



## 12:00 – 14:00 Poster Session A to G

### Highly reactive species

A1

A Series of Bicyclo[1.1.0]tetrasilane Radical Anions: Substituent Effects on 3-Electron-2-Center Silicon-Silicon Bonds  
Koike Taichi

<https://10esd.sciencesconf.org/463079/document>

A2

A stable heavier analogue of ketyl anion: synthesis, isolation and application

Kostenko Arseni

<https://10esd.sciencesconf.org/462361/document>

A3

Aryl-substituted Monosilanols and Silanediols as Molecular Precursors for Solventless (Poly)Condensation Reactions  
Kannengiesser Jan-Falk

<https://10esd.sciencesconf.org/477388/document>

A4

Carbonylation of Disilenes

Kiefer Fiona

<https://10esd.sciencesconf.org/482494/document>

A5

Catalytic Hydrometallation of CO<sub>2</sub> mediated by NHC-stabilized Silyliumylidenes

Stigler Sebastian

<https://10esd.sciencesconf.org/481306/document>

A6

Insights into the formation of the silicon cluster Si<sub>8</sub>{N(SiMe<sub>3</sub>)<sub>2</sub>}<sub>6</sub>

Moschref Cijam Amon

<https://10esd.sciencesconf.org/482920/document>

A7

Si(I)-Si(I) Bond Scission of Disilylenes by Insertion of Silylenes

Kobosil Sarah

<https://10esd.sciencesconf.org/481777/document>

A8

Strain-driven ring expansion of silicon heterocycles

Mueller Maximilian

<https://10esd.sciencesconf.org/468296/document>

## New bonding systems

B1

Aryl Isocyanides Mediated Aryl and Silyl Exchange of Acyclic Imino(silyl)silylene via Cleavage of Aryl C–N Bond  
Zhu Huaiyuan

<https://10esd.sciencesconf.org/482979/document>

B2

Characterization of bonding mode of 1,2-disilabenzene and 1,2-digermaabenzene  
Hashizume Daisuke

<https://10esd.sciencesconf.org/482817/document>

B3

Four-Membered Cyclic Cations with Electron-Withdrawing Substituents  
Falk Alexander

<https://10esd.sciencesconf.org/481702/document>

B4

Functionalization of Siliconoids with Group 14 Tetrylenes and Follow-Up Transition Metal Grafting  
Giarrana Luisa

<https://10esd.sciencesconf.org/468277/document>

B5

Synthesis and reactivity of a bicyclo[1.1.0]tetrasilatetraamide  
Quest Michael

<https://10esd.sciencesconf.org/481823/document>

B6

Synthesis, Structure and Dynamics of Silylated Nine Atomic [Si<sub>z</sub>Ge(9-z)] Zintl Clusters  
Frankiewicz Kevin Maximilian

<https://10esd.sciencesconf.org/483143/document>

B7

Three-membered Si<sub>2</sub>B ring and its reactivity towards pyridine, DMAP and NHC  
Parvin Nasrina

<https://10esd.sciencesconf.org/482872/document>

## Reactivity and low coordinate silicon species

C1

Bis(silylene)-Stabilized Zero-Valent Monoatomic Tin and Lead Complexes  
Xu Jian

<https://10esd.sciencesconf.org/464735/document>

C2

Bis-silylene ligands for the synthesis of low-valent aluminium-silicon complexes  
Saddington Artemis

<https://10esd.sciencesconf.org/482522/document>

C3

Synthesis and Reactivity of Alkali Metal-substituted Silyl Radicals

Eisner Teresa

<https://10esd.sciencesconf.org/479853/document>

C4

Synthesis and Reactivity of Cationic Silyne

Rodriguez Alvarez Aurora

<https://10esd.sciencesconf.org/481740/document>

C5

Synthesis and Reactivity of N-Heterocyclic Carbene-Phosphinidene Substituted Silylene

Doleschal Martin Ernst

<https://10esd.sciencesconf.org/480199/document>

C6

Two Heteroleptic Siladiboranes and their Electronic Structure

Maurer Leonard

<https://10esd.sciencesconf.org/481757/document>

C7

Weak interactions in Stabilized Silylium ions

Maerten Eddy

<https://10esd.sciencesconf.org/481502/document>

## New compounds

D1

Silicon Complexes with a Tetra-Amido Macrocyclic Ligand - Catalysis by Structural Constraint

