

Università degli studi di Messina

Dottorato di Ricerca in Scienze Chimiche



GIOVEDÌ 13 NOVEMBRE

Sessione mattutina - Aula Magna "Vittorio Ricevuto"

8.30-9.00 *Registrazione*

9.00-10.00 *Saluti Istituzionali*

Sessione I

Chairs: Salvatore G. M. Raccuia - Roberto Laganà Vinci

10.10-10.30 **K1 Dott. Pietro Battaglia e Dott.ssa Cristina Pedà**
(Stazione Zoologica "Anton Dohrn")

Microplastics in the Marine Environment - Interactions,
Effects, and Risks for Marine Organisms

10.30-10.42 **OC1 Giorgia Rinaldi**
A valve-based solution for the integration of Enantio-
Selective GC×GC-MS and Low-Pressure GC-MS: a smart
coupling

10.42-10.54 **OC2 Hafsa Anwar**
Sustainable Energy Storage through Advanced Vanadium
Redox Flow Batteries





- 10.54-11.06 **OC3 Gabriele D'Anna**
Synthesis of fluorinated biocompatible polyesters
- 11.06-11.18 **OC4 Federica Vento**
Chemical characterization of Mediterranean macroalgae with a focus on antioxidant molecules using liquid and gas chromatographic techniques
- 11.18-11.30 **OC5 Carmine Bellantoni**
Exploring the formation of pillar[n]arene-based supramolecular deep eutectic solvents
- 11.30-11.50 **Coffee Break**

Sessione II

Chairs: Mariachiara Sarà - Federica Vento - Noemi Totaro

- 12.00-12.20 **K2 CaponeLab**
Presentazione CaponeLab
- 12.20-12.32 **OC6 Alessandro Lo Presti**
Molecularly Imprinted Polymers for Environmental Monitoring: A Dopamine-Based Sensor for Levofloxacin Detection in Water
- 12.32-12.44 **OC7 Giuseppe Andrea Screpis**
Testing of a Novel System for Bacterial Load Detection in Water using ATP Chemiluminescence Reaction
- 12.44-12.56 **OC8 Roberto Lagana' Vinci**
QSRR Modelling and capillary LC for Phenolic Compounds analysis and their Retention Mechanism Elucidation
- 12.56-13.08 **OC9 Federica Giorgianni**
Design and synthesis of molecular components for biohybrid water photo-oxidation systems





13.08-13.20

OC10 Teresa Paviglianiti

Albumin–Gold Nanocluster Hybrids Control the Disassembly Kinetics of TPPS J-Aggregates

13.30-15.00

Lunch Break

Sessione pomeridiana - Aula Magna "Vittorio Ricevuto"

Sessione III

Chairs: Martina Mazzaferro - Salvatore Genovese

15.10-15.30

K3 Dott. Michele Calabretta e Dott. Alessandro Tumminia (Vishay Semiconductor)

La Chimica-Fisica nei semiconduttori di potenza: prospettive ed opportunità in Vishay Semiconductor

15.30-15.42

OC11 Cristian Reale

Supercritical Fluid Chromatography to Improve the Sustainability of Analytical Methods for Natural Products

15.42-15.54

OC12 Noemi Totaro

Complexation of rutin in a cross-linked β -cyclodextrin/PEG polymer: evaluation of antiangiogenic properties

15.54-16.06

OC13 Ana Laura Coria Gutiérrez

Tailored Magnetic Nanoparticles as Theranostic Tools for Osteosarcoma

16.06-16.18

OC14 Elisa Irrera

From waste to profit: characterization of orange by-products aiming to a zero waste Citrus processing

16.18-16.30

OC15 Annarita Borgosano

From Waste to Worth through CO₂ Mineralization: Harnessing Hypersaline Wastewater for Sustainable Carbon Capture and Critical Metal Recovery





VENERDÌ 14 NOVEMBRE

Sessione mattutina - Aula Magna "Vittorio Ricevuto"

