

## – CURRICULUM VITAE –

### **Julien THÉBAULT, Ph.D.**

Associate Professor in Marine Ecology and Biology

#### *Professional address:*

Université de Bretagne Occidentale, Institut Universitaire Européen de la Mer  
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## EDUCATION

2002–2005

### *Ph.D., Biological Oceanography*

Université de Bretagne Occidentale, Brest, France

Dissertation title: "The shell of the scallop, *Comptopallium radula* (Bivalvia; Pectinidae), Eulerian high-frequency archives of the variability of tropical coastal environments (Pacific Ocean)"

#### *Laboratories:*

Apr. 2002 – Oct. 2003: Centre IRD de Nouméa, UR Camelia, New Caledonia

Nov. 2003 – Sep. 2004: Centre IRD de Bretagne, US Chronos, Plouzané, France

Oct. 2004 – Dec. 2005: UBO–UEM, LEMAR, Plouzané, France

*Available online at:* <http://tel.ccsd.cnrs.fr/tel-00012033>

1999–2001

### *Maîtrise, DEA (equivalent to Masters of Science)*

Université de Bretagne Occidentale, Brest, France

Thesis title: "*Argopecten purpuratus* (Lmk.): calibration of an Eulerian sensor of coastal environmental variability in the South Pacific Ocean (Rinconada Bay, Chile)"

2001 – *DEA, Biological Oceanography and Marine Environment* (ranked 10/30)

2000 – *Maîtrise, Biology of Marine Populations and Ecosystems* (ranked 2/57)

1996–1999

### *DEUG, Licence (equivalent to Bachelor's Degree)*

Université de Bretagne Occidentale and Université de Rennes 1 (France)

1999 – *Licence, Biology of Organisms* (ranked 3/115)

1998 – *DEUG, Life Sciences* (no ranking)

## RESEARCH EXPERIENCE

The core of my research activities deals with extracting, analyzing and understanding structural (variation of growth increment width) and geochemical (variation of stable isotope ratios and elemental concentrations) proxies archived in shells of freshwater and marine mollusks in order (i) to get information on their life-history traits (growth, longevity, metabolism, reproduction), and (ii) to assess past and present variability of environmental conditions (temperature, salinity, primary production, pollutions, etc.). This scientific field is called sclerochronology, the aquatic equivalent to dendrochronology (study of tree rings). By extension, sclerochemistry is the sub-discipline of sclerochronology dealing with microchemical analyses performed in these structures.

- Since 2009**      **Associate professor in marine biology and ecology** at Université de Bretagne Occidentale (Brest, France). "Assessment of anthropogenic and climatic influences on phytoplankton dynamics in coastal ecosystems: geochemical recording in mollusk shells". Laboratory: UBO-IUEM, Laboratoire des Sciences de l'Environnement Marin (UMR6539 UBO/IRD/CNRS), Rue Dumont d'Urville, 29280 Plouzané.
- 2008–2009**      **Teaching and research assistant** at Université de Bretagne Occidentale (Brest, France). "Investigations on structure and functioning of a remote Mauritanian ecosystem (Banc d'Arguin National Park) – Environmental reconstruction using shells of the bivalve mollusk *Senilia senilis*". Laboratory: UBO-IUEM, Laboratoire des Sciences de l'Environnement Marin (UMR6539 UBO/IRD/CNRS), Rue Dumont d'Urville, 29280 Plouzané.
- 2007–2008**      **Postdoctoral scientist** at University of Mainz (Germany). "Investigations on the geochemical composition of freshwater (*Anodonta cygnea*, Germany) and marine (*Arctica islandica*, Iceland) bivalve shells". Laboratory: University of Mainz, Institute of Geosciences, Department of Applied and Analytical Paleontology, Becher-Weg 21, 55099 Mainz, Germany.
- 2007**            **Postdoctoral scientist** at U.S. Geological Survey (Menlo Park, CA, USA). "Description of primary production and estimation of the ecological importance of South San Francisco Bay salt ponds for resident and migratory birds". Laboratory: U.S. Geological Survey, Water Resources Division, 345 Middlefield Road, Menlo Park, CA 94025, USA.
- 2006**            **Research assistant** at European Institute for Marine Studies (IUEM, Brest, France). Involvement in a project dealing with the understanding of the geochemical signals (barium and molybdenum) archived in bivalve mollusk shells.
- 2002–2005**      **Ph.D. research project** with the Laboratoire des Sciences de l'Environnement Marin (LEMAR, France) and the Institut de Recherche pour le Développement (IRD) in Nouméa (UR Camélia) and Plouzané (LASAA). The project was an investigation about the potential of scallop shells (*Comptopallium radula*) as high-resolution archives of climatic and environmental variability in a tropical environment (south-west lagoon of New Caledonia). Supervision: Prof. Jacques CLAVIER & Dr. Laurent CHAUVAUD.
- 2001**            **DEA thesis** (6 months at LEMAR under the supervision of Dr. Gérard THOUZEAU and Dr. Laurent CHAUVAUD – CNRS, Plouzané, France). This project focused on calibrating the scallop *Argopecten purpuratus* as an Eulerian sensor of coastal environmental variability in the South Pacific Ocean (Rinconada Bay, Chile).

