



International Student Workshop on Laser Applications 2010 - ISWLA'10 –



Conference Schedule

MONDAY 24 MAY, 2010		
	16:00	Registration Desk Open
	19:30	Welcome Party

TUESDAY 25 MAY, 2010		
Course 1	08:00	Registration Desk Open Breakfast
	09:00	Conference Opening
	09:30	„The Craft of Scientific Presentations” – Part 1 – Prof. Michael Alley, Penn State University
	11:00	Coffee Break
Course 2	11:20	„The Craft of Scientific Presentations” – Part 2 – Prof. Michael Alley, Penn State University
	13:00	Lunch
	14:00	„The Craft of Scientific Writing” – Part 1 – Prof. Michael Alley, Penn State University
	15:45	Coffee Break
	16:15	„The Craft of Scientific Writing” – Part 2 – Prof. Michael Alley, Penn State University
	18:00	Free time
	19:30	Dinner

WEDNESDAY 26 MAY, 2010		
Plenary Session	08:00	Breakfast
	09:00	Plenary Session: Laser Review – Acad. Voicu Lupei – Romanian Academy, NILPRP
Session 1 –Medical Applications	09:40	Invited Lecture – Diagnostics and Treatment of Tumours using Laser Techniques – Prof. Katarina Svanberg, Department of Oncology, Lund University Hospital/ Lund University Medical Laser Centre- Lund, Sweden
	10:20	Physico-chemical properties of sucrose thin films for biomedical applications - S.L. Iconaru ¹ , D. Predoi ¹ , A. Costescu ¹ , A.M. Prodan ² - ¹ National Institute of Materials Physics, P.O.Box MG-7, Magurele, Bucharest, Romania, ² Department of General Surgery, Emergency Hospital, Bagdasar-Arseni, Bucharest



Conference Schedule

	10:40	Application of silver-doped nanomaterials for enhancing the efficiency of photodynamic diagnosis - <u>Pucińska Joanna</u> ¹ , <u>Kopaczyńska Marta</u> ¹ , <u>Ulatowska-Jarża Agnieszka</u> ¹ , <u>Wysocka-Król Katarzyna</u> ¹ , <u>Podbielska Halina</u> ¹⁻¹ Bio-Optics Group, Institute of Biomedical Engineering and Instrumentation, Wrocław University of Technology – Wrocław, Poland
	11:00	Coffee Break
Session 2 –Lasers in life sciences	11:20	1060 nm central wavelength swept source laser for OCT imaging – <u>Daniel Rumiński</u> , <u>Karol Karnowski</u> , <u>Michalina Góra</u> , <u>Maciej Wojtkowski</u> , <u>Andrzej Kowalczyk</u> – Institute of Physics, Nicolaus Copernicus University – Torun, Poland
	11:40	Invited Lecture – IN VITRO studies of cerebral tissues by laser induced autofluorescence – <u>Mihail – Lucian Pascu</u> ^{1*} , <u>Alexandru Pascu</u> ¹ , <u>Mihaela Oana Romanitan</u> ² , <u>Leon Danaïla</u> ³ - ¹ National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, ² Neurology Clinics, Emergency University Hospital, Bucharest, ³ Neurosurgery Clinics, National Institute of Neurology and Neurovascular Diseases, Bucharest
	12:20	Measurement of the modifications of polidocanol absorption spectra after exposure to NIR laser radiation - <u>Adriana Smarandache</u> ^{1*} , <u>M. Trelles</u> ² and <u>M.L.Pascu</u> ^{1- 1*} National Institute for Laser, Plasma and Radiation Physics, Laser Department, Bucharest, Romania, ² Instituto Médico Vilafortuny/Fundacion Antoni De Gimbernat, Cambrils, Spain
	12:40	Towards obtaining qualitative and quantitative spectroscopic information of scattering media with the use of Spectral OCT- <u>Szymon Tamborski</u> , <u>Danuta Bukowska</u> , <u>Ireneusz Grulkowski</u> , <u>Maciej Szkulmowski</u> , <u>Andrzej Kowalczyk</u> and <u>Maciej Wojtkowski</u> - Institute of Physics, Nicolaus Copernicus University - Torun, Poland
	13:00	Investigations about the production of micro and nano-droplets starting from immiscible solutions- <u>V. Nastasa</u> ^{1*} , <u>Andra Militaru</u> ¹ , <u>T. Karapantsios</u> ² , <u>M. Ferrari</u> ³ , <u>K. Samaras</u> ² , <u>E. Dafnopatidou</u> ² , <u>I. R. Andrei</u> ¹ , <u>L.Ligieri</u> ³ , <u>V. Pradines</u> ⁴ , <u>R. Miller</u> ⁴ , <u>M. L. Pascu</u> ^{1- 1} National Institute for Laser, Plasma and Radiation Physics Bucharest, Romania, ² Department of Chemistry, Aristotle University of Thessaloniki, Greece, ³ CNR- Institute for



International Student Workshop on Laser Applications 2010 - ISWLA'10 –



Conference Schedule

THURSDAY 27 MAY, 2010		Energetics and Interphases, Via De Marini 6, I-16149 Genova, Italy, ⁴ Max Planck Institute for Colloids and Interfaces, Potsdam, Germany
	13:20	Lunch
	14:30	Medieval Trip
	19:30	Dinner

THURSDAY 27 MAY, 2010		
Session 3 – Micro- and nano - Technologies	08:00	Breakfast
	09:00	Invited Lecture - Progress in high power ultrashort pulsed laser systems – <u>Dr. Razvan Dabu</u> - 3EU ELI - Project Coordinator, NILPRP- Bucharest, Romania
	09:40	Invited Lecture - Micro- and nano-processing with ultrashort laser pulses – <u>Zamfirescu, Marian</u> ¹ ; <u>Ulmeanu, Magdalena</u> ¹ ; <u>Jipa, Florin</u> ¹ ; <u>Rusen, Laurentiu</u> ¹ ; <u>Neagu, Liviu</u> ¹ ; <u>Anghel, Iulia</u> ¹ ; <u>Radu Catalina</u> ² ; <u>Ionita, Iulian</u> ² ; <u>Luculescu, Catalin</u> ¹ ; <u>Moldovan, Antoniu</u> ¹ and <u>Dabu, Razvan</u> ¹ – ¹ National Institute for Laser Plasma and Radiation Physics, Magurele, Romania, ² University of Bucharest, Faculty of Physics, Măgurele, Romania
	10:20	Soliton waveguides arrays in lithium niobate- <u>S. T. Popescu</u> ^{1*} , <u>A Petris</u> ¹ , <u>V. I. Vlad</u> ¹ , <u>E. Fazio</u> ² - ¹ Natl. Institute for Laser, Plasma and Radiation Physics, Dept. of Lasers, Bucharest-Magurele, Romania, ² University “La Sapienza” of Rome, Dept. of Energetics, Italy
	10:40	Interdigital capacitors fabricated by femtosecond laser ablation, <u>Radu, Catalina</u> ¹ , <u>Rusen, Laurentiu</u> ² , <u>Neagu, Liviu</u> ² , <u>Ion, Valentin</u> ² , <u>Amarandei, Luminita</u> ³ , <u>Banciu, George</u> ³ , <u>Zamfirescu, Marian</u> ²
	11:00	Coffee Break
Session 4 – Lasers in Environment Research	11:15	Invited Lecture – Laser remote sensing in atmosphere science – <u>Doina Nicolae</u> [*] , <u>Emil Carstea</u> [*] , <u>Anca Nemuc</u> [*] - [*] National Institute of Research and Development for Optoelectronics, Măgurele, Romania
	11:55	Cloud height comparisons from SEVIRI and LIDAR- <u>Luminita Marmureanu</u> [*] , <u>Camelia Talianu</u> [*] , <u>Razvan Radulescu</u> [*] , <u>Jeni Vasilescu</u> [*] - [*] National Institute of Research and Development for Optoelectronics, Magurele, Romania
	12:15	Validity of LIDAR time series measurements- <u>Rădulescu, Răzvan-Cosmin</u> ¹ and <u>Belegante, Livio</u> ² , ¹ Laser Remote Sensing



Conference Schedule

		Department - National Institute of R&D for Electronics and Optoelectronics, Măgurele, Romania, ² Laser Remote Sensing Department / National Institute of R&D for Electronics and Optoelectronics, Măgurele, Romania
	12:35	Aerosol imaging using a holographic method - <u>Ruxandra Cojocaru</u> , M. B. Tanasescu, M. Mihailescu - "Politehnica" University from Bucharest , Bucharest, Romania
	13:55	Lunch
Session 5 – Laser Engineering	14:00	Invited Lecture – Chaotic behaviour and control of a semiconductor laser – <u>Prof. Mircea Bulinsky</u> , Faculty of Physics, University of Bucharest- Bucharest, Romania
	14:40	Fast digital phase lock for external cavity diode lasers – <u>Mateusz Bawaj</u> – Faculty of Physics, Astronomy and Informatics Nicolaus Copernicus University – Torun, Poland
	15:00	Photonic crystal optoelectronic devices and circuits - <u>Radu-Florin Stancu</u> – Applied Sciences Faculty, Politehnica Bucharest University, Bucharest, Romania
	15:20	Analysis of in-plane rotational dynamics for photoisomerisable (DCM) and non-photoisomerisable (NR) molecules in PMA matrix – <u>Kordas Wojciech</u> ¹ , Dutier Gabriel ² , Pawlik Grzegorz ¹ and Mitus Antoni ¹ , ¹ Institute of Physics, Wroclaw University of Technology, Wroclaw, Poland, ² Laboratoire de Physique des Lasers, Centre National de la Recherche Scientifique, Universite' Paris, Villetaneuse, France
	15:40	Characterization of chaotic emission of a laser diode for selective and unselective optical feedback produced by external reflectors - <u>Andrei, Ionut-Relu</u> ¹ , Ticos, Catalin-Mihai ¹ , Bulinski, Mircea ² and Pascu, Mihail-Lucian ^{1,2} – ¹ National Institute for Laser, Plasma and Radiation Physics, Department of Lasers, Magurele, Romania, ² University of Bucharest, Faculty of Physics, Bucharest, Romania
	16:00	Coffee Break
Session 6 – Laser in Education	16:15	Invited Lecture – Outreach activities in optics and photonics – Sporea, Adelina and <u>Sporea, Dan</u> - Center for Science Education and Training, National Institute for Laser, Plasma and Radiation Physics – Bucharest, Romania
	16:55	Using laser physics in high school - Cătălin Chițu ^{1,2} , <u>Alexandra Vintilă</u> ¹ , Cătălin Măciucă ¹ , Laura Mihai ^{2,3} , ¹ Energetic High School, Câmpina, Romania, ² University of Bucharest - Faculty of Physics, Bucharest, Măgurele , Romania, ³ Center for Science Education and Training, INFLPR, Bucharest, Romania
	17:15	Laser audio transceiver/receiver on Mars community - Garabet Mihaela ^{1,2} , Neacsu Ion ² and <u>Munteanu Dragos</u> ^{2,3} -



