PROGRAMME:

Monday, June 8:

**Oral session 1: Past, present and future anthropogenic pressure – how do environmental changes affect nutrient and Organic Matter cycles, eutrophication, contaminant fate, coastal ocean acidification and ecosystem functions?**

08:30  **Registration**

09:00  Symposium opening

09:15  **Opening lecture:** Reconstructing the past, predicting the future: geochemical records of estuarine change
Andrew Cundy

09:40  **The International Estuarine Biogeochemistry Conference: A prospectus on meeting goals with progress**
Thomas Church

10:00  Historical records and geographical distribution of metallic pollution in sediments of the estuary of the Nerbioi-Ibaizabal Estuary (Bilbao, Basque Country)
Azibar Rodriguez-Iruretagoiena, Nerea Elejoste, Ainara Gredilla, Silvia Fernandez-Ortiz de Vallejuelo, Gorka Arana, Juan Manuel Madariaga, Alberto de Diego Rodriguez

10:20  Natural radionuclides enhanced by industrial activities: a 50 years sediment record in the upper Seine Estuary
Dominique Boust, Patrick Lesueur, Luc Solier, Marianne Roxet, Carole Dubrulle-Brunaud

10:40  **Coffee Break**

11:05  Anthropogenic tritium in the Loire River estuary
Olivier Péron, Claire Gégout, Benjamin Reeves, Gilles Montavon, Catherine Landesman

11:25  Sediment contamination and toxicity in the Guadalquivir estuary (SW, Spain)
Inmaculada Riba, Esther Bautista Chamizo, Víctor Almagro Pastor, T. Angel del Valls Casillas, Pilar Rodriguez

11:45  **Poster flash presentations**

12:25  **Lunch Time & Poster Session**
14:00 Mercury speciation in waters from the Aveiro Lagoon (Portugal)  
Teodor Stoichev, Emmanuel Tessier, Marisa Almeida, David Amouroux, Maria Clara Basto,  
Vitor Vasconcelos, Olivier Donard

14:20 Contrasting geochemical behavior and sources of Osmium and Platinum in the  
environment as revealed from intertidal sediments  
Clara Almecija, Antonio Cobelo-Garcia, Mukul Sharma, Juan Santos-Echeandia, Miguel Caetano

14:40 Occurrence, sources and fate of pesticides in Gironde estuary (France)  
Justine Cruz, Patrick Pardon, Karyn Le Ménaire, Marie-Hélène Dévier, Hélène Budzinski

15:00 Occurrence of synthetic musk compounds in the Adour estuary (SW France) and  
their fate during treatment processes  
Laurent Lanceleur, Joana Cavalheiro, Thierry Pigot, Mathilde Monperrus

15:20 Dynamics and pathways of glutathione-like and thioacetamide-like compounds in  
temperate macrotidal estuary (Brittany-France)  
Lauriane Marie, Benoît Pernet-Coudrer, Matthieu Waeles, Ricardo Riso

15:40 Coffee Break

16:05 Past and present carbon dynamics in the Scheldt estuary as traced by changes in C  
speciation and isotopes.  
Natacha Brion, Marc Elskens, Loreto De Brabandere, Frank Dehairs

16:20 Biogeochemical characterisation of 200 years local changes in a transitional  
environment - What is the foraminifera’s message?  
Fabio Francescangeli, Eric Armynot du Chatelet, Alain Trentesaux, Thorbjorn Andersen,  
Vincent Bouchet

16:40 The freshwater estuaries of the Three Gorges Reservoir in China-Insights from in  
situ and online monitoring with a MINIBAT multisensor system  
Andreas Holbach, Yonghong Bi, Lijing Wang, Yijun Yuan, Hao Chen, Binghui Zheng, Stefan Norra

17:00 Dilute waters of Kallada-Ashtamudi, Kerala: Steep Terrain and High Rainfall areas  
with slow erosion rates  
Stephy Thomas, Govind Chakrapani

17:20 Origin, Transport and Fate of Particulate Organic Carbon and Nitrogen along the  
Land-Sea Interface of the São Francisco River-Estuary, NE-Brazil  
Bastiaan Knoppers, Paulo Medeiros, Tim Jennerjahn, Luiz da S. Fontes, Marcileia do Carmo,  
W de Souza, M Messias, M Arguelho, I Carvalho, M Silva, M Carneiro

17:40 End of Session 1
Tuesday, June 9:

**Oral session 2: Physical and chemical factors influencing biogeochemistry and exchanges at estuarine boundaries (sediment-water-air, urban areas, subterranean estuaries).**

08:50 Introduction to the Session 2

09:00 Influence of environmental variables on the early diagenesis of Fe and Mn in the Laurentian Trough - one of the world’s largest estuaries  
*Qiang Chen, Alfonso Mucci, Bjorn Sundby*

09:20 Trace metal cycling in the Baltic Sea: role of suspended Mn and Fe particles  
*Johan Ingri, Susanne Bauer*

09:40 Fe isotopes in the near-shore environment - fractionation in the sediments and the water column  
*Michael Staubwasser, Susann Henkel, Sabine Kasten, Simon Poulton*

10:00 Natural and anthropogenic processes controlling trace metals dynamics in a highly stratified estuary: the Krka River estuary (Adriatic, Croatia)  
*Ana-Marija Cindric, Cédric Garnier, Benjamin Oursel, Ivanka Pizeta, Dario Omanovic*

10:20 Influence of seasonal diminishing of river discharge on the trace metals distribution and fluxes in estuaries  
*Vladimir Shulkin, Pavel Tishchenko*