Hannibal Valentin

<https://10esd.sciencesconf.org/482201/document>

D2

Silylene and Germylene Amidinate Iron Complexes: A Versatile Route for Nanoparticles Synthetic Precursors

Madec David

<https://10esd.sciencesconf.org/482606/document>

D3

Stereochemically Pure N-Hydrosilyl-Substituted Phosphine Sulfides as Valuable Precursors for the Design of Inorganic Rings

Huber Tanja

<https://10esd.sciencesconf.org/480366/document>

D4

Synthesis and characterization of "click-functionalized" halogenosilane-pyridine-complexes

Riedel Sophie

<https://10esd.sciencesconf.org/482876/document>

D5

Theoretical study of the Si/C mixed analogues of polyhedral compounds

Uchiyama Tamotsu

<https://10esd.sciencesconf.org/481388/document>

## Organometallics

E1

Borasilsesquioxanes - synthesis and functionalization

Frydrych Milosz

<https://10esd.sciencesconf.org/482490/document>

E2

Cobalt-catalyzed selective synthesis of organometalloid compounds utilizing low-cost pincer complexes

Lewandowski Dariusz

<https://10esd.sciencesconf.org/468322/document>

E3

Highly Markovnikov-selective hydrosilylation and hydrogermylation of alkynes catalyzed by cobalt(0) complex bearing bulky N-heterocyclic carbene ligand

Bolt M.

<https://10esd.sciencesconf.org/482498/document>

E4

Hydrosilylation of carbonyl compounds in the presence of novel iridium(I) complexes bearing (-)-menthol-based phosphorous(III) ligands

Stesik Konrad

<https://10esd.sciencesconf.org/464819/document>

E5

Non-noble metal catalysts for industrial hydrosilylation reactions

Vivien Anthony

<https://10esd.sciencesconf.org/482459/document>

E6

Ru-catalyzed Formation of Thiosilanes and Selenosilanes using Dichalcogenides as a User-Friendly Alternative to Thiols and Selenols

Gruszczynski Marcin

<https://10esd.sciencesconf.org/475892/document>

E7

Si-, Ge- and P-based Photoinitiators- Synthesis, Characterization and Evaluation of their Photochemical Properties

Wiesner Tanja

<https://10esd.sciencesconf.org/477993/document>

E8

Synthesis, Isolation and Characterization of a Genuine Distannene

Bashkurov Roman

<https://10esd.sciencesconf.org/474355/document>

E9

Two is better than one - influence of Bis-NHC ligand on platinum-catalyzed hydrosilylation of internal alkynes

Mermela Aleksandra

<https://10esd.sciencesconf.org/482480/document>

E10

Understanding Pd(0)-Si(IV) Z-Type Interaction in a Neutral Bis(amidophenolato)silane Complex

Ansmann Nils

<https://10esd.sciencesconf.org/481297/document>

## New synthetic methodologies

F1  
(PMe<sub>3</sub>)<sub>3</sub>Co≡SiTbb: A Cobalt Silylidyne Complex via Metathetical Exchange of Cobalt-Tetrel Triple Bonds  
Deckstein Tobias  
<https://10esd.sciencesconf.org/481452/document>

F2  
Catalytic and Sustainable Approaches to Organosilicon and Related Elements Compounds  
Walkowiak Jędrzej  
<https://10esd.sciencesconf.org/465076/document>

F3  
Catalytic synthesis of germasiloxanes and alkynylgermanes mediated by earth-abundant species.  
Broniarz Konstancja  
<https://10esd.sciencesconf.org/479782/document>

F4  
CO<sub>2</sub>-Insertion into Silylamines, Aminosilanes and Silazanes - Precursors for Isocyanates, Ureas, Siloxanes and Methylamines  
Kroke Dr. Edwin  
<https://10esd.sciencesconf.org/465079/document>

F5  
Cobalt pincer complexes for syn-selective hydrosilylation of internal alkynes  
Stachowiak-Dluzynska Hanna  
<https://10esd.sciencesconf.org/480993/document>

F6  
Functional Mesoporous Silica Nanostructures: From Size to Shape  
Vashishtha Anu  
<https://10esd.sciencesconf.org/465065/document>

F7  
Monosilane as a Cheap Feedstock for Branched Oligohydridosilanes  
Heurix Madeleine  
<https://10esd.sciencesconf.org/478622/document>

F8  
Preparation of Cage Germoxane“Cage Siloxane Composites and Selective Removal of the Germoxane Units  
Hayashi Taiki  
<https://10esd.sciencesconf.org/484885/document>

