

Programme and abstracts

22-24 June 2016,
Bizkaia Aretoa, Bilbao



XV International Symposium on Oceanography of the Bay of Biscay *Changing Ecosystems: Natural versus Anthropogenic Effects*

ISOBAY 15

Bilbao 2016



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Friday, 24 June

Session 5. **Biogeochemical Cycles and Anthropogenic effects; quality assessment and ecosystem management**

(Chairs: Miren Cajaraville and Pierre Anschutz)

- 09:00 - 09:20 **Anschutz P., Buquet D., Charbonnier C.**
Nutrient sequestration in Aquitaine lakes limits nutrient flux to the coastal zone
- 09:20 - 09:40 **Borja Á., Uyarra M.C.**
From data to marine environmental status assessment: innovative tools for European seas management
- 09:40 - 10:00 **Gil-Uriarte E., Bilbao E., Marigómez I., Soto M.**
Xenostrobus securis: a challenge to classic Biomonitoring studies?
- 10:00 - 10:20 **Valencia A., Ruiz M., Serrano M.T., Cancio I., Ortiz-Zarragoitia M.**
Endocrine disruption and contaminant exposure assessment in male thicklip grey mullets, using liver and gonad histopathological and molecular biomarkers
- 10:20 - 10:40 **Briaudeau T., Izagirre U., Marigómez I.**
Screening sentinel fish species for biomonitoring programmes in the Bay of Biscay: histopathological and biomarker approaches
- 10:40 - 11:20 Coffee break and poster session 2
- 11:20 - 11:40 **Mijangos L., Delgado A., Kortazar L., Ziarrusta H., Olivares M., Zuloaga O., Fernández L.A., Prieto A., Etxebarria N.**
Analysis of emerging organic contaminants in the estuaries of Biscay: identification of potential sources
- 11:40 - 12:00 **Rial D., Leon V., Bellas J.**
Integrative assessment of coastal marine pollution in Santander Bay and Galician Rías
- 12:00 - 12:20 **Huguenin L., Lalanne Y., Bru N., Lissardy M., D'Amico F., Milon E., Castege I., de Casamajor M.N.**
Biodiversity and indicator species in intertidal boulder fields: a case study on the French Basque coast
- 12:20 - 12:40 **Serrano H., Cearreta A., Irabien M.J., López, I.**
Anthropocene geological record of the environmental regeneration process in the Bilbao estuary (N Spain)
- 12:40 - 13:00 **Pouso S., Uyarra M.C., Borja A.**
Does recovery of ecosystems equal to the recovery of ecosystem services? The Nervión estuary and recreational fishing ecosystem service case study
- 13:00 - 14:30 Lunch

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Integrative assessment of coastal marine pollution in Santander Bay and Galician Rías Rial D.^{1}, Leon V.², Bellas J.¹*

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Sediments from the Bay of Santander (n = 11) and the Rías of A Coruña, Ferrol, Betanzos and Ares (n = 26) were sampled in July 2012. The concentration of organic contaminants in sediment elutriates (CBs, PAHs, pesticides and pharmaceutical drugs) and sea urchin (*Paracentrotus lividus*) embryotoxicity were assessed. The concentration of organic pollutants in the elutriates were relatively low (Contaminants < 400 ng/L) and their interpretation in terms of the observed toxicity was not straightforward. A clear gradient of toxicity from the inner part to the outer side of the Santander Bay was observed. Sediment elutriates from two stations situated close to the city of A Coruña showed moderate toxicity values, whereas sediment elutriates from the Rías of Ares and Betanzos showed no marked toxicity. Stations located close to the city of Ferrol showed moderate to high toxicity, which is indicative of a nearby source of contamination. On the contrary, the outer side of the Ría of Ferrol was classified as clean according to the calculated toxic units. These results allowed for an integrative assessment of the environmental quality in the studied areas, which highlights the usefulness of embryo-larval test to monitor the coastal pollution.