Personal information

Family name, First name: **Bardelli, Fabrizio**Date and place of birth: 05/04/1973, Rome (Italy)

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Scopus: <u>11140217900</u>

Education

2006 PhD in Physics Ecole doctorale de Physique, Joseph Fourier University, France

2001 MSc in Physics Department of Physics, University of Roma Tre, Italy

• Professional Experience

Present	Marie Sklodowska-Curie fellow (Individual Fellowship) at CNR-Nanotec, Rome –Italy
2014 – 2015	Collaborator at Earth Science department (University of Torino, Italy) and at the Earth Science Institute (ISTerre, University of Grenoble Alpes, France) (24 months)
2011 – 2013	Postdoctoral researcher (27 months) Joseph Fourier University, Grenoble – France
2010 – 2011	Postdoctoral researcher (12 months) French council of scientific research (CNRS), Grenoble – France
2008 – 2010	Postdoctoral researcher (24 months) Nanostructured Interfaces and Surfaces, Turin – Italy
2006 – 2008	Postdoctoral researcher (26 months) Italian beamline at the ESRF, Grenoble – France
2003 – 2006	PhD student (36 months) Ecole doctorale de Physique, Joseph Fourier University, Grenoble – France
2002	Postgraduate researcher (6 months) Department of Physics, University of Roma Tre, Rome – Italy

Short stays at international research institutions

2016	CNR-Nanotec, (STSM in the framework of the COST EU project), Italy (2 months)
2015	CNR-Nanotec, (STSM in the framework of the COST EU project), Italy (1 month)
2008	Istituto Balseiro, Centro Atomico de Bariloche, Argentina (1 month)

Supervision of graduate students and teaching activities

2010 – 2013	Co-supervision of three PhD students at the Institut des Sciences de la Terre,
	Joseph Fourier University, Grenoble – France;

2007 – 2008 Practicals at the High European Research Course for Users of Large Experimental Systems – HERCULES, CNRS, Grenoble – France.

Publications

47 journal articles in the fields of materials science, scientific software and instrumentation, health and environment, and cultural heritage + 6 peer-reviewed conference papers and proceedings. h-index: 14 (source SCOPUS; publication range 2003 - today).

Patents

Processes for producing conductive and/or piezoresistive traces on polymeric substrates, 2011, US Patent App. (US20130255997), 60, 2014-01-15.



Conferences, workshops, and schools

16 international conferences, workshops, or schools (8 oral contributions, 1 invited talk), and 8 national conferences/workshops/schools (4 oral contributions).

Awards

2003 – Winner of the "Carla Cauletti" student fellowship (University of Rome Tre)

Beamtime granted at large scale facilities

40 experiments at the ILL (FR) and ISIS (UK) neutron sources, and at the ESRF (FR), Diamond (UK), SLS (SW), and ELETTRA (IT) synchrotron light sources.

Major collaborations

- United States: L. Valenzano, environmental chemistry, Michigan Tech. University;
- Argentina: G. Aurelio, physicist, Centro Atómico de Bariloche;
- *Italy*: C. Lamberti, physical chemistry, University of Torino; E. Belluso, geologist, Univ. of Torino; P. Lattanzi, geochemist, University of Cagliari; P. Costagliola, geochemist, University of Florence;
- Germany: E. Eiche, environmental scientist, Karlsruhe Institute of Technology;
- Switzerland: L. Winkel, geochemist, ETH;
- China: M. Kang, environmental scientist, Guangzhou Institute of Geochemistry;
- France: A. Bravin, Medical imaging, ESRF; L. Charlet, geochemist, Univeristy of Grenoble Alpes;
- India: K. Dillon, environmental scientist, Punjab Agricultural University

· Editorial activity and membership of scientific societies

2014 – 2016 Editorial Board Member of the American Journal of Environmental Sciences

2012 – 2016 Member of the Geochemical Society, US

2003 – Today Member of the Società Italiana Luce di Sincrotrone (SILS), Italy.

Advanced investigations tools and computer skills

- Micro and bulk Synchrotron Radiation X-ray Absorption Spectroscopy (XAS): theory, experimental, data analysis, and simulation of EXAFS and XANES data;
- Synchrotron micro x-ray fluorescence for element detection, quantification, and spatial distribution;
- Synchrotron radiation X-Ray Diffraction (XRD) and X-ray Pair Distribution Function (XPDF);
- Quasi Elastic Neutron Scattering (QENS);
- Developing language: FORTRAN;
- Developed software: ESTRA-FITEXA for XAS data analysis (doi:10.1016/j.nimb.2012.05.027);
- Scientific software: Origin, Fullprof, IFEFFIT, Fit2D, PDFgui, PyMCA, Lamp, Mantid, Materials Studio, Vesta, FEFF, XOP, FindIt, X'pert Highscore, Labview, Volview, ImageJ, Spec, Syrmep;
- Operating systems: Windows, Linux/Unix, MacOS.

Spoken languages

Italian (mother tongue); English (proficient); French (proficient); Spanish (basic).