F9  
Synthesis and Structural Investigation of Silanols and Lithium Siloxides  
Rothfelder Robin  
<https://10esd.sciencesconf.org/482421/document>

F10  
Synthesis of silicon-containing polyolefins  
Januszewski Rafai  
<https://10esd.sciencesconf.org/462967/document>

F11  
Tuning Silicon's Lewis Acidity- From Structural Insights to Enhanced Reactivity  
Thorwart Thaddaeus  
<https://10esd.sciencesconf.org/481709/document>

## New industrial trends

G1

Catechol-Mediated Redox-Neutral One-pot Transformation of SiO<sub>2</sub> into SiPh<sub>4</sub>

Luo Qingqing

<https://10esd.sciencesconf.org/482571/document>

G2

Glycerol-suspended substances in a two-component silicone adhesive enable facile transdermal and topical drug release

Kristensen Jonas Brems

<https://10esd.sciencesconf.org/476388/document>

G3

Hydrosilylation of Siloxanes: An Industrial Perspective

Huggins John

<https://10esd.sciencesconf.org/464944/document>

G4

Microsystem for optical detection of toxic gas

Guittet Esteban

<https://10esd.sciencesconf.org/464829/document>

G5

Müller-Rochow and Siemens Reloaded

Heinz Myron

<https://10esd.sciencesconf.org/463158/document>

G6

Preparation of Polymer-Layered Silicate Hybrids Coating for Anticorrosion

Tirayaphanitchkul Chalunda

<https://10esd.sciencesconf.org/481640/document>

G7

Silicone-Glycerol formulations embedded with cosmetic ingredients for Dermatological Applications: A Clinical Trial.

Echarri Maria

<https://10esd.sciencesconf.org/480964/document>

G8

Stimulus responsive fluorescent organosilicon smart materials

Manman Wu

<https://10esd.sciencesconf.org/464114/document>

# 15:45 – 17:45 Poster Session H to N

Biocomposites, biomaterials and nanomedicine

H1

Effect of macromolecular organosilicon compounds containing functional methacrylate groups on the impact properties of polylactide (PLA).

Glowacka Julia

<https://10esd.sciencesconf.org/482461/document>

H2

Mechanically tunable silicone substrates with low-temperature curing for mechano-regulation of cardiomyocyte cellular responses

Tirgar Pouria

<https://10esd.sciencesconf.org/483427/document>

H3

Transdermal drug delivery via transdermal patches

Eriksen Sofie

<https://10esd.sciencesconf.org/478614/document>

H4

Wetting kinetics of PDMS-PEG surfactant based silicone antifouling coatings: Influence on protein adsorption

Gourlaouen Elliot

<https://10esd.sciencesconf.org/481295/document>

H5

Cyclotriphosphazenes with mixed functional groups and high P-content for durable flame retardant finishing of cotton fabrics

Szymanska Anna

<https://10esd.sciencesconf.org/482856/document>

H6

Synthesis of New Bio-based Silica Modifiers for the Tire Industry by Hydrosilylation of Terpenoid Derivatives

Sokolnicki Tomasz

<https://10esd.sciencesconf.org/483184/document>

H7

Organosilicon compounds contain phosphor as a new flame retardant modifiers for cotton textiles

Przybylak Marcin

<https://10esd.sciencesconf.org/482900/document>

H8

Synthesis and studies of hollow periodic mesoporous organosilicas (HPMO)

KONGKAEW Manisa

## Luminescence and sensors

I1

A novel alkoxy silane-bearing photoreversible cinnamic side group: synthesis, characterization and exploitation in the design of multifunctional silica nanoparticles

Orsini Sara Fernanda

<https://10esd.sciencesconf.org/462772/document>

I2

Computational study on luminescence properties of small organosilicon molecules

Li Jia

<https://10esd.sciencesconf.org/462815/document>

I3

Designable hybrid ionic liquid sensor based on POSS for detecting polycyclic aromatic hydrocarbons (PAHs) and Nitroaromatic compounds (NACs)

