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Workshop 1: HISTORY, STATUS AND FUTURE OF LASER IGNITED COMBUSTION ENGINES

691688 LASIG-TWIN: LASER IGNITION - A TWINNING COLLABORATION FOR FRONTIER RESEARCH IN ECO-FRIENDLY FUEL-SAVING COMBUSTION (http://www.lasig-twin.eu/)

Date: 29-30 September 2016
Place: National Institute for Laser, Plasma and Radiation Physics
Magurele, Bucharest 077125, ROMANIA

- PROGRAMME -

- DAY 1: 29 SEPTEMBER 2016 -

9:00 - 9:30	Registration
9:30 - 9:45	**Welcome. Introduction** Nicolaie PAVEL, Dr. — National Institute for Laser, Plasma and Radiation Physics (INFLPR), Bucharest, ROMANIA
9:45 - 10:45	**HISTORY** **Early Achievements, Developments, Solutions and Current Challenges in Laser Ignition** Ernst WINTNER, Professor Emeritus — Technische Universität Wien, Wien, AUSTRIA 10:30-10:45 Questions & Answers
10:45 – 11:00	Coffee break
11:00 – 12:00	**The Effects of Ignition Discharge Parameters on Combustion of Homogeneous Mixtures in Engines** Radu CHIRIAC, Prof. Dr. — University POLITEHNICA of Bucharest, The Faculty of Mechanical Engineering and Mechatronics, Bucharest, ROMANIA 11:45-12:00 Questions & Answers
12:00 – 13:00	Lunch time
13:00 – 14:00	**STATUS** **Laser Ignition for Space Propulsion - I -** Gerhard KROUPA, DI — Carinthian Tech Research (CRT), 9524 Villach, AUSTRIA 13:45-14:00 Questions & Answers
14:00 – 15:00	**STATUS** **Laser Ignition for Space Propulsion – II -** Mr. Michael BÖRNER — German Aerospace Center, Institute of Space Propulsion, Hardthausen, GERMANY 14:45-15:00 Questions & Answers
15:00 – 15:15	Coffee break
15:15 - 16:00	**THE FUTURE** **- Teams in LASIG-TWIN Tackling Technological Challenges - Standardization, Legislative, Political and Social-Ethical Challenges for Laser Ignition** Erik BECKERT, Dr. — FRAUNHOFER IOF, Jena, GERMANY 15:50-16:00 Questions & Answers
16:00 - 16:45	**DISCUSSION SESSION** (GUESTS AND PROJECT' PARTNERS) Moderated Discussion Round; Moderators: Erik BECKERT, PAVEL Nicolaie

- END OF DAY 1 OF THE WORKSHOP -

18:30 DINNER (based on invitation)

Workshop 1: HISTORY, STATUS AND FUTURE OF LASER IGNITED COMBUSTION ENGINES

- DAY 2: 30 SEPTEMBER 2016 -

9:00 - 10:00	**STATUS** **Automotive Applications – I -** Geoffrey DEARDEN, Prof. Dr. The University of Liverpool, UNITED KINGDOM 9:45-10:00 Questions & Answers
10:00 - 11:00	**STATUS** **Automotive Applications – II -** Traian DASCALU, Dr. INFLPR, Bucharest, ROMANIA Adrian BIRTAS, Dr. Renault Technologie Roumanie, Bucharest, ROMANIA 10:45-11:00 Questions & Answers
11:00 – 11:15	Coffee break
11:15 - 12:00	**THE FUTURE - Technological Challenges for the Application of Laser Ignition** Moderated Discussion Round. Moderators: Geoffrey DEARDEN Mr. Mark BÄRWINKEL University of Bayreuth, Bayreuth, GERMANY
12:00 – 13:00	Lunch time
13:00 - 13:30	**Wrap-up, Outlook to the Future Workshop Program and Workshop 2 in Bayreuth** Mark BÄRWINKEL, Nicolaie PAVEL
13:30 - 14:10	**DISCUSSION SESSION** (GUESTS AND PROJECT' PARTNERS)
14:15 – 16:00	**LABORATORY TOUR** ▹ **LABORATORY OF SOLID-STATE QUANTUM ELECTRONICS** (ecs.inflpr.ro); 45 min. ▹ **LABORATORY OF LASER INDUCED PHOTOCHEMISTRY** (http://llp.inflpr.ro/); 30 min. ▹ **X-RAY MICROTOMOGRAPHY LABORATORY** (http://tomography.inflpr.ro/); 30 min.

- END OF THE WORKSHOP -

18:30 DINNER (based on invitation)

The workshop will be held in a seminar room of THE NATIONAL LIBRARY OF PHYSICS - Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering (IFIN-HH).

The Library is located in the courtyard of INFLPR.