Eleonora Conterosito

Curriculum vitae

BIO AND EDUCATION

First level degree in Material Science (110/110 cum laude) from University of Piemonte Orientale in 2007. She worked for one year at the Degussa Novara Technology laboratory as researcher in sol-gel materials in 2007 and then obtained the second level degree in Chemistry (110/110 cum laude) in 2009. In 2013, she obtained her Ph.D. from the Università del Piemonte Orientale for the *in situ* structural study of materials using a combination of X-ray powder diffraction and Raman spectroscopy with Marco Milanesio as her Ph.D advisor.

UNIVERSITY CAREER

2013 - 2016	Research fellow, Università del Piemonte Orientale
2017 - 2023	Research collaborations, Università del Piemonte Orientale
2023	Researcher, Università del Piemonte Orientale

MAIN FIELDS OF INTEREST

1. Green synthesis methods development and optimization
2. Principal component analysis applied to datasets and single measurements
3. Materials characterization – quantitative analysis
4. Hyphenated techniques

CURRENT ISSUES OF RESEARCH

1. Green synthesis optimization

Development of synthesis of materials with green approaches and their optimization by design of experiment. Analysis of the obtained materials by spectroscopic, termogravimetric and chromatographic techniques, mass spectrometry and x-ray diffraction. Analysis of waste and recycled materials.

2. Multivariate statistical analysis

Use of multivariate methods, such as principal component analysis, for the analysis of large datasets and for the direct analysis of spectroscopic and diffraction data. The main goal is to simplify the handling of large datasets and "big data" reducing at the same time the operator subjectivity when analyzing manually each spectrum or pattern.

TOP FIVE PAPERS

[1] M. Monti, E. Perin, E. Conterosito, U. Romagnolli, B. Muscato, M. Girotto, M. T. Scrivani, V. Gianotti, *Resour. Conserv. Recycl.* **2023**, *188*, 106691.

[2] E. Conterosito, L. Palin, R. Caliandro, W. van Beek, D. Chernyshov, M. Milanesio, *Acta Crystallogr. Sect. A Found. Adv.* **2019**, *75*, 214–222.

[3] E. Conterosito, V. Gianotti, L. Palin, E. Boccaleri, D. Viterbo, M. Milanesio, *Inorganica Chim. Acta* **2018**, *470*, 36–50.

[4] E. Conterosito, I. Benesperi, V. Toson, D. Saccone, N. Barbero, L. Palin, C. Barolo, V. Gianotti, M. Milanesio, *ChemSusChem* **2016**, *9*, 1279–1289.

[5] E. Conterosito, L. Palin, D. Antonioli, D. Viterbo, E. Mugnaioli, U. Kolb, L. Perioli, M. Milanesio, V. Gianotti, *Chem. A Eur. J.* **2015**, *21*, 14975–14986.

AWARDS

1. IUCr Poster Prize at the ECM29 (29th European Crystallographic Meeting) in Rovinj (Croatia) 2015
2. AIC Award for the best Ph.D. thesis of crystallographic subject 2013
3. Lodovico Prize "For the most dynamic student" awarded during the "46th course of the International School of Crystallography" - Erice 2013
4. AIC Award for the best 2nd level degree thesis of crystallographic subject 2010