

France

International conferences

2013

- Abadie C., Lacan F., Radic, A. and Poitrasson F. Dissolved and particulate iron concentrations and isotopic compositions in the Southern Ocean. Goldschmidt Conference. Florence, Italy, August 2013.
- Bowie, A.R., Qu erou  F., Sarthou G., Chever F., van der Merwe P., Bucciarelli E., Townsend A., Blain S., 2013, Dissolved and particulate trace metals in the vicinity of the Kerguelen Islands, Southern Ocean, during the KEOPS 2 experiment, Aquatic Sciences meeting, New Orleans, USA, 17-22 February.
- Cavagna, A.; Qu eguiner, B.; Planchon, F.; Jacquet, S.; Closset, I.; Dehairs, F., Production regime and potential for carbon export in the naturally iron-fertilized Kerguelen area (Southern Ocean), Aquatic Sciences meeting, New Orleans, USA, 17-22 February.
- de Brauwere A., Jeandel C., Lacan F., van Beek P., Venchiarutti C., Fripiat F. Putting the pieces together: A multi-tracer model to quantitatively identify the major processes related to the fertilized bloom on the Kerguelen Plateau (TALK) ASLO, New Orleans, USA, February 2013.
- Dulaquais, G. R.; Boye, M.; Carton, X.: Contrasting features of the biogeochemical cycle of cobalt in the west atlantic ocean, Aquatic Sciences meeting, New Orleans, USA, 17-22 February.
- Heimb urger LE, Sonke JE, Cossa D, Galfond B, Laffont L, Point D, Lagane C, and Rutgers van der Loeff M, 2013. Arctic Ocean methylmercury profiles suggest a marine origin, influenced by the carbon cycle - Results from the 2011 GEOTRACES Arctic cruise, 11th International Conference on Mercury as a Global Pollutant, Edinburgh, Scotland 28 July-2 August 2013.
- Heimb urger LE, Sonke JE, Labatut M, Lacan F, Pradoux C, Lagane C, Point D, Jeandel C and Eldin G, 2013. Marine methylmercury production and marine boundary exchange - Results of the 2012 GEOTRACES PANDORA cruise 11th International Conference on Mercury as a Global Pollutant, Edinburgh, Scotland, 28 July-2 August 2013.
- Heimb urger LE, Sonke JE, Labatut M, Lacan F, Pradoux C, Lagane C, Point D, Jeandel C and Eldin G, 2013. Marine methylmercury production and marine boundary exchange - Results of the 2012 GEOTRACES PANDORA cruise. 29th International Conference of the Society for Environmental Geochemistry and Health, Toulouse, France, 8-12 July 2013.
- Jacquet, S. H.; Dehairs, F.; Cavagna, A. J.; Planchon, F.; Closset, I.; Cardinal, D., Seasonal variability of mesopelagic organic carbon remineralization in the naturally iron-fertilized Kerguelen area (Southern Ocean), Aquatic Sciences meeting, New Orleans, USA, 17-22 February.
- Lacan F., Tachikawa K, K. Tachikawa, Arsouze T., Bayon G., Bory A., Colin C., Dutay J-C., Frank N., Gherardi J., Gourlan A. T., Grousset F., Hillaire-Marcel C., Jeandel C., Meynadier L., Montagna P., Puc eat E., Roy-Barman M., Waelbroeck C. A new database for Nd isotopes in marine environments. Goldschmidt Conference. Florence, Italy, August 2013.
- Labatut M., Radic A., Lacan F., Poitrasson F. and Murray J. Oceanic cycle of Fe in the western equatorial Pacific: A story of Fe in the western equatorial Pacific: Insights from its isotopic composition in the dissolved and particulate fractions of seawater and in potential sources. Submitted to ASLO. New Orleans, USA, February 2013.

