

THIN FILMS TECHNOLOGIES AT ISSP UL April 20,2022 | 12:00 (CET)



THE AIM of this webinar is to give an overview of available facilities, knowledge and experience in Thin Films related research at ISSP UL as well as examples of ongoing research activities including:

- Smart Metal Oxide Nanocoatings and HIPIMS Technology;
- Functional ultra wide bandgap gallium oxide and zinc gallate thin films and novel deposition technologies;
- Large area deposition technologies of multifunctional antibacterial and antiviral nanocoatings.

Transparent Conductive Films Sputtering Evaporation Education Course Thin Film Science and Deposition Technologies' (Theory and labs) Technologies' (Theory and labs)

THE OFFER is aimed at users from academia and industries promoting both service and collaborative research. The Thin Films Laboratory is focused on thin film deposition and nanocoating of a wide variety of inorganic materials, using different deposition techniques from existing and new tools, including:

PVD vacuum multifunctional R&D cluster SAF25/50 (thermal, e-beam and magnetron sputtering), magnetron sputtering G500M cluster including High Power Impulse Magnetron Sputtering (HiPIMS), PLD (Pulsed Laser Deposition), MOCVD (Metal Organic Chemical Vapour Deposition), and ALD (Atomic Layer Deposition).





Dr. habil. phys., Prof. JURIS PURANS is a head of Thin Films Laboratory. Since 2013 he is a full member of the Latvian Academy of Science. In 2001, 2005, 2008 he received a qualification of Professors of Universities in France, but in 2003-2005 - Prof. COC Universita' di Trento, 2005-2008 - Prof. University of France. 30-years of growing experience in the R&D of electrochromic, thermochromic, TCO thin films, HIPIMS magnetron sputtering and characterization of various materials including Synchrotron Radiation Facilities for x-ray absorption spectroscopy. Over 197 scientific papers (h-index=34, citation 2913). Juris.Purans@cfi.lu.lv



ISSP UL (Institute of Solid State Physics, University of Latvia) is an internationally recognized leader in materials science and cross-disciplinary topics, conducting competitive research, educating students and offering innovative solutions for industrial needs. It is located in 10 000 m² office and laboratory building with modern infrastructure for the synthesis and analysis of various types of materials and certified 650 m² ISO class 4 - 8 cleanroom space for dust-free experiments. The work is organized in the form of Open Labs, available to all researchers, industry and students. In order to promote export of scientific services in the area of innovative materials based technologies and cooperation with the industry special platform <u>Materize</u> is created. www.cfi.lu.lv/en/