

Curriculum Vitae Francesca Pagnanelli

Prof. Francesca Pagnanelli is Full Professor (2022) in the scientific sector of Theory of the development of chemical processes (SSD ING-IND / 26; SC 09 / D2) at the Chemistry Department of the Faculty of Mathematical, Physical and Natural Sciences (SMFN) of La Sapienza University of Rome.

Prof. Pagnanelli belongs to the Didactic Area Council (CAD) of Industrial Chemistry in the SMFN Faculty and to the CAD of the Master's Degree in Nanotechnology Engineering of the Faculty of Civil and Industrial Engineering. Since 2010 she has been a member of the Teaching Board of the Doctorate of Chemical Engineering for Industry and Environment of the Faculty of Engineering of Sapienza.

She is the Director (2016) of the HIGH TECH RECYCLING Interuniversity Research Center for the development of innovative environmentally friendly technologies for the recycling of high-tech wastes (website: <https://www.chem.uniroma1.it/strutture/centri-di-ricerca/htr>).

She is one of the founding members of the university spin-off Eco Recycling for technology transfer in the e-waste disposal sector (year of foundation 2008) (www.ecorecycling.eu).

The scientific activity mainly concerned with the study of the chemical and physical phenomena involved in processes characterized by the interaction and transfer of metal species between aqueous systems and solid matrices: adsorption of metals onto biological matrices (bioadsorption), decontamination of soils from metals, leaching of metals from minerals and waste fractions, synthesis of metallic nanostructures by electrodeposition, hydrothermal and microemulsion synthesis.

Scientific activities are reported in 158 Scopus products (130 scientific papers, 1 review and 6 book chapters, H-index = 39, total citations 4647) and 5 European/international patents.

Prof. Pagnanelli is currently the Principal Investigator/Responsible of Unit in the following European projects

- LIFE-BioAs: Removal of As from water using innovative BIO-adsorbents produced from by-products of the agro-industrial sector, EU LIFE Project (2020-2023), Role: Principal Investigator (<https://www.lifebioas.eu/>)

- LIFE-DRONE: Direct pROduction of New Electrode materials from battery recycling, EU LIFE Project (2020-2023), Role: Responsible of Unit (<https://www.lifedrone.eu/>)

- Crocodile: First of a kind commercial Compact system for the efficient Recovery Of COBalt Designed with novel Integrated LEading technologies, EU project H2020 (2018-2022) Role: Responsible of Unit (<http://h2020-crocodile.eu/>)

- MEWLIFE: MicroalgaE biomass from phototrophic-heterotrophic cultivation using olive oil Wastewaters, EU project LIFE + (2018-2022), Role: Responsible of Unit (<http://www.mewlife.eu/>)

Prof. Pagnanelli was Principal Investigator/Responsible of Unit in the following European and national projects

- LIFE-LIBAT: Recycling of primary Lithium BATtery by mechanical and hydrometallurgical operations, EU project LIFE (2017-2020), Role: Principal Investigator (www.lifelibat.eu)

- BIPAM: Processo innovativo ed integrato per la produzione di BioPellet a partire da scarti Amidacei Cofinanced by Regione Lazio (2018-2020) Role: Responsible of Unit

- RECENT: Riduzione Elettrocatalitica di CO₂ mediante Elettrodi Nanostrutturati Cofinanced by Regione Lazio (2018-2019) Role: Responsible of Unit

- ORIFO: Optimization of a zero-waste treatment for the recycling of photovoltaic modules at the end of their life. Co-financed by the Ministry of the Environment (2018-2019), Role: Principal Investigator

- Photolife: Process and automated pilot plant for simultaneous and integral recycling of different kinds of photovoltaic Panels, EU project LIFE + (2014-2017) Role: Responsible of Unit (<http://www.photolifeproject.eu/>)

- HYDROWEEE DEMO - Innovative Hydrometallurgical Processes to recover Metals from WEEE including lamps and batteries - Demonstration. EU project FP7 (2012-2017) Role: Responsible of Unit (http://cordis.europa.eu/result/rcn/158626_en.html)

- Alghe Energetiche: co-financed by the Ministry of the Environment (2011-2013) Role: Responsible of Unit