- Planquette, H., M.P. Field. Improving absolute detection limits and minimizing sample size requirements for marine particulate trace metal determination by SF-ICP-MS, Thermo Scientific – Les Ulis, France. Innovations Technologiques en ICP-MS, 18 Juin 2013.
- Point D., Lorrain A., Heimbürger L-E, Lagane C., Menkes C., Masboul J., Allain V., Sonke J. E., Labaut M., Lacan F., Pradoux C., Jeandel C., Eldin G. Methylmercury origin, accumulation and distribution in tuna and swordfish from the southwestern Pacific Ocean. 11th International Conference on Mercury as a Global Pollutant. Edinburgh, UK, July 2013.
- Quéroué, F., A.T. Townsend, D. Lannuzel, P. van der Merwe, G. Sarthou, E. Bucciarelli, A.R. Bowie, 2013, Trace metal (Fe, Mn, Co, Cu, Pb, Cd, Ni, Al) analysis in open ocean samples using Sector Field ICP-MS, Collaborative on Oceanographic Chemical Analysis Meeting, Hawaii, March 26-29, 2013.
- Sanial V., van Beek P., Lansard B., Souhaut M., Kestenare E. and Zhou M. Use of the radium quartet to study the natural iron fertilization off Kerguelen Islands. Aslo' 2013 Aquatic Sciences Meeting, News Orleans (Louisiana, USA), February 2013.
- van Beek P., Sanial V., Lansard B., Souhaut M., Kestenare E., F. D'Ovidio, Zhou M., S. Blain. Study of the Natural Iron Fertilization off Crozet and Kerguelen Islands (Southern Ocean) Using Radium Isotopes as Tracers, Goldschmidt conference, August 2013.
- Zhou M., d'Ovidio F., Park Y.H., Durand I., Kestenare E., Sanial V., van Beek P., Queguiner B. and Blain S. Estimates of horizontal surface circulation and upwelling using surface drifters in Kerguelen Plateau regions during the 2011 austral spring cruise. ASLO' 2013 Aquatic Sciences Meeting, New Orleans (Louisiana, USA), February 2013.

2012

- de Brauwere A., Jeandel C., Lacan F., van Beek P., Venchiarutti C., Fripiat F. Putting the Pieces Together: A Multi-Tracer Model to Quantitatively Identify the Major Processes Related to the Fertilized Bloom on the Kerguelen Plateau (Southern Ocean). POSTER. AGU. San Francisco, USA, December 2012.
- Eldin, G., A. Ganachaud, S. Cravatte and C. Jeandel The Pandora cruise, July 2012 : an integrated approach of the circulation in the Solomon Sea (POSTER) 10th ICSHMO, Noumea (New Caledonia), April 2012.
- Garcia-Solsona E., Labatut M., Lacan F., Pradoux C., Vance D., Jeandel C., Distribution of REE and Nd isotopes along the Bonus Goodhope section in the Southeast Atlantic Ocean. Ocean Sciences Meeting, Abstract ID: 9695. Salt Lake City, USA, February 2012.
- Grenier M., Cravatte S., Blanke B., Menkes C., Koch-Larrouy A., Durand F., Melet A., and Jeandel C. (ORAL) From the western boundary currents to the Pacific Equatorial Undercurrent: modeled pathways and water mass evolutions. 10th ICSHMO, Noumea (New Caledonia), April 2012.
- Grenier M., C. Jeandel, F. Lacan, S. Cravatte, and F. Durand. From the subtropics to the equatorial Pacific: along the route, the neodymium relates. POSTER Ocean Sciences Meeting, Salt Lake City (Utah, USA), February 2012.
- Grenier M., S. Cravatte, and C. Jeandel. Origins and fates of the Solomon Sea thermocline waters: from the subduction areas to the Equatorial Undercurrent. Open Ocean Symposium on Western Pacific Ocean Circulation and Climate (TALK) Qingdao (China), October 2012.
- Grenier, Melanie, Catherine Jeandel, Francois Lacan, Derek Vance, Celia Venchiarutti, Alexandre Cros, S. Cravatte From the subtropics to the equatorial Pacific: along the route, the Neodymium relates., OSS on Western Pacific Ocean Circulation and Climate, October 15-17, 2012, Qingdao, China

