Enrica Gianotti

Curriculum vitae

Born in Turin (Italy) 13/05/1970 Italian citizen Telephone: +39.0131.360251 E-mail: <u>enrica.gianotti@uniupo.it</u>

CURRICULUM VITAE ET STUDIORUM

09/2010-08/2012	Marie Curie Fellowship of the EU (Marie Curie Intra-European Fellowships for Career Development (IEF)), Proposal n° 253032, at the Instituto de Tecnologia Quimica (ITQ) of the Universidad Politécnica de Valencia(Spain).
03/2005	Researcher (permanent position) at the University of of Torino, Italy
09/2004-03/2005	Post doctoral position at the Chemistry Department of the University of Torino, Italy.
04/2002-04/2004	Post doctoral position at the Chemistry Department of the University of Torino, Italy.
10/1996-10/1999	PhD in Chemical Science specialty Physical Chemistry at University of Torino, Italy.
11/07/1995	"Laurea" degree in Chemistry at the University of Torino, Italy. Top marks.
	High School Degree, Liceo Classico "M D'Azeglio", Torino, Italy.

UNIVERSITY CAREER

04/2015	Associate Professor at the Department of Science and Technological Innovation, Università del Piemonte Orientale, Italy.
12/2011	Transfer as a Researcher to the Department of Science and Technological Innovation, Università del Piemonte Orientale from the University of Torino.
03/2005	Researcher Chemistry Department of the University of Torino, Italy.
1999-2005	Post-doctoral position at the Chemistry Department of the University of Torino, Italy.

RESEARCH FIELD

- 1. Nanomaterials
- 2. Heterogeneous catalysts
- 3. Nanomedicine
- 4. Physico-chemical characterization of the materials

1. Nanomaterials

Synthesis and physico-chemical characterization of nanomaterials for technological applications.

The synthesis are performed by hydrothermal or sol-gel processes to obtain ordered micro and mesoporous materials. These nanomaterials can be functionalized to introduce particular chemical properties to be applied in the field of heterogeneous catalysis and nanomedicine.

2. Heterogeneous catalysts

Synthesis and physico-chemical characterization of materials for heterogeneous catalysis.

The surface properties and the catalytically active sites will be studied by means of vibrational (FTIR) and electronic (DR UV-Vis and photoluminescence) spectroscopies.

3. Nanomedicine

Synthesis and functionalization of mesoporous silica based nanoparticles for application in photodynamic therapy and theranostic.

3. Caratterizzazione chimico-fisica dei materiali

Structural and spectroscopic characterization of nanomaterials by means of XRD, electro microscopies (SEM and HRTEM), volumetric analysis of N₂ adsorption/desorption at 77K and vibrational and electronic spectroscopies.

Bando	TITOLO DEL PROGETTO
Progetto di Ateneo	Principal Investigator (PI) of the project: "Aluminophosphates with designed hierarchical porosity for green chemistry." Founded by Compagnia di San Paolo.

FOUNDED PROJECTS

PRIN 2012	Studio e sviluppo applicativo di ossicarbonati e ossidi misti
	contenenti ioni lantanidi con proprietà luminescenti per
	applicazioni nel bio-imaging e nell'optoelettronica

TOP FIVE PAPERS

- B. Martins Estevão, I. Miletto, L. Marchese, E. Gianotti "Optimized Rhodamine B labeled mesoporous silica nanoparticles as fluorescent scaffold for the immobilization of Photosensitizer: a theranostic platform for optical imaging and photodynamic therapy" *Phys. Chem. Chem. Phys.*, 2016, 18, 9042 – 9052.
- S. H. Newland, D.J. Xuereb, E. Gianotti, L. Marchese, R. Rios, R. Raja. "Highly Effective Design Strategy for the Heterogenisation of Enantioselective Organocatalysts" *Catal. Sci. Technol.*, 2015, 5, 660-665.
- E. Gianotti, B. Martins Estevão, F. Cucinotta, N. Hioka, M. Rizzi, F. Renò, L. Marchese. "An efficient Rose Bengal based Nanoplatform for Photodynamic Therapy". *Chem. Eur. J.*, 2014, 20, 10921–10925.
- 4. E. Gianotti, M. Manzoli, M. E. Potter, V.N. Shetti, D. Sun, J. Paterson, T. M. Mezza, A.Levy, R. Raja.

"Rationalising the role of solid-acid sites in the design of versatile single-site heterogeneous catalysts for targeted acid-catalysed transformations". *Chem. Sci.*, **2014**, 5, 1810-1819.

 R.M. Leithall, V.N. Shetti, S. Maurelli, M. Chiesa, E. Gianotti, R. Raja.
"Towards understanding the catalytic synergy in the Design of Bimetallic Molecular Sieves for Selective Aerobic Oxidations"

J. Am. Chem. Soc., **2013**, 135(8), 2915–2918.