

11th EUROPEAN SILICON DAYS

SALZBURG, July 14th - 16th 2025



MONDAY 14th July

08:00 – 09:00

Registration

09:00 – 09:30

Opening Ceremony (Audimax)

09:30 – 10:15 (Audimax)

PLENARY LECTURE 1

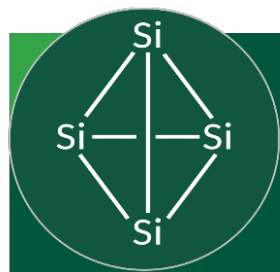
David Scheschkewitz

Saarland University, Germany

Silicon versions of iconic Hückel aromatics

10:15 – 10:45 Coffee Break

	Audimax	Blue	Green
10:45 – 11:15	IL 1 M. Driess TU Berlin, Germany Subvalent Silicon and Boron in Concert: Entering New Chemical Space in Small Molecule Activation	IL 2 B. Arkles Catemer Inc., USA; Temple University, USA Silacrown Ethers: Synthesis and Influence on Ion Flux Across Myocardial Cell Membranes	IL 3 H. Mack Evonik Operations GmbH, Germany Fluorine-free Hybrid Siloxane Resins Feel the Heat
11:15 – 11:35	L1 J.O. Bauer University of Regensburg, Germany Activation by CO ₂ : C–C Coupling Reactivity of Borylsilyl Ester Enolates	L2 K. Stefanowska Adam Mickiewicz University, Poland Synthesis of alkenyl-functionalized silsesquioxanes and spherosilicates	L3 O. Dudarko SLU Uppsala, Sweden Amine-functionalized silicas for water purification from PFAS
11:35 – 12:05	IL4 T. Iwamoto Tohoku University, Japan Valence Isomerization of a Tetrasil-1,3-dienide	IL5 I. Melnyk Slovak Academy of Sciences, SL, National Academy of Sciences, Ukraine Enhanced Performance of Bifunctional Silica Spheres: Advantages of Dual Functional Surface Engineering Versus Monofunctional Strategies	IL 6 C. Stauch ISC Würzburg, Germany Hybrid coatings for biomaterials: advancing functionality and circularity

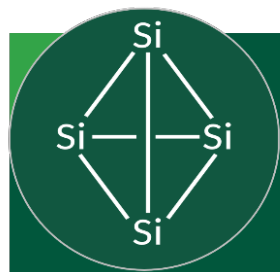


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12:05 – 13:30 Lunch			
	Audimax	Blue	Green
13:30 – 14:00	IL7 T. Müller Carl von Ossietzky University Oldenburg, Germany A Short Story on Oligosilanyl Cations, Oligosilyl Carbocations and Bissilylium Ions	IL8 M. Wong-Chi-Man Univ. Montpellier, France Silsesquioxanes: Defined Sizes, Structures and Shapes	IL9 J. J. Vilatela IMDEA Materials, Spain Large-scale silicon nanowire paper fabrication and battery applications
14:00 – 14:20	L4 L. Bichlmaier TU München, Germany Hydrosilane-Functionalized [2.2]Paracyclophane for Plasma- Etch-Resistant and Post- Modifiable Poly(Para-Xylylene)	L5 M. Przybylak Adam Mickiewicz University, Poland Thiol-ene Click Chemistry as a Versatile Tool for the Functionalization of Natural Fabrics with Organosilicon Compounds	L6 G. Bourret University of Salzburg, Austria Engraving Function at the Nanoscale via Metal-Assisted Chemical Etching
14:20 – 14:40	L7 A. Seidel TU Freiberg, Germany LEWIS-Base-Stabilized α -Amino Acid-Derived Silaheterocycles and Their Role in Peptide Bond Formation	L8 A. Sarkar Momentive Performance Materials, India Evidence of "Structured Water" in a Rationally Designed Silicone Elastomer	L9 E. Idowu University of Bordeaux, France Synthesis of hybrid silicon nanowires with different metal catalysts
14:40 – 15:00	L10 G. Nikonov Brock University, Canada Ge(0) supported by a diimino- NHC, and its lighter and heavier congeners	L 11 A. Nouredine University of New Mexico, USA Immunogenic silica nanoparticles and silicified cells for ovarian cancer immunotherapy	
15:00 – 15:30 Coffee Break			

