PERSONAL INFORMATION

Elena Spennati

PROFESSIONAL AND EDUCATIONAL EXPERIENCES

2023 Research grant (ING-IND/27): Catalysts and catalytic processes for the production of H_2 and/or its use in the synthesis of e-fuels, with funding PNRR - PE2 -NEST - Network 4 Energy Sustainable Transition, under thematic area 2 "Energy Scenarios of the Future". CUP D33C22001330002.
Supervisor: Prof. Gabriella Garbarino (from 01/03/2023 to present).

2021 Research grant (ING-IND/27): Development of heterogeneous catalysts for the conversion of oxygenated compounds to high value-added chemicals.
Supervisor: Prof. Gabriella Garbarino (from 01/10/2021 to 28/02/2023).

2021 PhD in n Civil, Chemical and Environmental Engineering, curriculum in Chemical, Material and Process Engineering.
Thesis: Winery wastewater treatment by microalgae co-culture for low-cost biomass production in a biorefinery concept." (ING-IND/27). Supervisors: Prof. Guido Busca, Prof. Attilio Converti and Prof. Patrizia Perego (11/06/21, University of Genoa)

2019 Acquisition of 24 CFUs for teaching qualification
University of Genoa

2017 Acquisition of the license to practice as an industrial engineer
University of Genoa, I session of the year 2017

2017 Master's degree in Chemical Engineering
Thesis: Thermal and catalytic conversion of exhausted microalgae biomass after proteins and lipids recovery. Supervisors: Professors Guido Busca, Attilio Converti (108/110, 31/03/2017, University of Genoa)

2015 Bachelor's degree in Chemical Engineering
Thesis: Initial study on the preparation and characterization of Cu-SAPO catalysts for CSR-DeNOx applications. Supervisors: Prof. Luis Arrebola, Prof. Maria Ageles Larrubia (Universidad de Malaga, Spagna) and Guido Busca. (102/110, 30/03/2015, University of Genoa)

STUDY AND REASEARCH PERIODS ABROAD

2020 Research period abroad:
University of Sydney (Sydney, Australia) and University of Technology Sydney (Sydney, Australia)
Project: Protein extraction from microalgae by innovative technologies and evaluation of resistance to cell wall rupture by image analysis.
Supervisors: Prof Fariba Dehghani and Prof. Peter Ralph.
(08/01/20-28/07/20)

2016 Erasmus + for studying abroad:
TU Dortmund (Dortmund, Germania)
(03/03/2016–22/08/2016)

2014-2015 Erasmus + for traineeship:
Universidad de Malaga (Malaga, Spain)
(15/09/2014–22/02/2015)

TEACHING ACTIVITIES

Planned and carried out at the University of Genova, Department of Civil, Chemical and Environmental Engineering (DICCA).

2022-2023 Contract professor:
Mass balances in chemical processes: from laboratory to industrial applications" for the course "Refinery and petrochemistry and green industrial organic chemistry" – code 98732 (7 hours).
(Carried out, 09/22-12/22)

2022-2023 Contract professor:
Mass balances in chemical processes: from laboratory to industrial applications" for the course "Industrial chemical products" – code 98731 (8 hours).
(Planned, 03/23-06/23)

2022-2023 Professor:
PhD course of "Characterization of powdered materials" (7 hours).
(Planned, 09/23)

2017-2023 Correlator of 6 bachelor/master thesis and tutor and supervisor in the laboratory for conducting 13 thesis at the Laboratory of Surface Chemistry and Industrial Catalysis and Laboratory of Industrial Biotechnology.

AWARD AND GRANT FOR CONGRESS PARTECIPATION

2022 Best PhD thesis award:
Rotary Euroflora Festival di Nervi per i giovani" per la promozione della ricerca scientifica riservato ai giovani (22/06/2022, Genova)

2022 Grant for congress participations from SCI (Società Chimica Italiana):
- XXIII GIC National Congress on Catalysis (14-16/06/2023, Genova, Italy)
- XXII Congresso Nazionale della divisione di chimica industriale (7-8/11/2022, Catania, Italy)
- XXII GIC National Congress on Catalysis (11-14/09/2022, Riccione, Italy)
- Giornate Italo-Francesi della Chimica (26-27/04/22022, Toulon, France)

PUBBLICATIONS

1. Busca, G., Spennati, E., Riani, P., Garbarino, G., 2023. Energies 16, 5304. https://doi.org/10.3390/en16145304
2. Fasolini; A.[§], Spennati E.[§], 2023. Catal. Today, 423, 114271. [§] equal contribution https://doi.org/10.1016/j.cattod.2023.114271
3. Spennati, E., et al. 2023. Catal. Today, 418, 114131. https://doi.org/10.1016/j.cattod.2023.114131
4. Spennati, E. et al., 2023. Catal. Today, 420, 114164. https://doi.org/10.1016/j.cattod.2023.114131
5. Spennati, E. et al., 2023. Biomass Convers, 1-15. https://doi.org/10.1007/s13399-023-04118-8
6. Spennati, E. et al., 2023. Int. J. Hydrog. Energy, HE38177_ proof. https://doi.org/10.1016/j.ijhydene.2023.01.181
7. Riani, P. et al., 2023. Int. J. Hydrog. Energy, HE37998_proof. https://doi.org/10.1016/j.ijhydene.2023.01.002
8. Spennati, E. et al., 2022. Sep. Purif. Technol, 121088. https://doi.org/10.1016/j.seppur.2022.121088
9. Spennati, E et al., 2021. Algal research 60, 102519. https://doi.org/10.1016/j.algal.2021.102519
10. Spennati, E., et al. 2020. Energies 13, 5246. https://doi.org/10.3390/en13205246
11. Spennati, E. et al., 2020. Energies 13, 2490. https://doi.org/10.3390/en13102490
12. Casazza, A.A. et al., 2020. Fuel Process. Technol. 201, 106336. https://doi.org/10.1016/j.fuproc.2020.106336
13. Solisio, C. et al., 2020. Chem. Eng. Technol. 43, 240–247. https://doi.org/10.1002/ceat.201900463
14. Spennati, E. et al., 2019. Chem. Eng. Trans. 74, 1471–1476. https://doi.org/10.3303/CET1974246
15. Casazza, A.A. et al., 2019. Chem. Eng. Trans. 74, 1141–1146. https://doi.org/10.3303/CET1974191

Signature