

Education

- 2001-2005** PhD Biogeochemistry, Louis Pasteur University (Strasbourg), France
2001 Advanced degree in Soil sciences, University of Nancy, France.
2000 Master's degree in Cellular Biology and Physiology, Claude Bernard University (Lyon), France
1999 Master's degree in Geosciences, Claude Bernard University (Lyon), France
1998 Three-years university degree in Geosciences, Claude Bernard University (Lyon), France
1995-1997 Two-year university degree in General Biology and Geology, Jules Verne University (Amiens), France

Professional and research experience

- 10/2005 to present** Research associate, Princeton University..
Study of catecholate siderophores produced by the nitrogen fixer *Azotobacter vinelandii* and their role in oxoanions uptake and detoxification.
- 10/2001 to 06/2005** PhD in Biogeochemistry, Strasbourg University, France.
« Oxyanions Mo, V and W uptake by nitrogen fixer *Azotobacter vinelandii* »
- 11/2002 - 02/2003** Princeton Environmental Institute, Princeton University, USA.
« Characterization of the molybdate azotochelin complex in the range of pH 3-12. » using IR spectrometry and XANES.
- 01/2001 - 07/2001** INRA-ENSAM Montpellier (National institute of agronomic research).
« Adsorption and desorption of strontium and caesium on synthetics organic-clay complex. »
Study of strontium and caesium complexation by synthetic organic-clay complex (humic acid, fulvic acid, illite, montmorillonite and kaolinite) using UV-vis spectrometry and HPIC for evaluate the risk of food chain contamination by radioelement after the Chernobyl accident.

Teaching experience (ULP University, Strasbourg, France)

- 2004/2005** Geosciences : Primitive Life history - Three-years university degree (40 hours)
Soil science - Three-years university degree (15 hours)
Mineralogy - Master's degree (10 hours)
Analytical chemistry – Master's degree (16 hours)
- 2003/ 2004** Environmental chemistry - Three-years university degree (30 hours)
Soil science - Three-years university degree (15 hours)
Scientific methodology - Three-years university degree (20 hours)

- 2002/2003** Environmental chemistry - Three-years university degree (30 hours)
 Soil science - Three-years university degree (15 hours)
 Scientific methodology - Three-years university degree (20 hours)
- 2001/2002** Environmental chemistry - Three-years university degree (30 hours)
 Soil science - Three-years university degree (15 hours)
 Scientific methodology - Three-years university degree (20 hours)

Communications

- 2001** *3^e journées du groupe Français de l'IHSS, Limoges.*
 oral presentation »Adsorption d'un acide fulvique sur des minéraux de référence et conséquences sur leur affinité pour le radiocésium et le radiostrontium ».
- 2003** *Biogeochemical controls on the mobility and bioavailability of metals in soils and groundwaters, International Workshop, (CSF) Monteverita, Ascona, Switzerland*
 Poster: "Azotochelin, a potential buffer of oxyanions"
- 2005** *229th ACS National Meeting, San Diego, CA, March 13-17, 2005, Trace element biochemistry.*
 Oral presentation "Molybdenum and vanadium uptake by the nitrogen fixer *Azotobacter vinelandii*"
Bellenger JP, Arnaud-Neu F, Myneni SCB, Stiefel E, Kraepiel AML

Publications

Complexation of oxoanions and cationic metals by the bis(catecholate) siderophore Azotochelin.

J.P Bellenger, F Arnaud-Neu, Z. Asfari , S.C.B. Myneni, E.I. Stiefel , A.M.L. Kraepiel.

J. Biol. Inorg. Chem.

Accepted

Adsorption and desorption of ⁸⁵Sr and ¹³⁷Cs on reference minerals, with and without inorganic and organic surface coatings.

J.P. Bellenger, S. Staunton.

J. Environmental. Radioactivity.

Accepted

In review

Role of Catechol Siderophores for Tungstate Detoxification in the Nitrogen Fixing Bacterium

Azotobacter vinelandii

Jean-Philippe Bellenger, Thomas Wichard, Aurélie Loison and Anne M.L. Kraepiel