

# Monday, September 10

17:00-19:00	Registration
19:00-21:00	Welcome reception

# Tuesday, September 11

<b>Plenary session – session chair: Gediminas Raciukaitis</b>				
09:45-10:30 <b>Plenary Lecture</b>	TU-PL-1	Photonic Crystal Devices for Bio-Sensing and LiDAR Applications	<b>Toshihiko Baba</b>	Yokohama National University, Japan
10:30-11:00	<b>Coffee break</b>			
<b>Fundamentals – session chair: Leonid Zhigilei</b>				
11:00-11:30 <b>Invited</b>	TU-IN-1	Relaxation cascade of laser-excited nonequilibrium electrons in solids	<b>Baerbel Rethfeld</b>	Technical University Kaiserslautern, Germany
11:30-11:50	TU-O-1	Ultrafast laser excitation of dielectrics: Measuring and modeling the transient optical properties	Peter Balling	Aarhus University, Denmark
11:50-12:10	TU-O-2	From high field plasmonics to laser driven shock kick-off: variety of ablation scenarios and navigation between them	Nail Inogamov	Landau Institute for Theoretical Physics of Russian Academy of Sciences (RAS), Russia & Dukhov Research Institute of Automatics (VNIIA), Russia
12:10-12:30	TU-O-3	Transport properties of liquid metals and semiconductors from molecular-dynamics simulation with Kubo-Greenwood formula	Kirill Migdal	Dukhov Research Institute of Automatics & Landau Institute for Theoretical Physics, Russia
12:30-12:50	TU-O-4	Nonthermal melting in Si controlled by ultrashort laser pulses	Tobias Zier	University of Kassel, Germany
12:50-13:10	TU-O-6	Electron excitation rates and saturation effects in laser-excited solids resolved by time-dependent density functional theory	Thibault J.-Y. Derrien	Institute of Physics of the Czech Academy of Sciences, Czech Republic & Max Planck Institute for Structure and Dynamics of Matter (MPSD), Germany
13:10-14:00	<b>Lunch</b>			
<b>Highly efficient laser ablation – session chair: Chunlei Guo</b>				
14:00-14:30 <b>Invited</b>	TU-IN-2	Making Metals Transparent for White Light by Surface Plasmons	<b>Ru-Wen Peng</b>	Nanjing University, China
14:30-14:45	TU-O-7	Ultrafast laser nanofabrication of advanced nanophotonic structures	Aleksandr Kuchmizhak	Far Eastern Federal University, Russia & Russian Academy of Science, Russia
14:45-15:00	TU-O-8	Efficient Laser Scanning Ablation Procedure for Ultrafast Surface Structuring	Mindaugas Gedvilas	Center for Physical Sciences and Technology, Lithuania
15:00-15:15	TU-O-9	High-throughput ultrashort laser micromachining by MHz-THz pulse bursts	Sergey Kudryashov	ITMO university, Russia, Lebedev Physical Institute, Russia, & Far Eastern Branch of RAS, Russia
15:15-15:30	TU-O-10	Near-THz bursts of pulses –governing surface ablation mechanisms for laser material processing	Jaka Mur	University of Ljubljana, Slovenia
15:30-15:45 <b>Student</b>	TU-O-11	From the bulk to thin films: On the interplay of photomechanical and photothermal ablation induced within gold by ultrafast laser radiation	Markus Olbrich	Laserinstitut Hochschule Mittweida, Germany
15:45-16:00	TU-O-12	Vector vortex beams generated by q-plates as a versatile route to direct femtosecond laser surface structuring	Salvatore Amoruso	Università di Napoli Federico II, Italy & Complesso Universitario di Monte S. Angelo, Italy
16:00-16:30	<b>Coffee break</b>			
<b>X-ray – session chair: Gediminas Raciukaitis</b>				
16:30-17:00 <b>Invited</b>	TU-IN-3	Modulation of Light with Metasurfaces and Phase Change Materials	<b>Hamza Kurt</b>	TOBB University of Economics and Technology, Turkey
17:00-19:00	<b>Poster session 1 (odd numbers)</b>			
19:00	<b>A visit to Light Conversion company and selected laboratories at Laser Research Center of Vilnius University</b>			

