

## ***France***

### ***Meetings***

- GEOTRACES-France organized the GEOTRACES SSC meeting (C. Jeandel and E. Masferrer, Toulouse, 22-24 September 2010).
- GEOTRACES-France organized the Med Sea workshop, Nice, 4-6 Oct 2010 (L. Coppola, <http://www.cybaes.org/gtmed/>).
- Participation to the GEOTRACES Asia Planning Workshop, 4-6 oct 2010 (F. Lacan invited as representative).
- KEOPS II kick off meeting (Banyuls, 17-18 march 2011).
- Participation to the Scientific Committee and large participation to the “Traces and Tracers” oceanographic meeting (Liège, 2-6 may 2011).
- Participation to the COST-GEOTRACES-GMOS International Workshop on Mercury in the marine environment: a global metrology challenge (9-12 May 2011).
- Participation to the French National meeting in the framework of the Joint Programming Initiative “Healthy and Productive Seas and Oceans” (G. Sarthou, Roscoff 30-31 may 2011).
- Meeting for the GA01 cruise proposal preparation (G. Sarthou/C. Jeandel, Brest, 5 july 2011).

### ***Cruises***

- Dates of KEOPSII: 6 October-28 November .

### ***New funding***

- KEOPS II (G. process study) fully funded, both for the cruise and for the science.
- Funds for the acquisition of the French clean sampling system are (finally) completed this year.

### ***New results***

The most recent results of the GEOMAR group in Toulouse on Nd and Fe isotopes and in Brest along the BGH section are confirming that dissolved elements are released by the dissolution of a fraction of the sediments that are deposited on the oceanic margins. Due to the large amount of these sediments, the resulting net flux to the ocean is very large, as discussed in a recent publication to EOS (Jeandel et al, in press).

### ***Other activities***

Participation to the Scientific Committee (with O. Marchal) for the organization of the 3<sup>rd</sup> GEOTRACES Data-Model Synergy Workshop (Barcelona).

### ***Publications***

Bourquin et al., Determination of <sup>226</sup>Ra concentrations in seawater and suspended particles (NW Pacific) using MC-ICP-MS

Bown J., Boye M., Baker A., Duvieilbourg E., Lacan F., Le Moigne F., Planchon F., Speich S. and Nelson D.M., 2011. The biogeochemical cycle of dissolved cobalt in the Atlantic and the Southern Ocean south off the coast of South Africa. *Marine Chemistry*, in press. doi:10.1016/j.marchem.2011.03.008

Boye M., Achterberg E., Bown J., Bucciarelli E., Cardinal D., Cassar N., Cavagna A.-J., Chever F., Dehairs F., Fine R.A., Happell J., Joubert W., Le Moigne F., Masqué P., Monteiro P., Planchon F., Sarthou G., Verdeny E., Wake B., Waldron H., 2009. A First look at GEOTRACES issues from the IPY BONUS GOODHOPE cruise in the Southern Ocean. *Geochim. Cosmochim. Acta*, 73 (13): A152.

Heimbürger L.H., H. Lavigne, C. Migon, L. Coppola, F. D'Ortenzio and J-C. Miquel Physical

- control on the interannual variability of the mass flux at the DYFAMED time-series station (Ligurian Sea). Submitted to Deep Sea Research II 2011
- Jeandel C., Peucker-Ehrenbrink B., Jones M., Pearce C.R., Oelkers E., Godderis Y., Lacan, F., Aumont O. and Arsouze T. Ocean margins: the missing term for oceanic element budgets? Eos, in press
- Lacan, F., A. Radic, C. Jeandel, F. Poitrasson, G. Sarthou, C. Pradoux, R. Freydier and J. Chmeleff. High precision determination of the isotopic composition of dissolved iron in iron depleted seawater by double spike MC-ICPMS., Anal. Chem. 2010, 82, 7103–7111
- Oelkers, E, Gislason, S.R, Eiriksdottir, E.S, Jones, M., Pearce, C.R. and Jeandel, C. The role of riverine particulate material on the global cycles of the elements, Applied Geochemistry. 26, Suppl. 1, June 2011, Pages S365-S369
- Radic, A., F. Lacan, et J. Murray (2011), Isotopic composition of dissolved iron in the equatorial Pacific Ocean: new constraints for the oceanic iron cycle, Earth And Planetary Science Letters, in press, doi:10.1016/j.epsl.2011.03.015.
- Ussher, S.J., Achterberg, E.P., Sarthou, G, Laan, P., de Hein Baar J.W., Worsfold, P.J., 2010, Distribution of size fractionated dissolved iron in the Canary Basin, Marine Environmental Research, doi: 10.1016/j.marenvres.2010.03.001

Submitted by Catherine Jeandel.