## TEACHING & STUDENT GUIDANCE

I teach zoology to undergraduate students, focusing my lectures on entomology and deuterostomes. I also give lectures to students in their 2<sup>nd</sup> year of B.Sc. (marine ecology) and in their 3<sup>rd</sup> year of B.Sc. (population dynamics, methods in ecology). Besides, I teach biology of populations to graduate students, focusing on evolutionary biology (selection and evolution of life history traits) and conservation biology. I also give them an introduction on the ecology of polar marine ecosystems. Finally, one of my favorite course is the one I give to

graduate students (2<sup>nd</sup> year of M.Sc.) on biological records of environment, which consists in an introduction to sclerochronology and sclerochemistry (fish otoliths, mollusk shells, and other biogenic archives). The rest of my teaching activity consists in training master students (1<sup>st</sup> and 2<sup>nd</sup> year of M.Sc.) and Ph.D. students to scientific research, mostly in sclerochronology and chemistry of mollusk shells.

*Student guidance:*

- Ms. Elena BOGDANIUK, 2018, University of Western Brittany (M.S. Marine Biological Sciences): "Shell growth dynamics of freshwater pearl mussels from the Elez River, Brittany, France"
- Mr. Valentin SIEBERT, 2018, University of Western Brittany (M.S. Marine Biological Sciences): "Are *Clathromorphum compactum* colonies archives of environmental variability in Saint-Pierre-et-Miquelon?"
- Ms. Justine DORÉ, 2017–2020, University of Western Brittany (Ph.D. Biological Oceanography): "Retrospective analysis of ecological changes in the Laurentian ecosystem using sclerochronology"
- Mr. Johan VIEIRA, 2017, University of Bordeaux (M.S. Marine Biology and Ecology): "Analyses of age, growth rate, and elemental composition of shells of freshwater pearl mussels *Margaritifera margaritifera* from the River Dronne (SW France)"
- Ms. Julie BELLEC, 2016, University of Bordeaux (M.S. Ecotoxicology and Environmental Chemistry): "Sclerochronological investigations on freshwater pearl mussels *Margaritifera margaritifera* from the River Dronne (SW France)"
- Mr. Sylvain MENNETEAU, 2016, University of Western Brittany (M.S. Marine Biological Sciences): "Is *Mya truncata* (Mollusca; Bivalvia) a witness of climate change effects on Arctic trophic webs? Insights from sclerochronology, sclerochemistry, stable isotopes and fatty acid analyses"
- Mr. Pierre POITEVIN, 2015–2018, University of Western Brittany (Ph.D. Biological Oceanography): "Sclerochronology and sclerochemistry of three soft bottom bivalve species from Saint-Pierre et Miquelon"
- Ms. Sophie SABAROT, 2015, University of Pau (M.S. Aquatic Ecosystem Dynamics): "Transfer pathways of molybdenum and lithium from seawater to calcite (via soft tissues) in *Pecten maximus* from the Bay of Brest, France"
- Ms. Justine DORÉ, 2015, University of Aix-Marseille (M.S. Marine Biology and Ecology): "Elemental fingerprinting in larvae of *Crepidula fornicata* as a tool to study population connectivity."
- Ms. Ariadna PURROY, 2014–2017, Institute of Oceanography and Fisheries of Split, Croatia (Ph.D. Marine Ecology): "The biological and ecological drivers of calcification rate and increment formation in several bivalve species"
- Ms. Amy FEATHERSTONE, 2014–2017, University of Western Brittany (Ph.D. Biological Oceanography): "Construction of long annually-resolved shell-based chronologies using *Glycymeris glycymeris* (Bivalvia; Glycymerididae) from the Bay of Brest, France"
- Mr. Quentin MOREL, 2014, University of Western Brittany (M.S. Marine Biological Sciences): "Investigation of shell growth on *Pecten maximus* specimens of age class II"
- Mr. Adhitya Kusuma WARDANA, 2012, Diponegoro University (Semarang, Indonesia) & University of Western Brittany (M.S. Marine Biological Sciences): "Sclerochronological investigation on ecology and life-history traits of a reef gastropod *Trochus niloticus*: comparison of populations from New Caledonia and Vanuatu"
- Ms. Clémentine LE JOUAN, 2012, University of Western Brittany (M.S. Marine Biological Sciences): "Investigation of the response of primary consumers to the Deepwater Horizon oil spill using sclerochemical analyses of Louisiana oyster shells, *Crassostrea virginica*"
- Ms. Clémence ROYER, 2011–2014, University of Western Brittany (Ph.D. Biological Oceanography): "Palaeoecological reconstruction of the impact of anthropogenic activities on aquatic ecosystems of the Bay of Brest and its watersheds: sclerochronological and geochemical investigations on shells of the freshwater pearl mussel (*Margaritifera margaritifera*) and the dog cockle (*Glycymeris glycymeris*)"
- Ms. Blandine GAILLARD, 2011, University of Western Brittany (M.S. Marine Biological Sciences): "Sclerochronology and sclerochemistry of deep-water bivalve shells of *Astarte moerchi* in the Canadian Arctic"

