



## SCHOOL PROGRAM

**Monday 20.09.2010 B.****C. LASER REMOTE SENSING AND ECOLOGY  
INDUSTRIAL PRESENTATIONS**

- 9:00** Opening  
**9:30** **L1.** RAMAN-SHIFTED EYE-SAFE AEROSOL LIDAR (REAL),  
*Prof. Shane Mayor*
- 10:30** **IP1.** INTEGRATED SOLUTIONS FOR STATE-OF-THE-ART BIOMEDICAL IMAGING: FROM OCT TO ADAPTIVE OPTICS,  
*Dr. Julien Vigroux, Thorlabs GmbH, Germany*
- 10:45** **IP2.** LASERS FOR SCIENTIFIC CHALLENGES,  
*Dr. Jan Schaefer, TOPTICA Photonics AG, Germany*
- 11:00** Coffee break  
**11:15** **IP3.** SPECTRAL METHODS FOR ANALYSIS OF BIOLOGICAL SAMPLES,  
*Dr. Nikolay Georgiev, ASTEL – Bulgaria*
- 11:30** **IP4.** NEW DPSS INDUSTRIAL AND SCIENTIFIC LASERS,  
*Dr. Plamen Yankov, Coherent – Bulgaria*

**B. LASER SPECTROSCOPY AND METROLOGY**

- 15:00** **L2.** COHERENT LASER SPECTROSCOPY OF RUBIDIUM ATOM,  
*Prof. P. N. Ghosh*
- 16:00** **L3.** LASER SPECTROSCOPY WITH NANOMETRIC CELLS CONTAINING ATOMIC VAPOR OF METAL: INFLUENCE OF BUFFER GAS,  
*Prof. D. Sarkisyan*
- 17:00** Coffee break  
**17:15** **L4.** ATOMIC SOURCES CONTROLLED BY LIGHT: MAIN FEATURES AND APPLICATIONS,  
*Prof. L. Moi*
- 18:15** **L5.** RAMAN-RAMSEY SPECTROSCOPY IN RUBIDIUM VAPOR CELL,  
*Prof. B. Jelenković (Shifted Thursday 23.09.2010 from 10:00 a.m)*
- 20:00** Welcome party

**Tuesday 21.09.2010 – Morning session****A. LASER - MATTER INTERACTIONS**

- 9:00** **L6.** ULTRAFAST DYNAMICS IN STRONG-FIELD INTERACTIONS WITH MOLECULES AND SOLID SURFACES  
 - High-harmonic Generation and nanostructuring -,  
*Prof. K. Miyazaki*
- 10:00** **L7.** ULTRAFAST LASER ABLATION: LASER-MATTER INTERACTION, PLASMA CHARACTERIZATION AND NANOPARTICLES GENERATION,  
*Dr. X. Wang (Canceled)*
- 10:00** **L8.** LASER DEPOSITION OF TiO<sub>2</sub> FOR URETHRAL CATHETER,  
*Prof. M. Jelínek*



## SCHOOL PROGRAM

**Tuesday 21.09.2010 – Afternoon session****E. LASER SYSTEMS AND  
NONLINEAR OPTICS**

- 15:00** **L9.** NANOPHONONICS: A NONLINEAR BATTLEGROUND  
 PAR EXCELLENCE,  
*Prof. Christos Flytzanis*
- 16:00** **L10.** 3D SOLITONLIKE BULLETS IN NONLINEAR OPTICS AND BOSE-EINSTEIN CONDENSATES,  
*Prof. Vladimir Serkin*
- 17:00** Coffee break  
**17:15** **L11.** SOLITON DYNAMICS IN SUPERCONTINUUM GENERATION,  
*Dr. J. Travers*
- 18:15** **L12.** FUNCTIONAL NONLINEAR PHOTONIC CRYSTALS,  
*Prof. Arye*

**19:15 – 21:15 Exhibition and Poster session I (Topics A and B)****Wednesday 22.09.2010****D. LASERS IN BIOLOGY AND MEDICINE**

- 9:00** **L13.** PHOTODYNAMIC THERAPY: BACKGROUND, CLINICAL APPLICATIONS AND NEW DEVELOPMENTS,  
*Prof. HJCM Sterenberg*
- 10:00** **L14.** OPTICAL BIOPSY FOR STRUCTURE, FUNCTION AND BIOCHEMISTRY – A CONTINUING CHALLENGE,  
*Dr. Martin Leahy*
- 11:00** Coffee break  
**11:15** **L15.** LASER ABLATION AND HIGH PRECISION PATTERNING OF BIOMATERIALS AND INTRAOCULAR LENSES,  
*Prof. Alexandros Serafetinides*
- 15:00** **L18.** ADVANCES IN PHOTONICS DESIGN AND MODELING FOR NANO-AND BIOPHOTONICS APPLICATIONS,  
*Dr. S. Tanev,*
- 16:00** **L17.** WILL ANYONE REMEMBER US? THOUGHTS ON INFORMATION LOSS CAUSED BY PROGRES,  
*Prof. Peter Townsend*