- Grenier, M., C. Jeandel, F. Lacan et S. Cravatte REE & isotopes du Nd dans le Pacifique Sud, Workshop NEOSYMPA, Paris, 14 octobre 2012
- Jeandel, C., P. Behra, E. Oelkers, J. Sonke and M. Jones Particle/dissolve exchange processes at the land to ocean boundary: how to improve our understanding of the processes? INVITED ORAL Ocean Sciences Meeting, Abstract ID: 9695. Salt Lake City, USA, February 2012
- Jeandel Catherine (2012) AMANDES: a multidisciplinary GEOTRACES process study on the Amazon shelf Invited talk, GEOTRACES Latino-American workshop. Rio de Janeiro, Novembre 2012.
- Jeandel C., Grenier M., Garcia-Solsona E., Rousseau T., Jones M., and Pearce C. Rare earth Elements (REE) and Nd isotopes in the ocean. INVITED TALK Le STUDIUM® conference, Orléans, May 2012.
- Labatut M., Radic A., Lacan F., Poitrasson F. and Murray J. Oceanic cycle of Fe in the western equatorial Pacific: Insights from its isotopic composition in the dissolved and particulate fractions. Ocean Sciences Meeting, Abstract ID: 10247. Salt Lake City, USA, February 2012.
- Lacan F., Labatut M., Radic A., C. Abadie. Invited talk. Fe isotopic signatures in the seawater and suspended particles from the Equatorial Pacific and the Southern Ocean. AGU. San Francisco, USA, December 2012.
- Marchandise, S., E. Robin, S. Ayrault and M. Roy-Barman (2012) U-Th-REE-Hf-rich phases in marine sediments reflect weathering effect. Goldschmidt conference, Montréal
- Pearce, C.R., Jones, M.T., Oelkers, E.H., Jeandel, C. and Pradoux, C. Marine particulate weathering: A significant seawater source? Rip Meeting 2012, Int Conference, Open Univ. Milton, Keynes
- Pearce, C.R., Jones, M.T., Oelkers, E.H., Jeandel, C. and Pradoux, Marine particulate weathering: A significant seawater source? Geochemist group workshop, Oxford University, February 2012
- Planquette H., James R.H. & Parkinson I.J. (2012) Characterisation of the Cr isotopic signature of marine sediments deposited in the S1 Mediterranean sapropel, Mineralogical Magazine, 76(6) : 2239. Goldschmidt Conference, Montréal, Canada
- Planquette, H., James, R.H., Parkinson, I.J. (2012). Characterization of the Cr isotopic signature of marine sediments deposited in the S1 Mediterranean sapropel GEOTRACES Workshop Stable isotopes of biologically important trace metals, London, UK, September 2012.
- Rousseau, T., Jeandel C., Sonke JE, Boaventura G R and Seyler P Nd isotopes in the western equatorial Atlantic water masses: Amazon river and margin contributions.(POSTER) Ocean Sciences Meeting, Abstract ID: 9695. Salt Lake City, USA, February 2012.
- Roy-Barman, M and S. Marchandise (2012) A short oceanic residence time for Hf: element/isotope comparison. Goldschmidt conference, Montréal.
- Sanial V., van Beek P., Lansard B., Souhaut M. and Zhou M. Land-Ocean Connectivity : Tracing and quantifying the iron input that fuels phytoplankton blooms off Kerguelen and Crozet Islands. Land-Ocean Connectivity Meeting : from hydrological to ecological understanding of Groundwater effects in the coastal zone. L'Aber Wrac'h, Brittany (France), September 2012.
- Sarthou G., Quéroué F., Chever F., Bowie A., van der Merwe P., Bucciarelli E., Fourquez M., Blain S., 2012, Dissolved iron in the vicinity of the Kerguelen Islands, Southern Ocean, during the KEOPS 2 experiment, Goldschmidt Conference, Montreal, Canada, 24-29 June.

Workshops, Seminars, etc...

