

Detailed Programm EuCOMC-2019 - Helsinki

Sunday | 16.06.2019

15.00-18.00 | Registration for the conference is open at Porthania

Lecture hall LR **PII**

18.00 - 18.10 | Opening Words

18.10 - 19.00 | PL 01 | Sponsored by CHEMS and Borealis

Bernhard Rieger - Technische Universität München

Catalytic precision polymerization: the organometallic chemistry behind novel i-PPs and CO₂-polymers

Chair: Timo Repo/Helena Grennberg

19.00 - 19.30 | PL 02 | Sponsored by the Finnish Chemical Society

Petri M. Pihko - University of Jyväskylä

Can we design new ligands or catalysts?

Chair: Anu Airaksinen

19.30 - 20.00 | Welcome Sparkling Wine- Porthania

Sponsored by the Finnish Chemical Society

Monday | 17.06.2019

Lecture hall LR **PII**

09.00 - 09.55 | PL 03 | Sponsored by Nord CO₂

Ola F. Wendt – Lund University

Pincer complexes of Pd and Ni: activation of carbon dioxide

Chair: Kathrin Hopmann

10.00 - 10.30 | K 01 Christian Kleeberg

News from old acquaintances: Synthesis of and with copper(I) boryl complexes

10.30 - 10.50 | O 1 Ricky Payen

In situ NMR spectroscopy to probe reaction intermediates in homogeneous copper(I) mediated carboboration reactions

10.50 – 11.10 | O 2 Evgeniya S. Degtyareva

Hunting metal thiolate species in C-S bond formation reactions

Chair: Beatriz Royo

11.10 - 11.30 | Coffee Break- Porthania

11.30 - 12.00 | K 02 Toni T. Metsänen

Synthetic ketoreductase mimics

12.00 – 12.20 | O 3 Aitor Bermejo López

Nonclassical mechanism in the cyclodehydration of diols catalyzed by bifunctional iridium complex

12.20 – 12.40 | O 4 Christian S. Gjermestad

The mechanism of Ir-catalyzed reduction of phenol to benzene

Chair: Aleco Macchioni

12.40 - 13.40 | **Lunch Break** – Porthania - UniCafe - second floor

13.40 - 14.35 | PL 04 | Sponsored by Nord CO₂

Walter Leitner - Max-Planck-Institute for Chemical Energy Conversion/ RWTH Aachen University

Is manganese the better ruthenium?

Chair: Ainara Nova

14.40 - 15.00 | O 5 Veronica Papa

Hydrogenation of n-heteroarenes with a simple earthabundant metal catalyst: peaceful conflict between Mn(I) and Mn(II)

15.00 – 15.20 | O 6 Alessandro Passera

Manganese(I)-catalyzed asymmetric hydrogenation of ketones: exploring the analogy to iron(II)

15.20 – 15.40 | O 7 Alaa Eldin Salem

Trivalent metal ions induce the formation of antiparallel G-quadruplex structures upon interaction with human telomeric DNA

Chair: Martin Albrecht

15.40 – 15.50 | **Break**

15.50 – 16.45 | PL 05 | Sponsored by Nord CO₂

Troels Skrydstrup – Aarhus University

Applications of organometallic chemistry to carbon isotope labeling

Chair: Martin Albrecht

16.45 – 18.00 Poster Session I – even numbers – Porthania

18.00 – 20.00 University of Helsinki – Reception – Main Building Lehtisali

Monday | 17.06.2019

Lecture hall LR PIII

Nord-CO₂ Session

10.00 - 10.30 | K 03 Ference Joó

Hydrogenation of carbon dioxide to formic acid in neutral or acidic aqueous solutions

10.30 - 10.50 | O 8 Ainara Nova

Mechanistic insight into the hydrogenation of amides by noyori-type bifunctional catalysts

10.50 – 11.10 | O 9 Florian K. Scharnagl

Homogeneous cobalt-catalysed reduction of CO₂ to methanol

Chair: Kathrin Hopmann

11.10 - 11.30 | Coffee Break- Porthania

11.30 - 12.00 | K 04 Moran Feller

CO₂ activation by metal–ligand-cooperation

12.00 – 12.20 | O 10 Simone Bertini

Nickel complexes containing oxygen-chelating mesoionic carbenes as easily accessible catalysts for CO₂ reduction

12.20 – 12.40 | O 11 Joakim Bøgelund Jakobsen

A surprising ligand effect in the electrocatalytic reduction of carbon dioxide with manganese-bipyridine complexes

