CRC - ELSEVIER CATALYSIS SYMPOSIUM

CATALYSIS IN A CHANGING ENVIRONMENT – LINKING FUNDAMENTAL ASPECTS TO ENGINEERING

Local Organizers: Roland A. Fischer and Jennifer Strunk; Catalysis Research Center, TUM. International Advisory Board: Evgeny A. Pidko, Maricruz Sanchez-Sanchez and Carsten Sievers.

Program

| Sunday | | | |
|-----------------|--|---|--|
| July 21st, 2024 | | | |
| Time | Speaker & Location | Topic | |
| 16:00 | IAS Faculty Club | Get Together - Drinks & Finger Food | |
| 17:00 | IAS Auditorium | Opening | |
| 17.00 | R. A. Fischer & | | |
| | M. Sanchez-Sanchez | Introduction | |
| | J. A. Lercher | Welcome Address | |
| | R. W. Fischer | Munich Catalysis Alliance of Clariant and TUM | |
| | Chair E. A. Pidko | Session 1 | |
| | | Catalysis Science – Personal Perspectives | |
| 17:30 | Avelino Corma | Heterogeneous catalysts design: getting inspiration from homo and | |
| | | enzymatic catalysis | |
| 18:15 | Rutger van Santen | How computational catalysis evolved | |
| 19:00 | | Dinner - TUM IAS Faculty Club | |
| 20:30 | IAS Auditorium | After Dinner Speech | |
| 21:00 | | End of Day 1 | |
| Monday | | | |
| | | July 22 nd , 2024 | |
| | CH 26411 | Session 2 | |
| | Chair C. Sievers | Site Design | |
| 9:00 | Yong Wang | tba | |
| 9:30 | Eranda Nikolla | Modulating metal cationic centers in non-stoichiometric mixed metal | |
| | | oxides for enhanced oxygen electrocatalysis | |
| 10:00 | Liney Arnadottir | Propane dehydrogenation on modified Pt catalysts | |
| 10:30 | | Coffee Break | |
| 11:00 | Moniek Tromp | Understanding catalysis: Probing and tuning active sites and people | |
| 11:30 | Yue Liu | Molecular reactions in chemical degradation of polyolefin plastics | |
| 12:00 | Cathy Chin | Journey of Acceleration and Liberation (JAL) of bound molecules towards | |
| | | transition states driving catalysis with excess potential | |
| 12:30 | Lunch & Round Table Discussion 1 – Site Design | | |
| | 01100444 | CRC Foyer & Garden | |
| | CH 26411 | Session 3 | |
| 14:00 | Chair M. Sanchez-S. | Energy Input | |
| | Ulrike Diebold | Surface science & catalysis – how's the relationship going? | |
| 14:30 | Silvia Bordiga | Optical spectroscopies as a "swiss army knife" in understanding catalysts. | |
| 15:00 | Andreas Jentys | Capture and hydrogenation of CO ₂ over bifunctional mesoporous catalysts Coffee Break | |
| 15:30 | Dava Flahartu | | |
| 16:00 | Dave Flaherty | New evidence for the active state and reaction pathways for ethylene epoxidation on silver | |
| 16:30 | Jennifer Strunk | Transfer of active sites between thermal and photocatalysis | |
| 17:30 | Jenninei Strank | Departure to shuttle bus | |
| 18:00 | | | |
| | Shuttle bus transfer to dinner location; departure from U6 subway station Conference Dinner | | |
| 18:30 | | | |
| 22:30 | | End of Day 2 | |

| Tuesday | | | |
|------------------------------|--|--|--|
| July 23 rd , 2024 | | | |
| Time | Speaker & Location | Topic | |
| | CH 26411 | Session 4 | |
| | Chair A. Jentys | Closing the Carbon Cycle | |
| 9:00 | Gabriele Centi | Solar fuels for carbon circularity and closing the cycle | |
| 9:30 | Angeliki Lemonidou | Reactive CO ₂ capture: Integrating calcium looping with dry reforming | |
| 10:00 | Unni Olsbye | Avoiding reactions to quantify diffusion of alkenes in zeolites: | |
| | | a new benchmark set by Temporal Analysis of Products (TAP) | |
| 10:30 | Coffee Break | | |
| 11:00 | Gerhard Mestl | Sustainability: A new driver for industry, not so new for oxidation catalysis | |
| 11:30 | Matt Neurock | tba | |
| 12:00 | Laura Gagliardi | Computational discovery of MOFs for a changing world | |
| 12:30 | Aditya Bhan | CO₂ hydrogenation on Cu-based catalysts | |
| 13:00 | Lunch & Round Table Discussion 2 – Energy Input & Closing the Carbon Cycle | | |
| | CRC Foyer & Garden | | |
| 14:00 | CH 26411 | Closing | |
| | Chair J. A. Lercher | Plenary Discussion | |
| 14:30 | End of Day 3 | Departure | |