

## Poster session Wednesday, December 7, 2022

### Catalysis

24	Unraveling the effect of Rh steps on the NO reduction by CO	Fernando Garcia Martinez (Deutsches Elektronen-Synchrotron DESY)
32	Evolution of active species in ethylene epoxidation over silver foil revealed by ambient pressure X-ray photoelectron spectroscopy	Man Guo (ETH Zurich)
54	The study of steam reforming of dimethyl ether (DME) on Pt(111)	Moonjung Jung (Gwangju Institute of Science and Technology)
57	NAP-XPS study of Mo/HZSM-5 under methane dehydroaromatization conditions	Stephan Bartling (Leibniz-Institut für Katalyse)
67	The electronic structure of PdAu alloys during selective alkyne hydrogenation	Patrick Zeller (Fritz-Haber-Institute of the Max-Planck Society)
75	In situ analysis of propane oxidation on Ru/CeO <sub>2</sub> catalyst by NAP-XPS	Thu Ngan Dinhová (Charles University)
79	Size-selected alumina-supported Pd nanoparticles under methane-oxidation conditions studied by NAP-XPS	Georg Held (Diamond Light Source)
95	APXPS investigation on Co-Mn oxides under in operando conditions	Carlos Ostos (UdeA)
96	Surface chemistry of Co <sub>3</sub> O <sub>4</sub> and CoMn <sub>2</sub> O <sub>4</sub> sputtered high-textured thin films in the CO catalytic oxidation: An operando NAP-XPS study	Carlos Ostos (UdeA)
97	Monitoring active sites for CO <sub>2</sub> methanation on Ni/CeO <sub>2</sub> catalysts by NAP-XPS	Virginia Pérez-Dieste (ALBA synchrotron)

### Environmental chemistry

20	Understanding the "Water-on" surface catalysis in the context of atmospheric chemistry	Xiangrui Kong (University of Gothenburg)
43	Water ordering and freezing behavior on Feldspar affected by exposure to liquid water	Markus Ammann (Paul Scherrer Institut)
44	Adsorption of hexylamine on ice	Markus Ammann (Paul Scherrer Institut)
51	Acid-base chemistry of ammonia at the ice-vapor interface	Clemens Richter (Fritz-Haber-Institute of the Max-Planck Society)
84	Atmospheric iodine oxide surface propensity determined by combined theoretical calculations and liquid jet XPS	Antoine Roger Roose (Paul Scherrer Institut)
86	The reaction of HCl with calcite particles in the context of stratospheric aerosol injection	Sandro Vattioni (ETH Zurich)
107	Surfactant-ion interactions at seawater-vapor interfaces	Shirin Gholami (Fritz-Haber-Institute of the Max-Planck Society)

### Technical developments

30	A lab source electrochemical NAP-XPS setup	Hassan Javed Nagra (Leiden University)
31	Catalysis on glowing catalysts: Breaking the 1000°C limit in APXPS	Claudiu Colbea (ETH Zurich)
40	Environmental science at ISS/SLS: Endstation development and characteristics	Thorsten Bartels-Rausch (Paul Scherrer Institut)
41	O K-edge NEXAFS in presence of high water vapor pressures	Thorsten Bartels-Rausch (Paul Scherrer Institut)
45	Opening complex data: How FAIR data handling helps during a beamtime	Thorsten Bartels-Rausch (Paul Scherrer Institut)
56	Tailored mass spectrometry solutions for the gas analysis in APXPS setups	Ina Schmidt-Hanke (InProcess Instruments GmbH)
99	Commissioning of photo-ALD capability at Max IV SPECIES APXPS end station for time-resolved APXPS studies	Rosemary Jones (Lund University)
100	A flow-focused droplet train for investigating liquid phase processes with ambient pressure XPS	David Starr (Helmholtz-Zentrum Berlin)