

Poster Contribution SCS2022

Section for Analytical Chemistry (SAC)

- 1.1 Mikael Axelsson SENSITIVE DETERMINATION OF IMPURITIES IN LITHIUM BATTERIES USING THE THERMO SCIENTIFIC ICAP PRO XP ICP-OES
- 1.2 Mikael Axelsson A NOVEL ICP-MS METHOD FOR SENSITIVE, ACCURATE AND HIGH-THROUGHPUT ANALYSIS OF BABY FOOD
- 1.3 Raychelle Burks Seeing Clearly: Benzoic Acid Derivatives as Visualization Agents of Latent Fingerprints
- 1.4 **Vivek Chaturvedi** A low-cost interdigitated electrode based setup for water sorption studies and humidity sensing applications
- 1.5 **Åsa Emmer** Capillary and microchip electrophoresis for monitoring of cell culture media in biopharmaceutical processes
- 1.6 **Anne Farbrot** *Portable measurement of preservatives in air using new SPE-discs*
- 1.7 **Thamani Freedom Gondo** Exploring selectivity of ternary CO2-EtOH-H2O mixtures for the extraction of antioxidants from seaweed
- 1.8 Firas Jumaah Exploring the bromodomain of SMARCA4 (BRG1) by Weak Affinity Chromatography (WAC™)
- 1.9 Shahla Namazkar Dermal bioaccessibility of listed PFAS ingredients in cosmetic products
- 1.10 Fiona Nermark Desulfurization of Morupule coal with subcritical aqueous ethanol extraction
- 1.11 **Mynta Norberg** *RExiSiL An upcoming toolkit for exploring lignin spaces*
- 1.12 Daniel Papp Universal quantification of lignin dimers by supercritical fluid chromatography/charged aerosol detection
- 1.13 Tim Aström Imported clothes frequently contain high levels of disperse azo dyes and aromatic amines A possible health risk and cause of textile allergy

Section of Biochemistry, Biophysics and Molecular Biology (SFBBM)

- 2.1 Luisa Beyer Discovery of new antimicrobial peptides from marine actinobacteria
- 2.2 **Helen Farrants** Switching a nanobody against fluorescent proteins on and off
- 2.3 Oxana Klementieva Drug development
- 2.4 Oxana Klementieva Food science
- 2.5 Oxana Klementieva New materials
- 2.6 **Johan Larson** *HSP10* as a chaperone for neurodegenerative amyloid fibrils
- 2.7 **Farjana Parvin** Imaging Aβ amyloid fibril polymorphic structures in Drosophila and mouse models
- 2.8 **Fatemeh Rasti Boroojeni** Primary Human Fibroblasts Promote the Formation of Breast Cancer Spheroids in a 3D Bioprinted Cancer Model.
- 2.9 **Anna Svärd** Paper-Based Protease Sensor for Periodontal Assessment
- 2.10 **Henrik Vinther Sørensen** *Encapsulation of Lysozyme in starch particles*
- 2.11 Elisa Zattarin Self-Regulating Wound Dressing for the Treatment of Wound Infection
- 2.12 **Hanna Zhdanova** Chemical synthesis of transmembrane proteins: from ion channels to bio-inspired sensors

