

Industrial applications of irradiation-driven phenomena in condensed matter systems

Workshop October 10- 11, 2024, Rethymno, Crete

All sessions will be held at the Institute of Plasma Physics and Lasers (IPPL), ippl.hmu.gr (Tria Monastiria, GR-74100 Rethymnon), except for the afternoon session on Thursday 10 October, which will be held in a renovated Venetian olive mill. The venue can be reached from Rethymno Centre by a special bus rented by IPPL that will start at 09:00 a.m. (EEST -Eastern European Summer Time) each day from the center of Rethymno town outside the eastern gate of municipal garden in Dimitrakaki Str.

Thursday, October 10

09:00 EEST	Departure from the centre of Rethymno to IPPL
09:30-10:00	Workshop opening: Nektarios Papadogiannis - Andrey Solov'yov M. Tatarakis , Institute of Plasma Physics and Lasers, Rethymno, Greece <i>Scientific activities in IPPL/HMU</i>
10:00-10:30	Davide Valzani, Davide De Salvador , University of Padova, Padova, Italy <i>Progress in Germanium Gamma Undulator Development Using Pulsed Laser Melting Technique</i>
10:30-11:00	Laura Bandiera , Istituto Nazionale di Fisica Nucleare, Ferrara, Italy <i>Experimental results with positrons</i>
11:00-11:30	Coffee break
11:30-12:00	Kawal Sawhney, John Sutter , Diamond Light Source, Didcot, United Kingdom <i>UK Diamond Light Source upgrade (online)</i>
12:00- 12:30	Marco Romagnoni , University of Ferrara, Ferrara, Italy <i>Analysis of crystals characterized at Diamond Light Source (online)</i>
12:30- 13:00	Thu Nhi Tran Caliste , ESRF, France <i>Using ESRF facility for the crystals characterisation</i>
13:00- 13:30	Raffaele Agostino , STAR at the University of Calabria (on-line) <i>Compton scattering based LSs</i>
13:30–14:30	Meal time
14:30-15:30	Tour in the Institute of Plasma Physics and Laser
15:30-16:00	Travel from IPPL to Venetian olive mill
	Afternoon session in a renovated venetian olive mill: Technology related topics (Chair: Nektarios Papadogiannis)
16:00-16:20	Konstantinos Kaleris , Institute for Plasma Physics and Lasers, Hellenic Mediterranean University, Heraklion, Greece (on behalf of K. Kaleris, E. Kaselouris, V. Dimitriou, E. Kaniolakis-Kaloudis, M. Bakarezos, M. Tatarakis, N.A. Papadogiannis, and A. V. Korol, G.B. Sushko, A. V. Solov'yov) <i>Modelling of experimentally feasible acoustically driven crystalline undulators</i>
16:20-16:40	Matthew Dickers , University of Kent, Canterbury, United Kingdom (on behalf of N. Mason, A. V. Korol, A. V. Solov'yov) <i>Modelling $C_{1-x}B_x$ Structures and Channelling Dynamics in Periodically Bent Crystals</i>
16:40-17:00	Rebecca Doweck , European Synchrotron Radiation Facility, Grenoble, France <i>Multi-technical study of Boron-doped diamond for undulator application"</i>
17:00-17:20	Suzana Petrović , „VINČA" Institute of Nuclear Sciences - National Institute of the Republic of

17:20-17:40	Serbia, University of Belgrade <i>Laser surface texturing of Ti-based multilayers for biomedical application</i> B. M. Gaković , Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia (on behalf of C. Siogka, J. Tsibidis, B. Sagbas, S. M. Petrović) <i>Modifications of Nb/Ti nano layer composite with femtosecond laser pulses</i>
17:40-18:00	Vincenzo Guidi , University of Ferrara, Italy <i>Experimental results with electrons for the LS- experiment</i>
18:00–19:00	Round table discussion
19:30–23:00	Conference dinner

Friday, October 11

09:00 EEST	Departure from the centre of Rethymno to IPPL
09:30- 10:00	Morning session I: Research and development for future markets (Chair: Nigel Mason) Laura Bandiera, Vincenzo Guidi, Andrey V. Solov'yov <i>Technology potential within the scientific projects</i>
10:00-10:30	Thomas G. Maris , University of Crete & Maris Magnetics PC & RTsafe PC, Heraklion, Greece <i>Polymer gel dosimetry: Clinical and non-clinical applications</i>
10:30-11:00	Dusan Korytar , Integra TDS, Slovakia (on-line) <i>Recent progress in X-ray crystal optics</i>
11:00-11:30	Riccardo Signorato , CINEL (scientific instruments), Padova, Italy <i>TBA</i>
11:30-11:50	Coffee break
11:50-12:15	Morning session II: Research and development for future markets (Chair: Andrey V. Solov'yov) Irfan Kuvvetli , DTU Space, Department of Space Research and Technology, Technical University of Denmark, <i>Another PAHTFINDER Project</i> <i>i-RASE: intelligent radiation sensor readout system for high-energy astronomy</i>
12:15-12:40	Vladimir A. Srećković , <i>Collisional and radiative databases/datasets of importance for molecular dynamics</i>
12:40-13:15	Linking academia and industry: Discussing practical steps: IPR, Non-disclosure agreements (Legal representatives of universities, on-line participation)
13:15	Workshop closing
13:15–14:30	Meal time
14:30 – 17:30	Afternoon session: Internal discussion of the MultiChem consortium Publication policy within Consortium Last year project implementation