



Swedish Research School in Tribology

Research school course plan

Title:	<i>Surface analysis</i>
Points:	4 hp
Time:	26-28 January 2010
Objectives:	After completion the student should be able to <ul style="list-style-type: none">- explain the physical principle and describe the performance (such as room resolution and sensitivity) for the included methods,- describe the interaction between radiation (electrons, ions, X-rays) and the sample surface including the origin of the detected signal,- describe the design of the most important instruments,- compare techniques and methods regarding performance and practical use,- chose appropriate methods to solve a specific problem.
Contents:	Techniques and methods for surface imaging and analysis, such as SEM, AFM, EDS in SEM, XPS, Auger, SIMS, with a focus on characterization of surfaces and studies of wear mechanisms.
Teaching:	Lectures 12 h, labs and demonstrations 8 h
Prerequisites:	-
Examination:	web based (via Marratech); 2 weeks after the week when the course was given
Grading:	Pass or Fail
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Literature:	Selected papers and copied book chapters