

# Posters - Session 1- Wednesday, July 10

- S1-P1** Boosting of the associative pathway in CO<sub>2</sub> methanation reaction by adding Mn on Rh/ZrO<sub>2</sub> catalyst. Ayala Flores Fernando - *Universidad Michoacana de San Nicolas de Hidalgo (Mexico)*
- S1-P2** IR spectroscopic tools dedicated to revealing reaction mechanisms. Bazin Philippe – *Université de Caen (France)*
- S1-P3** ROCK: a versatile beamline for *operando* quick-XAS monitoring catalysts life span at the second and micrometer resolution. Beauvois Anthony - *Synchrotron SOLEIL (France)*
- S1-P4** Site-selective insights in the activation and decomposition pathways of N<sub>2</sub>O over Fe-FER using *operando* XAS, EPR and DRIFTS. Buttignol Filippo - *Paul Scherrer Institut (Switzerland) / Institute for Chemical Sciences and Engineering, Ecole Polytechnique Fédérale de Lausanne (EPFL) (Switzerland)*
- S1-P5** Reducibility and restructuring of ruthenium nanoparticles in Ru/Al<sub>2</sub>O<sub>3</sub> catalysts. Lazzarini Paolo - *University of Turin (Italy)*
- S1-P6** SO<sub>2</sub> poisoning of Cu-CHA deNO<sub>x</sub> catalyst: insights from X-ray absorption spectroscopy. Molokova Anastasia - *ESRF (France)*
- S1-P7** Coupling laser Induced Breakdown Spectroscopy and infrared spectroscopy for zeolites characterization. Talla Tembonso Sorelle - *Complexe de recherche interprofessionnel en aérothermochimie (CORIA) (France)*
- S1-P8** Application of Hard-Soft MCR-ALS and IR spectroscopy for isotherms assessment: an innovative method for the characterization of adsorption at the molecular scale. Aboulayt Reda - *Université de Caen (France)*
- S1-P9** ZnO-supported MoS<sub>2</sub> catalysts for CO<sub>2</sub> hydrogenation: insights from in-situ X-ray absorption. Andrade Silva Alves Gustavo - *TU Wien (Austria)*
- S1-P10** Towards the automatization of catalysts synthesis thanks to real-time in-situ Raman spectroscopy coupled with artificial intelligence. Dubois Clara - *Centrale Lille (France) / HORIBA France SAS [Villeneuve D'ascq] (France) / Inria Lille - Nord Europe (France)*
- S1-P11** FEXRAPV study of photocatalytic oxygen evolution reaction on epitaxial Ni-doped g-Fe<sub>2</sub>O<sub>3</sub>. Fonda Emiliano - *Synchrotron SOLEIL (France)*
- S1-P12** The role of metal-support interaction on the red-ox properties of palladium catalyst. Kozyr Elizaveta - *Università degli studi di Torino (Italy)*
- S1-P13** Mechanistic investigation of the methanol-to-olefins process with co-feeding via *operando* UV-vis spectroscopy. Lemaire Phebe - *Industrial Catalysis and Adsorption Technology (INCAT) (Belgium) / Laboratory for Chemical Technology (LCT) (Belgium)*
- S1-P14** *Operando*-FTIR studies on Fe,Pt-zeolites for HC-SCR of NO<sub>x</sub> and N<sub>2</sub>O: surface species spying surface redox properties. Leone Michele - *Chemistry Department, Sapienza University of Rome (Italy)*
- S1-P15** *In situ* evaluation of NiCeO<sub>2</sub> catalysts synthesized using the polymeric precursor method by XAS for CO<sub>2</sub> reduction. Possato Luiz G. - *Universidade Estadual Paulista Júlio de Mesquita Filho São Paulo State University*
- SP-P16** Unraveling Transfer Hydrogenation Mechanisms by Ammonia Borane to Alkenes Over Copper Nanoparticles as Catalyst. Uboldi Matteo - *Dipartimento di scienze teoriche e applicate [Università degli Studi dell'Insubria] (Italy)*
- S1-P17** Analyzing Factors Impacting Citronellal Transformation Selectivity in Lewis Acid Sn- and Zr- Zeolites. Zhang Yuqi - *Department of Physical and Macromolecular Chemistry, Charles University (Czech Republic)*
- S1-P18** Spectroscopic and kinetic studies to elucidate the effect of Zn promoter on the CO<sub>2</sub> hydrogenation over Cu catalysts. Daviel Gómez - *Instituto de Tecnología Química, Universitat Politècnica de València (Spain)*

