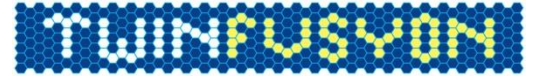




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TWINFUSYON Guest Lecture

Surface analytics with electron spectroscopy on coated steel sheets

CEITEC MU

Kotlářská 267/2, Brno

Building 9, Hall

START: 11.00

WEDNESDAY

3/5/2017

Guest lecturer: David Stifter,

Zentrum für Oberflächen- und Nanoanalytik / ZONA, Johannes Kepler
Universität Linz / JKU

Modern steel industry faces the challenge to provide new innovative materials and products with properties which fulfill the requirements of the market, especially including aspects related to high strength, light weight, reliable galvanizability, increased corrosion resistance and aesthetics. Phenomena like surface segregation of alloying elements, formation of oxide layers and corrosion products call for advanced analytical studies of the developed materials down to the nanoscale.

In this talk X-ray photoelectron and Auger electron spectroscopy will be shown to provide as surface sensitive analytical methods valuable insight for understanding the structure and processes occurring on the surfaces and interfaces of modern coated steel materials. In this context it will be underlined that great care has to be taken in the investigation of such uncooperative surfaces, which exhibit a highly complex and heterogeneous nature. Adverse effects - related to differential charging or material degradation of partly unstable compounds formed on the surfaces - have to be carefully taken into account to perform accurate surface analytics.

More information about TWINFUSYON lectures is available on the [TWINFUSYON website](#).



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