



Der Wissenschaftsfonds.

Special Research Program (SFB) F45 Functional Oxide Surfaces and Interfaces (FOXSI)

7th Annual PhD Workshop

31. January– 03. February 2018, Gasthof Stenitzer, 8967 Haus im Ennstal

Wednesday, 31. January 2018

7:30 – ca. 11:15	Bus transfer from Vienna Karlsplatz to Haus im Ennstal, Styria
11:15	Check-in
11:15 – 12:30	Get-together and LUNCH
13:30 – 16:30	Discussions
18:00 – 19:30	DINNER
20:00 – 20:30	Thomas Götsch Kinetic and thermodynamic investigations of the iron exsolution in lanthanum strontium ferrite (03)
20:30 – 21:00	Nevzat Yigit Preferential CO oxidation on cobalt-based perovskite materials: synthesis, characterization and catalytic activity (02)
21:00 – 23:00	Poster Session

Thursday, 01. February 2018

- 07:30 – 08:30 **Breakfast**
- 08:30 – 09:00 **Johannes Zeininger**
Hydrogen oxidation on a μm -sized curved rhodium crystal (04)
- 09:00 – 09:30 **Matthias Grünbacher**
Properties and reactivity of adsorbed and dissolved hydrogen in acceptor-doped ceria materials (03)
- 09:30 – 10:00 **BREAK**
- 10:00 – 10:30 **Stephan Pollitt**
Stability and reactivity studies on $\text{Au}_n(\text{SR})_m$ nanoclusters supported on oxides by in-situ XAFS (02)
- 10:30 – 11:00 **Clara Garcia**
Thiolate protected gold nanoclusters, catalysts for liquid phase oxidation reactions: size and oxide support effect (02)
- 11:00 – 12:00 **LUNCH**
- 13:00 – 17:00 Discussions
- 18:00 – 19:00 **DINNER**
- 19:30 – 20:00 **Peter Lackner**
Tetragonal and monoclinic ZrO_2 films in STM and XPS - connections between structure and electronic states (05)
- 20:00 – 20:30 **Giada Franceschi**
In-situ investigations of thin pulsed-laser-deposited $\text{La}_{0.8}\text{Sr}_{0.2}\text{MnO}_3$ films (07)
- 20:30 – 21:00 **Michele Riva**
Pulsed Laser Deposition of thin $\text{In}_2\text{O}_3(111)$ films on $\text{YSZ}(111)$ (07)
- 21:00 – 23:00 **Poster Session**

Friday, 02. February 2018

- 07:30 – 08:30 **Breakfast**
- 08:30 – 09:00 **Zdenek Jakub**
Partially dissociated water dimers on hematite ($1\bar{1}02$) surface (07)
- 09:00 – 09:30 **Alexander Hutterer**
Oxygen redox kinetics at Pt electrodes on zirconia (09)
- 09:30 – 10:00 **Jakub Planer**
First-principles studies of the electronic and structural properties of rutile vanadium (IV) dioxide and surface characterization of derived $\text{VO}_2(110)$ slabs (11)
- 10:00 – 11:15 **General Discussion – Project Planning**
- 11:15 – 12:00 **LUNCH**
- 13:00 – 17:00 Discussions
- 18:00 – 19:00 **DINNER**
- 19:30 – 21:00 **General Assembly**

Saturday, 03. February 2018

- 07:00 – 08:00 **Breakfast**
- 08:30 Bus transfer to Vienna, Secession (return ca. 13:00)

Posters

Wolfgang Wallisch (P 01):

Investigations towards $\text{La}_2\text{CoMnO}_6$: Transformations of electronic and optical properties

Verena Pramhaas (P 02):

Structure effects of CO adsorption on Pt

Abdul Motin (P 02):

Surface science approach to Pt/carbon model catalysts: XPS, STM and microreactor studies

Vera Truttmann (P 02):

Ligand exchange reaction studies of Au_{11} nanoclusters on surfaces

Kevin Ploner (P 03):

The quest for key parameters controlling the selectivity of Cu on different ZrO_2 polymorphs in methanol steam reforming

Maximilian Watschinger (P03):

In-situ and operando FTIR studies on Cu/t- ZrO_2 systems

Daniel Hauser (P 03):

Investigations on structure, composition and phase transition of pyrochlore thin films

Norbert Köpfle (P 03):

Mechanism and intermediates of methane dry reforming on bimetallic PdZr surfaces studied by In-Situ XPS

C. Freytag, M. Datler, I. Bepalov, J. Zeininger, G. Rupprechter, Y. Suchorski (P 04):

Transmitting metal-oxide interaction by solitary chemical waves: H_2 oxidation on Rh

P. Winkler, J. Zeininger, S. Buhr, G. Rupprechter, Y. Suchorski (P 04):

Extracting information from high voltage environment: WiFi is the best isolator

Zhiyu Zou (P 07):

Zirconia-supported transition metal clusters and the metal-oxide interface

Alexander Viernstein (P 09):

STO and light: Where do the oxygen vacancies go?

Tobias Huber (P 09):

3-Point measurement in solid state devices: Why everybody measures artefacts

Wernfried Mayr-Schmölzer (P 11):

Meta-GGA functionals applied to the adsorption of methyl groups on Ni and Pt