Section for Inorganic Chemistry

- 3.1 **Rohan Bhimpuria** Photophysical properties and excited-state reactivity of tris(trimethylsilyl)cyclopentadienyl Ln(III) complexes
- 3.2 **Troy Breijaert** Nanocellulose composite fibres with ferria
- 3.3 James Gardner 2-Dimensional Perovskites: Phase Transitions & Photovoltaic Use
- 3.4 Alisa Gordeeva Phase relation and morphology of titania polymorphs in deep supercritical conditions: pure & industrially scalable brookite and TiO2-II
- 3.5 Yogeshkumar Goriya Influence of Alkyl Chains on DSSC based on Fe N-Heterocyclic Carbene Photosensitizers
- 3.6 **Björn Greijer** POM-peptide complexes as models for metal oxide nanoparticle bioactivity
- 3.7 Arvind Kumar Gupta Incorporation of A Hydroxamic Acid Anchoring Group For DyeSensitized Solar Cells
- 3.8 **Valtýr Hlynsson** New Fe-NHC complex and the effect of ligand design on its electronic properties
- 3.9 **Mahboubeh Jamshidisemiromi** Copper Iodide Complexes with Perylene Diimides: Promising Materials for Optical and Electronic Applications
- 3.10 **Dnyaneshwar Kand** Introducing Umbrella Effect in Fe(II)-NHC Dyes for Improved Performance in Dye Sensitized Solar Cells (DSSCs)
- 3.11 **Daniel Kocsi** Tuning the photophysical properties of luminescent lanthanide complexes through regioselective antenna fluorination
- 3.12 Marijana Lakic Ligand chemistry and surface functionalization in approach to selective hybrid silica nano adsorbents
- 3.13 Nathan O'Brien Synthesis, Structure and Reactivity of a Radical Nickel(III) Triazenide
- 3.14 **Per Persson** ARTEMI a National Research Infrastructure in Electron Microscopy
- 3.15 Suresh Rayavarapu Influence of Hagfeldt Donar on the performances of Fe-NHC based push-pull complexes
- 3.16 **Rouzbeh Samii** Group 11 Triazenides as Potential Chemical Vapor Deposition Precursors
- 3.17 **Jesper Schwarz** High Yielding Hydrogen Evolution Reaction driven by green light irradiation of an Fe N-Heterocyclic Carbene Photosensitiser
- 3.18 Kumkum Sharma Tetra -NHC based Cyclometalated Fe(III) Complexes as Molecular Photosensitizers: Synthesis and Structural Analysis
- 3.19 Irina Terekhina Valorisation of Glycerol via Electrooxidation on Palladium Nanocatalysts
- 3.20 **Monika Tomar** Development Of Catalytic Eu(II)-Mediated Reactions
- 3.21 Lars Öhrström Lanthanoid Metal-Organic Frameworks based on rods and hexagons with gated CO2 sorption and chirality

Section for Mass Spectrometry (SMS)

- 4.1 **Susana Cristobal** Evaluation of thermal proteome profiling methodologies to identify membrane protein targets
- 4.2 Marius Gaedke Switchable Donor-Acceptor Rotaxanes Using Dynamic Covalent Chemistry in Water
- 4.3 Anneli Kruve Identification of chemicals possessing highest risk in water with non-target LC/HRMS analysis
- 4.4 **Thomas Norberg** Derivatization of sugars with N,O-dimethylhydroxylamine. Efficient RP-HPLC separation of sugar mixtures
- 4.5 Clara Schäfer Effect of the Aza-N-Bridge and Push-Pull Moieties: A Comparative Study between BODIPYs and Aza-BODIPYs
- 4.6 **Mateusz Werlos** Photocatalytic Synthesis of α,α-Difluoroalcohols
- 4.7 **Jingjing Yu** [2]Rotaxane Synthesis Based on Dynamic Covalent Boron Templates

Section for Organic Chemistry (SOC)

- 5.1 **Anton Astré** A Diastereoselective and Green Synthesis of Novel Polycyclic Nitrogen Heterocycles
- 5.2 **Fredrik Barnå** Solvent-free synthesis extra molam an alternative to ball-milling

5.3	Linnea Björk	. Proteophenes	- amino acid	functionalized	thiophene-base	d ligands
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- 5.4 **Satyajit Das** Towards synthesis of polyrotaxanes from carbohydrate polymers
- 5.5 **Prakriti Dhillon** Switching the Regioselectivity of Cobalt-catalyzed C-H activation Annulation of Benzamides with 1,3-diynes
- 5.6 **Davide Di Francesco** Regiospecific allylation of θ -O-4' aryl ether model via water tolerant catalysis
- 5.7 **Simon Edin** Small organic monomers capable of hydrogen-bonded tubular selfassembly
- 5.8 **Måns Eriksson** Synthesis of Diphenylacetylene Boronic Acid Derivatives for Hydroarylation of C60
- 5.9 Marius Gaedke Switchable Donor-Acceptor Rotaxanes Using Dynamic Covalent Chemistry in Water
- 5.10 **Liang Fei** MOST fabric for wearable energy management
- 5.11 **Ellymay Goossens** Activation of *y*-carbon via aerobic oxidative NHC catalysis for the synthesis of tetra-substituted benzene rings
- 5.12 **Jason Harper** Kinetic analysis to drive solvent choice picking an ionic liquid to get the outcome you want!
- 5.13 **Helen Hölzel** Molecular solar thermal energy storage (MOST) materials and the use of flow chemistry
- 5.14 **Christoph Kern** *Titanium-Catalyzed Reductive Defunctionalizations*
- 5.15 **Julius Kyzmin** *Electrochemical reduction of C-S bonds*
- 5.16 **Fei Liang** *MOST fabric for wearable energy management*
- 5.17 Fanny Lundmark From In Silico to In Vivo Development of PSMA-targeting radioligands for Imaging of Prostate Cancer
- 5.18 Cristiana Margarita Zirconium-catalysed direct substitution of alcohols: enhancing the selectivity by kinetic analysis
- 5.19 **Roberto Mastio** Labeled xylosides as tools for glycosaminoglycan investigation
- 5.20 **Thomas Norberg** Derivatization of sugars with N,O-dimethylhydroxylamine. Efficient RP-HPLC separation of sugar mixtures
- 5.21 Esther Olaniran Design and Synthesis of Macrocyclic Insulin-regulated Aminopeptidase (IRAP) Inhibitors
- 5.22 Maria Quant Bicyclooctadienes Towards Molecular Solar Thermal Energy Storage Applications
- 5.23 **Anja Ramström** A rotaxane sensor based on switchable lanthanide luminescence
- 5.24 August Runemark Visible light driven EDA complex mediated synthesis of tetrahydroquinolines
- 5.25 Clara Schäfer Effect of the Aza-N-Bridge and Push-Pull Moieties: A Comparative Study between BODIPYs and Aza-BODIPYs
- 5.26 Marcus Söderström Thioacetylation and a Multi-Component Reaction Using BF3-SMe2
- 5.27 **Monika Shamsabadi** Noraboradienes with combined molecular solar thermal system and phase change material function
- 5.28 Thomas Norin Orthogonal Flash Chromatography Reduces Organic Solvent Use While Maximizing Workflow
- 5.29 **Mateusz Welos** Photocatalytic Synthesis of α, α -Difluoroalcohols
- 5.30 **Jingjing Yu** [2]Rotaxane Synthesis Based on Dynamic Covalent Boron Templates
- 5.31 **Jonas Rydfjord** Acylamidines by Pd-catalyzed aminocarbonylation: one-pot cyclizations and 11C-labeling

Section for Surface and Material Chemistry (SSMC)

- 6.1 Ali Aya Reaction of Copper and Copper(I) lodide with lodine and Strong Field Ligands
- 6.2 **Prasad Anaspure** Palladium nanoparticles immobilized on polyethylenimine-derivatized gold surfaces for catalysis of Suzuki reaction: development and application in a lab-on-a-chip context
- 6.3 Athira Anil Cu-Pt electrocatalysts for alycerol electrooxidation reaction
- 6.4 Hannah Boyd MUC5B mucin films under mechanical confinement: A combined neutron reflectometry and atomic force microscopy study
- 6.5 **Jian Chang** Humidity Resistant and Mechanically Enhanced Graphene Oxide (GO)/Poly(ionic liquid) (PIL) Composite Films
- 6.6 **Miao Zhang** MXene Membrane with facilitated Water Transport: an Interlayer Engineering Strategy
- 6.7 Anna du Rietz Poly(acrylic acid) coated Cerium oxide nanoparticles with Gadolinium integration for targeted biomedical imaging purposes
- 6.8 **Philipp Gaiser** Surface immobilization of molecular catalysts using conducting redox polymers
- 6.9 Alisa Gordeeva Phase relation and morphology of titania polymorphs in deep supercritical conditions: pure & industrially scalable brookite and TiO2-II

- 6.10 Frédéric Héraly Humidity-Sensitive Bilayer Actuator Derived from Cellulose Nanofibrils and Reduced Graphene Oxide
- 6.11 **Jing-Jia Huang** Controlled CVD growth of highly-oriented 3C-SiC
- 6.12 Anil Incel Sequence Specific Phosphopeptide Enrichment of ZAP-70 Regulatory Motifs using Epitope-imprinted Polymer Complements
- 6.13 Yan Jayin Assembly of 2D Materials by Poly(ionic liquid) for High-Performance Nanofiltration Membranes
- 6.14 Atefeh Khorsand Kheirabad Synthesis of Task Specific Porous Poly(ionic liquid) Membranes
- 6.15 **Pamburayi Mpofu** Thermal atomic layer deposition of In203 thin films using a homoleptic indium triazenide precursor and water.
- 6.16 **Trinh Nguyen** Charging of the amine moiety at the liquid / vapor interface: molecular insights revealed by vibrational sum frequency spectroscopy
- 6.17 **Mark Rambaran** Tunable surfaces from molecular building blocks
- 6.18 Carina Schiele Thermally insulating air- and ice-templated plant-based foams
- 6.19 Yulia Sergeeva Multivalent reversible self-assembled monolayers as a biomimetic platform for virus detection and inhibition
- 6.20 Fredric Svensson Facile Synthesis of Sulfate-Modified Titania Nanoparticles from Titanyl Sulfate: Catalytic Activity and Surface Properties
- 6.21 Fredric Svensson Interaction of Nano Titania in Hybrid Wound Dressings with Blood Proteins
- 6.22 **Lu Yahua** Preparation and properties of highly permeable two-dimensional Layered double
- 6.23 Savannah Zacharias Fill. Flush. Product. An investigation into building a reusable stationary phase using a catalytic gel.
- 6.24 Miao Zhang MXene Membrane with facilitated Water Transport: an Interlayer Engineering Strategy

Section for Physical Chemistry (SPC)

- 7.1 **Igor Djerdj** Band gap Engineering in Novel Fluorite-Type Rare Earth High Entropy Oxides (RE-HEOs) with Computational and Experimental Validation for Photocatalytic Water Splitting Applications
- 7.2 **Elin Fossum** Water-based electrolytes for Li-ion batteries
- 7.3 Karl Rönnby OpenGibbs: A Statistical Thermodynamics-Equilibrium Software for Research and Teaching
- 7.4 Aleksander Tot Aqueous electrolytes for Li-ion batteries- hybride WISE approach

Section for Theoretical Chemistry

- 8.1 **Iria Bolaño Losada** Contrasting photoredox-interactions of earth-abundant photosensitizers with hydrogen reduction catalysts
- 8.2 Giane Damas On the Gas Phase Decomposition of Trimethylindium and Indium Trisguanidinate Precursors during the InN Deposition
- 8.3 **Dusanka Golo** Promoting Selective Generation of Formic Acid from CO2 Using Mn(bpy)(CO)3Br as Electrocatalyst and Triethylamine/Isopropanol as Additives
- 8.4 Manuel Hodecker Analytic Resonance Raman Intensities using the Complex Polarization Propagator Approach

Section for Vibration Spectroscopy (SVS)

9.1 **Nils Lenngren** *Infrared spectroscopy at the user facility ELI Beamlines*