

Stefano Covelli (Trieste, 29/05/1966)

Present Position:

Associate Professor in Geochemistry (SSD GEO/08) at the Department of Mathematics and Geosciences of Trieste University since October 2014 whereas his former position was researcher at the same University from 2001 to 2014.

Teaching:

He is currently lecturer of *Geochemistry* (9 CFU, Degree Course in Geological Sciences) and *Environmental Geochemistry* (6 CFU, Master Course in Geosciences).

At Trieste University, he was also formerly lecturer of Environmental Geology (Degree Course in Environmental Sciences) since the academic year 2002-03 till 2009-10 and of Waters & Sediments Monitoring for Geology and Environmental Sciences Master Degree courses since the academic year 2005-06 till 2008-09.

Student Thesis supervisor from 2001: 23 (15 M.Sc. Degree, 14 B.Sc. Degree) and 3 (2 M.Sc. Degree, 1 B.Sc. Degree) ongoing.

He is currently member of the Scientific Board for the PhD course in "*Environmental Life Sciences*" jointly offered by the University of Trieste and University of Udine.

Ph.D. supervisor from 2011: 2 (*Environmental Sciences - Marine Sciences*), 1 ongoing (*Environment and Life*) and 1 (*Chemical Sciences*).

Research Delegate for the Department of Mathematics and Geosciences and Member of the Board of the same Department.

Contact person for the *Erasmus* agreements within the Geological Sciences between University of Trieste and the Universities of Castilla-La Mancha and Oviedo (Spain).

Education:

1998: Ph.D. in Environmental Sciences (Marine Sciences) at Trieste University. Topic: "Biogeochemical cycling of mercury in the sediments of the Gulf of Trieste".

1991: Degree in Geological Sciences at Trieste University. Topic: "Sedimentological and geochemical characteristics of some cores from the Isonzo River delta".

Post-Degree research activity:

2000 research contract at the Dipartimento di Scienze Geologiche, Ambientali e Marine of Trieste University in the project founded by the Italian Environment Ministry to CoNISMa on the topic- "Heavy metals and hydrocarbons in surficial sediments of the Italian seas".

2000 research fellowship granted by CNR (Italian National Research Council) at the Dipartimento di Scienze Geologiche, Ambientali e Marine of Trieste University in the framework of ANPA-CNR research project on geochemical cartography coordinated by Genova University.

1999 research fellowship at the University of Algarve (Portugal) in the framework of the European MAST (Contract number: MAS3/CT97/0145) F-ECTS ("Feed-backs of Estuarine Circulation and Transport of Sediments on phytobenthos").

1999 research contract by Dipartimento di Scienze Geologiche e Paleontologiche of Ferrara University in the study of the environmental assessment of sediments of Sacca di Goro (Po river delta) founded by Regione Emilia-Romagna.

1998 research fellowship at the University of Algarve (Portugal) in the framework of the European MAST (Contract number: MAS3/CT97/0145) F-ECTS ("Feed-backs of Estuarine Circulation and Transport of Sediments on phytobenthos"). 1998 visiting researcher at the Marine Biology Station of Pirano (Slovenia), March and May 1998, in the framework of Italian-Slovenian scientific cooperation on the topic "Identification of geochemical background sedimentary levels to define the contamination degree of the marine sediments of Trieste Gulf".

1993 Post-graduate fellowship (awarded by University of Trieste) at the Coastal Geology Group, British Geological Survey (Nottingham, United Kingdom). Topics: sedimentation processes and heavy metals pollution in estuarine environment.

Research Activity:

The main research interests are on the biogeochemical cycle of mercury in the aquatic environment (rivers, lakes, estuaries, lagoons) with particular attention to the coastal environment of Friuli Venezia Giulia, one of the most contaminated areas in the world in relation to this metal. Scientific production is particularly focused on this potentially toxic element and it is also the result of a fruitful collaboration with colleagues from national and international research institutions. Next to this issue, he is also involved in studies on contamination of coastal marine sediments, including organic contaminants (TBT, PAH), focusing on biogeochemical aspects of heavy metals, their mobility, dispersion and accumulation in sediments in relation to natural (riverine inputs of suspended matter, processes at the water-sediment) and anthropogenic (dredging, landfills at sea) processes to the definition of natural background values at regional level through normalization procedures.

