

Curriculum vitae

Francesca Pagnanelli graduated with honors in Industrial Chemistry at Sapienza University of Rome (1999) with a thesis awarded with the XIII National Prize of Federchimica.

In 2003 she received her PhD in Industrial Chemical Processes at Sapienza University.

In 2002 Dr. Pagnanelli won a public competition and became an Assistant Professor in the field "Theory of the development of chemical processes" in the Department of Chemistry of Sapienza University. In 2012 she became Associate Professor in the same field.

She is a member of the interuniversity research center HIGH TECH RECYCLING, and she is one of the founder of the Spin-Off Eco-Recycling for technology transfer.

She has been responsible of project unit in three FPVII projects (Hydroweee: Innovative Hydrometallurgical Processes to recover Metals from WEEE including lamps and batteries; Hydroweee Demo: Innovative Hydrometallurgical Processes to recover Metals from WEEE including lamps and batteries – Demonstration; Photolife: Process and automated pilot plant for simultaneous and integral recycling of different kinds of photovoltaic Panels) for the development of innovative projects for material recovery from wastes and the realization of demonstrative plants. She has been also principal investigator and responsible of units in different national projects (Alge Energetiche: Design and construction of a pilot plant for the cultivation of microalgae for biofuel production, cofinanced by Ministero dell'Ambiente e della Tutela del Territorio e del Mare; Photorec: Development of a recycling process for end of life photovoltaic panels, cofinanced by Regione Lazio; Nanohydro: Production of metal nanoparticles from RAEE valorization, financed by Regione Lazio; Hyrpam: Process for the recovery of Pd-Ag membranes for hydrogen, financed by Regione Lazio).

Research activities mainly focused on the development of innovative hydro- and biohydro-metallurgical processes in environmental and industrial applications:

- Recovery of metals from high tech wastes such as batteries, lamps, printed circuit boards, cathodic ray tubes, liquid crystal displays, photovoltaic panels, catalysts;
- Synthesis and characterization of nanoparticles by electrodeposition and microemulsion method;
- Production of biofuels and fine chemicals by microalgae;
- Biosorption of heavy metals in wastewater treatment.

Prof. Pagnanelli is author of more than 70 scientific articles published in peer reviewed international journals in the field of chemical and biochemical engineering and environmental sciences.

She participated at several international conferences where she presented oral communications and posters (more than 50 contributions in book of proceedings with ISBN).

She is inventor and co-owner of three European patents for the recycling of batteries and photovoltaic panels (EP1684369A120060726; EP2450991A120120509; PCT/IT2014/000124).