

Sunday, 21 July 2024

17.15 ISHC 2024 Opening Ceremony

Chairs: Barbara Milani & Martin Albrecht

- 17.45 KL1 **Karen Goldberg** *Developing Mechanistic Insight to Allow Effective Use of Molecular Oxygen as a Reagent in Transition Metal Homogeneous Catalysis*
- 18.30 KL2 **Michael Neidig** *Down the Rabbit Hole: Illuminating the Organoiron Species Central to Organic Synthesis*
- 19.30 welcome mixer Piazza dell'Unità d'Italia

Monday, 22 July 2024

Chair: Giulia Licini

- 08.45 KL3 **Robert Franke** *An industrial perspective on carbonylation reactions*
- 09.30 ST01 **Sarah Yunmi Lee** *Copper-Catalyzed Cross Couplings of Tertiary Alkyl Halides Enabled by Cyclopropenimine-Based Ligands*
- 09.50 ST02 **Marko Hapke** *Catalytic Cyclotrimerization Reactions using Cobalt, Iron and Manganese Precatalysts*
- 10.10 Coffee Break

Chair: Anna Trzeciak

- 10.45 KL4 **Xiaohua Liu** *The design, synthesis and application of chiral guanidines*
- 11.30 ST03 **Damien Héroult** *Compartmentalized parallel kinetic resolution for simultaneous enantiomers synthesis*
- 11.50 ST04 **Montserrat Diéguez** *Synergistic approaches to catalyst design. Pushing the boundaries of asymmetric hydrogenation*
- 12.10 ST05 **Walter Baratta** *Ruthenium Catalysts for Hydrogen Transfer Reactions*
- 12.30 KL5 **Shigeki Matsunaga** *Development of Chiral Catalysts for Asymmetric C-H Functionalization*
- 13.15 Lunch Break

LAST UPDATE 21 JULY 2024

Chair: Cathleen Crudden

- 14.45 KL6 **Ana Albéniz** *Palladium catalyzed C–H arylation of simple arenes via metal-ligand cooperation and synergistic metal catalysis*
- 15.30 ST06 **Bas de Bruin** *8-Membered Ring Synthesis via Carbene Radicals*
- 15.50 ST07 **Martin Smith** *Ethylene oligomerisation chromium/PCNP catalysts*
- 16.10 Coffee Break

Chair: Johanna Blacquiere

- 16.45 KL7 **Luca Rocchigiani** *Mechanistic Adventures in Organometallic Chemistry: All That Glitters is not Gold*
- 17.30 ST08 **Johannes de Vries** *Use of Iridium-Catalyzed Transfer Vinylation as an Efficient Synthetic Route towards Bio-Based (bis)-Vinyl Ethers*
- 17.50 ST09 **Michael Unkrig-Bau** *Advancements in Palladium-Catalyzed Coupling Reactions: Novel Ligands and Comparative Catalyst Screening*
- 18.10 ST10 **Takuya Kodama** *Syntheses and Reactivities of Metallylenes Bearing a Phenalenyl-Based Ligand*
- 18.30 KL8 **Carolin Limburg** *Process development at BASF using Homogeneous Catalysis: Sodium Acrylate from Ethylene and CO₂*

Tuesday, 23 July 2024

Chair: Deryn Fogg

Symposium in honor of Robert H. Grubbs

- 08.45 KL9 **Alois Fürstner** *Ruthenium Carbenes by gem-Hydrogenation*
- 09.30 ST11 **Kyoko Nozaki** *Oxidative addition of C–H and E (group 13 and 14 elements)–H bonds to cyclopentadienone metal complexes*
- 09.50 ST12 **Cathleen Crudden** *Enantiospecific and Enantioselective Cross-Coupling of Sulfones*
- 10.10 Coffee Break
- 10.45 KL10 **Robert Tuba** *A New Era in the Development and Application of Olefin Metathesis Catalysts*
- 11.30 ST13 **Kristof Altus** *Room Temperature Ethene to Propene Using Sequential Solid-State Molecular Catalysts: InCrystallo Dimerization, Isomerisation and Metathesis*
- 11.50 ST14 **Marta Mon** *Development of an economical and sustainable methodology for the selective obtention of internal alkenes*
- 12.10 ST15 **Johanna Blacquiere** *Inspired by Electrocatalysis: Cooperative PR₂NR'₂ Ligands for Alkyne Functionalization Catalysis*
- 12.30 KL11 **Robert Waymouth** *A Paeon to Bob: Catalysis as an Enabling Science*
- 13.15 Lunch Break

LAST UPDATE 21 JULY 2024

LAST UPDATE 21 JULY 2024

14.00 **Posters** (uneven numbers)

15.30 **Posters** (uneven numbers) and Round Table discussion

16.15 Coffee Break

Chair: Cathy Dwyer

16.45 KL12 **Mari Rosen** *Towards a Sustainable Polyethylene Future Through Catalysis*

17.30 ST16 **Nora Janssen** *Accessing High Molar Mass Polyesters: Design of Al(III)/ M(I) Catalysts for Precise Epoxide and Anhydride Ring Opening Copolymerisation*