- Mr. Romain LAVAUD, 2010, University of Western Brittany (M.S. Marine Biological Sciences): "Assessing the potential of bloody cockle shells, *Anadara senilis*, as environmental archives of ecological functioning of the Banc d'Arguin ecosystem (Mauritania)"
- Ms. Clémence ROYER, 2010, University of Western Brittany (M.S. Marine Biological Sciences): "Structural analysis and paleoenvironmental potential of dog cockle (*Glycymeris glycymeris*) in Brittany"

## PH.D. COMMITTEE MEMBER

- Ms. Dilmi HERATH (Macquarie University, Sydney, Australia - 2018): "Bivalve shells as paleo-proxy archives: assessment of the usefulness as environmental and climatic recorders in the southern hemisphere" – Supervisor: Dorrit JACOB (Macquarie University)
- Ms. Irene BALLESTA-ARTERO (Vrije Universiteit Amsterdam, Netherlands - 2018): "Disentangling *Arctica islandica*'s environmental archive: Ecological drivers of its feeding behavior and growth" – Supervisors: Jaap VAN DER MEER & Rob WITBAARD (Royal Netherlands Institute for Sea Research - NIOZ)
- Ms. Katie MCFARLAND (Université de Bretagne Occidentale, France - 2015): "Population dynamics of the invasive green mussel, *Perna viridis*, in southwest Florida and individual energetics through the application of the Dynamic Energy Budget Theory" – Supervisors: Frédéric JEAN (Université de Bretagne Occidentale) & Aswany VOLETY (Florida Gulf Coast University)
- Ms. Blandine GAILLARD (Université du Québec à Rimouski, Canada - 2015): "Use of filter-feeding bivalves to monitor pelagic-benthic coupling in Arctic " Supervisor: Réjean TREMBLAY (Université du Québec à Rimouski, Canada)
- Ms. Tiphaine MILLE (Université de Lille 1, France - 2015): "Sources of otolith morphology variation at the intra-population level: directional asymmetry and diet" Supervisor: Ching-Maria VILLANUEVA (Ifremer)

