
INVITED LECTURE	09.30	“ <i>Dusty Plasmas: a review of experiments and possible applications</i> ”, Dr. Catalin Ticos , National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania
Oral communication	10.00	“ <i>Helmholtz equations in rectangular-shaped curved optical fiber</i> ”, Daniel Gustaw , Nicolaus Copernicus University, Faculty of Physics, Astronomy and Informatics, Torun , Poland
Oral communication	10.15	“ <i>Dose distributions in water-equivalent materials irradiated with hadron beams</i> ”, Chirvase Cezarina-Isabela , Faculty of Physics, “Al. I. Cuza” University, Iasi, Romania
Oral communication	10.30	“ <i>Preparation and characterization of double perovskite targets for thin films deposition by PLD method</i> ”, Robert Lowndes , National Institute of Materials Physics, Bucharest, Romania
	10.45	Coffee break
ROUND TABLE	11.00	“ <i>How to develop a successful scientific research carrier</i> ”
	12.00	Lunch
	13.30	Visit to Peles Castle
	19.00	Banquet

Saturday May 12 , 2012

	09.00	Poster and Oral Presentation Awards
	09.30	Conference Closing

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