17.50 ST34 **Banothile Makhubela** *Paving the way to a carbon-neutral future: catalytic strategies for the conversion of biomass and carbon dioxide into valuable chemicals and fuels*

18.10 ST18 **Claudio Pellecchia** *New Zn(II) and Fe(II) catalysts for the synthesis and the chemical recycling of biodegradable (co)-polyesters*

18.30 KL13 **Eva Harth** *Carbyl Iminopyridyl Complexes for Polyolefin Synthesis*

19.15 Young-Industry mixer

Wednesday, 24 July 2024

Chair: Alceo Macchioni

08.45 KL14 **Todd Hyster** *Emergent Mechanisms in Photoenzymatic Catalysis*

09.30 ST19 **Rosa Llusar** *Mechanistic insights into the catalytic hydrogenation of organic substrates mediated by molybdenum sulfide clusters*

09.50 ST20 **Caterina Damiano** *Hemin Derivatives Anchored onto Colour Catcher®: Catalytically Active and Bio-Compatible Materials for CO₂ Valorisation and C-C Bond Formation*

10.10 Coffee Break

Chair: Carmen Claver

10.45 KL15 **Kylie Vincent** *What can we do with hydrogenases? From mechanism to biocatalytic hydrogenations*

11.30 ST21 **Marta Mosquera** *Organocatalysts vs metal catalysts for the controlled synthesis of bioplastics*

11.50 ST22 **Moshe Kol** *Poly(lactic acid) – circular economy with new catalysts*

12.10 ST23 **Stephen Ojwach** *Towards a circular economy: Production and degradation of poly(lactides) using N[^]O-donor Mn(II) and Zn(II) catalysts*

12.30 KL16 **Kurt Püntener** *Catalysis at Roche: Selected Highlights in Asymmetric Hydrogenations*

13.15 free afternoon

LAST UPDATE 21 JULY 2024

Thursday, 25 July 2024

Chair: Walter Leitner

- 08.45 KL17 **Timothy Noël** *From Batch to Flow: Advancing Synthetic Organic Chemistry through Technological Innovation*
- 09.30 ST24 **Dieter Vogt** *Homogeneous Multiphase Catalysis in Continuous Operation*
- 09.50 ST25 **Brent Gunnoe** *Cu(II) Carboxylate Arene C–H Functionalization: Tuning for Non-Radical Pathways and the Activation of Strong C–H Bonds*

10.10 Coffee Break

Chair: Andy Weller

- 10.45 KL18 **Jason Hein** *Real-Time Catalyst Speciation for Rapid Optimization and Understanding of Complex Catalysis*
- 11.30 ST26 **Jolene Reid** *Data-Driven Mechanistic Modeling of Asymmetric Catalysis*
- 11.50 ST27 **Marco Foscato** *Automated de Novo Design of Homogeneous Catalysts: Experimentally Validated Multi-Factor Design Criteria*
- 12.10 ST28 **Shigeru Yamaguchi** *Molecular Field Analysis for Data-Driven Molecular Catalyst Design*
- 12.30 KL19 **Anat Milo** *Machine Learning Strategies for Secondary Sphere Modification in Organocatalysis*

13.15 Lunch Break

14.00 **Posters** (even numbers)

15.30 **Posters** (even numbers) and Round Table discussion

16.15 Coffee Break

Chair: Emma Gallo

- 16.45 KL20 **Jade Markham** *Catalysing Innovation: Commercial Manufacture of Phosphorus Building Blocks and Tailored Phosphine Ligands*
- 17.30 ST29 **Fabio Ragaini** *Use of CO Surrogates in the Palladium-Catalyzed Reductive Cyclization of Nitroarenes to give N-Heterocycles*
- 17.50 ST30 **David Morales-Morales** *C–S couplings catalyzed by Ni(II) complexes of the type [(NHC)Ni(Cp)(Br)]*
- 20.00 Conference dinner (buses leaving 19.15 sharp from Piazza Oberdan)

Friday, 26 July 2024

Chair: Shuli You

- 09.15 KL21 **Ruth Webster** *Iron(salen) Catalyzed Reduction Reactions*
- 10.00 ST31 **Yuichiro Himeda** *Heterogenous CO₂ hydrogenation to methanol catalyzed by dinuclear iridium complexes in gas-solid phase*
- 10.20 ST32 **Jakob Albert** *Revealing the nitrogen reaction pathway for the catalytic oxidative denitrification of fuels*
- 10.40 Coffee Break

Chairs: Barbara Milani & Martin Albrecht

- 11.10 ST33 **Rafal Kusy** *Palladium-catalyzed oxidative amination of olefins using oxygen as an oxidant*
- 11.30 KL22 **Marcella Bonchio** *Hybrid Organic-Inorganic Interfaces for Supramolecular Photosynthesis: The Quantasome Vision*
- 12.15 Poster Awards and Closing Remarks
-