



VELITROP

CNRS International Research Project

FRANCE – BRASIL



WEBINAR

“VULNERABILITY OF TROPICAL LITTORAL ECOSYSTEMS TO EUTROPHICATION”

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-- 30 Nov. – 3 Dec. 2020 –



BOREA Museum National d'Histoire Naturelle

CNRS IRD Sorbonne Université



Universidade Federal Fluminense

Programa de pós-graduação em Geoquímica

Programa de pós-graduação em Biologia Marinha



LPG-BIAF Université d'Angers CNRS



Universidade Do Estado do Rio de Janeiro

Faculdade de Oceanografia



LOG Université du Littoral Côte d'Opale – Université de Lille – CNRS



Universidade Federal do Ceará

Instituto de Ciências do Mar – Labomar



CONSULAT GENERAL DE FRANCE
RIO DE JANEIRO



VELITROP Webinar Program

Monday (30/11/2020)

- Time: 10:00-10:20h (Brazil); 14:00-14:20h (France):

“Introduction to VELITROP and objectives of the meeting” – Gwenaël Abril (CNRS)

- Time: 10:20-10:40h (Brazil); 14:20-14:40h (France):

“Diversity of the Brazilian Coastal Zone: Hydro-geomorphology, susceptibility to eutrophication and multiple Anthropogenic Impacts” – Bastian Knoppers (UFF-GEOQ)

Co-authors: Nilva Brandini, Aguinaldo Nepomuceno Luiz C. Cotovicz Jr & Gwenaël Abril

- Time: 10:40-11:00h (Brazil); 14:40-15:00h (France):

“CH₄ production in relation to salinity gradients and organic matter composition in a hypereutrophic coastal lagoon” - Leandro Galliza (UFF-GEOQ)

Co-authors: Marcelo C. Bernardes & Gwenaël Abril

- Time: 11:00-11:20h (Brazil); 15:00-15:20h (France):

“The Sistemas Lagunares do Leste Fluminense Project: Fisheries, community engagement and ecosystem modeling” – Cassiano Monteiro-Neto (UFF-PBMAC)

Co-authors: Rafael de A. Tubino, Tailan M. Mattos, Paulo R. C. Almeida, Maurício D. Abreu, Marcus R. da Costa

- Time: 11:20-11:40h (Brazil); 15:20-15:40h (France):

“pCO₂ distribution in a tropical eutrophic lagoon adjacent to marine waters impacted by upwelling: antagonist effects of biological and thermal processes” – Thaís Erbas (UFF-PBMAC)

Co-authors: Aguinaldo Nepomuceno & Gwenaël Abril

- Time: 11:40-12:00h (Brazil); 15:40-16:00h (France):

“The Brazilian brown mussel *Perna Perna*: a historical and ecological tale from pre-columbian to present times” – Edson Pereira da Silva (UFF-PBMAC)

- Time: 12:00-12:20h (Brazil); 16:00-16:20h (France):

“Coupling geochemical and geoprocessing techniques to evaluate eutrophication history in a tropical lagoon” – Aguinaldo Nepomuceno (UFF-PBMAC)

Co-authors: Fernando Lamego, Mauricio Cerda & Vinicius Vogel

- Time: 12:20-12:40h (Brazil); 16:20-16:40h (France):

“Pigments as a tool for oceanographic and limnological studies” – Silvana V. Rodrigues (UFF-PPGQ)

Co-authors: Marcelo M. Marinho and co-workers

- Time: 12:20-12:40h (Brazil); 16:20-16:40h (France): ***DISCUSSIONS DAY 1***

- Time: 10:00-10:20h (Brazil); 14:00-14:20h (France):

“Experimental Design to Evaluate Ocean Acidification Impacts on Seafood. A Global Approach” –
Fernando Lamego (UFF-PBMAC)

Co-authors: Henrique F. Santos, Aguinaldo Nepomuceno, Micheli Ferreira Ascoli & Sam Dupont

- Time: 10:20-10:40h (Brazil); 14:20-14:40h (France):

“Paleo-oxygenation in dolomitic hypersaline coastal lake based on pore analysis of *Ammonia beccarii* vr. *tepida* (Foraminifera)” - **Daniel François (UFF-GEOQ)**

Co-authors: Camila Areias, Cátia F. Barbosa, Nayara Dornelas, Luiz G.R. Sá-Valle, José C. Seoane & Crisógono Vasconcelos

- Time: 10:40-11:00h (Brazil); 14:40-15:00h (France):

“Proposition of an untargeted metabolomic approach for hypersaline lagoons biofilms” – **Cedric Hubas (BOREA-MNHN)**

Co-authors: Julie Gaubert-Boussarie, Soizic Prado

- Time: 11:00-11:20h (Brazil); 15:00-15:20h (France):

“Changes in the hydrological cycle of two hypersaline lagoon inferred from annually surface water isotopic composition and lipids biomarkers” – **Camila Areias (UFF-GEOQ)**

Co-authors: A. S. Cruz, N. Dornelas, D. S. François, L. Valle, C. Vasconcelos, J. A. McKenzie, T. Eglinton, D. Ariztegui & C. F.