## REVIEWING

- Palaios
- Geochemical Journal
- Aquatic Living Resources
- Palaeogeography, Palaeoclimatology, Palaeoecology
- Restoration Ecology
- Climate of the Past
- Geochimica et Cosmochimica Acta
- Geochemistry, Geophysics, Geosystems
- Frontiers in Earth Sciences
- Estuaries & Coasts
- Programme national inter-organismes LEFE (CNRS-INSU), France
- Deutsche Forschungsgemeinschaft - German Research Foundation, Germany
- Fonds de Recherche du Québec Nature et Technologies (FRQNT), Québec

## SERVICE TO THE COMMUNITY

- Session co-chair "Coastal Archives of Climate Change and Ecosystem Processes" at the 24<sup>th</sup> Goldschmidt Conference (June 2014, Sacramento, USA)
- Member of the scientific committee of the "International Conference on Conservation and Restoration of Freshwater Pearl Mussel Populations and Habitat in Europe" (November 2014, Brest, France)
- Member of the scientific committee of the "5<sup>th</sup> International Sclerochronology Conference" (June 2019, Split, Croatia)

## MISCELLANEOUS

- Professional diver certification: *Certificat d'Aptitude à l'Hyperbarie, classe 1 mention B* (March 2010) & *Chef de Plongée Scientifique* (July 2012)
- Alexander von Humboldt fellow (2007-2008)

## PEER-REVIEWED PUBLICATIONS

# = student under my (co-)supervision ; \* = other student

- (41) Peharda M., **Thébault J.**, \*Markulin K., Schöne B.R., Janeković I. & Chauvaud L. (2018). Contrasting shell growth strategies in two Mediterranean bivalves revealed by oxygen-isotope ratio geochemistry: The case of *Pecten jacobaeus* and *Glycymeris pilosa*. *Chemical Geology*: in press.
- (40) #Purroy A., Najdek M., Isla E., Župan I., **Thébault J.** & Peharda M. (2018). Bivalve trophic ecology in the Mediterranean: Spatio-temporal variations and feeding behavior. *Marine Environmental Research* 142: 234–249.
- (39) #Poitevin P., **Thébault J.**, Schöne B.R., Jolivet A., Lazure P. & Chauvaud L. (2018). Ligament, hinge, and shell cross-sections of the Atlantic surfclam (*Spisula solidissima*): Promising marine environmental archives in NE North America. *PLoS ONE* 13(6): e0199212.
- (38) #Purroy A., \*Milano S., Schöne B.R., **Thébault J.** & Peharda M. (2018). Drivers of shell growth of the bivalve, *Callista chione* (L. 1758) – Combined environmental and biological factors. *Marine Environmental Research* 134: 138–149.
- (37) Guédrón S., Point D., Acha D., Bouchet S., Baya P.A., Tessier E., Monperrus M., Molina C.I., Groleau A., Chauvaud L., **Thébault J.**, Amice E., Alanoca L., Duwig C., Uzu G., Lazzaro X., Bertrand A., Bertrand S., Barbraud C., Delord K., Gibon F.M., Ibanez C., Flores M., Fernandez Saavedra P., Ezpinoza M.E., Heredia C., Rocha F., Zepita C. & Amouroux D. (2017). Mercury contamination level and speciation inventory in Lakes Titicaca & Uru-Uru (Bolivia): Current status and future trends. *Environmental Pollution* 231: 262–270.
- (36) #Featherstone A.M., Butler P.G., Peharda M., Chauvaud L. & **Thébault J.** (2017). Influence of riverine input on the growth of *Glycymeris glycymeris* in the Bay of Brest, North-West France. *PLoS ONE* 12(12): e0189782.
- (35) Bertucci A., Pierron F., **Thébault J.**, Klopp C., #Bellec J., Gonzalez P. & Baudrimont M. (2017). Transcriptomic responses of the endangered freshwater mussel *Margaritifera margaritifera* to trace metals contamination in the Dronne River. *Environmental Science and Pollution Research* 24: 27145–27159.
- (34) \*De Cesare S., Méziane T., Chauvaud L., Richard J., Sejr M., **Thébault J.**, Winkler G. & Olivier F. (2017). Dietary plasticity in the bivalve *Astarte moerchi* revealed by a multimarker study in two Arctic fjords. *Marine Ecology Progress Series* 567: 157–172.
- (33) #Purroy A., Šegvić-Bubić T., Holmes A., Bušelić I., **Thébault J.**, #Featherstone A. & Peharda M. (2016). Combined use of morphological and molecular tools to resolve species mis-identifications in the Bivalvia The case of *Glycymeris glycymeris* and *G. pilosa*. *PLoS ONE* 11(9): e0162059.