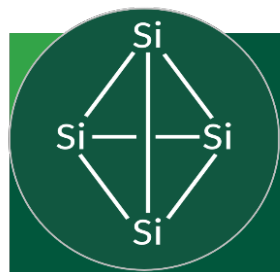


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	Audimax	Blue	Green
15:30 – 16:00	IL10 F. Lips University of Münster, Germany Reactivity of a Silylium Borata Ylide	IL 11 M. Unno Gunma University, Japan Functional Silsesquioxanes as Versatile Monomers	IL12 D. Lau ISC Würzburg, Germany PFAS-free hybrid coatings: Technical applications and wet- chemical functionalization of textiles
16:00 – 16:20	L12 K. Tomer University of Bonn, Germany Metal–Silicon Triple Bonds: Reactivity of the Silyldiyne Complexes [Cp*(CO) ₂ M≡Si–Tbb] (M = Cr – W)	L13 K. Mitula-Chmielowiec Adam Mickiewicz University , Poland Tailoring the Properties and Applications of Polysiloxanes Using Silsesquioxanes	L14 K. Kraushaar TU Freiberg, Germany Advanced Sol-Gel Coatings for Anti-Graffiti and Anti-Fingerprint Applications: A Hybrid Material Approach
16:20 – 16:50	IL13 A. Franczyk Adam Mickiewicz University, Poland Organosilicon-based building blocks for the controlled synthesis of unsaturated organic compounds	IL14 J. Furgal Bowling Green State University, USA Investigations of Photoresponsive Behaviors in Q-Silica Cage- based Network Polymer Gels	IL15 J. Tillmann Wacker Chemie AG, Germany Technology example for the reduction of silanol freight in waste water
16:50 – 17:10	L15 M. Bermeshev A.V. Topchiev Institute of Petrochemical Synthesis, Russia The development of approaches to the synthesis of silicon- containing cycloolefins: the search for ways to the selective bis-silylation of norbornadiene		L16 K. Korth, F. Zschocke Evonik Operations GmbH & Total Energies Glass Lubricants Europe Glasskote Base 1 – a new coating for the container glass industry
17:10 – 18:30	Postersession I		
18:00 – 20:00 Welcome Reception			



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TUESDAY 15th July

08:30 – 9:15 (Audimax)

PLENARY LECTURE 2

Carole C. Perry

Nottingham Trent University, UK

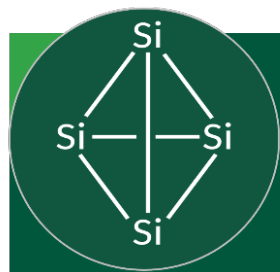
Experimental and computational approaches to studying silica-based materials and their interaction with biomolecules; towards an understanding of the biological processing of silica

5 min Break

		Blue	Green
9:20 – 09:50		IL16 T. D. Tilley University of California Berkeley, USA Bond-Breaking and -Making at Silicon with Coordination Chemistry	IL 17 S. Zhao EMPA, Switzerland Silica-Based Aerogels: Manufacturing and Emerging Applications
09:50 – 10:10		L17 U. Das Ruhr Universität Bochum, Germany Coordination Chemistry of Silicon: Multiple Bonding and Ligand Exchange	T18 B. Milow DLR Cologne, Germany Efficient automotive heat shielding based on complex shaped aerogel composites

10:10 – 10:40 Coffee Break

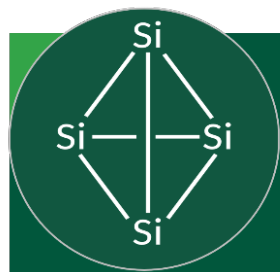
		Blue	Green
10:40– 11:00		L19 E. Kroke TU Freiberg, Germany Phosgene-free, silane-based, sustainable synthesis of isocyanates	L20 C. Scherdel Center for Applied Energy Research, Germany Silica aerogels with structural sizes varied over two decades
11:00 – 11:20		L21 M. Haas Graz University of Technology Water Soluble Acyl Metalloids for Innovative Phototherapeutics and Novel Photoinitiators	L22 G. Kickelbick Saarland University, Germany Unlocking the Potential of Polysilsesquioxanes: Advanced Materials for Optics and Beyond



