

July 14th - 16th 2025
Salzburg, Austria



Abstracts Poster

Molecular Silicon Chemistry & Organometallics

P01

An Authentic Al=Si Double Bond

Nasrin Parvin

<https://esd11.sciencesconf.org/634883/document>

P02

Catalytic Desymmetrization of Diaminosilanes via Buchwald-Hartwig-Type Coupling

Manuel Kümper

<https://esd11.sciencesconf.org/632116/document>

P03

Dismutational hexasilabenzene as functional model for the Si(100) surface

Michel Bollmann

<https://esd11.sciencesconf.org/647641/document>

P04

First Example of a Germa-Michael Addition: Novel Synthetic Route Towards Functionalized Acylgermanes

Matthias Paris

<https://esd11.sciencesconf.org/633308/document>



11th EUROPEAN SILICON DAYS

July 14th - 16th 2025
Salzburg, Austria



P05

N-Heterocyclic Carbene (NHC) Functionalized Germanolates and Germylenes
Matthias Paris

<https://esd11.sciencesconf.org/633310/document>

P06

Hydrogen-Bridged Mono- and Disilyl Dications

Corinna Girschik

<https://esd11.sciencesconf.org/634357/document>

P07

Mechanistic Homo-/Hetero-coupling of Isocyanide and Carbon Monoxide Mediated by Acyclic Imino(silyl)silylene

Huaiyuan Zhu

<https://esd11.sciencesconf.org/630771/document>

P08

Monofunctionalization of [20]Silafulleranes via Selective H⁺ or H⁻ Abstraction

Julius Wicke

<https://esd11.sciencesconf.org/633232/document>

P09

N-Heteroarene Activation by Imino(silyl)disilenes

Nina Krüger

<https://esd11.sciencesconf.org/646519/document>

P10

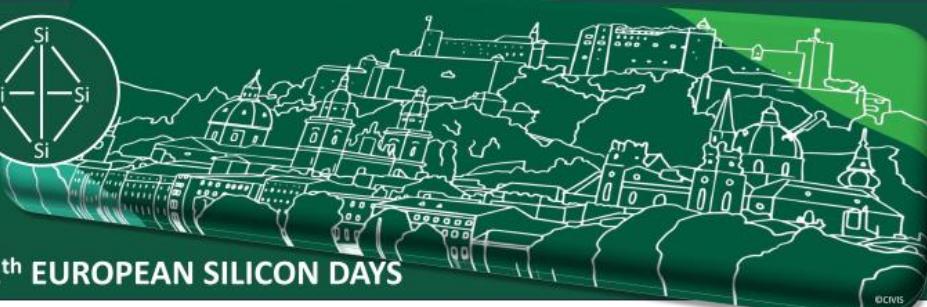
Pentasilacyclopentadienide: A silicon analogue of Cp

Ankur

<https://esd11.sciencesconf.org/647694/document>



11th EUROPEAN SILICON DAYS



July 14th - 16th 2025
Salzburg, Austria



P11

Photochemistry of Silyl-, Germyl-, and Phosphino-1,2-Diones

Daniel Griess

<https://esd11.sciencesconf.org/647093/document>

P12

Utilization of NHC-stabilized Silyliumylidene Ions in the Catalytic Hydrosilylation of CO₂

Sebastian Stigler

<https://esd11.sciencesconf.org/630825/document>

P13

The Use of Sila-Wagner-Meerwein Rearrangement

Elias Drösemeier

<https://esd11.sciencesconf.org/630307/document>

P14

Synthesis of Group 14 Heterooligomers

Sebastian Karger

<https://esd11.sciencesconf.org/633235/document>

P15

Functionalized Hydrosilanes – Novel Precursors for Liquid Phase Deposition (LPD)

Daniel Griess

<https://esd11.sciencesconf.org/632924/document>

P16

Synthesis and Reactivity of Alumasilyl Coinage Metal Complexes

Johannes Voigtland

<https://esd11.sciencesconf.org/631085/document>



July 14th - 16th 2025
Salzburg, Austria



P17

Quantum-Grade Trichlorosilane: New Synthesis Approaches for a ²⁸Si-enriched SiC-Precursor

Max Steudel

<https://esd11.sciencesconf.org/634917/document>

P18

Metal–Silicon Triple Bonds: Reactivity of the Silylidyne Complexes

[Cp*(CO)₂M≡Si–Tbb] (M = Cr – W)

Kanishk Tomer

<https://esd11.sciencesconf.org/631689/document>

P19

Uncharged *Zintl* Cluster [Hyp₃Si₉]Cu^{Dipp}NHC and Dimerization in Solution

Bettina E. Frank

<https://esd11.sciencesconf.org/634927/document>

P20

Anionic Rhodium and Cobalt Complexes as Very Active Catalysts for Hydrosilylation Reactions

Magdalena Jankowska-Wajda

<https://esd11.sciencesconf.org/634925/document>

P21

Click Chemistry Meets Germanium:

