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## IAP-SEMINAR

## **ANNOUNCEMENT**

Date: **Tuesday, 29.11.2016** 

Time: **16:00 s.t.** 

Location: Technische Universität Wien, Institut für Angewandte Physik, E134

yellow tower "B", 5<sup>th</sup> floor, Sem.R. DB gelb 05 B (room number

DB05L03), 1040 Wien, Wiedner Hauptstraße 8-10

Lecturer: **Dr. Luděk Frank** 

Institute of Scientific Instruments, The Czech Academy of Sciences,

Brno/CZ

Subject: Very Low Energy Scanning Electron Microscopy

Abstract: The seminar lecture will introduce the scanning electron microscopy with the biased

specimen that enable arbitrary variations of the landing energy of electrons at consistent quality of images. Fundamental electron-optical features of this configuration will be described together with appropriate detection strategies, examples of proven detectors and other required features of the device. Results of demonstration experiments will be presented for imaging in reflected as well as transmitted electrons throughout the entire energy scale. Application examples concerning important families of samples will include metallic and non-metallic materials and semiconductors as well as sections of biological tissues. Treatment of surfaces with slow electrons will be also

discussed.

All interested colleagues are welcome to this seminar lecture (45 minutes presentation followed by discussion).

W. Werner e.h. (Seminar-Chairperson)

F. Aumayr e.h. (LVA-Leiter)