- Abadie C., Radic A., Labatut M., Pradoux C., Lacan F., Poitrasson F. Particulate Iron Concentrations and Isotopic Compositions in the Southern Ocean, Atlantic Sector. GEOTRACES Workshop, Stable isotopes of biologically important trace metals. Imperial College London, UK. Sept. 2012. Poster
- Grenier M., Jeandel C., Delattre H., Lacan F., Cravatte S. REE et isotopes du Nd dans le Pacifique Sud. NEOSYMPA Workshop. Paris 6 University, Oct. 2012.
- Lacan F. Equipe de Géochimie marine du LEGOS. Journées Scientifiques du LEGOS. Toulouse, March 2013.
- Lacan F., Radic A., Labatut M., C. Abadie, C. Pradoux. Les isotopes du fer pour l'étude des cycles biogéochimiques océaniques. Après-Midi Scientifique de la Société Française des Isotopes Stables, Toulouse, Nov. 2012.
- Lacan F., Labatut M., C. Abadie., Radic A. – Iron isotopes in the dissolved and particulate phases of seawater: sources and processes. GEOTRACES Workshop, Stable isotopes of biologically important trace metals. Imperial College London, UK. Sept. 2012.
- Lansard B, Sanial V., van Beek P., Souhaut M., d'Ovidio F. and Zhou M. What do we learn from radium isotopes about natural iron fertilization off Crozet and Kerguelen Islands ? 4th International Ra-Rn Workshop. Narragansett, June 2012.
- Souhaut, M., van Beek P. Presentation of the LAFARA underground laboratory of Ferrières, French Pyrénées, Collaboration of European Low-level Underground Laboratories (CELLAR) meeting, Lingolsheim, France, 16.-17 October 2012.
- Tachikawa K., Meeting Neo-SYMPA (Workshop NEOdymium isotopes in marine environments: SYnergy between Modern, Modelling and PAleo communities), Paris 6 University, Oct. 2012.
- van Beek P., Souhaut M., Sanial V., Lansard B. Study of the ocean using low-background gamma spectrometry, Collaboration of European Low-level Underground Laboratories (CELLAR) meeting, Lingolsheim, France, 16.-17 October 2012.

Working groups

- Working group on results from the KEOPS 2 cruise (GEOTRACES Process Study), 23-24 May 2013 at LEMAR-IUEM in Brest. 17 scientists from France, Belgium and Australia attended this meeting.
<http://www.geotraces.org/meetings/geotraces-events/eventdetail/152/-/working-group-on-fe-budget-during-the-keops-2-cruise>

New Publications

- Annett A., Henley S., van Beek P., Souhaut M., Ganeshram R., Venables H., Meredith M., Geibert W., Use of radium isotopes to estimate mixing rates and trace sediment inputs to surface waters in northern Marguerite Bay (Antarctic Peninsula), Antarctic Science, Antarctic Science 25(3), 445–456, doi:10.1017/S0954102012000892.
- Bown, J., Boye, M., Nelson, D.M., 2012, New insights on the role of organic speciation in the biogeochemical cycle of dissolved cobalt in the southeastern Atlantic and the Southern Ocean. Biogeosciences, 9, 2719-2736, doi:10.5194/bg-9-2719-2012.
- Bown, J., Boye, M., Laan, P., Bowie, A., Park, H.-Y., Jeandel, C., Nelson, D.M. (2012) Imprint of a dissolved cobalt basaltic source on the Kerguelen Plateau. Biogeosciences, 9, 5279–5290, doi:10.5194/bg-9-5279-2012
- Boye, M., Wake, B.D., Lopez Garcia, P., Bown, J., Baker, A.R., Achterberg, E.P., 2012, Distributions of dissolved trace metals (Cd, Cu, Mn, Pb, Ag) in the southeastern Atlantic and the Southern Ocean. Biogeosciences, 9, 3231-3246, doi:10.5194/bg-9-3231-2012.