- (32) \*McFarland K., Jean F., **Thébault J.** & Volety A.K. (2016). Potential impacts of blooms of the toxic dinoflagellate *Karenia brevis* on the growth, survival and juvenile recruitment of the non-native green mussel *Perna viridis* in southeastern United States. *Toxicon* 109: 94–102.
- (31) Jolivet A., Chauvaud L., **Thébault J.**, Robson A.A., Dumas P., Amos G. & Lorrain A. (2015). Circadian behaviour of *Tectus (Trochus) niloticus* in the southwest Pacific inferred from accelerometry. *Movement Ecology* 26:3.
- (30) \*Marchais V., Richard J., Jolivet A., Flye-Sainte-Marie J., **Thébault J.**, Jean F., Richard P., Paulet Y.-M., Clavier J. & Chauvaud L. (2015). Coupling experimental and field-based approaches to decipher carbon sources in the shell of the great scallop, *Pecten maximus* (L.). *Geochimica et Cosmochimica Acta* 168: 58–69.
- (29) Zeppilli D., Sarrazin J., Leduc D., Martinez Arbizu P., Fontaneto D., Fontanier C., Gooday A.J., Kristensen R.M., Ivanenko V.N., Sørensen M.V., Vanreusel A., **Thébault J.**, Mea M., \*Allio N., \*Andro T., \*Arvigo A., \*Castrec J., \*Danielo M., \*Foulon V., \*Fumeron R., \*Hermabessiere L., \*Hulot V., \*James T., \*Langonne-Augen R., \*Le Bot T., \*Long M., \*Mahabror D., \*Morel Q., \*Pantalos M., \*Pouplard E., \*Raimondeau L., \*Rio-Cabello A., \*Seite S., \*Traisnel G., \*Urvoy K., \*Van Der Stegen T., \*Weyand M. & Fernandes D. (2015). Is the meiofauna a good indicator for climate change and anthropogenic impacts? *Marine Biodiversity* 45: 505–535.
- (28) Peharda M., Puljas S., Chauvaud L., Schöne B.R., Ezgeta-Balić, D. & **Thébault J.** (2015). Growth and longevity of *Lithophaga lithophaga*: what can we learn from shell structure and stable isotope composition? *Marine Biology* 162: 1531–1540.
- (27) Jolivet A., Asplin L., Strand Ø., **Thébault J.** & Chauvaud L. (2015). Coastal upwelling in Norway recorded in Great Scallop shells. *Limnology and Oceanography* 60: 1265–1275.
- (26) Peharda M., Calcinai B., Puljas S., Golubić S., Arapov J. & **Thébault J.** (2015). Endoliths in *Lithophaga lithophaga* shells – Variation in intensity of infestation and species occurrence. *Marine Environmental Research* 108: 91–99.
- (25) Jolivet A., Chauvaud L., Huchette S., Legoff C., **Thébault J.**, Nasreddine K., Schöne B.R. & Clavier J. (2015). The ormer (*Halotis tuberculata*): A new, promising paleoclimatic tool. *Palaeogeography, Palaeoclimatology, Palaeoecology* 427: 32–40.
- (24) \*Biscéré T., Rodolfo-Metalpa R., Lorrain A., Chauvaud L., **Thébault J.**, Clavier J. & Houlbrèque F. (2015). Responses of two scleractinian corals to cobalt pollution and ocean acidification. *PLoS ONE* 10(4): e0122898.
- (23) \*Poulain C., Gillikin D.P., **Thébault J.**, Munaron J.-M., Bohn M., Robert R., Paulet Y.-M. & Lorrain A. (2015). An evaluation of Mg/Ca, Sr/Ca, and Ba/Ca ratios as environmental proxies in aragonite bivalve shells. *Chemical Geology* 396: 42–50.
- (22) Lorrain A., Clavier J., **Thébault J.**, Tremblay-Boyer L., Houlbrèque F., Amice E., Le Goff M. & Chauvaud L. (2015). Variability in diel and seasonal *in situ* metabolism of the tropical gastropod *Tectus niloticus*. *Aquatic Biology* 23: 167–182.
- (21) \*Artigaud S., \*Lavaud R., **Thébault J.**, Jean F., Strand Ø., Strohmeier T., Milan M. & Pichereau V. (2014). Proteomic-based comparison between populations of the Great Scallop, *Pecten maximus*. *Journal of Proteomics* 105: 164–173.
- (20) Waeles M., \*Dulaquais G., Jolivet A., **Thébault J.** & Riso R.D. (2013). Systematic non-conservative behavior of molybdenum in a macrotidal estuarine system (Aulne–Bay of Brest, France). *Estuarine, Coastal and Shelf Science* 131: 310–318.
- (19) #Pérez V., Olivier F., Tremblay R., Neumeier U., **Thébault J.**, Chauvaud L. & Méziane T. (2013). Trophic resources of the bivalve, *Venus verrucosa*, in the Chausey archipelago (Normandy, France) determined by stable isotopes and fatty acids. *Aquatic Living Resources* 26: 229–239.
- (18) **Thébault J.** & Chauvaud L. (2013). Li/Ca enrichments in great scallop shells (*Pecten maximus*) and their relationship with phytoplankton blooms. *Palaeogeography, Palaeoclimatology, Palaeoecology* 373: 108–122.