10:40 **Coffee Break**

11:05 Spatial and seasonal variability of reactive metals in surface sediments of the Morbihan coast (South Brittany)  
*Joselyn Jimenez, Evelyne Goubert, Laurent Labeyrie, Alexandra Coynel, David Menier*

11:25 **Poster flash presentations**

12:25 **Lunch Time & Poster Session**

14:00 Conservative or Reactive? Permafrost-derived organic matter in the Lena River Delta  
*Boris Koch, Ivan Dubinenkov, Ruth Flerus, Philippe Schmitt-Kopplin, Gerhard Kattner*

14:20 Evolution of molecular weight and type of dissolved organic matter in the Gironde Estuary using asymmetrical field flow fractionation  
*Jérémie Parot, Edith Parlanti, Céline Guéguen*
14:40  Nutrient cycling along a subterranean estuary and the discharge zone  
  Mathilde Couturier, Gwénaëlle Chaillou, Christian Nozais

15:00  Nutrient flux through the subterranean estuary of the 240 km-long Aquitanian  
  coast  
  Pierre Anschutz, Céline Charbonnier, Loris Deirmendjian, Damien Buquet, Pascal Lecroart

15:20  Carbon mitigation: a salt marsh ecosystem service in times of change.  
  Isabel Caçador, Bernardo Duarte, João Marques, Noomene Sleimi

15:40  Coffee Break

16:05  A large annual CO2 sink enhanced by eutrophication in a tropical coastal  
  embayment (Guanabara Bay, Rio de Janeiro, Brazil)  
  Luiz Carlos Cotovicz Jr, Bastiaan Knoppers, Niiva BRANDINI, Suzan Da Costa Santos, Gwenaël Abril

16:25  Carbon Capture and Storage (CCS) strategy: a risk assessment overview focused  
  on marine bacteria  
  Ana Rocío Borrero, Inmaculada Riba López, Angel Del Valls Casillas

16:45  Effects of CO2 leakage from CCS technology using a mixed marine microalgae  
  population  
  Esther Bautista Chamizo, Manoela Romanó de Orte, Inmaculada Riba López, T. Angel del Valls  
  Casillas

17:05  End of Session 2

19:30  Conference Dinner: CapSciences
Wednesday, June 10:


09:00 Introduction to the Session 3, supported by the SChemA project

09:20 Keynote speaker:  
Interconnections between Estuaries, Human Health and Wellbeing  
Michael Depledge

10:00 Nutrient and Carbon Cycling in Coastal Tropical Waters of Hawaii: Effects of Land-derived Inputs, Reef biogeochemistry, and Physical Forcing.  
Eric Heinen De Carlo, Gerianne Terlouw, Patrick Drupp, Fred Mackenzie, Sylvia Musielewicz, Adrienne Sutton, Christopher Sabine

10:20 Modelling nutrient budgets in the Elbe Estuary (Germany) - role of phytoplankton as sink and source term  
Andreas Schöl

10:40 Coffee Break

11:10 Connectivity and fate of nutrients in the Derwent and Huon Estuaries in southeast Tasmania.  
Karen Wild-Allen, John Andrewartha

11:30 Study of water-sediment interface: coupled approach biogeochemistry-modeling for nutrient fluxes evaluation (C, P, N)  
Arnaud Vennin, Valérie Mesnage, Nicolas Lecoq

11:50 Poster flash presentations

12:30 Lunch Time & Poster Session

14:00 The environmental constraints on faunal distribution: biogeochemical interaction as underlined by geostatistical tools  
ERIC Armynot du Chatellet, Viviane Bout-Roumazeilles, Rodolfo Coccioni, Fabrizio Frontalini, Fabio Francescangeli, Giulia Margaritelli, Roberto Rettori, Federico Spagnoli, Federica Semprucci, Alain Trentesaux, Nicolas Tribovillard

14:20 Geochemical rates estimated from two-dimensional distributions of dissolved iron and phosphate from an intertidal estuarine mudflat  
Aubin Thibault de Chanvalon, Edouard Metzger, Emmanuelle Geslin, Florian Cesbron, Joel Knoery, Aurelia Mouret, Sebastiaan van de Velde, Filip Meysman
14:40  Lab-on-chip analysers for high resolution in situ analysis of nutrients in estuaries and rivers  
Alexander Beaton, Anouska Panton, Duncan Purdie, Matthew Mowlem

15:00  The Biofish – an underwater in situ and on line measuring multi-sensor system  
Stefan Norra, Andreas Holbach, Lijing Wang, Hao Chen, Yanwen Qin, Binghui Zheng, Yonghong Bi, Peter Haushahn

15:40  Coffee Break

15:45  Defining benchmark values for nutrients in twelve Portuguese estuaries under the Water Framework Directive  
Miguel Caetano

15:55  Abandoned boats as a source of metal contamination of estuarine sediments  
Andrew Turner, Aldous Rees

16:05  Modelling summer hypoxia in the Gironde estuary, using a 3D model coupling hydrodynamics, sediment transport and biogeochemical processes.  
Katixa Lajaunie Salla, Aldo Sottolichio, Bénédicte Thouvenin, Xavier Litrico, Gwenael Abril

16:25  Approaching environmental Cu and Ag bioaccumulation in oysters (Crassostrea gigas) from Gironde Estuary by stable isotope spiking in-vivo experimentations.  
Mathilde Mikolaczyk, Ane Rementeria, Laurent Lanceleur, Jörg Schäfer, Jérome Petit, Benat Zaldibar, Jean-François Chiffoleau, Manu Soto, Ionan Marigomez, Gérard Blanc

16:45  Awards for the best student oral and poster presentation

16:55  Announcements

17:00  Closing

The Organizing Committee greatly acknowledges support by: