

SCS 2022 Program

Monday June 20

09:00 - 12:00	REGISTRATION			
12:00 - 13:00	LUNCH			
13:00 - 13:10	WELCOME			
13:10 - 13:55	Room: Crusell, Plenary talks 1 Molly Stevens, Imerial College, London, U.K. (Chair: Henrik Pedersen) <i>Designing nanomaterials for therapeutics and ultrasensitive biosensing</i>			
14:00 - 14:45	Room: Crusell, Plenary talks 2 Cathleen Crudden, Queens University, Canada (Chair: Daniel Aili) <i>N-Heterocyclic Carbenes in Materials Self Assembled Monolayers, Nanoclusters and Catalysts</i>			
14:50 - 15:10	Coffee, Posters and Exhibition			
	Room: Crusell, Session 1: Forensic Chemistry (Chair: Johan Dahlen)	Room: Spegelsalen, Session 2: Chemical Biology (Chair: Per Hammarström)	Room: Musikalen, Session 3: Energy and Materials (Chair: Henrik Pedersen)	
15:10 - 15:40	Keynote: Crister Åstot, FOI, Umeå, Sweden <i>Chlorine as a chemical weapon—How to verify exposure?</i>	Keynote: Monika Fuxreiter, University of Padova, Italy <i>Fuzzy interactions in biomolecular condensates</i>	Keynote: Sean Barry, Carleton University, Canada <i>Volatile Stable Radicals For Thin Film Applications</i>	
15:40 - 16:10	Keynote: Andreas Tillmar, IKE, Linköping University, Sweden <i>Forensic genetics - Current practice and future perspectives</i>	Keynote: Edward Lemke, EMBL, Heidelberg, Germany <i>Decoding molecular plasticity in the Dark Proteome</i>	Keynote: Tomas Edvinsson, Uppsala University, Sweden <i>Optical quantum confinement and surface engineering of materials for energy applications</i>	
16:10 - 16:40	Keynote: Jonas Malmberg, NFC, Linköping, Sweden <i>A murder case - forensic chemistry in practice</i>	Keynote: Kathrin Lang, ETH Zurich, Switzerland <i>Expanding the genetic code à €" new chemistries for biology</i>	Keynote: Maarit Karpinen, Aalto University, Finland <i>Atomic/molecular layer deposition of novel inorganic-organic materials and interfaces for emerging energy technologies</i>	
16:40 - 18:00	FREE TIME			
18:00 - 20:00	Poster Session, buffé and open bar			Room: Solat, Annual Proceedings SKR

Tuesday June 21

	Room: Operan, Session 4: Supramolecular Chemistry (Chair: Daniel Aili)	Room: Musikalen, Session 5: Catalysis (Chair: Niclas Solin)	Room: Spegelsalen, Session 6: Svedberg Award (Chair: Wolfgang Knecht)		
08:30 - 09:00	Keynote: Kenneth Wärnmark, Lund University, Sweden <i>Self-Assembly of molecular belts, capsules, tubes, and networks by hydrogen-bonding</i>	Keynote: Per Ola Norrby, AstraZeneca, Sweden <i>From Mechanism to Reaction Selectivity</i>	Svedberg Award talk:		
09:00 - 09:30	Keynote: Björn Högberg, Karolinska Institute, Sweden <i>Learning the nanoscale distance effects in biology using DNA origami</i>	Keynote: Jan Streuff, Uppsala University, Sweden <i>Catalytic-Reductive Defunctionalization Reactions</i>	Ville Kaila <i>Deciphering Molecular Mechanisms of Biological Energy Catalysis</i>		
09:30 - 10:00	Keynote: Silvia Marchesan, University of Trieste, Italy <i>Hierarchical peptide assembly into gels: from channels to cages</i>	Keynote: Nina Kann, Chalmers, Sweden <i>Biocatalysis and palladium catalysis for the formation of chiral polycyclic scaffolds from benzoic acid</i>			
10:00 - 10:30	Coffee, Posters and Exhibition				
	Room: Spegelsalen, Session 7: SOC Chemical biology & Supramolecular Chemistry (Chair: Daniel Strand)	Room: Operetten, Session 8: SVS Vibrational Spectroscopy (Chair: Andreas Barth)	Room: Musikalen, Session 9: SOC Synthesis and Method Development (Chair: Luke Odell)	Room: Operan, Session 10: SITS Surface and Material Chemistry (Chair: Thomas Ederth)	Room: Sonaten, Session 11: SMS Mass Spectrometry (Chair: Jonas Bergquist)
10:30 - 11:00	Keynote: Erik Chorell, Umeå University <i>Blocking gene expression with small molecules</i>	Keynote: Karin Hauser, University Konstanz, Germany <i>Time-Resolved IR-Spectroscopy to Unravel Molecular Mechanisms of Protein Folding and Misfolding</i>	Keynote: Belen Martin-Matute, Stockholm University <i>Catalytic Methods for the Construction of Halogen-Functionalized Organic Compounds</i>	Keynote: Astrid de Wijn, Norwegian University of Sci & Tech. <i>Understanding the friction of atomically thin layered materials</i>	Keynote: Léon Reubsæet, University of Oslo <i>Smart samplers for LC-MS based protein analysis</i>
11:00 - 11:15	Giulia Monceli <i>Synthesis of responsive tetra-urea calix[4]arenes and calix[4]pyrroles: a combined experimental and predictive chemical approach</i>	Andreas Barth <i>The aggregation of the amyloid-β peptide studied with isotope-edited bulk and nanoscale infrared spectroscopy</i>	Sara Bacaicoa <i>Activation of β-carbon via aerobic oxidative NHC catalysis for the synthesis of tetra-substituted benzene rings</i>	Zhaojun Li <i>Mechanistic Insight to the Chemical Treatments of Monolayer Transition Metal Disulfides for Photoluminescence Enhancement</i>	Susana Cristobal <i>Evaluation of thermal proteome profiling methodologies to identify membrane protein targets</i>
11:15 - 11:30	Susanne Doloczki <i>3-Iminoindoline as a new fluorescent scaffold for cell imaging: Photophysical and cellular studies</i>	Joel Wahl <i>Raman spectroscopy for in-vivo brain tumor classification: A pre-study on spectral features in freshly resected tumor samples</i>	Helena Ankner Lundberg <i>Catalytic and electrosynthetic C-OH bond activation</i>	Xiaoting Xue <i>Recyclable Nanoparticles Based on Boronic Acid-Diol Complex for Real-Time Monitoring of Imprinting, Molecular Recognition and Detection of Copper Ion</i>	Emma Palm <i>Two-dimensional ion mobility for characterization of PCB metabolites</i>
11:30 - 11:45	Daniel Frankel Willén <i>Exploration of glycosaminoglycan biosynthesis</i>	Eric Tyrode <i>Vibrational Signatures of Hydrated Protons at Interfaces</i>	Rickard Lindroth <i>Visible-Light Mediated Oxidative Fragmentation of Ethers and Acetals by Means of Fe(III) Catalysis</i>	Ani Vardanyan <i>Nanosized functional adsorbents for separation of Rare Earths and Late Transition Metals</i>	Per Larsson <i>Lipid analysis of exhaled particles derived from small airways, with results from a post COVID-19 cohort</i>
11:45 - 12:00	Linnea Björk <i>Proteophenes - amino acid functionalized thiophene-based ligands</i>	Per Uvdal <i>An Infrared Microscope at MAX IV, Concepts and Opportunities</i>	Suppan Kathiravan <i>Iridium catalysed site selective C-H functionalization of Indole</i>	Atefeh Shafaat <i>Glucose-to-resistor transduction integrated into RF antenna for chip-less and battery-less wireless sensing</i>	Mynta Norberg <i>REXiSIL - An upcoming toolkit for exploring lignin spaces</i>
12:00 - 12:15	Annual Proceedings SOC		Annual Proceedings SSMC		
12:00 - 13:30	LUNCH				

	Room: Spegelsalen, Session 12: SOC MedChem & Synthesis (Chair: Erik Chorell)	Room: Operetten, Session 13: SBBM Biochemistry, Biophysics & Molecular Biology (Chair: Wolfgang Knecht & Per Hammarström)	Room: Musikalen, Session 14: SOC Synthesis & Method Development (Chair: Belen Martin-Matute)	Room: Operan, Session 15: SITS Theoretical Chemistry (Chair: Bo Durbeej)	Room: Sonaten, Session 16: SMS Mass Spectrometry (Chair: Jonas Bergquist)
13:30 - 13:45	Keynote: Morten Gröthli, Göteborg University <i>Photoresponsive Small Molecule Kinase Inhibitors</i>	Keynote: Wolfgang Knecht <i>Protein Production Sweden (PPS)</i>	Keynote: Peter Dinér, KTH Royal Institute of Technology <i>Photoredox Functionalization of Strong Bonds: A Radical Approach to Spiro-compounds</i>	Keynote: Gerrit Groenhof, University of Jyväskylä <i>Manipulating molecules with mirrors: insights from multi-scale molecular dynamics simulations</i>	Award talk:
13:45 - 14:00		Johanna Utterström <i>Peptide-Folding Triggered Phase Separation and Lipid Membrane Destabilization in Cholesterol-Rich Lipid Vesicles</i>			Kristina Håkansson <i>Chemical and Physical Strategies for Enabling Proteomic Analysis of Tyrosine Sulfation</i>
14:00 - 14:15	Daniel Umereweneza <i>Bioactive secondary metabolites from Rwandese medicinal plants</i>	Therése Klingstedt <i>Detection of polymorphic Aβ aggregates in Alzheimer's disease using thiophene-based ligands</i>	Andrey Shatskiy <i>Accessing unnatural ?-amino acids through photoredox catalysis</i>	Thomas Fransson <i>eChem: Computational Chemistry from Laptop to HPC</i>	Reza Shariatgorji <i>Molecular Tissue Profiling by Mass Spectrometry Imaging: Recent Progress and Applications in Neuroscience</i>
14:15 - 14:30	Yeersen Patehebieke <i>Photosensitized PCET mediated β-Scission of alcohols for addition reactions</i>	Tong Zhang <i>Molecularly Imprinted Nanogels with High Affinity for the prostate cancer biomarker PSMA</i>	Alice Ondrejková <i>Visible – light mediated chemodivergent oxidative transformation of alcohols</i>	Giane Damas <i>On the Gas Phase Decomposition of Trimethylindium and Indium Trisguanidinate Precursors during the InN Deposition</i>	
14:30 - 14:45	Victor Garcia Vazquez <i>Stereospecific Isomerization of Allylic Substrates via Ion Pairs with Induced Non-Covalent Chirality</i>	Sajjad Naeimipour <i>Modular and Tuneable Hydrogel System by Peptide-Folding Mediated Interactions and Bioorthogonal Cross-linking for 3D Cell Culture and 4D Bioprinting</i>	Lisa de Groot <i>Photoredox chemistry driven by visual light and iron N-heterocyclic carbene complexes</i>	Juan de Gracia <i>Exploring the Oxide Relay mechanism from molecular catalysts to hybrid electroanodes for catalyzed water oxidation by a multiscale approach</i>	Annual Proceedings SMSS
14:45 - 15:00	Ester Maria Di Tommaso <i>Explaining Regio-Divergent Vinylations with Vinylbenziodoxolone</i>	Johan Larsson <i>HSP10 as a chaperone for neurodegenerative amyloid fibrils</i>	Ergun Dönmez Merve <i>Improved Reaction Conditions for Hydroarylation of [C60]Fullerene Using Arylboronic Acids via Metal Catalysis</i>		
15:00 - 15:30	Coffee, Posters and Exhibition				

