



Anna Maria Cardinale

Researcher

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Education and training

1991

PhD in chemistry

Università di Genova

Academic experience

1992 - ONGOING

Researcher

Università di Genova

Work experience

1992 - ONGOING

Researcher

UNIGE

Language skills

English

Independent

Teaching activity

- She has been teaching General and Inorganic Chemistry since 1995,
- Since 2012-2013 in charge of the course “Environmental and applied Radiochemistry”
- Supervisor of different thesis in chemistry (bachelor and master level).
- 2005 she attended the first summer school of ECTN (European Chemistry Thematic Network), organized by the Working Group on Newly Appointed University Chemistry Teaching Staff.
- 2007 she held some lectures to the pool technicians of the Aquarium of Genoa.
- Responsible for the training stage in our department for the secondary school students.
- Since 2005 involved in the “ Progetto Nazionale Lauree Scientifiche” and then “Piano Nazionale Lauree Scientifiche”

- Since 2005 organization of didactic laboratory activities at the “Porto Petroli Genova”.
- 2004-2011 organization of didactic laboratory activities for the primary schools “ Dai banchi ai banconi “with the founding of the Faci S.p.A. company
- Since 2010 member of the WP10 “Transparency” of the E2C2N.
- During the academic years 2011-2012 and 2012-2013 scientific responsible for the didactic activities of the project Techschool founded by “Fondazione Edoardo Garrone”
- AY 2012-2013 holds the course "Teaching laboratory of Chemistry" as part of TFA for enabling class A059
- AY 2014-2015 in charge of the interfaculty course "Cooperation to the development"
- Since 2016 responsible for the students leaning for the different course of study in Chemistry

Research interests

The research fields of interest are: phase equilibria and thermodynamic properties of metallic alloys, in binary and ternary systems formed by rare earth elements, with metals as Al, Mg, Cu, Mn, Si, Zn. The research activity mainly pertains the effects of a rare earth addition on the properties of binary light alloys, as Al-Si, focusing both on the phase diagram of the ternary system and on the correlation between thermodynamic technologically interesting properties.

Experimental measurements of the enthalpy of formation at 300K of binary and ternary alloys and intermetallic compounds, particularly according to the following reaction in the solid state: $(1-x)RE(s) + xAl(s) \rightleftharpoons RE(1-x)Alx(s)$. More recently she has undertaken the study of possible chemical and biochemical methods for the recovery of precious metals and rare earths from waste, with particular attention to electronic waste.

The experimental techniques used are: direct calorimetry, differential thermal analysis, thermogravimetric analysis, X-ray diffraction, optical and scanning electron microscopy. Furthermore another area in which she is involved regards some spread of science activities.

Editorial activity

- Chairman at the 13th Mediterranean Conference on Calorimetry and Thermal Analysis (Medicta2017), Loano (SV), Italy, September 24-27.
- Guest Editor for the special issue on the Journal of Thermal Analysis and Calorimetry (13th Mediterranean Conference on Calorimetry and Thermal Analysis (Medicta2017), Loano (SV), Italy, September 24-27.
- Reviewer for several international journals: Journal of Alloys and Compounds, Journal of Thermal Analysis and Calorimetry, Journal of Materials Science Research, Journal of Materials Science, Materials and Design, Journal of Phase Equilibria and Diffusion, Advanced

Engineering Materials.

Other professional activities

- In 2009, 2011 and 2017 she contributed at the “sustainability report” of the Porto Petroli Sp.A.by processing the productivity emission inventory
- 2005-2008 member of the scientific committee for the chemical area of the Università di Genova
- 2002-2005 member of the “ Giunta di Dipartimento”
- From 2009 member of the Erasmus project team for the Dipartimento di Chimica e Chimica Industriale.
- From 2009 to 2012 member of the scientific committee of the department library “CSB Cannizzaro”
- She took part, as commission member, at three selections for a researcher role at the universities of Torino, Milano and Verona (in 2003, 2005 and 2009 respectively).
- From 2012 member of the committee for the Erasmus Placement attributions.
- July 2012 Component of the selection board for the TFA (class teaching 059).