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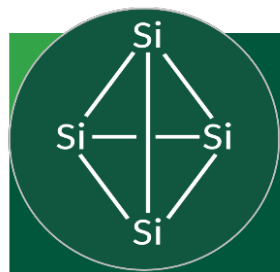
11:20 – 11:50		IL18 N. Tokitoh Kyoto University, Japan New Insights in the Chemistry of Heavier Aryl Anions	IL19 A. Andrieu-Brunsen TU Darmstadt, Germany In-situ functionalization and additive manufacturing of mesoporous silica
		11:50 Group Photo	
12:00 – 13:30 Lunch (IA Board Members Meeting)			
13:30 – 14:15 (Audimax) PLENARY LECTURE 3 Luisa Durães University of Coimbra, Portugal Silica aerogels versatility – from thermal insulation to pollutants capture			
		Blue	Green
14:20 – 14:50		IL20 T. Kato Université de Toulouse, France Base-stabilized silynes: Synthesis and reactivity	IL21 M. Brook McMaster University, Canada Waste Not, Want Not: Silicones and the Waste Stream
		L23 P. Lickiss Imperial College London, UK Synthesis, Structures and Applications of Metal-Organic Frameworks Containing Silicon Linkers	L24 N. Wienkenhöver Wacker Chemie AG, Germany Introduction of renewable raw materials into the chemical supply chain
15:10 – 15:30		L25 M. Joon OH Cracow University of Technology Surface modification of spherical silica with silane/silatrane coupling agents – application in photopolymerizable 3D-printing resin composites	L26 J. Lyubina Evonik Operations GmbH, Germany Advancing electrocatalyst stability and performance of water electrolysis with silicon chemistry solutions
		15:30 – 15:45 Coffee Break	



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15:45 – 16:45	Postersession II		
		Blue	Green
16:45 – 17:15		IL22 B. Dudziec Adam Mickiewicz University, Poland Expanding the Role of Silsesquioxanes: From Structural Modifications to Coordination Chemistry	IL23 V. Monteil CNRS, CPE Lyon, France Catalysis at Silicones' service
17:15 – 17:45		IL 24 S. Kahn IISEER Pune, India N-heterocyclic Silylene: From Bonding to Application	IL 25 A. Ladegaard-Skov TU Denmark, Denmark Identical silicone-gelatin compositions processed at different temperatures enable two distinct elastomer types for extrusion and shape-memory applications
17:45 – 18:15		IL26 C. Marschner Graz University of Technology, Austria From Oligosilylenoids to a Range of Cyclotetrasilanes	IL27 G. Drisko University of Bordeaux, France Silica's role in creating vivid structural color
Free Evening			



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Wednesday 16th July

08:30 – 9:15 (Audimax)

PLENARY LECTURE 4

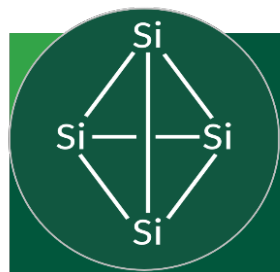
Volker Deringer

University of Oxford, UK

Modelling and understanding amorphous silicon with the help of atomistic machine learning

5 min Break

	Audimax	Blue	Green
09:20 – 09:50	IL28 M. Wagner Goethe-Universität Frankfurt, Germany Silafulleranes and silaadamantanes: new developments	IL30 A. Lobnik University of Maribor, Slovenia Sol Gel Nanomaterials and their Applications: Challenges, Opportunities and Risks	IL29 T. Fässler Technische Universität München, Germany Low-Oxidation State Si and mixed Si/Ge Clusters
09:50 – 10:10	L27 A. Kostenko TU München, Germany CO Insertion into the Si=Si bond of a disilene yields a 1,3-disaallene oxide which exhibits divergent reactivity toward CO ₂	L28 K.M. Lewis Momentive Performance Materials, USA Silahydrocarbons as Potential Alternatives to Volatile Silicones	L29 T. Lainer Graz University of Technology, Austria Mechanochemical Synthesis of Oligo- and Poly-silanes
10:10 – 10:40	IL31 M. E. Moret Utrecht University, The Netherlands Elementary Steps of Catalysis at Cage Silanides	IL32 A. Shimojima Waseda University, Japan Synthesis and unique properties of layered silica/silsesquioxane and polydimethylsiloxane nanocomposites	
10:40 – 11:15 Coffee Break			



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AUDIMAX
11:15 – 11:25 Wacker Silicone Award Presentation M. Schulze-Adams
11:25 – 12:15 Wacker Silicone Award Lecture L. Greb Universität Heidelberg, Germany Beyond the Comfort Zone: Expanding the Chemistry of Silicon(IV) through Ligand Control
12:15 – 13:00 Poster Awards and Closing ceremony
13:15 – 18:30 Excursion Wacker Chemie / Burghausen* or Lunch
18:30 – 23:00 Conference Dinner Kavalierhaus Klessheim**

*Lunch included

**Conference Dinner will start at 6:30 pm on Wednesday 16th July 2025.