

Salerno, June 11<sup>th</sup> – 13<sup>th</sup>, 2025



## **Programme**

#### Wednesday, June 11th 2025

14.00 Registration

14:30 - 15:00 Opening

1st Session: 15:00 – 16:45 Chair: Carmine Gaeta

> 15:00 – 15:50 PL1 Konrad Tiefenbacher Catalysis inside a supramolecular capsule

#### Chair: Carlo Diaferia

- 16:00 16:15 OC1 Andrea Barba-Bon
   The Chaotropic Effect as Driving Force for Membrane Transport
- 16:15 16:22 SC1 Clara Sabrià
   Simulations on the regio-functionalization of ellipsoidal fullerenes with supramolecular masks
- 16:23 16:30 SC2 Pierluigi Gulotta
   Enrichment of histone tail methylated lysine residues via cavitand-decorated magnetic nanoparticles for ultra-sensitive proteomics

16:30 - 17:00 Coffee Break

2<sup>nd</sup> Session: 17:00 - 18:30

Chair: Subir Paul

- 17:00 17:15 OC2 Orane Domecq-cazaux Controlling supramolecular supramolecular stacking in  $\pi$ -extended carpyridine systems through water intercalation
- 17:15 17:30 OC3 Ernesto Santoro
   Prism[n]arenes macrocycles for chiral recognition in supramolecular sensing
- 17:30 17:45 OC4 Gabriele Melchiorre Imine-Based Transient Supramolecular Polymers
- 17:45 18:00 OC5 Sarah Karnib
   Design of functionalized Phenoxycalix[4]pyrroles for the Chelation of Radionuclides and Lanthanides in Aqueous Media



Researchers 2025



CF Diportimento di Offirmico e Biologia

Chair: Vittoria Ferrara

18:00 – 18:07 SC3 Jinghui Yang
 Emergence of Persistent Supramolecular Chirality of Self-Replicators from Dynamic Chemical Networks Guided by Surfactant Microenvironments

 18:08 – 18:15 SC4 Sena Ozturk
 Solvent-Controlled Self-assembly of Lanthanide-Foldamer Supramolecular Architectures

18:15 – 18:22 SC5 Anna Palmieri
 Synthesis of coprism[4+1]arene macrocycles via selective co-macrocyclization of 2,6-dialkoxynaphthalene monomers

18:22 – 18:30 SC6 Liam Cribbin
 Nonplanar Porphyrins as a Tunable Framework for Organocatalysis

18:30 - 19:30 Welcome Cocktail & Poster Session

#### Thursday, June 12th 2025

3<sup>rd</sup> Session: 9:00 – 10:45 Chair: Rosaria Schettini

• 9:00 – 9:30 IL1 part 1 Federica Tanghetti
Mastering the ERC Starting Grant Application

9:30 – 9:45 OC6 Subir Paul
 Complex Pathways Drive Pluripotent Fmoc-Leucine Self-assemblies

9:45 – 10:00 OC7 Tommaso Paravano
 Catecholamine profiling and classification of urine samples for diagnosis and prognosis of neuroblastoma

• 10:00 – 10:15 OC8 Carlo Diaferia
Supramolecular peptide elements as inspiring sequences for self-assembling materials: the case of Transthyretin

Chair: Ernesto Santoro

 10:15 – 10:22 SC7 Grzegorz Markiewicz
 Chirality-Assisted Self-Assembly of Low Symmetry Non-Covalent Capsules with Quantitative Diastereoisomeric Selection

10:23 – 10:30 SC8 Marianna Barbieri
 Controlled aggregation of pyrene-based supramolecular nanostructures for light-driven switchable H<sub>2</sub> or H<sub>2</sub>O<sub>2</sub> production

• 10:30 – 10:37 SC9 Nils Jansen Shape-assisted assemblies in solution

10:38 – 10:45 SC10 Marta Zaleskaya-Hernik
 Molecular Recognition of Organic Dyes in Aqueous Environments Using Prismarene
 Hosts

10:45 - 11:15 Coffee Break & Poster Session

Researchers 2025

Rom Days

4<sup>th</sup> Session: 11:15 – 13:00 Chair: Ludmilla Sturm

11:15 – 11:45 IL2 Simona Ranallo
 Dream big, explore far: a scientist's path across continents

11:45 – 12:00 OC9 Deepak
 Molecule to functional supramolecular materials

• 12:00 - 12:15 OC10 Martina Mazzaferro

A novel chiroptical sensor based on a dicarboxyl-pillar[5]arene pseudo[1]catenane for enantioselective recognition

12:15 – 12:30 OC11 Simone D'Agostino
 Crystal Engineering Meets Host-Guest Chemistry: Novel Approaches for the Enhancement of agrochemicals Solubility

#### Chair: Jessica Milia

12:30 – 12:37 SC11 Mykola Kravets
 Light-Responsive Catalysis in an Organic Monolayer

12:38 – 12:45 SC12 Paolo Della Sala
 Unveiling the Potential of Novel Alkylated Iminosugars as Innovative pH-responsive Pharmacological Chaperones through Endo-Cavity Complexation with Water-Soluble

Prismarene Hosts

12:45 – 12:52 SC13 Matteo Longo
 Synthesis and supramolecular properties of calixarene-based raft polymers

• 12:53 – 13:00 SC14 Mercy Arteaga
Amphiphilic scorpiand-like complexes with biomedical applications.