Chair: Fabio Marchetti

12.40 - 13.40 | Lunch Break

14.40 - 15.00 | O 12 Giulio Bresciani

CO₂ activation reactions mediated by metal N,N-dialkylcarbamates

15.00 – 15.20 | O 13 Indrek Pernik

Selective formylation and methylation of amines using CO₂ as carbon source

15.20 – 15.40 | O 14 Amparo Sanz-Marco

Synthesis of cyclic carbonates and oxazolidinones catalyzed by PCN-222(Co)

Chair: Ainara Nova

16.45 – 18.00 Poster Session I – even numbers – Porthania

18.00 – 20.00 University of Helsinki – Reception – Main Building Lehtisali

Tuesday | 18.06.2019

Lecture hall LR PII

09.00 - 09.55 | PL 06

King Kuok (Mimi) Hii – Imperial College London

Redox chemistry of palladium: implications for catalysis

10.00 - 10.30 | K 05 Abhik Ghosh

Near-IR phosphorescent 5d metallocorroles: new materials for solar cells and photodynamic therapy

10.30 - 10.50 | O 15 Valeriu Cemortan

Heterobimetallic complexes with transition metals and lanthanides: modulation of the electronic properties

10.50 – 11.10 | O 16 Jurt Pascal

Bimetallic dirhodium complexes as models to study hydrogen activation on carbon-supported Rh(0) catalysts

Chair: Viktoria Gessner

11.10 - 11.30 | Coffee Break - Porthania

11.30 - 12.00 | K 06 Amalia I. Poblador-Bahamondea | Sponsored by Hylleraas

Combined effort between computational and experimental chemistry: a powerful tool

12.00 – 12.20 | O 17 Marco Baron

Dinuclear gold(I) complexes with μ -di(N-heterocyclic carbene) ligands as catalysts: are there cooperative effects in alkyne hydrofunctionalization?

12.20 – 12.40 | O 18 Miquel Navarro

P[^]P and P[^]N chelated gold(I) π -complexes

Chair: Reko Leino

12.40 - 13.40 | Lunch Break - Porthania - UniCafe - second floor

13.40 - 14.35 | PL 07

Zoltán Novák - Eötvös Loránd University

Transition metal catalyzed construction and functionalization of aromatic and heteroaromatic systems with salts

Chair: Rinaldo Poli

14.40 - 15.00 | O 19 Philippe Hermange

Bioconjugated arylpalladium complexes on solid supports for convenient last-step labellings by [¹¹C]CO

15.00 – 15.20 | O 20 Samuel Kjærsgaard Pedersen

Small scale hydroformylation using solid precursors for syngas generation in a two-chamber setup

15.20 – 15.40 | O 21 Niccolò Bartalucci

Clean CO release from tertiary α -phenylcarboxylic acids promoted by high valent transition metal halides

Chair: Rita Skodáné Földes

15.40 – 16.00 | Coffee Break - Porthania

16.00 – 16.20 | O 22 Martí Garçon

Addition of Mg–H bonds to transition metals: new structures and reactivity

16.20 – 16.40 | O 23 Ana C. Albéniz

Assisted C–H cleavage in the Pd-catalyzed direct arylation reaction of arenes with the cooperating ligand [2,2'-bipyridin]-6(1H)one

16.40 – 17.00 | O 24 José-Antonio García-López

Pd-catalyzed cascade reactions on skipped dienes: from double carbopalladation to remote C–C cleavage.

17.00 – 17.55 | PL 08

Farbio Marchetti – Università di Pisa

Building organometallic architectures on diiron complexes

Chair: Valerio Zanotti

18.15 – 20.15 Walking tour of Helsinki – if booked

Tuesday | 18.06.2019

Lecture hall LR PIII

10.00 - 10.30 | K 07 Alceo Macchioni

Iridium pyridine carboxylate and amidate complexes as efficient catalysts for energy applications

10.30 - 10.50 | O 25 Brian J.J. Timmer

Accelerating water oxidation catalysis by modulation of intermolecular interactions

10.50 – 11.10 | O 26 Valerio Zanotti

Beyond the iron-dithiolate mimic paradigm: new insight into the mechanism of electrocatalytic H₂ production with μ -carbyne diiron complexes.

Chair: Nicolas Mézailles

11.10 - 11.30 | Coffee Break - Porthania

11.30 - 12.00 | K 08 Jannick Guschlbauer

Metalate complexes with unsubstituted chalcogenide and silylated chalcogenolate moieties

12.00 – 12.20 | O 27 Aleksandr Sapianik

New heterometallic MOFs from preorganized complexes and their applications

12.20 – 12.40 | O 28 Anna Kowalewska

Tetracyclosiloxanates of alkali metals - precursors for polymeric materials.