- Boyle E.A., John S., Abouchami W., Adkins J.F., Echegoyen-Sanz Y., Ellwood M., Flegal R., Fornace K., Gallon C., Galer S., Gault-Ringold M., Lacan F., Radic A., Rehkamper M., Rouxel O., Sohrin Y., Stirling C., Thompson C., Vance D., Xue Z., Zhao Y. 2012. GEOTRACES IC1 (BATS) contamination-prone trace element isotopes Cd, Fe, Pb, Zn, Cu, and Mo intercalibration. *Limnology and Oceanography Methods*, 10:653-665, DOI: 10.4319/lom.2012.10.653.
- Bressac M., C. Guieu. Organic complexation versus scavenging: What really happens to new atmospheric iron in the ocean surface? Submitted to *Global Biogeochemical Cycles*, in revision
- Cavagna, A.J., Dehairs, F., Bouillon, S., Woule-Ebongué, V., Planchon, F., Delille, B., Bouloubassi, I., 2013. Water column distribution and carbon isotopic signal of cholesterol, brassicasterol and particulate organic carbon in the Atlantic sector of the Southern Ocean. *Biogeosciences* 10, 2787-2801.
- Cheize, M., Sarthou, G., Croot, P.L., Bucciarelli, E., Baudoux, A.-C. and Baker, A.R., Iron organic speciation determination in rainwater using cathodic stripping voltammetry, 2012, *Anal. Chim. Acta*, 736, 45– 54, <http://dx.doi.org/10.1016/j.aca.2012.05.011>.
- Evrard O., van Beek P., Gateuille D., Pont V., Lefèvre I., Lansard B., P. Bonté, 2012. Evidence of the radioactive fallout in France due to the Fukushima nuclear accident, *Journal of Environmental Radioactivity* 114, Volume spécial Fukushima, 54-60.
- Grenier, M., C. Jeandel, F. Lacan, D. Vance, C. Venchiarutti, A. Cros, and S. Cravatte From the subtropics to the central equatorial Pacific Ocean: neodymium isotopic composition and rare earth element concentration variations. *J. Geophys. Res. Oceans*, 118, 592–618, doi: 10.1029/2012JC008239.
- Hassler, C.S., Schoemann, V., Boye, M., Tagliabue, A., Rozmarynowycz, M. and McKay, R.M.L., 2012. Iron bioavailability in the Southern Ocean. In: R.N. Gibson et al. (Editors), *Oceanography and Marine Biology: An Annual Review*. Taylor & Francis.
- Hsieh, Y.-T., Geibert, W., van-Beek, P., Stahl, H., Aleynik, D., and Henderson, G.M. (2013) Using the radium quartet (²²⁸Ra, ²²⁶Ra, ²²⁴Ra, and ²²³Ra) to estimate water mixing and radium inputs in Loch Etive, Scotland. *Limnol. Oceanogr.* 58: 1089-1102.
- Jeandel C., Delattre M., Grenier M., Pradoux C. and Lacan F. Rare Earth Concentrations and Nd isotopes reveal exchange processes along the East Pacific Rise, South East Pacific Ocean. G3, in press., doi:10.1029/2012GC004309
- Jones M.T., Pearce C .R., Oelkers E.H., Jeandel C., Eiriksdottir E. and Gislason S.R. Suspended river material as key parameter in the global strontium cycle Earth and Planet. *Sci Letter*, (2012), pp. 51-59 DOI information: 10.1016/j.epsl.2012.08.04
- Lacan F, Tachikawa K, Jeandel C. 2012. Neodymium isotopic composition of the oceans: a compilation of seawater data. *Chemical Geology*, 300-301, 177-184, 10.1016/j.chemgeo.2012.01.019.
- Maiti, K., Buesseler, K.O., Pike, S.M., Benitez-Nelson, C., Cai, P., Chen, W., Cochran, K., Dai, M., Dehairs, F., Gasser, B., Kelly, R.P., Masque, P., Miller, L.A., Miquel, J.C., Moran, S.B., Morris, P.J., Peine, F., Planchon, F., Renfro, A.A., Rutgers van der Loeff, M., Santschi, P.H., Turnewitsch, R., Waples, J.T., Xu, C., 2012. Intercalibration studies of short-lived thorium-234 in the water column and marine particles. *Limnology and Oceanography Methods* 10, 631-644
- Oelkers E.H, Morgan Jones, Christopher R. Pearce, Catherine Jeandel, Eydis Salome Eiriksdottir and Sigurdur R. Gislason. Riverine particulate material dissolution in seawater and its implications for the global cycles of the elements. *Compte Rendu Academie des Sciences*, 2012
- Pearce C. R., Morgan T. Jones, Eric H. Oelkers, Catherine Pradoux and Catherine Jeandel The effect of particulate dissolution on the neodymium (Nd) isotope and Rare Earth