13:00 - 15:00 Lunch

#### 5<sup>th</sup> Session 15:00 – 16:45

#### Chair: Rocco Del Regno

• 15:00 – 15:30 IL1 part 2 Federica Tanghetti ERC Proposal Writing Essentials: from B1/B2 to evaluation

15:30 – 15:45 OC12 Karolina Urbanska
 Bicyclo[1.1.1]pentane in macrocycles – synthesis, structure and non-covalent interactions

15:45 – 16:00 OC13 Francesco Ranieri
 Transient Induction of Chirality by an Activated Carboxylic Acid

**16:00 – 16:07 SC15 Anna Walczak**β-Diketone-Functionalized Coordination Cages: New Building Units for Creating Porous Materials

#### Chair: Grzegorz Markiewicz

**16:08 – 16:15 SC16 Claudia Argenio**Functional Biopolymers: Innovating Alginate Systems for versatile Bioactive Applications





- 16:15 16:22 SC17 Deepshikha Priyadarshini
  Resorcin[4]arenes: anion receptors and potential anion transporters
- 16:23 16:30 SC18 Fei Guo
   Molecular thermometers to study photothermal catalysis at the nanoscale
- 16:30 16:37 SC19 Erika Palazzetti
   Strategic structural modifications for improving fluorescence selectivity towards metal cations in solution: new HNBO- and HBO-based ligands
- 16:38 16:45 SC20 Tania Pèlachs
   Supramolecular Mask Regio-Converter: Orthogonal Diels-Alder C<sub>70</sub> bis-adducts by Mask-Mediated regioselective synthesis

16:45 - 17:15 Coffee Break & Poster Session

Free Time in Salerno

20.30 Pizza & Dr. Why

#### Friday, June 13th 2025

6th Session: 9:00 – 10:45 Chair: Paolo Della Sala

9:00 – 9:30 IL3 Luka Đorđević
 Supramolecular dye polymers for photocatalysis

9:30 – 9:45 OC14 Jessica Milia
 Squaramide based LMGWS as smart materials for water remediation

• 9:45 – 10:00 OC15 Ilaria Di Filippo
Chirality induction on porphyrin-hemicucurbituril adducts

10:00 – 10:15 OC16 Alessia Cavallaro
Optical sensor array for assessing *penicillium* rot and storage status in packaged citrus fruit

#### Chair: Karolina Urbanska

- 10:15 10:22 SC21 Owen Kanisius
   Exploring the communication between different pi systems through a metal centre
- 10:23 10:30 SC22 Carmine Bellantoni
  Exploring the formation of pillar[n]arene-based supramolecular deep eutectic solvents
- 10:30 10:37 SC23 Giuseppa Campanile
   Carboxylato-Prism[6]arene as Supramolecular Catalysts for the Selective Oxidation of Anilines into Nitro Derivatives in Aqueous Media
- 10:38 10:45 SC24 Wojciech Drożdż
   Ambidentate Ligands As Platforms For Efficient Synthesis Of Pd-Based Metallosupramolecular Cages

10:45 - 11:15 Coffee Break & Poster Session

Researchers 2025



7<sup>th</sup> Session: 11:15 – 13:00 Chair: Veronica Iuliano

11:15 – 11:30 OC17 Ludmilla Sturm

Synthesis of curved Polycyclic aromatic macrocycles towards shape mediated self-assembly

11:30 – 11:45 OC18 Yemataw Addis Alemu
 Dye-Doped Silica Nanoparticles for Improved Electrochemiluminescence Signals:
 Strategies and Key Parameters

• 11:45 – 11:52 SC25 Francesca Commito
Solid magnetoliposomes to tackle water pollution due to bisphenols

11:53 – 12:00 SC26 Vittoria Ferrara
 Synthesis and ionophoric properties of proline-rich cyclic peptoids

12:00 – 12:30 IL4 Mauro Mocerino
 Enhancing Laboratory Learning and Implementing Active Learning Strategies in University Science.

