



PhD Program in Catalysis

PhD students enrolled in the XL cycle

A.A. 2024-2025

CURRICULUM	NAME	PROJECT AND TUTOR/S	MAIN PLACE OF WORK
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	ARNESI RITA	Metal organic frameworks for direct air capture of CO ₂ Prof. Gloria Berlier (UNITO) Prof. Silvia Bordiga (UNITO)	UNITO
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	BAFARO CONCETTA	Development and scale-up of new semiconductor materials for applications in new generation photovoltaic cells Prof. Ferdinando Costantino (UNIPG) Dr. Edoardo Mosconi (CNR-SCITEC)	UNIPG
CATALISI OMOGENEA: MECCANISMI E APPLICAZIONI	CASSINERA CRISTIANO	Upcycling of NdFeB magnets in the EU for green applications-NEO-Cycle Prof. Giuseppe Zanoni (UNIPV)	UNIPV
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	CHIANESE MARICA	Biodegradable polymers: kinetic, catalytic and biodegradability aspects Prof. Vincenzo Russo (UNINA) Prof. Martino Di Serio (UNINA)	UNINA
CATALISI OMOGENEA: MECCANISMI E APPLICAZIONI	DI SAVERIO MATTEO	Sustainable catalysis and asymmetric catalysis for fine chemicals and consumer products Prof. Armando Carlone (UNIVAQ) Dr Fabio Pesciaioli (UNIVAQ)	UNIVAQ
NUOVE TECNOLOGIE PER LA CATALISI	DRUSIANI DAVIDE	Design and implementation of innovative synthesis strategies in the field of green chemistry and the development of sustainable chemistry methodologies Prof. Elena Petricci (UNISI) Dr. Simone Mantegazza (DIPHARMA)	UNISI
CATALISI OMOGENEA: MECCANISMI E APPLICAZIONI	FERRARA MAURO	Data Driven Statistical Modeling of Industrially Relevant Processes Mediated by Molecular Catalysts Prof. Vincenzo Busico (UNINA) Prof. Alceo Macchioni (UNIPG)	UNINA
NUOVE TECNOLOGIE PER LA CATALISI	FREISA PAOLO	Application of unconventional methods and technologies to the synthesis of contrast agents for diagnostic imaging Prof. Giancarlo Cravotto (UNITO)	UNITO

		Prof. Alessandro Barge (UNITO)	
CATALISI OMOGENEA: MECCANISMI ED APPLICAZIONI	GAMBARDELLA MARIAROSARIA CARMEN	New polymeric materials with elastomeric properties based on polyesters obtained from biomass Prof. Carmine Capacchione (UNISA) Dr. Luca Giannini (Pirelli Tyre)	UNISA
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	GARGANO GABRIELE MARIA	New hybrid organic-inorganic materials for heterogeneous catalysis Prof. Michelangelo Gruttadauria (UNIPA) Prof. Francesco Giacalone (UNIPA)	UNIPA
NUOVE TECNOLOGIE PER LA CATALISI	GOBBO JODI	Optically active nanomaterials for energy and environmental applications Prof. Kassa Belay Ibrahim (UNIVE) Prof. Elisa Moretti (UNIVE)	UNIVE
CATALISI OMOGENEA: MECCANISMI ED APPLICAZIONI	GUZZO BENIAMINO	Sustainable and Catalytic Biomass Valorization for a Carbon-Neutral Future Prof. Giulia Licini (UNIPD) Dr. Beatrice Zampieri (SanMarco Group)	UNIPD
NUOVE TECNOLOGIE PER LA CATALISI	JACINTO MEJIA CARLOS ROBERTO	Computational Modelling and design of sustainable and highly selective catalytic processes using novel theoretical methods Prof. Giovanni Bistoni (UNIPG) Dr. Edoardo Mosconi (CNR-SCITEC)	UNIPG
NUOVE TECNOLOGIE PER LA CATALISI	LERDA SOFIA	Computational modeling of new generation materials for catalytic applications Dr. Edoardo Mosconi (CNR -SCITEC) Prof. Giovanni Bistoni (UNIPG)	CNR-SCITEC
CATALISI OMOGENEA: MECCANISMI E APPLICAZIONI	MASSIMINI TOMMASO	Upcycling of NdFeB magnets in the EU for green applications-NEO-Cycle Prof. Giuseppe Zanoni (UNIPV)	UNIPV
CATALISI OMOGENEA: MECCANISMI E APPLICAZIONI	ORSATTI DAVIDE	Upcycling of NdFeB magnets in the EU for green applications-NEO-Cycle Prof. Giuseppe Zanoni (UNIPV)	UNIPV
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	PANAGINI FEDERICO	Metal- and metal-oxide-based catalysts for photothermal reductions Prof. Matteo Signorile (UNITO) Prof. Valentina Crocellà (UNITO)	UNITO
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	PETRELLINI ALESSIO	Correlation of catalytic activity and catalyst material for sustainable synthesis of small molecules heterocyclic biologically actives	UNICAM

