



International Seminar

4th & 5th December

Group of Microscopy and Spectroscopy of Surfaces

Department of Electron Microscopy

Institute of Scientific Instruments of the Czech Academy of Science

Královopolská 147, Brno 612 64, Czech Republic

(Lecture hall)

Program

December 4 (MON)

9:00 – 9:10 Welcome speech Dr. Eliška Mikmeková (*Microscopy and Spectroscopy of Surfaces group leader*)

9:10 – 10:00 Dr. Ilona Müllerová (Director of the Institute of Scientific Instruments of the Czech Academy of Science, Brno, Czech Republic) Scanning Low Energy Electron Microscopy at ISI - an overview

10:00 – **10:50** Dr. Leonard Francis (International Iberian Nanotechnology Laboratory, Braga, Portugal) Advanced Electron Microscopy and Spectroscopy of Transition Metal Chalcogenide (TMDCs) low dimensional materials

10.50 – **11:40** Dr. Sergio de la Barrera (*Carnegie Mellon University, Pittsburgh, PA, USA*) Low-energy electron microscopy and spectroscopy of two-dimensional materials

Lunch break

14:00 – **14:50** Prof. Eugene Krasovskii (University of the Basque Country, Bilbao, Spain) **THEORY OF ELECTRON SCATTERING FROM SURFACES AND ULTRATHIN FILMS** **14:50** – **15:40** Dr. Vladimir Nazarov (*Research Center for Applied Sciences, Academia Sinica, Taipei, Taiwan*) **Probing quasi-two-dimensional crystals with electrons: One-step inelastic and elastic scattering theory**

15:40 – **16:30** Dr. Luděk Frank (Institute of Scientific Instruments of the Czech Academy of Science, v.v.i., Brno, Czech Republic) Ultra-low energy SEM/STEM of graphene

December 5 (TUE)

9:30 – **10:20** Prof. Zhongwu Liu (School of Materials Science and Engineering, South China University of Technology, Guangzhou, China) Performance improvement and microstructure characterizations of permanent magnetic materials

10:20 – **11:10** Dr. Michael Lejeune (University of Picardie Jules Verne, Amiens, France) Surfaces and interfaces : elaboration and characterization

11:10 – 12:00 Eng. Thomas Schachinger (Centre for Transmission Electron Microscopy (USTEM), TU Wien, Vienna, Austria) Electron Vortex Beams in a TEM: From peculiar Landau state rotations towards magnetic measurements on the nanoscale

Transport

Connection from the Main Railway Station: tram stop 12 Skácelova stop (the stop is across the street from ÚPT).

Connection from the Bus Station: bus 67 Skácelova stop (stop is in front of the entrance to the ÚPT). Other public transport links: buses 44 and 84, trolleybus 30, Skácelova stop.