12:30 – 12:45 Wiley Prize 12:45 – 13:00 Closing

13:00 - 15:00 Lunch





### Poster List

#### PO1 Fabio Buonsenso

Exploring the Self-Assembly of Resorc[4]arenes: From Macrocycles to Supramolecular Drug Delivery Systems

#### PO2 Filomena Luigia Damiani

Solid state assembly of azaderivatives and their borane adducts

#### **PO3 Xin Wang**

Transient Product Bias and the Modulation of Convergent Oxidation in a Dynamic Chemical System

#### PO4 Maria Emilia Arriaga

Magnetic niosomes for biotechnological applications

#### PO5 Viktoriia Zheltova

Supramolecular Silica Nanomaterial for Selective Hydrocarbons Separations

#### PO6 Maria Manuela Ignoto

Bio-Based Tanning Agents from Olive-Derived Lignin: A Sustainable Alternative for the Leather Industry

#### **PO7 Sophie Maguire**

Controlling Atropisomerism by Metal Coordination

#### **PO8 Marco Milone**

Drug delivery applications of water-dispersible supramolecular polymer microemulsion nanoparticles

#### **PO9 Fatima Amine**

A one-dimensional supramolecular polymer assembled via resorcin[4] arene complexation

#### **PO10 Michele Larocca**

A New BINOL-based Macrocycle as Fluorescent Chemosensor for Metal Cations of Biological Interest

#### PO11 Eugenia Barbato

Hybrid nanoparticles as drug delivery vectors

#### PO12 Laura Cifalinò

Chemosensing properties of cyclodextrin-methyl red conjugates for VOC detection

#### PO13 Andrea Asia Paparella

c-Methylcalix[4]resorcinarene/choline salt/water ternary sistems as novel bio-based, macrocycle- containing deep eutectic solvents.

# Supramolecular Chemistry Days for Young Researchers 2025





#### **PO14 Paolo Reale**

Chiral and fluorescent supramolecular gels: study of properties and insights into applications

#### PO15 Francesca Grifalconi

An excimer-based Malten-anthracene fluorescent chemosensor for metal ions in aqueous solution

#### **PO16 Rosamaria Lombardo**

Supramolecular design and analytical characterization of DOTA-NHS and NOTA-NHS functionalized antibodies radiolabeled with gallium and indium for pet imaging in gastric cancer

#### **PO17 Sonali Ghosh**

Design and Characterization of Amino Acid-Metal Supramolecular architectures

#### PO18 Alessandro Grasso

New p-azaquinodimethane (p-AQM) chromophores for intermolecular singlet fission in THIN FILMS

#### **PO19 Valeria Loise**

Discerning optimum water content in novel bio-based, macrocycle-containing des formulations via viscosity measurements

#### PO20 Cecilia Sepe

Oxadiazole-based bridging units for supramolecular coordination assemblies

#### **SC2 Pierluigi Gulotta**

Enrichment of histone tail methylated lysine residues via cavitand-decorated magnetic nanoparticles for ultra-sensitive proteomics

#### SC3 Jinghui Yang

Emergence of Persistent Supramolecular Chirality of Self-Replicators from Dynamic Chemical Networks Guided by Surfactant Microenvironments

#### SC4 Sena Ozturk

Solvent-Controlled Self-assembly of Lanthanide-Foldamer Supramolecular Architectures

#### SC5 Anna Palmieri

Synthesis of coprism[4+1]arene macrocycles via selective co-macrocyclization of 2,6-dialkoxynaphthalene monomers

#### **SC6 Liam Cribbin**

Nonplanar Porphyrins as a Tunable Framework for Organocatalysis

#### SC8 Marianna Barbieri

Controlled aggregation of pyrene-based supramolecular nanostructures for light-driven switchable  $H_2$  or  $H_2O_2$  production





#### SC9 Nils Jansen

Shape-assisted assemblies in solution

#### **SC11 Mykola Kravets**

Light-Responsive Catalysis in an Organic Monolayer

#### SC12 Paolo Della Sala

Unveiling the Potential of Novel Alkylated Iminosugars as Innovative pH-responsive Pharmacological Chaperones through Endo-Cavity Complexation with Water-Soluble Prismarene Hosts

#### **SC13 Matteo Longo**

Synthesis and supramolecular properties of calixarene-based raft polymers

#### **SC14 Mercy Arteaga**

Amphiphilic scorpiand-like complexes with biomedical applications.

#### SC16 Claudia Argenio

Functional Biopolymers: Innovating Alginate Systems for versatile Bioactive Applications

#### SC17 Deepshikha Priyadarshini

Resorcin[4]arenes: anion receptors and potential anion transporters

#### SC18 Fei Guo

Molecular thermometers to study photothermal catalysis at the nanoscale

#### SC19 Erika Palazzetti

Strategic structural modifications for improving fluorescence selectivity towards metal cations in solution: new HNBO- and HBO-based ligands

#### SC21 Owen Kanisius

Exploring the communication between different pi systems through a metal centre

#### **SC22 Carmine Bellantoni**

Exploring the formation of pillar[n]arene-based supramolecular deep eutectic solvents

#### SC23 Giuseppa Campanile

Carboxylato-Prism[6]arene as Supramolecular Catalysts for the Selective Oxidation of Anilines into Nitro Derivatives in Aqueous Media

#### **SC26 Vittoria Ferrara**

Synthesis and ionophoric properties of proline-rich cyclic peptoids