Chair: Abhik Ghosh

12.40 - 13.40 | Lunch Break - Porthania - UniCafe - second floor

14.40 - 15.00 | O 29 Axel Jacobi von Wangelin

3D metal nanoclusters

15.00 – 15.20 | O 30 Chihchinag Chiu

Proton-catalyzed formation mechanism of the secondary building unit in a zirconium terephthalate-derived metal-organic frameworks

15.20 – 15.40 | O 31 Barsukova Marina

Highly stable scandium-organic frameworks for gas separation

Chair: Moritz Malischewski

15.40 – 16.00 | Coffee Break – Porthania

16.00 – 16.20 | O 32 Alexey S. Kashin

Direct electron microscopy observations of liquid-phase processes involving metal-organic coordination polymers

16.20 – 16.40 | O 33 Stanislav Nikolaevskii

Cobalt-lanthanide carboxylates as single molecule magnets and starting reagents for synthesis of heterometallic complexes containing n-heterocyclic carbenes

16.40 – 17.00 | O 34 Maria Talavera

Activation of the refrigerant HFO-1234yf (2,3,3,3-tetrafluoropropene)

Chair: Pascal Castro

18.15 – 20.15 Walking tour of Helsinki – if booked

Tuesday | 18.06.2019

Lecture hall LR **PIV**

10.00 - 10.30 | K 09 Marc-Etienne Moret

Side-on coordinated C=O and C=N bonds as reactive sites in nickel complexes.

10.30 - 10.50 | O 35 Ondřej Mrózek

Propene complexes of molybdenum and tungsten

10.50 – 11.10 | O 36 Sergey V. Zubkevich

Ni (II) and Co (II) halide complexes with novel NNNO-heteroscorpionate ligands in ethylene oligomerization: the crucial role of AOC

Chair: Lukasz Pilarski

11.10 - 11.30 | Coffee Break - Porthania

11.30 - 12.00 | K 10 Pascal Castro

Olefin polymerisation catalysts: an industrial perspective

12.00 – 12.20 | O 37 Francesco Zaccaria

Structure and reactivity of phenol-modified methylaluminumoxane cocatalyst for olefin polymerization

12.20 – 12.40 | O 38 Anna Dall'Anese

Ligand desymmetrization: application of Pd(II)-pyridylimines complexes in copolymerization reactions

Chair: Ana Albéniz

12.40 - 13.40 | Lunch Break - Porthania - UniCafe - second floor

14.40 - 15.00 | O 39 Badma N. Mankaev

Metal complexes based on polydentate ligands. Synthesis, structure, polymerization activity.

15.00 – 15.20 | O 40 Paweł Horeglad

Rationalizing the effect of NHC on the catalytic properties of alkylgallium alkoxides in the ROP of cyclic esters

15.20 – 15.40 | O 41 Mohammed Lahcini

Organotin-bridged-ionic liquid as a solvent-free, leaching-resistive catalyst for ring opening polymerization of ϵ -caprolactone

Chair: Rinaldo Poli

15.40 – 16.00 | Coffee Break – Porthania

16.00 – 16.20 | O 42 Sebastian Sandl

Cobalt-catalyzed hydrogenations via olefin cobaltate and hydride intermediates

16.20 – 16.40 | O 43 Kristina Sorochkina

Development of intramolecular frustrated lewis pairs for NMR signal amplification.

16.40 – 17.00 | O 44 Vladimir Iashin

Metal-free C-H bonds activation by boron trifluoride

Chair: Christian Kleeberg

18.15 – 20.15 Walking tour of Helsinki – if booked

Wednesday | 19.06.2019

Lecture hall LR PII

09.00 - 09.55 | PL 09 | Sponsored by Magritek

Eva Hevia - University of Strathclyde

Towards a paradigm shift in main group polar organometallic chemistry

10.00 - 10.20 | O 45 Philipp Melle

Cobalt & nickel complexes with mesoionic PYA ligands as potential proton reservoirs

10.20 - 10.40 | O 46 Martin H. G. Prechtl

Paradigms of (non)-cooperative ligands in pincer complexes in catalytic reactions

10.40 - 11.00 | O 47 Alain Igau

Tethered oxocyclohexadienyl piano-stool Ru(II) complexes: a new class of metal-ligand bifunctional catalysts

Chair: Helena Grennberg

11.00 - 11.20 | Coffee Break- Porthania

11.20 - 11.40 | O 48 Julien Monot

Efficient C-C bond formation by cooperative catalysis with indenediide palladium pincer complexes

11.40 - 12.00 | O 49 Pablo M. Pérez-García

A mechanistic study of the oxidative addition of substituted aryl halides to Ni(0): The influence of a pincer PPP ligand.