Synthesis and Characterization of Click-Functionalized Acyl Germananes

Andre Stephan Culum

<https://esd11.sciencesconf.org/634604/document>



July 14th - 16th 2025
Salzburg, Austria



P22

Polyethylene-Modified Acylgermanes: Expanding the Applicability of Germanium-Based Photoinitiators in Polar Systems

Andre Stephan Culum

<https://esd11.sciencesconf.org/634804/document>

P23

Reactivity of Stannole Dianions towards Silicon and other Main Group Halides

Nadeschda Geibel

<https://esd11.sciencesconf.org/634813/document>

P24

Reactivity of germanolates with the chlorides of group 14 elements

Nilanjana Sen

<https://esd11.sciencesconf.org/634505/document>

P25

Molecular-scale Combination of Silicon, Germanium and Phosphorus and Applications in Coordination Chemistry

Daniel Mühlhausen

<https://esd11.sciencesconf.org/652587/document>

Silicones to Silica

P26

Silicon Polyolates: Opportunities and Challenges in Sol-Gel Processing

Julia Spanring

<https://esd11.sciencesconf.org/621361/document>



11th EUROPEAN SILICON DAYS

July 14th - 16th 2025
Salzburg, Austria



P27

Synthesis of Tetraethoxysilane using Rice Husk Ash as Biogenic Precursor

Karoline Wissel

<https://esd11.sciencesconf.org/634924/document>

P28

Gelation Studies of Sodium Silicate Solutions in the Presence of Organic Acids

Reese Caliman

<https://esd11.sciencesconf.org/660281/document>

P29

Sustainable Reinforcement of Silicone Rubber: Comparative Analysis of Biosilica from Rice husk and Conventional Silica

Hyeonwoo Jeong

<https://esd11.sciencesconf.org/632882/document>

P30

Redesigning inorganic-organic hybrid polymer coatings for sustainable, heat-sensitive substrates: Achieving oxygen barrier and hardness at room temperature

Christopher Fischer

<https://esd11.sciencesconf.org/634404/document>

P31

The application of organofunctional silanes to protect the wood surface

Karol Szubert

<https://esd11.sciencesconf.org/632974/document>

P32

Designing Superhydrophobic Cotton Fabrics with Polysiloxane–Silsesquioxane Hybrids via Thiol-ene Click and Hydrosilylation Chemistry

Marcin Przybylak

<https://esd11.sciencesconf.org/634353/document>



July 14th - 16th 2025
Salzburg, Austria



P33

Stimuli-Responsive Spiropyran-Based Polysilsesquioxane Monoliths with Hierarchical Porosity

Andrea Heugenhauser

<https://esd11.sciencesconf.org/646716/document>

P34

Development of PSQ High Heat-Resistant Thermal Insulation Material with Cross-Linker and Thermodegradable Groups

Kosuke Tsutsui

<https://esd11.sciencesconf.org/647099/document>

P35

Crosslinking density or SQ cage – which has a greater influence on composite properties?

Mariusz Szolyga

<https://esd11.sciencesconf.org/634396/document>

P36

Corner- and edge-connected dimer of T₈-POSS

Peter Spiess

<https://esd11.sciencesconf.org/646953/document>

P37

Click & Catch: Metallosupramolecular Complexes with SQ-Based Ligands

Monika Rzonsowska

<https://esd11.sciencesconf.org/632487/document>

P38

Study of the thermal decomposition of clay mineral-polysiloxane nanocomposites using high-temperature FTIR and TG/MS/FTIR

Monika Wójcik-Bania

<https://esd11.sciencesconf.org/630189/document>



July 14th - 16th 2025
Salzburg, Austria



P39

Polysiloxane-halloysite nanocomposites as adsorbents for organic pollutants: a case study with methylene blue

Monika Wójcik-Bania

<https://esd11.sciencesconf.org/630187/document>

P40

Facile preparation of heptazine-covered Fe₂O₃ Flame Retardant and its Application of the Silicone Rubber

Jaewon Lee

<https://esd11.sciencesconf.org/632881/document>

P41

Circular dielectric elastomer actuators: design and application

Alina Khmelnitskaia

<https://esd11.sciencesconf.org/634734/document>

P42

Exploration of Silicones and Hydrocarbons for anti-Smudge Agents

Shinya Handa

<https://esd11.sciencesconf.org/641403/document>

P43

Development of Phenyl Silicone-based Thermal Interface Materials

Issei Nishimura

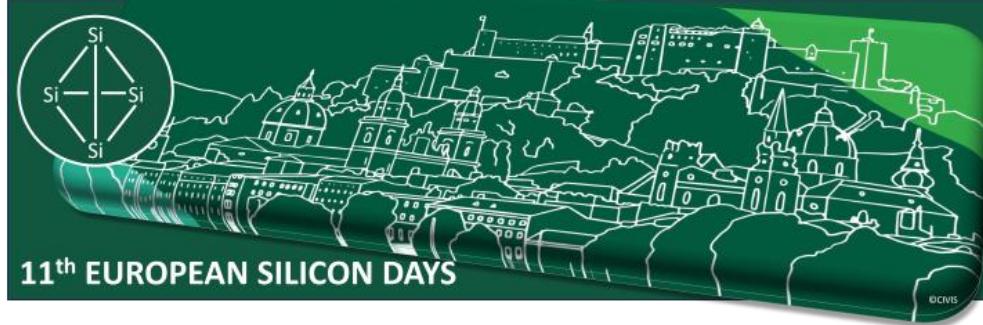
<https://esd11.sciencesconf.org/647065/document>

