

## Complete Programme for ICPEPA 7

(prepared 12 August 2010)

(Invited talks 30 min. incl. discussion, contributed talks 20 min. incl. discussion.)

**Monday, 16 August, Copenhagen**

All oral presentations are given in

Lundbeck Auditorium, Biocenter, Ole Maaløes vej 5 , 2200 Copenhagen N

0800-0900		Registration
		<b>Chair : Jørgen Schou</b>
0900-1015		900 Opening of conference – <b>The 50-years anniversary of the laser</b> 905 Opening by Rector, University of Copenhagen, <b>Ralf Hemmingsen</b> , 920 "Optical communication milestones and the laser", <b>Palle Jeppesen</b> , and Christophe Peucheret, DTU Fotonik, Technical University of Denmark, Denmark. 940 "The laser - the first 50 years", <b>Sune Svanberg</b> , University of Lund, Lund, Sweden
1015-1045		Coffee break
		<b>Chair: Leonid Zhigilei</b>
1045-1055		Practical comments on the conference <b>Jørgen Schou</b> , DTU Fotonik, Denmark
1055-1250	Key-note talk Contr. 1-4	"Femtosecond electron diffraction phenomena" <b>Dwayne Miller</b> , University of Toronto, Canada 3D nano- and microstructures in transparent materials by in-volume selective laser etching <b>Jens Gottmann</b> , RWTH Aachen University, Aachen, Germany "Fine-ripple formation at high fluence conditions during femtosecond laser ablation of ceramics", <b>Sungho Leung</b> , Gwangju Institute of Science and Technology (GIST)), Gwangju, Republic of Korea "Direct observation of acoustic oscillations in InAs nanowires", <b>Simon Mariager</b> , University of Copenhagen, Copenhagen, Denmark "Computer simulations of plume evolution in aluminium" <b>Johannes Roth</b> , University of Stuttgart, Stuttgart, Germany
1250-1400		Lunch
		<b>Chair : Nini Pryds</b>
1400-1540	Invited 1  Contr. 5-6         Invited 2	"Pulsed Laser deposition. Nucleation and growth on the atomic scale" <b>Peter Varga</b> , Vienna University of Technology, Vienna, Austria "Oxygen diffusion in SrTiO <sub>3</sub> and LaAlO <sub>3</sub> thin films prepared by pulsed laser deposition " <b>Thomas Lippert</b> , PSI, Villigen, Switzerland "Optical emission studies in pulsed Nd:YAG laser deposition of diamond- like carbon", <b>Teck Yong Tou</b> , Multimedia University, Cyberjaya, Malaysia, "Functional interfaces in oxide heterostructures by atomically controlled pulsed laser deposition", <b>Guus Rijnders</b> , University of Twente, Enschede, The Netherlands,
1540-1610		Coffee break
		<b>Chair: Motoichi Ohtsu</b>

1610-1740	Invited 3 Contr. 7-9	"Ultrafast laser interaction with group IV materials" <b>Harold Haugen</b> , McMaster University, Hamilton, Canada "Nanocrystal growth of II-VI II-VI wide band gap semiconductors by ultra fast laser ablation and deposition", <b>Marta Castillejo</b> , Spanish Research Council, Madrid, Spain "Experimental comparison between intensity and phase detection in grating coupling surface plasmon resonance" <b>Wen-kai Kuo</b> , National Formosa University, Taiwan "Patterned laser annealing of silicon oxide films" <b>Jürgen Ihlemann</b> , Laser Lab Göttingen, Göttingen, Germany
1740-1800		Break - walk to H.C. Ørsted Institute
1800-2030		Posters and exhibitions with beer and sandwiches
2000		<b>Concert:</b> <b>The Choir of Rigshospitalet sings traditional Danish Summer songs</b>

Tuesday, 17 August, Copenhagen

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Lundbeck Auditorium, Biocenter, Ole Maaløes vej 5 , 2200 Copenhagen N