12.00 - 12.20 | O 50 Vladislava A. Kirkina

Isomerism of triptycene iridium pincer complex (PCP)IrH(Cl): remarkable differences in the reactivity toward ligand exchange

Chair: Kristina Wähälä

12.20 - 13.20 | Lunch Break – Porthania - UniCafe - second floor

13.25 - 14.20 | PL 10

Rinaldo Poli – Université de Toulouse

Homolytically weak metal-carbon bonds and the persistent radical effect in metal-catalyzed/mediated reactions

Chair: Ola Wendt

14.20 - 14.40 | O 51 Yann Sarazin

Low-coordinate alkaline earth complexes: organometallic beauties and potent dehydrogenative catalysts

14.40 – 15.00 | O 52 Alexander S. Antonov

Exploring the acidic side of the proton sponge: selective meta- and peri-metallation of ring CH-bonds

15.00 – 15.20 | O 53 Nico Seling

Lithiation-trapping of oxygen and sulfur heterocycles

Chair: Troels Skrydstrup

15.20 – 15.30 | Break

15.30 – 16.45 | PL 11

Jarl Ivar van der Vlugt – University of Amsterdam

Reactive ligands and ligand-centered radicals: stoichiometric and catalytic transformations

Chair: Troels Skrydstrup

16.45 – 18.00 Poster Session II – odd numbers – Porthania

19.00 – 23.00 | Conference Dinner – if booked – Ravintola Saaristo

Wednesday | 19.06.2019

Lecture hall LR **PIII**

10.00 - 10.20 | O 54 Michael J. Chetcuti

Nickel (II) η -heterocyclic carbene complexes – recent chemistry and catalysis

10.20 - 10.40 | O 55 Yves Canac

Playing with NHC and phosphonium ylide donor ends for catalytic applications

10.40 – 11.00 | O 56 Sergey S. Shapovalov

Heterometallic nickel and iron complexes with NHC ligands

Chair: Belén Martin-Matute

11.00 - 11.20 | **Coffee Break- Porthania**

11.20 - 11.40 | O 57 Katrine Domino

Direct access to aryl bis(trifluoromethyl)carbinols from aryl bromides or fluorosulfates via palladium-catalyzed carbonylation

11.40 – 12.00 | O 58 Kevin Salzmann

Pyridylidene amide ligands for highly efficient olefin oxidation

12.00 – 12.20 | O 59 Andrew D. Phillips

A comprehensive experimental and computational study into the oxidation of a ruthenium(II) β -diketiminate complex by molecular oxygen

Chair: Jan Deska

12.20 - 13.20 | **Lunch Break – Porthania - UniCafe - second floor**

14.20 - 14.40 | O 60 Doris Kunz

Catalytic deoxygenation of epoxides with carbon monoxide

14.40 – 15.00 | O 61 Dide G. A. Verhoeven

Base metal complexes of chelating pyridylidene amide (pya) ligands for oxidation catalysis

15.00 – 15.20 | O 62 Sergey Ketkov

Fine ligand effects on electronic structures of transition-metal sandwich complexes: New insights provided by DFT-assisted laser ionization spectroscopy

Chair: Ola Wendt

15.20 – 15.30 | **Break**

16.45 – 18.00 Poster Session II – uneven numbers – Porthania

19.00 – 23.00 | Conference Dinner – if booked – Ravintola Saaristo

Thursday | 20.06.2019

Lecture hall LR **PII**

09.00 - 09.55 | PL 12

Katrin H. Hopmann – The Arctic University of Norway

Is your mechanism correct? Insights into organometallic hydrogenation and carboxylation reactions

10.00 - 10.30 | K 11 Nicolas Mézailles

Dinitrogen functionalization at Mo centers

10.30 - 11.00 | K 13 Viktoria H. Gessner

A Journey through the ylide universe: from metallated ylides to ylid-functionalization and catalysis

Chair: Marc-Etienne Moret

11.00 - 11.20 | Coffee Break- Porthania

11.20 - 11.50 | K 14 Moritz Malischewski

Organometallic chemistry in superacids

11.50 – 13.10 | PL 13

EuChems Prize Winner

Poster prizes

Closing Ceremony

Chair: Jan Cermak/Timo Repo

13.10 - 13.15 | Lunch to go

Thursday | 20.06.2019

Lecture hall LR **PIII**

10.00 - 10.30 | K 12 Max García-Melchor | Sponsored by Hylleraas

Unexpected transmetalation mechanisms in bimetallic catalysis

10.30 - 10.50 | O 63 Antonella Guerriero

Exploring the chemistry of the new phosphine CAP: from catalytic to medicinal application

Chair: Toni Metsänen

11.00 - 11.20 | Coffee Break- Porthania

13.10 - 13.15 | Lunch to go