# Wednesday, September 12

08:00	<b>Morning coffee</b>			
<b>PLD – Chairmen: session chair: Aaron Peled</b>				
08:15-08:45 <b>Invited</b>	WE-IN-1	Laser-induced Forward Transfer (LIFT) of 3D micro-structures	<b>Gert-Willem Römer</b>	University of Twente, The Netherlands
08:45-09:00	WE-O-1	Temperature effects in synthesis of metal nanostructures by pulsed laser deposition: Comparison of substrate heating and post-annealing	Alexander V. Bulgakov	Institute of Physics of the Czech Academy of Sciences, Czech Republic & Kutateladze Institute of Thermophysics SB RAS, Russia
09:00-09:15	WE-O-2	Short laser pulses excited processes: Applications to nanobiomedicine	Ion N. Mihailescu	National Institute for Lasers, Plasma and Radiation Physics, Romania
09:15-09:30	WE-O-3	Large optical nonlinearity in gold nanoparticle films made by PLD	James G Lunney	Trinity College Dublin, Ireland
09:30-09:45	WE-O-4	Thin films for solar cells produced by pulsed laser deposition	Jørgen Schou	Technical University of Denmark, Denmark
09:45-10:00	WE-O-5	One- and three-dimensional analysis of colliding laser-induced plumes	Ikuro Umezu	Konan University, Japan
10:00-10:15	WE-O-6	10B-enriched neutron conversion layers deposited by pulsed laser deposition at different wavelengths	Anna Paola Caricato	University of Salento-Lecce, Italy & National Institute of Nuclear Physics (INFN) - Sezione di Lecce, Italy
10:15-10:30 <b>Student</b>	WE-O-7	Surface microstructuring over wide area on nickel plating by laser-induced back deposition in ambient air	Kazuki Koda	DENSO CORPORATION, Japan & Osaka University, Japan
10:30-11:00	<b>Coffee break</b>			
<b>3D printing – session chair: Yongfeng Lu</b>				
11:00-11:30 <b>Invited</b>	WE-IN-2	Three-dimensional $\mu$ -Printing: An enabling Technology	<b>Georg von Freymann</b>	Technische Universität Kaiserslautern, Germany
11:30-11:45	WE-O-8	Continuous 3D Writing for Stich-Free 3D Meso-Scale Laser Printing	Mangirdas Malinauskas	Vilnius University, Lithuania
11:45-12:00	WE-O-9	Simple method for birefringence imaging of natural and laser fabricated polymers	Reo Honda	Tokyo Institute of Technology, Japan
12:00-12:15 <b>Student</b>	WE-O-10	3D printed Polarization Micro-Optics: Fresnel Rhomb printed on an optical fiber	Andrea Bertoncini	King Abdullah University of Science and Technology (KAUST), Saudi Arabia
12:15-12:30	WE-O-11	Laser Printing of Functional Resonant Dielectric Nanoparticles	Sergey Makarov	ITMO University, Russia
12:30-13:00 <b>Invited</b>	WE-IN-3	Complex and hybrid 3D printed microoptics	<b>Harald Giessen</b>	University of Stuttgart, Germany
13:00-14:00	<b>Lunch</b>			
14:00-17:30	<b>Excursion Vilnius old town &amp; Trakai castle</b>			
19:00	<b>Banquet in Palace of the Grand Dukes of Lithuania (Katedros ave. 4, Vilnius) in old town</b>			

