



UNIVERSITY OF NAPOLI "FEDERICO II"
POLYTECHNIC AND SCIENCE SCHOOL
Department of Chemical Sciences



Ph.D. School in Chemical Sciences
39th Cycle
Project presentation
February 8/9th 2024



Finanziato
dall'Unione europea
NextGenerationEU



Italiadomani
PIANO NAZIONALE DI RIPRESA E RESILIENZA



Ph.D. School in Chemical Sciences

Oral Communications (project presentation) – 39th Cycle

February 8th, 2024, 14.00 – Meeting Room

Time	Ph.D Student	Project Title	Supervisor
		Introduction & welcome	
14.00	Maria PETRONE	Design and synthesis of new natural product-based drugs for the treatment of Protein Conformational Diseases (PCDs).	A. Zarrelli G. di Fabio
14.20	Ilaria DE CRISTOFARO	Design and physico-chemical characterization of nanocarriers for oligonucleotide drug delivery.	L. Paduano
14.40	Diego DE CANDITIIS	Selective Hydrodefluorination of Poly- and Perfluorinated Alkanes, Alkenes, and Arenes by Means of Surface Organometallic Chemistry (SOMC) Approaches.	V. Busico
15.00	Ilaria DI DONATO	Structural and physical-chemical studies of bacterial molecular machineries as tools against antimicrobial resistance.	P. Del Vecchio R. Berisio
15.20	Simone DAVIDE	Exploring the thermodynamics of polymer/polymer and polymer/plasticizer miscibility for sustainable tire application.	F. Auriemma O.Ruiz De Ballesteros <i>Salvatore Cotugno</i>
15.40	Carmen SERPICO	Design and characterization of lead halide perovskites for next-generation solar cells.	M. Pavone Ana Munoz Garcia <i>Lucia Mercado</i>
16.00	Lorena SIMUNIC	Peptide-based artificial metalloenzymes for waste valorization.	A. Lombardi F. Nastri

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16.20	Claudio SAVINO	Characterization of biologically relevant G4-RNA and development of G4-RNA targeting compounds for therapeutic applications.	L. Petraccone
16.40	Ornella SERPINO	Structural biology approaches for characterization of Shigella O-antigen specific monoclonal antibodies	A. Molinaro
17.00	Stefania DE CHIARA	Structure to function study of lipopolysaccharides and other glycoconjugates of the human microbiota with potential effects on the gut-brain axis. .	F. De Lorenzo

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February 9th, 2024, 10.00 – Meeting Room

Time	Ph.D Student	Project Title	Supervisor
10.00	Martina D'AURIA	Enzymatic degradation of plastics: expression, structural characterization, and engineering of novel bacterial hydrolases able to work in different environmental conditions.	F. Sica
10.20	Claudia GONZALEZ-CASTRO	Selenium functionalization of organic compounds and agrifood wastes components to boost the biological activity.	S. Pedatella, A. Napolitano
10.40	Andrea RISPO	Design, synthesis and characterization of new sustainable propene-based materials with widely tunable properties.	V. Busico F. Auriemma <i>L. Rongo</i>
11.00	Gaetano ODORE	New organic semiconductors for photovoltaic applications.	A. Carella <i>A. De Maria</i>
11.20	Giusy MAROTTA	Development of a sustainable hydrothermal liquefaction process for the conversion of wastes to bio-fuels, with by-products recovery.	F. Montagnaro
11.40	Carlo DE LUCA	Development of non-fluorinated polymer electrolytes for fuel cells.	O. Tarallo <i>V. Naticchioni</i>
12.00	Claudia Maria GATTO	Omics approaches in bioremediation of environmental contaminants.	M. Monti <i>D. De Pascale</i>
12.20	Teresa PADUANO	Design of stimuli-responsive materials for the release of active molecules.	R. Tesser R. Vitiello

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February 9th, 2024, 14.00 – Meeting Room

Time	Ph.D Student	Project Title	Supervisor
14.00	Fatima HASSAN <i>Collegamento Teams</i>	Development of a CO2 capture process on-board ships.	F. Montagnaro
14.20	Muhammad Usama DAUD <i>Collegamento Teams</i>	Hydrogen storage and transportation through coupling of hydrogenation-dehydrogenation reactions of unsaturated organic substrates.	R. Tesser V. Russo
15.00			
	<i>Meeting of the PhD Board</i>		