	Room: Spegelsalen, Session 17: SOC MedChem & Supramolecular Chemistry (Chair: Morten Grötl)	Room: Operetten, Session 18: SPC Physical Chemistry (Chair: Karl Börjesson)	Room: Musikalen, Session 19: SOC Physical Organic Chemistry (Chair: Peter Dinér)	Room: Operan, Session 20: SITS Inorganic Chemistry (Chair: Gulaim Seisenbaeva & Peter Broqvist)	Room: Sonaten, Session 21: SAC Analytical Chemistry (Chair: Jonas Bergquist)
15:30 - 16:00	Keynote: Alesia Tietze, Göteborgs University <i>Chemical synthesis of membrane-spanning proteins: from drug discovery to bioinspired materials</i>	Victor Gray <i>TIPS-Tetracene-PbS Quantum dot Hybrid Materials for Singlet-Fission based Photon Multiplication</i>	Keynote: Mate Erdelyi, Uppsala University <i>Detecting weak non-covalent interactions in solution</i>	Keynote: Ralf Tonner-Zech, Leipzig University <i>Computational chemistry @€" a service science?</i>	Keynote: Charlotta Turner, Lunds University <i>Quantitative analysis of unknown compounds in complex samples</i> <i>– Challenges in extraction, chromatography and detection</i>
16:00 - 16:15	Yan Xue <i>Determination of amide cis/trans isomers in N-acetyl-D-glucosamine: NMR analysis of the N-acetyl group conformation</i>	Maria Cuartero <i>I on-selective electrodes based on interconnected charge-transfer processes</i>	Ilic Aleksandra <i>Consecutive Excitation of Two Charge-Transfer States in an Fe(III/II)-NHC Complex – A Tool for Driving Photoredox Reactions</i>	Pentti Niiranen <i>Reductive surface chemistry for metal deposition induced by plasma electrons</i>	Oksana Rogova <i>Short- and long-term effects of gastric bypass surgery on metabolism</i>
16:15 - 16:30	Anna Lidskog <i>Studying non-covalent interactions using a small synthetic receptor</i>	Xiangrui Kong <i>Understanding the "Water-on" Surface Catalysis in the context of Atmospheric Chemistry</i>	Jason Harper <i>Kinetic analysis to drive solvent choice – picking an ionic liquid to get the outcome you want!</i>	Vadim Kessler <i>Designing synthetic approaches to "impossible" oxide phases</i>	Hamidreza Ardalani <i>Simultaneous quantification of free fatty acids, acylcarnitines, and amino acids by LC/QqQ-MS in serum</i>
16:30 - 16:45	Tobias Rautio <i>Selective alkylation of Indazole-3-carboxylic acid in the synthesis of synthetic cannabinoid metabolites</i>	Emma Björk <i>Formation of mesoporous silica particles and films</i>	Elin Alexandersson <i>NMR experiments for selective suppression of unwanted signals in complex spectra</i>	Samuel Persson <i>Dye-sensitized solar cells based on Fe N-heterocyclic carbene photosensitizers with improved rod-like push-pull functionality</i>	Margareta Sandahl <i>Simultaneous determination of vitamin D and its hydroxylated and esterified metabolites in biological samples by Supercritical fluid chromatography – tandem mass spectrometry</i>
16:45 - 17:00	Ludwig Rambergs PhD Award (in Room: Musikalen)	Stefano Crespi <i>Mechanistic insights into the isomerization behavior of novel molecular motors and photoswitches</i>	Ludwig Rambergs PhD Award (in Room: Musikalen)	Marijana Lalic <i>Ligand chemistry and surface functionalization in approach to selective hybrid silica nano adsorbents</i>	Man Zhang <i>Double isothermal amplification and CRISPR-Cas12a for sensitive detection of citrinin</i>
17:00 - 17:15		Karl Börjesson <i>Introduction of the Section Physical chemistry</i>		Dnyaneshwar Kand <i>Introducing Umbrella Effect in Fe(II)-NHC Dyes for Improved Performance in Dye Sensitized Solar Cells (DSSCs)</i>	Jerk Rännöls <i>Machine Learning assisted analysis of Small Angle X-ray Scattering</i>
17:15 - 17:30					Zhehao Huang <i>Design of Metal-Organic Frameworks for Energy Applications: Incorporating Transition Metals at Atomic Levels</i>
18:00 - 18:50	Room: Crusell, Plenary talk 3 Phil Baran, Scripps Research, San Diego, USA (Chair: Peter Nilsson)				
19:00 - 23:00	Conference Dinner				