- Element (REE) composition of seawater. *Earth and Planetary Science Letters* (2013), <http://dx.doi.org/10.1016/j.epsl.2013.03.023i>
- Planchon, F., A.-J. Cavagna, D. Cardinal, L. André, and F. Dehairs, 2013, Late summer particulate organic carbon export and twilight zone remineralisation in the Atlantic sector of the Southern Ocean, *Biogeosciences*, 10, 803-820.
 - Planquette H. and R.M. Sherrell, 2012. Sampling suspended particles from rosette-mounted bottles for determination of trace elements: methodology and comparison with in situ pumping. *Limnology and Oceanography: Methods*, 10: 367-388.
 - Planquette H., Sherrell, R.M., Stammerjohn, S., Field, P.M., 2013. Sources of particulate iron in one of the most productive polynyas: the Amundsen Sea, *Marine Chemistry*, 153: 15-30
 - Rousseau Tristan C.C, Jeroen E. Sonke, Jerome Chmeleff, Frederic Candaudap, François Lacan, Geraldo Boaventura, Patrick Seyler and Catherine Jeandel (2013) Rare earth element analysis in natural waters by multiple isotope dilution – sector field ICP-MS *Journal of Analytical Atomic Spectrometry*, 2013, 28, 573-584
 - Stichel T., Frank M., Rickli J., Hathorne E.C., Haley B., Jeandel C. and Pradoux C. Sources and input mechanisms of Hf and Nd in surface waters of the Atlantic sector of the Southern Ocean. *Geochim. Cosmochim. Acta*, 94, 2012, 22-37 <http://dx.doi.org/10.1016/j.gca.2012.07.005>
 - Stieglitz T., van Beek P., Souhaut M., Cook P., Groundwater discharge Karstic groundwater discharge and seawater recirculation through sediments in shallow coastal Mediterranean lagoons, determined from water, salt and radon budgets, *Marine Chemistry*, in press.
 - van Beek P., Souhaut M., Lansard B., Bourquin M., Reyss J-L., Jean P., von Ballmoos P., 2013. LAFARA : A new underground laboratory in the French Pyrénées for low-background gamma spectrometry, *Journal of Environmental Radioactivity* 116, 152-158.
 - van de Flierdt, T., Pahnke, K., Amakawa, H., Andersson, P., Basak, C., Coles, B., Colin, C., Crockett, K., Frank, M., Frank, N., Goldstein, S.L., Goswami, V., Haley, B.A., Hathorne, E.C., Hemming, S.R., Henderson, G.M., Jeandel, C., Jones, K., Kreissig, K., Lacan, F., Lambelet, M., Martin, E.E., Newkirk, D.R., Obata, H., Pena, L., Piotrowski, A.M., Pradoux, C., Scher, H.D., Schöberg, H., Singh, S.K., Stichel, T., Tazoe, H., Vance, D., Yang, J. 2012. GEOTRACES intercalibration of neodymium isotopes and rare earth elements in seawater and marine particulates - Part 1: international intercomparison, *Limnology and Oceanography Methods*. 10, 2012, 234–251. DOI 10.4319/lom.2012.10.234.
 - Wuttig K., T. Wagener, M. Bressac, A. Dammschäuser, P. Streu, C. Guieu, and P. L. Croot, 2013, Impacts of dust deposition on dissolved trace metal concentrations (Mn, Al and Fe) during a mesocosm experiment *Biogeosciences*, 10, 2583-2600
 - Yeghicheyan D., C. Bossy, M. Bouhnik-Le Coz, C. Douchet, G. Granier, A. Heimburger, Lacan F., Lanzanova A. Rousseau T., Seidel JL., Tharaud M., Candaudap F., Chmeleff J., Cloquet C., Delpoux S., Labatut M., Losno R., Pradoux C., Sivry Y. Sonke J. 2013. A compilation of silicon, rare earth element and twenty one other trace element concentrations in the natural river water standard SLRS-5 (NRC-CNRC), *Geostandards and Geoanalytical Research*. DOI: 10.1111/j.1751-908X.2013.00232.x.

