

Xavier Bodiguel

5, rue, du Haut Landreau
44400 Rezé - France
+33 (0) 6 63 07 68 27
e-mail : xavier.bodiguel@ifremer.fr

French nationality
Born the 15 november 1979
in Trappes (France)

Education

- Dec. 2004-June 2008 PhD student at the French Research Institute for the Exploitation of the Sea (IFREMER).
- Feb. 2005-Apr. 2005 Third international tele-course on the Dynamic Energy Budget theory, Vrije Universiteit Amsterdam
- 2003–2004 European Master graduation, speciality Marine Environmental Modeling. Liège university, Belgium
- 2002–2003 Maîtrise (1st year of Master equivalent) Ecosystem and Population Biology for Marine Organisms. La Rochelle University, France.
- 2001-2002 Bachelor (3rd year of university) in Biology, speciality Cellular Biology and Physiology. Nantes University, France.
- 1998-2000 University Diploma of Technical in Biology (apprenticeship). Paris XII University, France.

Research experience

- Dec. 2004-Juin 2008 **PhD project** (IFREMER Sète and Brest).
Supervisors: Dr. V. Loizeau, Dr. C. Mellon, Pr. C. Casellas.
Characterization and modeling of contamination processes in fish by persistent organic contaminants - Example of PCBs in hake from the Gulf of Lions (NW Mediterranean).
- Mar. 2004-July 2004 **Graduation project** (costal ecology laboratory; IFREMER Brest)
Supervisor: Dr. V. Loizeau.
Modeling PCB bioaccumulation of the European hake from the gulf of Lions.
- May 2003-July 2003 **1st year of Master project** (halieutic ecology laboratory, IFREMER Nantes)
Supervisor: Dr. S. Vaz.
*Diet chracterization of the horse mackerel (*T. trachurus*) from the Bay of Biscay.*
- Oct. 2000-Apr. 2001 **Research technician** in biology (Innothéra laboratories, Arceuil)
Development of toxicological tests in a Biosafety Level 2 laboratory.
- Sept. 1998-Oct. 2000 **Research technician apprentice** in biology (Innothéra laboratories, Arceuil).
Supervisor: Dr. O. Falson. *Work in a Biosafety Level 2 laboratory.*
- July 1998-Sept. 1998 **Intern** in the costal laboratory (IFREMER Nantes). Supervisor: G. Gimeno
Health monitoring of a shellfish deposit.

Publications and communications

Publications

Harmelin-Vivien M., Loizeau V., Mellon C., Beker B., Arlhaca D., Bodiguel X., Ferraton F., Philippon X., Salen-Picard C (Subm.). Comparison in C and N stable isotope ratios between surface particulate organic matter and phytoplankton in the Gulf of Lions (NW Mediterranean). *Continental Shelf Research*.

Bodiguel X., Loizeau V., Mellon-Duval C., Le Guellec A.M., Roupsard F., Philippon X., and Ferraton F. (Subm.). Influence of biological and physiological parameters on organochlorine contaminant (PCB and p,p'-DDE) concentrations in demersal fish: the case of European hake (*Merluccius merluccius*, L.) from the Gulf of Lions (N.W. Mediterranean). *Marine Environmental Research*.

Bodiguel X., Loizeau V., Mellon-Duval C., Maury O. and F. Roupsard. (In prep.). A generic model of PCB bioaccumulation in the hake (*M. merluccius* L.).

Bodiguel X., Ferraton F., Mellon-Duval C., Loizeau V., Harmelin-Vivien M. (In prep.). Influence of trophic position on organochlorine concentrations and compositional patterns in a marine food web: example for hake food web from the Gulf of Lions.

Bodiguel X., Tronczynski J., Loizeau V., Le Guellec A.M., Guiot N., Moisan K.. (In prep.). DDE, PCB and PBDE levels and profiles in the hake food web from the Bay of Biscay (Atlantic) and the Gulf of Lions (Mediterranean).

Oral communications

Bodiguel X., Loizeau V., Mellon-Duval C., Le Guellec A.M., Roupsard F.. Using a dynamic and mechanistic model to simulate bioaccumulation of hydrophobic contaminants in fish. Example of a PCB bioaccumulation model in the European hake (*M. merluccius* L.). Integra World, EPP conference, 2007.

Posters

Bodiguel X., Ferraton F., Loizeau V., Mellon C., Le Guellec A.M., Philippon X.. Modelling the PCB bioaccumulation in the hake (*M. merluccius*) from the Gulf of Lions (Mediterranean sea). SETAC, 2005.

Bodiguel X., Ferraton F., Loizeau V., Mellon C., Le Guellec A.M., Philippon X.. A generic model of PCB bioaccumulation in the hake (*Merluccius merluccius* L.). 1st European Chemistry Congress, 2006.

Bodiguel X., Ferraton F., Loizeau V., Mellon C., Le Guellec A.M., Philippon X.. Influence of biological parameters on PCB concentrations of the European hake from the Gulf of Lions (N.W. Mediterranean). SETAC, 2007.

Research competence

Fields

Bioaccumulation processes of Persistent Organic Pollutants (POPs) in fish and in marine trophic webs, modeling of organism physiology and associated bioaccumulation processes.

Practical method

Organic contaminant dosages by gas chromatography, CHN analysis, chlorophyll and pheopigment analysis, calorimetric measurements, stomach content analysis of fish, genotoxicity and cytotoxicity tests on cells, traditional microbiological analysis and by system Malthus in 2000, use and handling of radioelements, preparation of oceanographic cruises.

Computer skills

General : Windows, Macintosh, Office pack
Data bases : Acces
Statistics : XLStats, Statgraphics, Statistica
Programming / Modeling : Fortran, Octave/Matlab, Stella.

Languages:

Anglais: fluent.
German: school level.

Interests and Extra-curricular activities

Teaching and student tutoring:

2007 Master 1 in halieutic science. Course in ecophysiology.
2005 Tutoring one Technical Processes student in marine sciences.

Leisure activities:

Sailing boat renovation
Sailing, cruising
Diving

Other:

French driving licence
Boat French driving licence