

GÖCH-OBERÖSTERREICH PROGRAMMVORSCHAU

02.05.2017

Univ. Doz. Dr. Peter Thiesen
Accurion GmbH, Göttingen

“Microscopic Characterization of
Interfaces and ultra thin layers with
Spectroscopic Imaging Ellipsometry
(SIE)”

Johannes Kepler Universität Linz
17.15 Uhr, HS 13 (TNF-Turm)



Univ.-Prof.Dr. Günther Knör
Leiter GÖCH – Oberösterreich

Microscopic Characterization of Interfaces and ultra thin layers with Spectroscopic Imaging Ellipsometry (SIE)

Conventional ellipsometry is well established in the field of thin film metrology due to the exceptionally high resolution in the z-axis, enabling very accurate thickness measurements for nano- and microfilms. The approach of spectroscopic imaging ellipsometry (SIE) differs from conventional ellipsometry in that the measurements are based on a series of micrographs taken at dedicated orientations of the optical components. The primary measurements are microscopic maps of the ellipsometric angles Delta and Psi or micro maps of dedicated elements of the Müller Matrix. A number of applications in situ and ex situ applications will be addressed in the field of biomolecular interaction, protein and lipid layers, electrochemical applications as well as organic electronics, and 2D materials. A short excursion in imaging the water interface by Brewster Angle Microscopy will be included.