		Prof. Enrico Marcantoni (UNICAM) Prof. Serena Gabrielli (UNICAM)	
CATALISI OMOGENEA: MECCANISMI ED APPLICAZIONI	PORCO MARTINA	Sustainable asymmetric catalysis and catalysis displaying relevance for pharmaceuticals and fine chemicals Prof. Armando Carlone (UNIVAQ) Dr Fabio Pesciaioli (UNIVAQ)	UNIVAQ
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	RUSTICHELLI DANIEL	Development of Bifunctional Catalysts, such as functionalized zeolites and Core-Shell structures, for the Conversion of CO2 into Light Olefins. Process Optimization and Industrial Applications Prof. Alfredo Aloise (UNIVAQ) Prof. Armando Carlone (UNIVAQ) Prof. Marcello Crucianelli (UNIVAQ)	UNIVAQ
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	SAEB MARYAM	Development of sustainable catalytic processes for chemical and energy industry Prof. Vito Capriati (UNBA) Prof. Filippo Maria Perna (UNIBA)	UNIBA
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	SALIERNO GIUSEPPE	Direct Valorization of Agro-Industrial Waste for Sustainable Chemical Processes Prof. Emilia Paone (UNIRC) Prof. Tommaso Tabanelli (UNIBO)	UNIBO/UNIRC
NUOVE TECNOLOGIE PER LA CATALISI	SANGALLI UMBERTO	Photocatalysis and flow chemistry: development of new sustainable synthetic methodologies Prof. Alessandra Puglisi (UNIMI) Prof. Maurizio Benaglia (UNIMI)	UNIMI
BIOCATALISI	SASAL EMILIA MALGORZATA	Biomonitoring protocols for mitigating the negative environmental impacts of local manufacturing realities Prof. Gianfranco Gilardi (UNITO) Prof. Roberto Mazzoli (UNITO)	UNITO
NUOVE TECNOLOGIE PER LA CATALISI	SCIPIOE ROBERTO	Materiali Catalitici Sostenibili Prof. Andrea Porcheddu (UNICA) Dr.ssa Veronica Papa (Leonardo)	UNICA
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	SEMINERIO ELENA	Optimization of catalysts based on supported metal nanoparticles Prof. Elena Groppo (UNITO) Prof. Valentina Crocellà (UNITO)	UNITO
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	VELLA ANTONIO	Valorization of phenols from lignin for the preparation of molecules of pharmaceutical interest	UNIPG

		Prof. Luigi Vaccaro (UNIPG) Dr. Giulia Brufani (UNIRC)	
CATALISI ETEROGENEA: SINTESI, CARATTERIZZAZIONE E APPLICAZIONI	VENTURI SARA	Photocatalytic and catalytic systems for energetic transition, obtained by innovative methods including electrospinning Prof. Barbara Bonelli (POLITO) Dr. Francesca Stefania Freyria (POLITO) Dr. Massimiliano Antonini (Hysytech)	POLITO
NUOVE TECNOLOGIE PER LA CATALISI	WEI XING	Continuous flow electrochemical reactors for the use of solid electrolytes Prof. Luigi Vaccaro (UNIPG) Prof. Francesco Ferlin (UNIPG)	UNIPG