- (17) #Royer C., **Thébault J.**, Chauvaud L. & Olivier F. (2013). Structural analysis and paleoenvironmental potential of dog cockle shells (*Glycymeris glycymeris*) in Brittany, northwest France. *Palaeogeography, Palaeoclimatology, Palaeoecology* 373: 123–132.
- (16) #Lavaud R., **Thébault J.**, Lorrain A., \*van der Geest M. & Chauvaud L. (2013). *Senilia senilis* (Linnaeus, 1758), a biogenic archive of environmental conditions on the Banc d'Arguin (Mauritania). *Journal of Sea Research* 76: 61–72.
- (15) Chauvaud L., Patry Y., Jolivet A., Cam E., \*Le Goff C., Strand Ø., Charrier G., **Thébault J.**, Lazure P., Gotthard K. & Clavier J. (2012). Variation in size and growth of the great scallop *Pecten maximus* along a latitudinal gradient. *PLoS ONE* 7(5): e37717.
- (14) Tabouret H., Pomerleau S., Jolivet A., Pécheyran C., Riso R., **Thébault J.**, Chauvaud L. & Amouroux D. (2012). Specific pathways for the incorporation of dissolved barium and molybdenum into the bivalve shell: an isotopic tracer approach in the juvenile Great Scallop (*Pecten maximus*). *Marine Environmental Research* 78: 15–25.
- (13) Schöne B.R., Wanamaker Jr. A.D., Fiebig J., **Thébault J.** & Kreutz K. (2011). Annually resolved  $\delta^{13}\text{C}_{\text{shell}}$  chronologies of long-lived bivalve mollusks (*Arctica islandica*) reveal oceanic carbon dynamics in the temperate North Atlantic during recent centuries. *Palaeogeography, Palaeoclimatology, Palaeoecology* 302: 31–42.
- (12) Schöne B.R., \*Zhang Z., \*Radermacher P., **Thébault J.**, Jacob D.E., Nunn E.V. & Maurer A.-F. (2011). Sr/Ca and Mg/Ca ratios of ontogenetically old, long-lived bivalve shells (*Arctica islandica*) and their function as paleotemperature proxies. *Palaeogeography, Palaeoclimatology, Palaeoecology* 302: 52–64.
- (11) Chauvaud L., **Thébault J.**, Clavier J., Lorrain A. & Strand Ø. (2011). What's hiding behind ontogenetic  $\delta^{13}\text{C}$  variations in mollusk shells? New insights from the great scallop (*Pecten maximus*). *Estuaries & Coasts* 34: 211–220.
- (10) \*Barats A., Amouroux D., Pécheyran C., Chauvaud L., **Thébault J.** & Donard O.F.X. (2010). Spring molybdenum enrichment in scallop shells: a potential tracer of diatom productivity in temperate coastal environments (Brittany, NW France). *Biogeosciences* 7: 233–245.
- (9) **Thébault J.**, Chauvaud L., L'Helguen S., Clavier J., \*Barats A., \*Jacquet S., Pécheyran C. & Amouroux D. (2009). Barium and molybdenum records in bivalve shells: Geochemical proxies for phytoplankton dynamics in coastal environments? *Limnology and Oceanography* 54: 1002–1014.
- (8) **Thébault J.**, Schöne B.R., \*Hallmann N., Barth M. & Nunn E.V. (2009). Investigation of Li/Ca variations in aragonitic shells of the ocean quahog *Arctica islandica*, northeast Iceland. *Geochemistry, Geophysics, Geosystems* 10: Q12008.
- (7) \*Barats A., Amouroux D., Chauvaud L., Pécheyran C., Lorrain A., **Thébault J.**, Church T.M. & Donard O.F.X. (2009). High frequency barium profiles in shells of the Great Scallop *Pecten maximus*: a methodical long-term and multi-site survey in Western Europe. *Biogeosciences* 6: 157–170.
- (6) \*Radermacher P., Schöne B.R., Gischler E., Oschmann W., **Thébault J.** & Fiebig J. (2009). Sclerochronology – a highly versatile tool for mariculture and reconstruction of life history traits of the queen conch, *Strombus gigas* (Gastropoda). *Aquatic Living Resources* 22: 307–318.
- (5) **Thébault J.**, Schraga T.S., Cloern J.E. & Dunlavy E.G. (2008). Primary production and carrying capacity of former salt ponds after reconnection to San Francisco Bay. *Wetlands* 28: 841–851.
- (4) **Thébault J.**, Thouzeau G., Chauvaud L., Cantillán M. & Avendaño M. (2008). Growth of *Argopecten purpuratus* (Mollusca: Bivalvia) on a natural bank in Northern Chile: sclerochronological record and environmental controls. *Aquatic Living Resources* 21: 45–55.
- (3) **Thébault J.**, Chauvaud L., Clavier J., Guarini J., Dunbar R.B., Fichez R., Mucciarone D.A. & Morize E. (2007). Reconstruction of seasonal temperature variability in the tropical Pacific Ocean from the shell of the scallop, *Comptopallium radula*. *Geochimica et Cosmochimica Acta* 71: 918–928.
- (2) **Thébault J.**, Chauvaud L., Clavier J., Fichez R. & Morize E. (2006). Evidence of a 2-day periodicity of striae formation in the tropical scallop *Comptopallium radula* using calcein marking. *Marine Biology* 149: 257–267.

