



TECHNISCHE
UNIVERSITÄT
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IAP-SEMINAR

EINLADUNG

- Termin: **Dienstag, 12.3.2013 um 16:00 Uhr**
Ort: **Technische Universität Wien,
Institut für Angewandte Physik,
Seminarraum 134A, Turm B (gelbe Leitfarbe), 5. OG
1040 Wien, Wiedner Hauptstraße 8-10**
- Vortragende: **Rahila Khalid**
TU Wien, IAP
- Thema: **Secondary electron emission studied by secondary electron
electron energy loss coincidence spectrometer (SE2ELCS)**

Kurzfassung

To investigate the mechanisms responsible for the emission of secondary electrons, a reflection ($e, 2e$) coincidence spectrometer named Secondary Electron Electron Energy Loss Coincidence Spectrometer (SE2ELCS) has been developed which allows one to uncover the relation between the features in the spectra which are due to energy losses and true secondary electron emission structures. Correlated electron pairs are measured with a hemispherical mirror analyzer (HMA) and a time of flight analyzer (TOF) by employing a continuous electron beam. An effort has been made to increase the coincidence count rate by increasing the effective solid angle of the TOF analyzer and optimizing the experimental parameters to get optimum energy resolution. Double differential coincidence spectra for free electron metals (Al, Si), noble metals (Ag, Au) and highly oriented pyrolytic graphite (HOPG) have been measured using this coincidence spectrometer. The interpretation of these data set will be presented using a semiclassical three step model based on linear response theory of semi-infinite solids.

*Alle interessierten Kolleginnen und Kollegen sind zu diesem Seminar
(45 min mit anschließender gemeinsamer Diskussion) herzlich eingeladen.*

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

*H. Störi e.h.
(LVA-Leiter)*