

Curriculum Vitae

Ayumi Koishi

Institut des Sciences de la Terre
1381 rue de la piscine
38400 St Martin d'Hères, France
Phone : +33 (0)4 76 51 40 68
E-mail : ayumi.koishi@ujf-grenoble.fr



EDUCATION

- PhD candidate** **Université Joseph Fourier – Grenoble I**, Grenoble, France
Environmental Geochemistry, October 2014 – present
Tentative title: *Mineral nucleation pathways relevant to biomineralization processes*
Advisors: Dr. Alejandro Fernandez-Martinez and Dr. German Montes-Hernandez
- MS** **University of Lausanne**, Lausanne, Suisse
Environmental Geosciences, September 2011 –January 2014
Master thesis title: *Long-term effects of inorganic and organic amendments on soil organic matter quality in a Swiss agrosystem* (Graded 6/ 6)
- BS** **Waseda University**, Tokyo, Japan
International Liberal Studies, April 2007- Mars 2011
Minor in Environmental Studies
- Exchange programme** **University of Lausanne**, Lausanne, Suisse
One-year intensive French course, September 2008-June 2009

HONORS AND FELLOWSHIPS

- Obtained French ministerial PhD fellowship, Université Joseph Fourier, France (2014 - 2017)
- Obtained best poster presentation award (Environmental Biogeosciences session), 11th Swiss Geoscience meeting, Lausanne, Switzerland (2013)
- Listed on the Dean's List (top 10%), Waseda University, Tokyo, Japan (2009)
- Obtained exchange fellowship, University of Lausanne, Lausanne, Switzerland (September 2008-June 2009)

EMPLOYMENT

- Biogeosciences laboratory (prof. Eric Verrecchia), University of Lausanne**, Lausanne, Switzerland
Research staff, April 2014 – present
- Optimization and monitoring of FTIR and fluorescence spectroscopy
 - Development of FTIR protocol for mineral phases (clays)
 - General assistance in the laboratory
- Environmental Geochemistry Lab (prof. Jasquelin Peña), University of Lausanne**, Lausanne, Switzerland
Student assistant, February 2013 – September 2013
- Writing MATLAB scripts for the plotting of various data files
 - Organization of laboratories
- Agroscope Changins**, Nyon, Switzerland
Intern, April 2012 – September 2012
- Field sampling and laboratory experimental works in revalorization of wood ash project

BIOGEOCHEMICAL METHODS

- *Microbiology*: Enzyme activity assay using fluorogenically-labelled substrates
- *SOM characterization and molecular analysis*: Chemical extraction, physical fractionation by particle size, combined analysis by FTIR
- *Soil/mineral characterization - Wood ash revalorization project (Agroscope)*: field sampling, soil incubation, pot experiments, sequential extraction of heavy metals from ashes, combined analysis by ICP-OES

OTHER COMPETENCES

- Languages: English (C1), French (C1), Japanese (native) and German (A1)
- Informatics: Good command of MATLAB, R and SPSS