He is coordinator of the working group called MercuriLab whose research (and teaching) activities are provided through the website <http://www.mercurilab.units.it/>.

Scientific participation in international and national research projects admitted to financing on the basis of competitive calls providing peer review (last 8 years):

- (FRA 2014, Research Funds from Trieste University): " Environmental monitoring of a fish farm in the lagoon environment contaminated by mercury through a multidisciplinary approach". Coordinator.
- CNR-MIUR "RITMARE" Flagship Project (2012-16): Subproject 3, Work Package 2, Action 3 "Integrated Environmental Characterization and Remediation of Contaminated Sites coastal". Responsible of CoNISMAR Research Unit at University of Trieste for the specific activity: "The management of sediment from dredging: a pilot study aimed at restoring saltmarshes in lagoon environment contaminated by mercury."
- PRIN 2009: "No traditional stable isotopes (Fe-Cr-Hg) as tracers of environmental problems: applications to the ecosystem of a site of national interest, the Marano and Grado lagoon (Friuli-Venezia Giulia)". Member of Trieste Research Unit.

- (FRA 2009, Research Funds from Trieste University): "Multidisciplinary research on saltmarsh areas in the Marano and Grado Lagoon in relation to biogeochemical cycling of mercury". Coordinator.

- PRIN 2007: "Geochemical budget for agri-environmental quality assessment in a complex territorial system: the case study of Ravenna ". Member of Trieste Research Unit.

- 2007: "TAGUBAR" (Tangential Guanabara Bay Aeration and Recovery, Rio de Janeiro, Brasile) Ref. N°76145-000, Italian Ministry of Foreign Affairs in collaboration with the Brazilian government, coordination University Ca 'Foscari of Venice: "Marine Sediment Geochemistry" (IUCN Contract Ref: C/DiSGAM1/CGL/jo050207). Responsible of Trieste Research Unit.

He is co-author of 54 peer-reviewed articles (SCOPUS H Index = 19, 1441 total citations by 959 documents), 4 book chapters, 20 publications in the Conference Proceedings, 18 extended abstracts and 85 abstracts (oral and poster presentations) at national and international conferences.

2102 *Estuarine, Coastal and Shelf Science (Elsevier)*, Guest Editor of the Special Issue entitled "The MIRACLE Project (Mercury Interdisciplinary Research project for Appropriate Clam farming in Lagoon Environment) on.

2016 *Environmental Science and Pollution Research (Springer)*, Guest Editor of the Special Issue entitled "Integrated Environmental Characterization of the Contaminated Marine Coastal Area of Taranto, Ionian Sea (Southern Italy) - The RITMARE Project".

He has been reviewer of articles for several international Journals and of project proposals regarding mercury and other heavy metals in the aquatic environment for National Science Foundation (NSF, USA), Estonian Science Foundation (ESF), the Portuguese Foundation for Science and Technology (FCT).

Conference Sessions Chaired:

2015 "Marine and Coastal Environments" at the 22nd Symposium of the International Society for Environmental Biogeochemistry (ISEB) held in Piran, Slovenia, 28 September-2 October 2015

2015 "Global Pollutants: from mercury to POPs", Conference "Il Pianeta Dinamico: sviluppi e prospettive a 100 anni da Wegener" held in Florence, 2-4 September 2015.

2014 "Mercury Biogeochemistry and Policy" at the annual Conference of SETAC-Europe Basel (Switzerland), May 11 to 15 in 2014.

2013 He was a member of the Scientific Committee of the Conference of Studies "Project RITMARE to restoration of the Mar Piccolo of Taranto", held in Taranto, 23 April 2013.

2010 "Fate and Biogeochemistry of Metals" at the annual Conference of SETAC-Europe (Society of Environmental Toxicology and Chemistry) held in Seville (Spain) 23-27 May 2010.