Simone Toller, PhD

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ACTUAL POSITION

Post-doctoral Fellowship *(June 2021 - Present)*

University of Parma, Department of Chemistry, Life Sciences and Environmental Sustainability, Italy
Mineral reactivity, a key to understand large-scale processes: from rock forming environments to solid waste recovering/lithification. Geochemical and mineralogical characterization of bottom ashes.
Advisors: Prof. Mario Tribaudino (UNITO); Prof. Enrico Dinelli (UNIBO); Dr. Valerio Funari (CNR-ISMAR)

EDUCATION

PhD in Earth, Life and Environmental Sciences (*November 2017 - December 2020)*

University of Bologna, Department of Biological, Geological, and Environmental Sciences
Thesis: Water and Sediments Geochemistry and Elemental Fluxes on a Large Dam: case study of the Ridracoli Reservoir.
Advisor: Prof. Enrico Dinelli - Degree conferred on 21.04.2021

Master Degree in Scienze e Tecnologie Geologiche *(October 2014 – February 2017)*

University of Pisa, Italy
Thesis:Thallium speciation in water and sediments from an abandoned mine site: the case of Valdicastello Carducci (Tuscany, Italy).
Advisor: Prof. Riccardo Petrini - Degree conferred on 24.02.2017, 110/110 magna cum laude.

Bachelor Degree in Geological Sciences *(October 2010 – July 2014)*

University of Ferrara, Italy
Thesis: Caratterizzazione petrografico-geochimica dei filoni lamprofirici della Valsugana.
Advisor: Prof. Gianluca Bianchini - Degree conferred on 16.07.2014, 98/110.

RESEARCH EXPERIENCE

Teaching tutor *(February 2021 – September 2021)*

University of Bologna - PLS, Piano Lauree Scientifiche - Bologna, Italy
Teaching project “L’acqua che beviamo”.
Advisor: Dr. Enrico Dinelli

Abroad period, Geochemical researcher *(September 2019 - December 2019)*
Shanghai State Key Laboratory of Marine Geology, Tongji University – Shanghai, China
Participation in research activity regarding reservoir-river-sea sediment geochemistry.
Advisors: Prof. Shouye Yang; Prof. Enrico Dinelli

Erasmus+, traineeship *(April 2016 – July 2016)*

HydroSciences Montpellier, CNRS – Montpellier, France
Participation in research activity regarding sediment and water Thallium speciation analysis.
Advisors: Dr. Corinne Casiot; Prof. Riccardo Petrini

Traineeship *(April 2014 – May 2014)*

Department of Agricultural and Food Sciences, University of Bologna – Bologna, Italy
Advisors: Prof. Livia Vittori Antisari; Prof. Gianluca Bianchini

PUBLICATIONS

S. Toller, V. Funari, I. Vasumini, E. Dinelli. “Geochemical characterization of surface sediments from the Ridracoli reservoir area and surroundings, Italy. Details on bulk composition and grain size”, Journal of Geochemical Exploration, 2021, 231, 106863. DOI: 10.1016/j.gexplo.2021.106863

S. Toller, B.M.S. Giambastiani, N. Greggio, M. Antonellini, I. Vasumini, E. Dinelli. “Assessment of Seasonal Changes in Water Chemistry of the Ridracoli Water Reservoir (Italy): Implications for Water Management”, Water 2020, 12(2), 581. DOI: 10.3390/w12020581

SKILLS

Laboratory

Sampling	Sampling of water, sediment, rocks and soil Sampling campaign planning Sample storage and preparation

Analytical methods	Major and trace elements by X-ray fluorescence (XRF) Carbon, hydrogen, and nitrogen analyzer (CHN-S) Ion chromatography (IC) Inductively coupled plasma mass spectrometry (ICP-MS) Leaching tests (UNI EN 12457-2, ICP-MS) Sequential extractions (BCR scheme, ICP-MS) Sediment digestion and leaching (ICP-MS) Lithium and Strontium isotopes (MC-ICP-MS) Heavy Minerals separation Thallium speciation (HPLC-ICP-MS)

Data acquisition, data quality assessment, statistical evaluation and interpretation

Scientific writing skills thanks to the writing of master's and doctoral theses and reports during my formative years and the publication of two scientific articles in International Journal with Impact Factor

Languages

English: good; Italian: mother tongue

Digital competences

Microsoft Office (Word, Excel, PowerPoint)
Graphic software (Photoshop, Illustrator, PrismGraphpad, Grapher)
Data elaboration (GCDkit in R, Past)
Raster data (QGIS, Global Mapper)

Communication and organization

Good communication and adaptive skills gained through my research experience, collaborating and interacting with different levels and international scientific figures. Very good attitude to work in team. Very good organisational capacities acquired in the laboratory, with experimental planning and execution. I developed good written skills by preparing reports of my scientific activity, PhD thesis and original manuscripts, and good verbal skills through the participation in international Congresses and Workshops.

Conferences and seminars held

-Convener and Poster "Partitioning and bioavailability of trace metals on bottom sediments from two very different water reservoirs, Ridracoli and Conca Reservoirs", BEGEO Congress (Napoli, 7-10/10/21)
-Talk "Geochimica di acque e sedimenti in un invaso artificiale", cycle of seminars CNR ISMAR 2021 (On-line, 18/03/2021)
-Poster "Reservoir-river-sea system sediment geochemistry in Fiumi Uniti catchent from Apennines to Adriatic Sea", EGU 2020 Sharing Geosciences Online (Online, 4-8/05/2020)
-Poster "Waste & Health during the Anthropic Times", COST Action MINEA (Bologna, 21/02/2020)
Talk "I sedimenti nei grandi invasi artificiali, casi studio in Emilia-Romagna", Ecomondo 2019 (Rimini, 05/11/19)
-Talk "Geochemical analysis on sediments, water and water-sediment interface in reservoirs: the cases of Ridracoli Lake and Conca Basin", meetin at School of Ocean and Earth Science, Tongji University (Shanghai, 04/10/19)
-Poster "Environmental quality assessment of sediments settled in an artificial lake, the case of Ridracoli Lake", SedNet Congress 2019 (Dubrovnik, 2-5/04/2019)
-Poster "Geochemical analysis on sediments and water column in reservoirs: the cases of Ridracoli Lake and Conca Basin", Gran Paradiso Summer School 2018 (Ceresole Reale, 10-18/07/2018)
-Talk "Geochemical and sedimentological characterization of sediments from the Ridracoli Lake, Emilia-Romagna, Italy" al 5th IAHR Europe Congress (Trento, 12-14/06/2018)

Driving licence

Patent B and A

CONSIDERING the DPR December 28, 2000, n. 445 on "Consolidated laws and regulations on administrative documentation" and successive amendments;
Aware that, according to art. 76 of the DPR 445/2000, false declarations, falsity in public acts and use of false acts are punished according to the Penal Code and to special laws on the subject, declares under his/her own responsibility:
That what declared in the curriculum vitae et studiorum including information on the scientific production corresponds to the truth, and is presented as self-certification in accordance with artt. 19, 46 and 47 of DPR n°445/2000.
I hereby authorize the use of my personal data in accordance to the GDPR 679/16 - "European regulation on the protection of personal data".

Bologna, 28th November 2021
Simone Toller