Pherkkhantod Chenchira

<https://10esd.sciencesconf.org/483019/document>

I4

Dual-function Fluorescent Elastomeric Material based on Silsesquioxane Cage

Bureerug Teeraya

<https://10esd.sciencesconf.org/483020/document>

I5

Photoresponsive organosilicon materials and their applications

Zhu Qingzeng

<https://10esd.sciencesconf.org/462461/document>

I6

Photoresponsive Self-Assembled Monolayers based-organosilanes for data storage

Courdurié Chloé

<https://10esd.sciencesconf.org/461322/document>

I7

Preparation of a Low-temperature Resistant Dual Network Hydrogel with Strain Stimulation Response Containing Polysiloxane Ionic Liquid

Yushu Xu

<https://10esd.sciencesconf.org/462957/document>

I8

Sensor and adsorbent for cation and anion removal based on silica

Jitjaroendee Thanudkit

<https://10esd.sciencesconf.org/483046/document>

I9

Stretchable and reversible photochromic hydrous TiO<sub>2</sub> glycerol-PDMS elastomer for rewritable film with minimal resolution loss

Li Chonghui

<https://10esd.sciencesconf.org/474667/document>

I10

Polylactide Membrane Modification Using A Novel Polymethylhydrosiloxane Hydrophilization Process

Audourenc Jules

<https://10esd.sciencesconf.org/463009/document>

I11

Redox-Active Lewis Pairs Yield Diradicaloids and Enable Modular Control of the Diradical Character

Maskey Rezisha

<https://10esd.sciencesconf.org/482296/document>



## Catalysis and environmental aspects

J1

A Systematic Investigation of Platinum Nanoparticle Catalyzed Polymerization and Characterization of Aromatic Silanes

Tortos Nathan

<https://10esd.sciencesconf.org/462606/document>

J2

Platinum on Alumina catalyzed Dehydrocoupling of Aliphatic Silanes

Garcia Oliver

<https://10esd.sciencesconf.org/462611/document>

J3

N-Heterocyclic imidazolium-functionalized polyhedral oligomeric silsesquioxane based on metal(II) acetate as a catalyst

Phansuwan Wannipa

<https://10esd.sciencesconf.org/483027/document>

J4

Synthesis of SiC-based catalysts for exothermic catalysis

Gonçalves Léa

<https://10esd.sciencesconf.org/464946/document>

J5

A multiscale approach to improve the thermoelectric performances of alkaline-earth-silicide alloys

Ghannam Rana

<https://10esd.sciencesconf.org/478971/document>

J6

PROPLANET- ENHANCED SAFE AND SUSTAINABLE COATINGS AS AN ALTERNATIVE FOR PFAS

Suarez Vega Ana

<https://10esd.sciencesconf.org/463063/document>

J7

Efficiency method for the synthesis of silyl ethers using cobalt complexes

Szafoni Ewelina

<https://10esd.sciencesconf.org/480156/document>

## silicon and functional organosilanes

K1

Nanostructuring Silicon via Metal-Assisted Chemical Etching

Bourret Gilles R.

<https://10esd.sciencesconf.org/457920/document>

K2

Organofunctional silanes obtained by thiol-(meth)acrylate Michael addition reaction

Przybylska Agnieszka

<https://10esd.sciencesconf.org/480625/document>

K3

Organofunctional silicon compounds as precursors of hydrophilic and anti-fogging materials

Kaczmarek Marta

<https://10esd.sciencesconf.org/480626/document>

K4

Single-Source Precursors: A Versatile Tool for Liquid Phase Deposition

Lainer Thomas

<https://10esd.sciencesconf.org/464751/document>

K5

SprayTex- A Spray Etching Approach to Structure or Polish Silicon Surfaces with HF-(HCl)-Cl<sub>2</sub> Mixtures

Stapf André

<https://10esd.sciencesconf.org/464972/document>

K6

Time-resolved Photoluminescence on Silicon Nanoparticles obtained from Hazardous Chlorosilane Hydrolysates

Franze Georg

<https://10esd.sciencesconf.org/482847/document>

K7

Zinc singles sites anchored on silica nanoparticles as alternative curing activators in elastomeric composites

Mostoni Silvia

<https://10esd.sciencesconf.org/462699/document>

### **Silicone- and siloxane-based materials**

L1

A subtle and quickly UV-fixed Si/P coating that significantly increases the thermal stability and reduces the flammability of cotton fabrics

Szolyga Mariusz

<https://10esd.sciencesconf.org/482212/document>

L2

Cyclophosphazene crosslinked silicone-based, flame retardant coatings for textiles