- (1) Fichez R., Adjeroud M., Bozec Y.-M., Breau L., Chancerelle Y., Chevillon C., Douillet P., Fernandez J.-M., Frouin P., Kulbicki M., Moreton B., Ouillon S., Payri C., Perez T., Sasal P. & **Thébault J.** (2005). A review of selected indicators of particle, nutrient and metal inputs in coral reef lagoon systems. *Aquatic Living Resources* 18: 125–147.

## NON PEER-REVIEWED PUBLICATIONS

- (1) **Thébault J.**, #Royer C., Jolivet A., Pasco P.-Y., Capoulade M., Masquelier P. & Chauvaud L. (2015). Climatic and environmental control of shell growth in the endangered freshwater pearl mussel (Brittany). *Penn ar Bed* 222: 69–73.

## INTERNATIONAL COMMUNICATIONS

# = student under my supervision ; \* = other student

- (55) #Doré J., **Thébault J.**, Chaillou G., Chauvaud L. & Archambault P. (2018). Use of Ba/Ca variation in shells of the long-lived bivalve mollusk *Arctica islandica* as a potential proxy of the phytoplanktonic dynamics in Saint-Pierre and Miquelon (North America). *4<sup>th</sup> World Conference on Marine Biodiversity*, Montréal, Canada, May 13-16, 2018 (Oral).
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