0830-0900		Registration
		<b>Chair: Martin Meedom Nielsen</b>
0900-1040	Invited 4 Contr. 10-11 Invited 5	"Ultrafast processes and single shot imaging of clusters with intense X-ray laser pulses" <b>Christoph Bostedt</b> , SLAC, Stanford University, USA, "Study of surface chemical reactions induced by molecules electronically excited in the gas phase" <b>Victor Petrunin</b> , University of Southern Denmark, Odense, Denmark "Phase transition in carbon based material induced by intense femtosecond x-ray pulse" <b>Jérôme Gaudin</b> , European XFEL GmbH, Hamburg, Germany "Ultrafast Delocalization of Hydrogen Atoms in Hydrocarbon Molecules in Intense Laser Fields" <b>Kaoru Yamanouchi</b> , University of Tokyo, Tokyo, Japan
1040-1110		Coffee break
		<b>Chair: James G. Lunney</b>
1110-1240	Invited 6 Contr. 12-14	"Atomistic simulations of laser interactions with metals: Melting of nanocrystalline films and generation of crystal defects" <b>Leonid Zhigilei</b> , University of Virginia, Charlottesville, USA "The role of anisotropic excitation in self-organized nanostructure formation upon femtosecond laser ablation" <b>Jürgen Reif</b> , Brandenburgische Technische Universität , Cottbus, Germany "The effect of laser wavelength on heating of the ablated plume", <b>Zygmunt Szymanski</b> , Institute of Fundamental Technological Research, Poland "Dynamics of fast phase transitions in metals during pulsed laser action" <b>Alexander Mazhukin</b> , Russian Academy of Sciences, Moscow, Russia
1250-1400		Lunch
		<b>Chair: Peter Balling</b>
1400-1530	Invited 7	"Phonon-assisted nanophotonic fabrication and its application"

	Contr. 15-17	<p><b>Motoichi Ohtsu</b>, University of Tokyo, Tokyo, Japan "Precipitation of ferromagnetic nanoparticles inside transparent glass by femtosecond laser",</p> <p><b>Seisuke Nakashima</b>, RIKEN, Japan "Preparation and formation mechanism of amorphous Si quantum dots by laser ablation of silicon in water"</p> <p><b>X.-Y. Chen</b>, Nanjing University, Nanjing, China "Dynamics of Exciton-Plasmon Coupling in ZnO-MgO-Metal Heterostructures"</p> <p><b>Richard Haglund</b>, Vanderbilt University, Nashville, Tennessee, USA</p>
1530-1600		Coffee break
		<b>Chair: Peter Hess</b>
1600-1730	Invited 8  Contr. 18-20	<p>"Nanoparticles produced by laser ablation"</p> <p><b>Paolo M. Ossi</b>, Politecnico di Milano, Milano, Italy "Novel processing for the oxide films by photoreaction of nano-particles"</p> <p><b>Tetsuo Tsuchiya</b>, National Institute of Advanced Industrial Science and Technology(AIST), Tsukuba, Japan "Self-organised nanostructures on metal surfaces produced by femtosecond laser ablation"</p> <p><b>Evgeny Gurevich</b>, ISAS, Institut fur Analytische Wissenschaften, Dortmund, Germany". "Selective Ablation of Xe on Silicon Surfaces: MD Simulation and Experimental Laser Patterning",</p> <p><b>Ori Stein</b>, Hebrew University, Jerusalem, Israel</p>
1730-1800		Break - walk to H.C. Ørsted Institute
1800-2030		Posters and exhibitions with beer and sandwiches

### Wednesday, 18 August, Copenhagen

All oral presentations are given in

Lundbeck Auditorium, Biocenter, Ole Maaløes vej 5 , 2200 Copenhagen N

		<b>Chair: Kaoru Yamanouchi</b>
0900-1040	Invited 9  Contr. 21-22  Invited 10	<p>"Laser interactions with organic MALDI matrices"</p> <p><b>Klaus Dreisewerd</b>, University of Münster, Münster, Germany "Investigating the fragmentation of C60 by Matrix Assisted Pulsed Laser Evaporation (MAPLE)",</p> <p><b>Stela Canulescu</b>, Technical University of Denmark, Roskilde, Denmark "Mechanistic evaluation of 213 nm pulsed laser cornea ablation",</p> <p><b>Wolfgang Kautek</b>, University of Vienna, Vienna, Austria "Production of films of organic materials for biomedical applications by laser-assisted methods"</p> <p><b>Ion N. Mihailescu</b>, National Institute for Lasers, Plasma and Radiation Physics, Bucharest-Magurele, Romania</p>
1040-1110		Coffee break
		<b>Chair: Marta Castillejo</b>
1110-1300	Invited 11  Contr. 23-26	<p>"Double pulse ultrafast laser ablation of metals"</p> <p><b>Salvatore Amoruso</b>, Università degli Studi di Napoli Federico II, Napoli, Italy "Pulsed laser deposition of La<sub>0.6</sub>Ca<sub>0.4</sub>O<sub>3</sub>: ion dynamics and thin film properties",</p>