Dutkiewicz Michal

<https://10esd.sciencesconf.org/482208/document>

L3

Hydrolysis of linear ethoxyoligosiloxanes as a cross-linking agent

Sato Yohei

<https://10esd.sciencesconf.org/462016/document>

L4

Synthesis of solvent-free, extremely soft and elastic bottlebrush elastomers for soft robotics

Hashmi Uzair

<https://10esd.sciencesconf.org/479868/document>

L5

New High Surface Area Silica for Silicone Compounds

Schmidt Franz

<https://10esd.sciencesconf.org/462339/document>

L6

Silicone dielectric elastomer fiber actuator

Kang Zhaoqing

<https://10esd.sciencesconf.org/474666/document>

L7

Perovskite-Silicone Elastomer with Excellent Flexibility and Luminescent Properties

Zheng Wei

<https://10esd.sciencesconf.org/462914/document>

L8

Functional silicone elastomers efficiently crosslinked through supramolecular interactions without catalyst

Ciubotaru Bianca-Iulia

<https://10esd.sciencesconf.org/482563/document>

L9

Experimental testing of self-repairing capacitive pressure sensors

Cârlescu Vlad

<https://10esd.sciencesconf.org/485483/document>

L10

An approach to develop silicone elastomers with enhanced electromechanical transduction properties based on multicarboxy-POSS

Dascalu Mihael

<https://10esd.sciencesconf.org/482553/document>

L11

Construction and performance research of silicone rubber conductive network

Han Jiyuan

<https://10esd.sciencesconf.org/463059/document>

L12

Ring-Opening Polymerization of Cyclic Oligodimethylsiloxanes (D3, D4) using Phosphonium Alkoxide initiators

Shi Limiao

<https://10esd.sciencesconf.org/481533/document>

L13

Novel silicone materials with cyclic polymers

Frederiksen Nikoline Stig

<https://10esd.sciencesconf.org/462427/document>

L14

Silicone elastomers for artificial muscles

Nedelcu Cristina

<https://10esd.sciencesconf.org/474743/document>

L15

INVESTIGATION ON THE LOSS OF SILICONE RUBBER ELASTICITY INDUCED BY HYDROTHERMAL AGEING

Ramram Manar

<https://10esd.sciencesconf.org/480817/document>

### **Silsesquioxanes, cage-like, POSS**

N1

The effects of organosilicon additives application on polylactide degradation process

Brzakalski Dariusz

<https://10esd.sciencesconf.org/477770/document>

N2

Synthesis of a T14Ph14 silsesquioxane framework

Hunsicker Marc

<https://10esd.sciencesconf.org/482933/document>

N3

The importance of organosilicon compounds for 3D printing technology

Sztorch Bogna

<https://10esd.sciencesconf.org/482761/document>

N4

Silsesquioxane Chemosensor for Dual Responsive Anions and Cations Based on 1,8-naphthalimide Benzo-Crown Ether.

Chanyong Boonsita

<https://10esd.sciencesconf.org/483023/document>

N5

Organocatalytic synthesis of POSS-SH derivatives- mechanochemistry vs. reaction in solvent.

Hanek Kamil

<https://10esd.sciencesconf.org/482226/document>

N6

N,X-pincer type derivatives of dendrimers with silsesquioxane core

Mrzyglód Aleksandra

<https://10esd.sciencesconf.org/462626/document>

N7

Influence of the organic substituents on the structure and properties of polysilsesquioxane melting gels

Pohl Svenja

<https://10esd.sciencesconf.org/455762/document>

N8

Ladder-like polysilsesquioxane/Al<sub>2</sub>O<sub>3</sub> nanocomposites with enhanced thermal conductivity

Romeo Chiara

<https://10esd.sciencesconf.org/482203/document>

N9

Nanocomposites from N-methyl imidazolium groups anchored octasilsesquioxane and meso-tetra(4-sulfonatophenyl)-porphyrin in aqueous medium for diversified applications

Srirattanasit Nattaya

<https://10esd.sciencesconf.org/483030/document>

N10

Novel Organic-inorganic Hybrid Polymer Based on Fluorinated POSS for Stable Superamphiphobic Fabrics and Aluminum Corrosion Protection

Li Wanli

<https://10esd.sciencesconf.org/474324/document>

N11

Preparation of porous networks by cross-linking cage siloxanes with Al species

Hikino Takuya

<https://10esd.sciencesconf.org/484901/document>

N12

Synthesis of New Functionalized Silsesquioxanes

Liu Yujia

<https://10esd.sciencesconf.org/462046/document>