# Thursday, September 13

08:00	<b>Morning coffee</b>			
<b>Graphene and carboneous materials – session chair: Mangirdas Malinauskas</b>				
08:15-08:45 <b>Invited</b>	TH-IN-1	Two-photon polymerization for three-dimensional assembly of aligned carbon nanotubes	<b>Yong Feng Lu</b>	University of Nebraska-Lincoln, USA
08:45-09:00 <b>Student</b>	TH-O-1	Laser-induced graphene ablation and graphene oxide reduction for application as electrodes in thin-film transistors	Maren Kasischke	Ruhr Universität Bochum, Germany
09:00-09:30	TH-O-3	Laser-Induced Processes in Nanotechnology	Wolfgang Kautek	University of Vienna, Austria
09:30-09:45	TH-O-4	Force Sensor Fabrication by AgNWs Film using 532nm Pulses Laser	Wen-Tse Hsiao	National Applied Research Laboratories, Taiwan
09:45-10:00	TH-O-5	Threshold fluence of femtosecond laser ablation for metals	Masaki Hashida	Kyoto University, Japan
10:00-10:15 <b>Student</b>	TH-O-6	Time-resolved investigation of laser-induced damage fatigue of single layer dielectric coatings	Linas Smalakys	Vilnius University, Lithuania
10:15-10:30	TH-O-7	Determination of material parameters for modelling of ultra-short pulse ablation threshold in transparent, dielectric material	Marco Jupe	Laser Zentrum Hannover e.V., Germany
10:30-11:00	<b>Coffee break</b>			
<b>Simulation of photo-excited processes – session chair: Peter Balling</b>				
11:00-11:30 <b>Invited</b>	TH-IN-2	Ultrafast Laser-Induced Surface and Bulk Nanostructuring: Similarities Revealed by Electromagnetic Modeling	<b>Jean-Philippe Colombar</b>	University of Lyon, France
11:30-11:50	TH-O-8	Large-scale atomistic simulations of the generation of nanoparticles and surface nanostructuring by short pulse laser ablation in liquids	Leonid V. Zhigilei	University of Virginia, USA
11:50-12:10	TH-O-10	Ultrafast dynamics of non-equilibrium electrons and strain generation under femtosecond laser irradiation of Nickel	George Tsibidis	IESL-FORTH, Greece
12:10-12:30	TH-O-11	Model for UV induced CdS nanoparticle formation in a polymer matrix	Nikita Bityurin	Institute of Applied Physics Russian Academy of Sciences, Russia
12:30-13:00 <b>Invited</b>	TH-IN-3	Intense femtosecond laser interaction with aqueous solutions for X-ray, THz wave, and ultrasound emission	<b>Koji Hatanaka</b>	Research Center for Applied Sciences, Academia Sinica, Taiwan
13:00-14:00	<b>Lunch</b>			
<b>LIPSS – session chair: Saulius Juodkazis</b>				
14:00-14:30 <b>Invited</b>	TH-IN-4	Periodic phase-change structures in silicon: Control and formation mechanism	<b>Jan Siegel</b>	Instituto de Óptica, IO-CSIC, Spain
14:30-14:45	TH-O-12	Formation of Highly-regular LIPSS on Cr Under Condition of Strong Ablation	Iaroslav Gnilitzkiy	NoviNano Inc., Ukraine & University of Modena and Reggio Emilia (UNIMORE), Italy
14:45-15:00	TH-O-13	Ultrafast microscopy in resolving femtosecond laser-induced surface structuring	Chunlei Guo	University of Rochester, USA & Changchun Institute of Physics, Fine Mechanics, and Physics, China
15:00-15:15 <b>Student</b>	TH-O-14	Control of femtosecond laser induced periodic nanostructures by changing dielectric constant of polymers on Ti surface	Naoki Shinohara	Osaka University, Japan
15:15-15:30 <b>Student</b>	TH-O-15	Laser fabrication of Si nanosheets via nanoplasmonic self-organization in liquid CS <sub>2</sub>	Irina Saraeva	Lebedev Physical Institute, Russia
15:30-15:45 <b>Student</b>	TH-O-16	Ablation suppression of titanium surface interacted with two color double-pulse beam of femtosecond laser	Keisuke Takenaka	Osaka University, Japan
15:45-16:00	TH-O-17	Nanometer-Precision Measurement of Surface Morphology Change Induced by Femtosecond Laser Ablation	Shuntaro Tani	The University of Tokyo, Japan
16:00-16:30	<b>Coffee break</b>			
<b>Bio-medical applications – session chair: Gediminas Raciukaitis</b>				
16:30-17:00 <b>Invited</b>	TH-IN-5	The functional roles of vibronic coupling in biological light harvesting	<b>Jürgen Hauer</b>	Technische Universität München, Germany
17:00-19:00	<b>Poster session 2 (even numbers)</b>			
19:00	<b>A visit to Ekspla company and Department of Laser Technologies of FTMC</b>			