**17:00** Coffee break**17:15 - 19:15 Exhibition and Poster session II (Topics C, D and E)****20:00 Official dinner**



## SCHOOL PROGRAM

**Thursday 23.09.2010****D. LASERS IN BIOLOGY AND MEDICINE**

**9:00 L19.** RAMAN SPECTROSCOPY: A PROSPECTIVE TOOL IN LIFE SCIENCES,  
*Dr. Ute Neugebauer*

**10:00 L20.** NEW METHOD FOR CONTROL OF THE THERAPEUTIC EFFECT EFFICIENCY OF COLD LASER RADIATION,  
*Dr. R. Asimov (Canceled) ( L5 Prof. Prof. B. Jelenković takes this time)*

*Free afternoon and excursion*

**Friday 24.09.2010**

**9:00 – 12:00** Oral presentation of the selected best student posters

**SPIE and OSA awards - prize bestow**

**12:00 – 12:30** Closing session

- Poster session I** A. Laser - matter interactions  
B. Laser spectroscopy and metrology
- Poster session II** C. Laser remote sensing and ecology  
D. Lasers in biology and medicine  
E. Laser systems and nonlinear optics

**Scientific exhibition** - Tuesdat **21.09.2010** and Wednesday **22.09.2010**

**Stand 1** Thorlabs GmbH, *Dr. Julien Vigroux*



**Stand 2** Topica photonics AG, *Dr. Jan Shaefer*



**Stand 3** ASTEL Ltd., *Dr. Nikolay Georgiev*



**Stand 4** Coherent Ltd. *Dr. Plamen Jankov*



**Stand 5** Edinburgh Instruments Ltd.




## SCHOOL PROGRAM

Sunday 19.09.2009	Monday 20.09.2010	Tuesday 21.09.2010	Wednesday 22.09.2010	Thursday 23.09.2010	Friday 24.09.2010
	9:00 Opening	09:00-10:00	09:00-10:00	09:00-10:00	09:00-12:00
	09:30-10:30	Prof. Kenzo Miyazaki	Prof. HJCM Sterenberg	Dr. Ute Neugebauer	<b>Best posters</b>
10:00 Pliska Hotel	Prof. Shane Mayor	10:00-11:00	10:00-11:00	10:00-11:00	Oral presentations
10:30 IE-BAS building	10:30 <b>Thorlabs GmbH</b> Dr. Julien Vigroux	Prof. Miroslav Jelinek	Dr. Martin Leahy	Prof. Brana Jelenkovic	
10:30 - 17:00	10:45 <b>Toptica AG</b> Dr. Jan Shaefer	11:00-11:15 <b>Coffee break</b>	11:00-11:15 <b>Coffee break</b>	FREE AFTERNOON EXCURSION	OSA and SPIE awards
	11:15 <b>ASTEL Ltd.</b> Dr. Nikolay Georgiev				
	11:30 <b>Coherent Ltd.</b> Dr. Plamen Jankov				Prof. Alexandros Serafetinidis
	12:15 - 15:00 Lunch time	12:15 - 15:00 Lunch time	12:15 - 15:00 Lunch time		12:00 - 12:30 Closing session
	15:00 - 16:00 Prof. Pradip Ghosh	15:00 - 16:00 Prof. Christos Flytzanis	15:00 - 16:00 Dr. Stoyan Tanev		<b>14:00 - 19:00</b>
16:00-17:00 Prof. David Sarkisyan	16:00-17:00 Prof. Vladimir Serkin	16:00-17:00 Prof. Peter Townsend	Conference bus Nessebar - Sofia		
	17:00-17:15 <b>Coffee break</b>	17:00-17:15 <b>Coffee break</b>	17:00-17:15 <b>Coffee break</b>		
17:30 - 20:00 Registration	17:15 - 18:15 Prof. Luigi Moi	17:15 - 18:15 Dr. John Travers	17:15 - 19:15 <b>Exhibition and Poster Session II</b> <i>Topic C, D and E</i>		
		18:15 - 19:15 Prof. Ady Arie			
	19:15 - 20:00 <b>Free time</b>	19:15 - 21:15 <b>Exhibition and Poster Session I</b> <i>Topic A and B</i>	19:15 - 20:00 <b>Free time</b>		
	20:00 <b>Welcome party</b>		20:00 <b>Official dinner</b>		