- Time: 11:20-11:40h (Brazil); 15:20-15:40h (France):

“The carbonate system of hypersaline lagoons: projected approaches within VELITROP” – **Gwenaël Abril (BOREA-CNRS)**

Co-authors: Luiz C. Cotovicz Jr, Bastiaan Knoppers, Cátia F. Barbosa, Cédric Hubas

- Time: 11:40-12:00h (Brazil); 15:40-16:00h (France):

“Rapid and cheap probes to document 2D porewater chemistry through the sediment water interface: first applications in Brazilian tidal mudflats” – **Edouard Metzger (LPG-BIAF)**

Co-authors: A. Mouret, C. Matos, W. Machado, R. Diaz-Ramos, G. Nascimento, J. Berredo, E. Geslin & G. Abril

- Time: 12:00-13:00h (Brazil); 16:00-17:00h (France):

DISCUSSIONS DAY 2: SEDIMENT WORKS AND SPECIFIC STUDIES IN HYPERSALINE LAGOONS

Wednesday (02/12/2020)

- Time: 10:00-10:20h (Brazil); 14:00-14:20h (France):

“Mixing zones of tropical river-dominated estuaries: a potentially overlooked CO₂ sink” - Luis C. Cotovicz (UFC-Inst. Ciências do Mar)

Co-authors: Bastiaan A. Knoppers, Nilva Brandini, Gwenaël Abril

- Time: 10:20-10:40h (Brazil); 14:20-14:40h (France):

“Development of Ocean Color observation for the study of the biogeochemical dynamics of Brazilian coastal waters” - Vincent Vantrepotte (LOG)

Co-authors: H. Loisel & M. Kampel

- Time: 10:40-11:00h (Brazil); 14:40-15:00h (France):

“Variability of Chromophoric Dissolved Organic Matter properties in an eutrophic tropical coastal embayment (Guanabara Bay, Brazil)” - Daniel Tremmel (UFF-GEOQ)

Co-authors: Daniel Tremmel, Eduardo N. Oliveira, Luiz C. Cotovicz Jr, Nilva Brandini, Dominique Poirier, Bastian A. Knoppers & Gwenaël Abril

- Time: 11:00-11:20h (Brazil); 15:00-15:20h (France):

“On the relationship between the coastal upwelling winds of Cabo Frio and temperature stratification in the Guanabara Bay, Brazil” – Alexandre Fernandes (UERJ-FAOC)

Co-authors: Alexandre Macedo Fernandes, Elisa Nóbrega Passos, Rogério Pinto Espíndola, Eduardo Negri de Oliveira, Gleyci Aparecida de Oliveira Moser

- Time: 11:20-11:40h (Brazil); 15:20-15:40h (France):

“Research perspectives on coastal plumes pollution by nutrients and trace elements in Rio de Janeiro bays” – Wilson Machado (UFF-GEOQ)

Co-authors: Wilson Machado, João Barreira, Gabriela Bravim, M. Santos, Nilva Brandini, Eduardo Negri

- Time: 11:40-12:00h (Brazil); 15:40-16:00h (France):

“Guanabara Bay: Chlorophyll estimation by remote sensing” – Eduardo Negri (UERJ-FAOC)

Co-authors: R. Paranhos, L. Cotovitz, Kampel, N. Brandini & B. Knoppers

- Time: 12:00-13:00h (Brazil); 16:00-17:00h (France):

DISCUSSIONS DAY 3: CHANGES IN CHEMICAL AND BIOLOGICAL CONDITIONS INDUCED BY EUTROPHICATION: WHAT? WHY? HOW?”

VELITROP Webinar Program

Thursday (03/12/2020)

- Time: 10:00-10:20h (Brazil); 14:00-14:20h (France):

“Investigating temporal changes in the physical, chemical and biological properties of coastal and marine ecosystems” – **Eric Goberville (BOREA Sorbonne Université)**

- Time: 10:20-10:40h (Brazil); 14:20-14:40h (France):

“Primary productivity and size structure of phytoplankton taxa and biomass in Guanabara Bay (Rio de Janeiro, Brazil)” – **Gleicy Moser (UERJ-FAOC)**

Co-authors R.N.T Lopes, Piedras, F. R.; Lima, D. T.; Lannes, D.

- Time: 10:20-10:40h (Brazil); 14:20-14:40h (France):

“Fungi and the role of the Mycoloop in planktonic ecosystems” – **Mélanie Gerphagnon (BOREA Sorbonne Université)**

- Time: 10:40-11:00h (Brazil); 14:40-15:00h (France):

“Assessment of Phytoplankton Distribution in South Brazilian Bight (Southwestern Atlantic Ocean) using Chemotaxonomic (pigments) Techniques” - **Daniel Tremmel (UFF-GEOQ)**

Co-authors: Daniel Tremmel, Daniela Sudatti, Vanessa Monteiro, Marcelo Marinho, Gwenaël Abril, Silvana Rodrigues

- Time: 11:00-11:20h (Brazil); 15:00-15:20h (France):

“The carbonate system : active witness of eutrophication in Tropical coastal ecosystems” – **Gwenaël Abril (BOREA-CNRS)**

Co-authors: Gwenaël Abril, Luiz C. Cotovicz Jr., Thais Erbas, Aguinaldo Nepomuceno, Nilva Brandini, Marcelo Bernardes, Bastian Knoppers

- Time: 11:20-11:40h (Brazil); 15:20-15:40h (France):

“Beyond Burial: Tidal Export of Blue Carbon in Brazilian Mangroves - BBLUES” – **Luiz Cotovicz Jr. (UFC-ICM)**

Co-authors: Luiz C. Cotovicz Jr., Gwenaël Abril & Isaac Santos

- Time: 11:40-13:00h (Brazil); 15:40-17:00h (France):

DISCUSSIONS DAY 4: FUTURE PLANS FOR BRAZIL-FRANCE COLLABORATIONS ON COASTAL EUTROPHICATION”