# Friday, September 14

08:00	<b>Morning coffee</b>			
<b>Nanotechnologies – session chair: Sergey Kudryashov</b>				
08:15-08:45 <b>Invited</b>	FR-IN-1	Nano-scale Laser Printing on Template Optical Metasurfaces	<b>Anders Kristensen</b>	Technical University of Denmark, Denmark
08:45-09:00	FR-O-1	Laser patterning of metal cylinders for roll to roll application	Klaus Zimmer	Leibniz Institute of Surface Engineering (IOM), Germany
09:00-09:15	FR-O-2	Growth of regular micro-pillars arrays on steel by polarization-controlled laser interference patterning	Bogdan Voisiat	Technische Universität Dresden, Germany
09:15-09:30	FR-O-3	Versatile surface structuring using cylindrically polarized femtosecond laser beams	George Tsibidis	IESL-FORTH, Greece & University of Crete, Greece
09:30-09:45	FR-O-4	Optical elements for synchrotron X-ray and THz beamlines	Saulius Juodkazis	Swinburne University of Technology, Australia & the Victorian Node of the Australian National Fabrication Facility, Australia
09:45-10:00	FR-O-5	Photodeposition of Nanometric Thin Films from Bio-Chromophores	Aaron Peled	Holon Institute of Technology (HIT), Israel
10:00-10:15 <b>Student</b>	FR-O-6	Qualitative and Quantitative Investigation of Free-Form fs Laser Made Structures to Intense Ultrafast Laser Radiation	Linas Jonušauskas	Vilnius University, Faculty of Physics, Laser Research Center
10:15-10:30	FR-O-7	Dicing of soda-lime glass with elliptical Bessel beam	Paulius Gečys	Center for Physical Sciences and Technology, Lithuania
10:30-11:00	<b>Coffee break</b>			
<b>Photo-excited processes &amp; spectroscopy – session chair: Salvatore Amoruso</b>				
11:00-11:30 <b>Invited</b>	FR-IN-2	Optical probing of charge carrier motion dynamics in disordered, heterogeneous organic and hybrid materials	<b>Vidmantas Gulbinas</b>	Center for Physical Sciences and Technology, Lithuania
11:30-11:45	FR-O-8	Luminescent carbon dots synthesized by the laser ablation in liquid	Justyna Chrzanowska-Gizyńska	Polish Academy of Sciences, Poland
11:45-12:00	FR-O-9	Interaction of femtosecond white light continua generated by different wavelengths in bulk transparent media	Mikas Vengris	Vilnius University, Lithuania
12:00-12:15	FR-O-10	High-quality CsPbBr <sub>3</sub> nanolasers fabricated by spray forming	Anatoly Pushkarev	ITMO University, Russia
12:15-12:30	FR-O-11	Photonic Crystal Microchip Laser	Kęstutis Staliūnas	Institució Catalana de Reserca i Estudis Avancats (ICREA), Spain, Universitat Politècnica Catalunya (UPC), Spain
12:30-13:00	FR-IN-3	Spectroscopy in Flatland	<b>Sejeong Kim</b>	University of Technology Sydney (UTS), Australia
13:00-14:00	<b>Lunch</b>			
<b>Laser generation of nanoparticles – session chair: Mindaugas Gedvilas</b>				
14:00-14:30 <b>Invited</b>	FR-IN-4	Nanofabrication of metal nanoparticles by femtosecond laser-induced photoreduction	<b>Atsushi Ono</b>	Shizuoka University, Japan
14:30-14:45	FR-O-12	Up-scaling for manipulation of particle properties on the nano- an sub-micrometer scale by laser irradiation in liquids	Marcus Lau	TRUMPF Laser- und Systemtechnik GmbH, Germany
14:45-15:00	FR-O-13	Laser Induced Quantum Dots generation	Iaroslav Gnilitzkiy	University of Modena and Reggio Emilia, Italy
15:00-15:15 <b>Student</b>	FR-O-14	Laser-ablative fabrication of hybrid meta-dielectric nanoparticles via laser-assisted heterogeneous condensation	Irina Saraeva	Lebedev Physical Institute, Russia
15:15-15:30	FR-O-15	Nanosecond Laser Treatment of Thin Gold Film on ITO Glass	Evaldas Stankevičius	Center for Physical Sciences and Technology, Lithuania
15:30-15:45	FR-O-16	Magneto-optical Faraday effect of waveguide structures fabricated inside silica xerogels containing magnetic nanoparticles	Seisuke Nakasima	Shizuoka University, Hamamatsu, Shizuoka, Japan
15:45-16:00	FR-O-17	Optical Properties of the Solar Cells with Nanostructures Formed by XeCl Excimer Laser	Mitsuhiro Kusaba	Osaka Sangyo University, Japan
16:00	<b>Awards and closing of the conference</b>			