Sessione IV

Chairs: Martina Mazzaferro - Salvatore Genovese - Noemi Totaro

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| 09.10-09.30 | K4 Dott.ssa Angela Castellano (<i>Medinutrex</i>)
Medinutrex: Extracting the best from nature |
| 09.30-09.42 | OC16 Salvatore G. M. Raccuia
The Sustainable Route: From Citrus Waste to Rare-Earth Recovery |
| 09.42-09.54 | OC17 Elisabetta Scalone
Clay-Based Functional Coatings Embedding Stimuli-Responsive Dyes for Smart Textile and Environmental Sensing Applications |
| 09.54-10.06 | OC18 Kochbati Najla
Copper-Based Electrocatalysts with Molybdenum for the Electroreduction of CO ₂ into Acetic Acid |
| 10.06-10.18 | OC19 José Starvaggi
Design, synthesis and biological evaluation of novel antiviral agents for the treatment of dengue and zika virus infections |
| 10.18-10.30 | OC20 Imen Cherif
Development of Multilayer Photoelectrodes for Enhanced Photoelectrochemical CO ₂ Reduction |
| 10.30-10.42 | OC21 Davide Cosio
From Disorder to Performance: High-Entropy PtCoCuNiMn Alloy Drives Rapid Ammonia Oxidation in Alkaline Media. |





- 10.42-10.54 **OC22 Marco D'Alì**
Molecular basis for the agonist-to-antagonist switching in Kv7 ion channels
- 10.54-11.06 **OC23 Fabio Genovese**
Optimization and Automation of Data for the Use of Artificial Intelligence in Drug Discovery
- 11.06-11.18 **OC24 Federico Nastasi**
Restored intensities from customized crops of NMR experiments (RICC-NMR) for the chemometric characterization of sicilian and sardinian evoos
- 11.18-11.30 **OC25 Mariachiara Sarà**
Synthesis and characterization of supramolecular system for metal ions sensing
- 11.30-11.50 **Coffee Break**

Sessione V

Chairs: Salvatore G. M. Raccuia – Mariachiara Sarà

- 11.55-12.15 **K5 Dott. Alessandro Sinopoli (*Università degli Studi di Messina*)**
MOF-polymer for solar-assisted atmospheric water harvesting
- 12.15-12.27 **OC26 Claudia Granata**
Gadolinium Hydrolysis: Beyond the State of the Art
- 12.27-12.39 **OC27 Salvatore Donato**
Design and computational study of the interface between the surface of modified TiO₂ (anatase) and pure water





- 12.39-12.51 **OC28 Maura Monforte**
Design and Synthesis of Biocompatible Curcumin-Based Luminescent Systems
- 12.51-13.03 **OC29 Martina Mazzaferro**
Enantioselective recognition with a new dicarboxyl-pillar[5]arene-based *pseudo*[1]catenane chiroptical sensor
- 13.03-13.15 **OC30 Salvatore Genovese**
Exploring reversible electron-transfer as a strategy to prolong luminescence lifetime in iron (III) complexes
- 13.15-15.00 **Lunch break**

Sessione pomeridiana - Aula Magna "Vittorio Ricevuto"

Sessione VI

Chairs: Salvatore G. M. Raccuia - Mariachiara Sarà - Salvatore Genovese - Martina Mazzaferro - Noemi Totaro - Roberto Laganà Vinci - Federica Vento

- 15.10-15.30 **K6 Antonino Cannaò (Birrificio Messina)**
Presentazione dell'Azienda Birrificio Messina
- 15.30-15.42 **OC31 Saeed Ahmed**
Advanced GC Approaches for Identification of Unusual Bacterial Fatty acids.
- 15.42-15.54 **OC32 Alessia Mastrolemba Ventura**
Geochemical modelling of Panarea hydrothermal system: key elements in the design of intelligent marine sensors
- 15.54-16.06 **OC33 Giuseppe Mistretta**
A Supramolecular Approach involving Polymers based on β -Cyclodextrin and Porphyrins for antimicrobial photodynamic therapy





16.06-16.18

OC34 Francesca Cannizzaro

Monitoring strategies for indoor air quality assessment in cultural heritage sites

16.18-16.30

OC35 Antonino Consoli

Emissive and photothermal carbon-Nanodots based on L-proline: optical properties and pH-sensing investigation

16.30-17.30

Tavola Rotonda

“Il ruolo del tutor: informare ed accompagnare nella crescita. Docenti, dottorandi e studenti a confronto su orientamento in itinere”

17.30-18.00

Istituzione del Gruppo Alumni del Dottorato in Scienze Chimiche

18.00

Apericena conclusiva