		<p><b>Thomas Lippert</b>, PSI, Villigen, Switzerland  “Electromagnetic control of plume expansion in laser ablation”</p> <p><b>James G. Lunney</b>, Trinity College Dublin, Dublin, Ireland  “Laser-induced breakdown spectroscopy for the analysis of strontium and uranium in glass matrix”</p> <p><b>E. C. Jung</b>, Korea Atomic Energy Research Institute, Daejeon, Republik of Korea  “Surface and bulk structuration of solid and liquid dielectrics”,</p> <p><b>Candice Mézel</b>, CELIA , Talence, France</p>
1300-1400		Lunch
1400-1700		Excursion to Copenhagen City - Harbour Cruise
1830- 2300		Reception and conference dinner in Stamhuset, Den danske Frimurerorden, Blegdamsvej 23, 2100-Copenhagen Ø

### Thursday, 19 August, Copenhagen - Sønderborg

All oral presentations are given in

Lundbeck Auditorium, Biocenter, Ole Maaløes vej 5, 2200 Copenhagen N

		<b>Chair: Wolfgang Kautek</b>
0900-1040	Invited 12	“Structural dynamics in laser-excited materials studied with ultrafast X-ray scattering” <b>Klaus Sokolowski-Tinten</b> , Universität Duisburg-Essen, Duisburg, Germany
	Contr. 27-28	“Laser processing with short and ultrashort laser pulses” <b>Peter Balling</b> , Århus University, Århus, Denmark “Chemistry of monolayer functionalizations of silicon studied by laser-induced desorption mass spectrometry” <b>Peter Hess</b> , University of Heidelberg; Heidelberg, Germany.
	Invited 13	„New opportunities at XFEL“ <b>Christian Bressler</b> , XFEL, Hamburg, Germany
1040-1110		Coffee break
		<b>Chair: Jürgen Reif</b>
1110-1240	Invited 14	“Black and colored metals” <b>Chunlei Guo</b> , University of Rochester, Rochester, USA
	Contr. 29-31	“Dielectric to metal transitions in silicon and dielectrics observed during periodic surface structure formation induced by temporally tailored pulses” <b>Magdalena Forster</b> , University of Vienna, Vienna, Austria “Synthesis of high-pressure phases of oxides by laser-induced optical breakdown” <b>Vygantas Mizeikas</b> , Shizuoka University, Japan “Energy coupling localization and selective laser processing in thin-film structures” <b>Gediminas Raciukaitis</b> , Center for Physical Science and Technology, Vilnius, Lithuania
1250-1400		Lunch
1400-1800		Bus departure and travelling to Sønderborg
1800-1900		Arrival at Hotels
1900-2200		Social arrangement

Friday, 20 August, Sønderborg

All oral presentations are given in Alslion , Alslion 2, 6400 Sønderborg

		<b>Chair: Jürgen Ihlemann</b>
0830-1010	Invited 15 Contr 32-33  Invited 16	<p>“Optical Near-Fields of Nanostructures: Characterization and Patterning”  <b>Paul Leiderer</b>, University of Konstanz, Konstanz, Germany</p> <p>“Films of brookite titania nanorods deposited by matrix-assisted pulsed laser deposition for gas sensor applications”  <b>Anna Paola Caricato</b>, University of Salento, Salento, Italy</p> <p>“Characterization of laser induced crystallization processes of (Ag)-Sb-S thin films towards optical data recording”  <b>Jan Gutwirth</b>, Faculty of Chemical Technology  University of Pardubice, Pardubice, Czech republic</p> <p>“Adaptive nanooptics und spatiotemporal control”  <b>Walter Pfeiffer</b>, University of Bielefeld, Bielefeld, Germany</p>
1010-1040		Coffee break
		<b>Chair: Gediminas Raciukaitis</b>
1040-1210	Invited 17 Contr 34-36	<p>“Ellipsometry of monolayers”,  <b>Peter Hess</b>, University of Heidelberg, Heidelberg, Germany</p> <p>Tailoring the optical properties of ZnO thin films by doping and co-doping  <b>George Epurescu</b>, NILPRP, Bucharest, Romania</p> <p>NN  “Synthesis of gallium nitride nanocrystallites by pulsed laser ablation in background gas of pure nitrogen”,  <b>Takehito Yoshida</b>, Anan National College of Technology, Anan,  Tokushima, Japan</p>
1210-1330		Lunch
1330-1730		Bus departure and travelling to Copenhagen Airport/Copenhagen via Fredericia Railway Station