International Student Workshop on Laser Applications 2010 - ISWLA'10 –



Conference Schedule

		¹ Faculty of Physics, University of Bucharest, Romania, ² “Grigore Moisil” Theoretical High School, Bucharest, Romania, ³ Faculty of Automatic Control and Computer, University “Politehnica” of Bucharest, Romania
	17:35	Albert Abraham Michelson – the master of light - <u>Kolenderska, Sylwia</u> - Department of Physics Faculty of Physics, Astronomy and Informatics, Nicolaus Copernicus University, 87-100, Toruń, Poland
Round Table	17:50	Quo vadis scientific research? - Bridging expectations and economy needs – <u>Dr. Clementina Timus</u> – RO SPIE Student Chapter Advisor, Dr. Dan Sporea – Director of Center for Science Education and Training, Prof. Sabina Stefan – Faculty of Bucharest, University of Bucharest
	18:30	Discussions / Poster Session
	19:30	Traditional Party

FRIDAY 28 MAY, 2010		
Session 7 – Advanced Materials	08:00	Breakfast
	09:00	Invited Lecture – Advanced laser processing of soft materials - <u>Dinescu M.</u> ¹ , <u>Palla-Papavlu A.</u> ¹ , <u>Dinca V.</u> ¹ , <u>Shaw-Stewart J.</u> ² , <u>Mattle T.</u> ³ , <u>T. Lippert</u> ³ , ¹ National Institute for Lasers, Plasma and Radiation Physics, Magurele, Romania, ² EMPA, Swiss Federal Laboratories for Materials Testing and Research, Laboratory for Functional Polymers, Dübendorf, Switzerland, ³ Paul Scherrer Institute, General Energy Research Department, Switzerland
	09:40	Different microscopic characterization techniques on hydroxyapatite powder - <u>Aurora Anca Poinescu</u> ¹ , <u>Rodica Mariana Ion</u> ^{2,3} <u>Otilia Vasile</u> ⁴ , <u>Raluca-Ioana van Staden</u> ⁴ , <u>Jacobus Frederick van Staden</u> ⁴ , <u>Marius Ghiurea</u> ³ , ¹ Valahia University of Targoviste, ² Valahia University of Targoviste, ³ ICECHIM, Bucharest, Analytical Department, Bucharest, Romania; ⁴ National Institute of R&D for Electrochemistry and Condensed Matter, Electrochemistry Laboratory, Bucharest, Romania
	10:00	Coffee Break
Session 8 – Laser Measurements and Control	10:20	Invited Lecture - Romanian contribution to the EUROMET 156 project – <u>Sporea, Dan</u> , and <u>Sporea, Adelina</u> – Laser Metrology Laboratory, National Institute for Laser, Plasma and Radiation Physics (NIPNE), Magurele, Romania



**International Student Workshop on Laser
Applications 2010 - ISWLA'10 –**



Conference Schedule

	11:00	Evaluation of Optical Spectrum Analyser Best Measurements Capabilities – <u>Mihai, Laura</u> and Sporea, Dan – Laser Metrology and Standardization Laboratory, National Institute for Laser, Plasma and Radiation Physics, Magurele, Romania
	11:20	Investigation of the vibration damping using laser vibrometry- Sporea, Dan ¹ , Dragomirescu, Cristian ² and <u>Frumosu, Flavia-Dalia</u> ² , ¹ National Institute for Laser, Plasma and Radiation Physics, Magurele, Romania, ² University "Politehnica" of Bucharest, Bucharest, Romania
	11:40	Poster and Oral Presentation Awards
	12:00	Lunch
	13:00	Conference Closing