## Posters - Session 2- Thursday, July 11

- S2-P1** Site-selective dynamics of Fe centers in Fe-exchanged zeolites: an EPR spectroscopy and kinetic study. Cano-Blanco Daniel C. - *Paul Scherrer Institute (Switzerland) / Institute for Chemical Science and Chemical Engineering, Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne (Switzerland)*
- S2-P2** Active site and dynamic catalyst changes in a Ru based catalyst during CO<sub>2</sub> methanation reaction conditions. Concepcion Heydorn Patricia - *Instituto de Tecnologia Quimica (Spain)*
- S2-P3** FTIR study of interplay between acidic properties of zeolites and their efficiency in catalysis of one-pot three-component Prins-Friedel-Crafts reaction. Golis Petr - *Department of Physical and Macromolecular Chemistry, Faculty of Science, Charles University (Czech Republic)*
- S2-P4** Unravelling Ethanol Dehydration Mechanisms over H-ZSM-5 with Insights from In-Situ Infrared Spectroscopy. Lemaire Phebe - *Industrial Catalysis and Adsorption Technology (INCAT) (Belgium) / Laboratory for Chemical Technology (LCT) (Belgium)*
- S2-P5** Activation of molecular oxygen over zeolitic matrices traced by in-situ XAS, Mossbauer and FTIR spectroscopies. Mlekodaj Kinga - *J. Heyrovsky Institute of Physical Chemistry (Czech Republic)*
- S2-P6** *In-Situ operando* STEM Characterization of spherical Co/MoS<sub>2</sub> Nanoparticles for Conversion of Heavy Crude Oils. Ramos Manuel - *Departamento de Física y Matemáticas, Instituto de Ingeniería y Tecnología, Universidad Autónoma de Cd. Juárez (Mexico)*
- S2-P7** Characterization of active sites of Fe-Ni bimetallic atomic catalysts supported on ZIF-8 derived carbon for SCR of NO with C<sub>3</sub>H<sub>6</sub>. Su Yaxin - *Donghua university (China)*
- S2-P8** Full Field Hyperspectral quick-EXAFS Imaging to probe  $\mu\text{m}$  spatial modifications of catalyst bed during regeneration. Briois Valérie - *Synchrotron SOLEIL (France)*
- S2-P9** The synthesis of mesoporous Ti-SBA-15 catalysts for high-performance catalytic oxidative desulfurization of dibenzothiophene. Guntida Adisak - *Université de Caen (France)*
- S2-P10** Structural dynamics of Pt/CeO<sub>2</sub> catalysts during the water gas shift reaction insighted by NAP-RESPES and *operando* DRIFT spectroscopies. Loridant Stéphane - *Université Claude Bernard-Lyon 1, CNRS (France)*
- S2-P11** Full Field Hyperspectral Quick-EXAFS Imaging at the ROCK beamline: Adding Spatial Resolution to the Second Dynamic of Transformation of Bimetallic Catalysts along mm-sized Catalyst Bed. Marceau Eric - *Université de Lille (France)*
- S2-P12** Reverse oxygen spillover triggered by CO adsorption on Sn-doped Pt/TiO<sub>2</sub> for low-temperature CO oxidation. Oliviero Laetitia - *Université de Caen (France)*
- S2-P13** *Operando* XAS and DRIFTS Investigations into Bi-Promotion of the CO Oxidation Reaction over Supported Pt Nanoparticles. Siewe Joëlle - *Institute for Sustainable and Circular Chemistry (Netherlands) / Debye Institute for Nanomaterials Science (Netherlands)*
- S2-P14** Novel insights into H<sub>2</sub> activation over C<sub>3</sub>N<sub>4</sub>-based Ni single-atom catalysts with *in situ* and *operando* hydrogenation studies. Allasia Nicolò - *Politecnico di Milano (Italy)*
- S2-P15** In-situ Spectroscopic Monitoring of Reactant/Product-Catalyst Interactions on Atomically Dispersed Rh/Ce-HAP Catalysts for Syngas Production from Ethanol. Erdali Ayşe Dilay - *Bilkent University [Ankara] (Turkey)*
- S2-P16** Unveiling the mechanism of Zn-MOF-74 synthesis by time-resolved ATR-IR spectroscopy and high-energy X-ray diffraction. Kochetygov Ilia - *Paul Scherrer Institut (Switzerland)*
- S2-P17** Effect of CH<sub>3</sub>OH/CD<sub>3</sub>OD exchange on the selectivity of the methanol-to-olefins process measured by *operando* DRIFTS/GC. Maggiulli Luca - *Paul Scherrer Institute (Switzerland) / Institute for Chemical and Bioengineering [ETH Zürich] (Switzerland)*
- S2-P18** MoS<sub>2</sub> catalysts for the WGS reaction: Optimization of activity, stability and characterization by spectroscopy and microscopy at atomic scale. Nouma Saloua – *Université de Caen (France)*
- S2-P19** FT-IR investigation and chemometric analysis of isobutanol dehydration on H-FER. Vottero Eleonora – *Université de Caen (France)*