P44

Carbon spherogels as nano reactors: transition of encapsulated titania into TiC

Aseel Al-Mohammad

<https://esd11.sciencesconf.org/647136/document>



July 14th - 16th 2025
Salzburg, Austria



P45

Iron functionalized carbon spherogels for energy storage applications

Saeed Borhani

<https://esd11.sciencesconf.org/647895/document>

P46

Sol-gel technology meets biopolymer: Chitosan-based hybrid coatings

Mareike Weigel

<https://esd11.sciencesconf.org/634989/document>

P47

Exploring the potential of Silica-based hybrid materials featuring in situ incorporated organic moieties for water purification

Viktoria Kyshkarova

<https://esd11.sciencesconf.org/627958/document>

P48

Magnesium Infiltration of Mesoporous Silica Hosts

Oliver Diwald

<https://esd11.sciencesconf.org/647906/document>

P49

Pseudomorphic Transformation of Nanostructured Silica

Aswathy Jayakumar Subha Rani

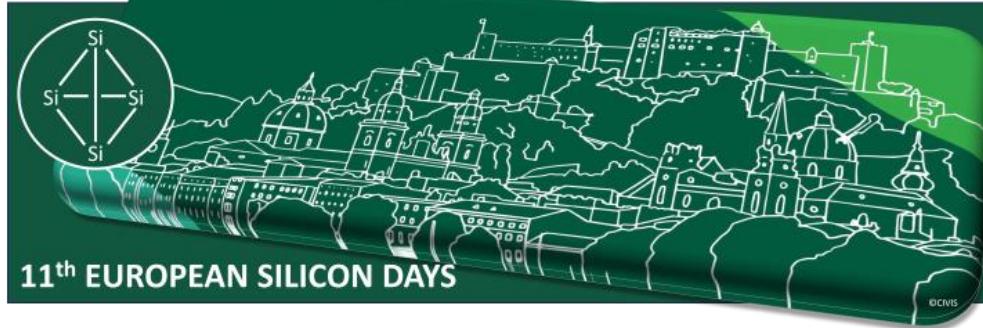
<https://esd11.sciencesconf.org/647924/document>

P50

Photoluminescent Sensing of Ibuprofen Using Terbium-Adsorbed Amino/Fluorinated Silica

Olha Semeshko

<https://esd11.sciencesconf.org/645873/document>



July 14th - 16th 2025
Salzburg, Austria



P51

Synthesis and Characterization of Gold Nanoparticle-Decorated Amino Silica Spheres

Nataliia Chechitko

<https://esd11.sciencesconf.org/633044/document>

P52

Controlling the pore structure of nanoporous silica scaffolds for silicon-based lithium-ion battery anodes

Simone Pokrant

<https://esd11.sciencesconf.org/636413/document>

P53

Electrifying chemical transformations in silicon chemistry

Alexis Milfleur

<https://esd11.sciencesconf.org/646792/document>

P54

HNO₃-less acidic etching of silicon wafers – surface reactions, morphologies and potential applications

Edwin Kroke

<https://esd11.sciencesconf.org/659714/document>

P55

In situ characterization of the conversion of 3D preceramic polymer structures to silicon oxycarbide ceramics

Maciej Sitarz

<https://esd11.sciencesconf.org/652620/document>



July 14th - 16th 2025
Salzburg, Austria



P56

From Molecular Structure to Macroscopic Performance: Insights into Carbosilane Resin Curing

Tobias Haupt

<https://esd11.sciencesconf.org/651745/document>

P57

Metal-modified silicon oxycarbide as the material with potential application in catalysis

Jakub Marchewka

<https://esd11.sciencesconf.org/652612/document>

P58

Synthesis and structural investigation of Polymer Derived Ceramics SiOC-Cu with potential application in catalysis

Wojciech Wieczorek

<https://esd11.sciencesconf.org/652375/document>

P59

Nanocomposites based on metal oxides and silica: synthesis and photocatalytic activity for methyl orange removal under UV irradiation

Oksana Makota

<https://esd11.sciencesconf.org/627456/document>

P60

KaSil – Solid Adsorbents for Carbon Capture

Sandra Schüttner

<https://esd11.sciencesconf.org/651747/document>



July 14th - 16th 2025
Salzburg, Austria