Cruises

- Monopole cruise (may-15th June 22nd-2012, PI: F. Bassinot). During this paleo-oceanographic cruise in the Gulf of Bengal, seawater, ISP and top surface sediment samples were collected for Pa-Th, Ra, Nd and Os analysis (Matthieu Roy-Barman, LSCE).

- The GEOTRACES French Pandora Cruise GP12 was completed from 27 June 2012 to 7 August 2012 (<http://www.geotraces.org/news-50/news/446-geotraces-french-cruise-in-the-solomon-sea-successfully-completed>), with scientists from France (LEGOS, GET, LOCEAN and LEMAR) Hawaii, Washington and Princeton universities (USA), British Columbia University (Ca), Bristol University (GB) and Max Plank Institute Mainz (G).
- GEOTRACES-A02 section extended in the west-northern Atlantic (LEG4), August 2012, RV Pelagia, Chief Scientist M. Rijkenberg (Gabriel Dulaquais, LEMAR).
- GEOTRACES-A04N in the Mediterranean and Black Seas, May-August 2013, RV Pelagia, Chief Scientist M. Rijkenberg (Gabriel Dulaquais and Marie Boyé, LEMAR; Lars-Eric Heimbürger, GET).

New funding

- French-Swedish funding for a project in the Arctic Ocean. PIs: Per Andersson and Matthieu Roy-Barman
- CHIPIE (Comportement des éléments d'intérêt biogéochimiques et du carbone Particulaire aux Interfaces atmosphère-océan et continent-océan dans un contexte d'évolution des conditions Environnementales; PI C. Guieu) fundings UPMC and INSU: Main goal of CHIPIE is to quantify by the mean of well controlled experiments conducted in clean room, the evolution of the behavior of chemical elements with biogeochemical interest (N, P, Fe etc.) and carbon at the atmosphere-ocean interface in a context of evolving environmental conditions (ocean acidification, increase in temperature). We propose to develop an original experimental approach to simultaneously follow the behavior of chemical elements and the fate of particles combining atmospheric deposition and various environmental conditions such as pH, temperature, mixing, quality of organic material.
- ANR RPDOC BITMAP : Bioavailability of Iron and other Trace Metals in marine Particles, 480 k€ (12/2012-12/2015), PI Hélène Planquette UMR 6539 LEMAR. Collaborators: LEMAR (E. Bucciarelli, S; LHelguen, F. Planchon, G. Sarthou); LEGOS (F. Lacan, C. Pradoux ; IPGP (E. Viollier), IMCS Rutgers (R. Sherrell)
- Pieter van Beek, Marc Souhaut (coll. Erika Sternberg; Roger François) : Analysis of the radium activities (²²⁶Ra, ²²⁸Ra) in water samples collected during ArcticNet 0903 – LEG 3a (Paulatuk – Paulatuk on board CCGS Amundsen) ; August 27 – September 12, 2009
- OPTIMISP project (F. Lacan) in 2012: optimization of in situ pumps (ISP).
- The 5 French McLane ISP should be modified by the end of 2013 in order to fit simultaneously 3 membranes (nuclepore for surface studies; SUPOR for trace metals and QMA or GFF for carbon) and 2 Mn impregnated cartridges for in situ preconcentration of dissolved elements such as radium. The prototype has been already modified by DT INSU (picture below).



Other activities

- Participation to cross-over station trace metal calibration (BGH/UK, BGH/NL, GA02/US, GA02/UK).
- Marine Hg and methylHg intercalibration exercise on the GEOTRACES Mediterranean / Black Sea cruise (PI Lars-Eric Heimbürger).
- Participation to the next intercalibration effort organised by P. Lam (WHOI): “Particles intercal. during GA04N section”, H. Planquette.

Submitted by Geraldine Sarthou.