Wednesday June 22

Room: Operan, Session 22: Organic Electronics (Chair: Niclas Solin)		Room: Spegelsalen, Per Claesson session 23: Surface and Material Chemistry (Chair: Mark Rutland)		Room: Musikalen, Session 24: Scientific Publishing and Outreach (Chair: Henrik Pedersen)
08:30 - 08:45		Per Claesson <i>Intro and reflections from Per</i>		Keynote: Haymo Ross <i>What is Chemistry Europe?</i>
08:45 - 09:00		Agne Swerin <i>Insights into Institute industry collaborations</i>		
09:00 - 09:15	Keynote: Helena Grennberg, Uppsala University, Sweden <i>Chemistry with carbon nanostructures: Moving molecules towards functional materials</i>	Keynote: William Ducker <i>Evaporation from Porous Coatings and the Implications for Antimicrobial Coatings</i>		Keynote: Ali Stoddard <i>The nature of chemistry publishing</i>
09:15 - 09:30		Lennart Bergström <i>Colloids at Work</i>		
09:30 - 10:00	Keynote: Kasper Moth-Poulsen, Chalmers, Sweden <i>Solar Thermal Management Materials</i>	Mark Rutland <i>Surface chemistry, friction and feeling old</i>		Keynote: Raychelle Burks <i>Social chemistry: tips, clicks, and engagement online</i>
10:00 - 10:30	Coffee, Posters and Exhibition			
Room: Spegelsalen, Session 25: SOC Energy and materials (Chair: Alesia Tietze)	Room: Operetten, Session 26: SSMC Surface and material Chemistry (Chair: Håkan Edlund och Thomas Ederth)	Room: Musikalen, Session 27: SOC Synthesis and method development (Chair: Mate Erdelyi)	Room: Sonaten, Session 28: SPC Physical Chemistry (Chair: Lars Ojamäe)	Room: Operan, Session 29: SAC Analytical Chemistry (Chair: Åsa Emmer)
10:30 - 10:45	Keynote: Daniel Strand, Lunds University <i>Electromechanically responsive hydrocarbons based on alkyne linked dibenzo[a,e]cyclooctatetraenes</i>	Keynote: Jiayin Yuan, Stockholm University <i>Assembly of 2D Materials by Poly(ionic liquid) for High-Performance Nanofiltration Membranes</i>	Keynote: Luke Odell, Uppsala University <i>New Chemical Tools for Drug Discovery and Molecular Imaging</i>	Keynote: Jonathan Benskin, Stockholm University <i>The analytical chemist's toolbox for measurement of per- and polyfluoroalkyl substances (PFAS) in humans and the environment</i>
10:45 - 11:00			Jakob Thyr <i>Quantum confinement in semiconductor materials and its use for energy level alignment</i>	
11:00 - 11:15	Rikard Emanuelsson <i>Electrifying Organic Frameworks</i>	Rana Alimohammadzadeh <i>Nature-Inspired Design of Superhydrophobic Cellulose- and Nanocellulose-Based Materials: A Novel Water- based Composition</i>	Sharon Berkowicz <i>Exploring the validity of the Stokes–Einstein relation in supercooled water using nanomolecular probes</i>	
11:15 - 11:30	Feng Gao <i>A new doping strategy of Spiro-OMeTAD: towards Instantly Efficient and Stable Perovskite Solar Cells</i>	Olof Eskilson <i>Nanocellulose Composite Wound Dressings with Integrated pH Sensors for Detection of Wound Infections</i>	Daive Schirone <i>Rheo-titration experiment for detection of optimum formulation conditions</i>	Zhangjun Hu <i>Specific ratiometric fluorogenic nanoprobe for broad pH sensing during mitophagy</i>
11:30 - 11:45	Mauricio Posada Urrutia <i>Synthesis and Characterization of Emissive Benzothiadiazole-Au(I)- L Complexes</i>	Sara Sigurdardottir <i>Viral receptor mimics based on peptide epitopes</i>	Marco Fornasier <i>Fluorescence to probe a-synuclein-lipid membranes interactions</i>	Helen Sepman <i>Concentration estimations for unidentified compounds in non- target analysis workflow</i>
11:45 - 12:00	Yutang Li <i>The long-awaited synthesis and self-assembly of a small rigid C3- symmetric triacetam</i>	Deepak Tomar <i>Development Of Catalytic Eu(II)-Mediated Reactions</i>	Aleksandar Tot <i>Aqueous electrolytes for Li-ion batteries- hybride WISE approach</i>	Tautgirdas Ruzgas <i>Non-invasive, topical sampling of potential, low molecular weight, skin cancer biomarkers</i>
		Erika Linde <i>Diarylation of N- and O- nucleophiles through a metal-free cascade reaction</i>	Karl Rönnyby <i>OpenGibbs: A Statistical Thermodynamics-Equilibrium Software for Research and Teaching</i>	Amina Souihi <i>Selecting mobile phase for high sensitivity non-targeted LC/ESI/HRMS</i>
12:00 - 13:10	LUNCH			
				Annual Proceedings SAC

13:10 - 14:00

Room: Crusell, Plenary talk 4
Lee Cronin, University of Glasgow U.K. (Chair: Henrik Pedersen)
Chemputers, Chemputation, and Chemputability

14:00 - 14:50

Room: Crusell, Plenary talk 5
Torbern Bergman Award - Graham Cooks, Purdue University (Chair: Jonas Bergquist)
Mass Spectrometry for Synthesis and Analysis: Accelerated Reactions in Microdroplets

14:50 - 15:30

Room: Crusell, Poster Awards and Closing

*Section of Organic Chemistry (SOC)
Section of Vibrational Spectroscopy (SVS)
Sections of Inorganic Chemistry, Theoretical Chemistry, Surface and materials Chemistry (SITS)
Section of Mass spectrometry (SMS)
Section of Biochemistry, Biophysics and Molecular Biology (SBBM)
Section of Analytical Chemistry (SAC)
Section of Physical Chemistry (SPC)
Section of Surface and Material Chemistry (SSMC)