



FEBRUARY 22-26, 2010

 Portland, Oregon, USA

Ocean Sciences Meeting

Co-Chairs Raleigh Hood, Greg Cutter, Julie Pullen

Interdisciplinary

IT13A PB252 Monday 1300h

Interactions Between Biogeochemistry and Ecosystems in Low-P Oligotrophic Areas I

Presiding: **T Moutin**, Laboratoire d'Océanographie Physique et Biogéochimique; **B Van Mooy**, Woods Hole Oceanographic Inst; **F T Thingstad**, Bergen University; **M W Lomas**, BIOS

1300h **IT13A-01** Understanding marine phosphorus composition and the potential impact on particle export in oligotrophic regions (*Invited*): **C R Benitez-Nelson**

1315h **IT13A-02** How is nitrogen fixation sustained in the eastern tropical North Atlantic? (*Invited*): **C Mahaffey**, R G Williams

1330h **IT13A-03** The Mediterranean sea as a typical low-P low chlorophyll oligotrophic system : overview and preliminary results of the BOUM experiment: **T Moutin**, L M Prieur

1345h **IT13A-04** NEAR-INERTIAL WAVE GENERATION WITHIN AN ANTICYCLONIC EDDY AND TURBULENCE IN THE MEDITERRANEAN SEA DURING BOUM EXPERIMENT: **P Bouruet-Aubertot**, Y Cuypers, J Fuda, C Marec

1400h **IT13A-05** The impact of anticyclonic mesoscale features on the Mediterranean Sea's microbial food web: **U Christaki**, D Lefevre, F Van Wambeke, A Lagaria, J Grattepanche, S Psarra, J Colombet, T Sime-Ngando, M Weinbauer, T Moutin

1415h **IT13A-06** Impacts of mesoscale eddies and phytoplankton dynamics on the biogeochemical cycling of dissolved cobalt and iron in the oligotrophic Sargasso Sea: **R U Shelley**, P N Sedwick, T S Bibby, A I Macey, P J Worsfold, M C Lohan

1430h **IT13A-07** Assessing Metabolic Balance In Oligotrophic Gyres: **D Lefevre**, C Tamburini, A Robert, P Payre, M Billault, S Beurthey, K Arnaud, L M Prieur

1445h **IT13A-08** Elemental Stoichiometry of Organic Matter Production by Trichodesmium IMS101 as a Function of Phosphorus Source with Emphasis on Phosphonate Utilization and the Production of Greenhouse Gases: **D Karl**, **A White**, K M Bjorkman, L J Beversdorf, R M Letelier

Interdisciplinary

IT14A PB252 Monday 1530h

Interactions Between Biogeochemistry and Ecosystems in Low-P Oligotrophic Areas II

Presiding: **T Moutin**, Laboratoire d'Océanographie Physique et Biogéochimique; **B Van Mooy**, Woods Hole Oceanographic Inst; **F T Thingstad**, Bergen University; **M W Lomas**, BIOS

1530h **IT14A-01** Nutrient Pathways Through the Microbial Food Web: Confirming the Results of a Lagrangian Experiment in the Eastern Mediterranean Using a Mesocosm Approach. (*Invited*): **T F Thingstad**, P Pitta, J Nejtgaard

1545h **IT14A-02** N-limited or N and P co-limited indications in the Mediterranean surface waters: BOUM microcosm experiments: **T Tanaka**, T F Thingstad, U Christaki, V Cornet-Barthaux, C Courties, J Grattepanche, A Lagaria, L Oriol, S Psarra, M Pujo-Pay, F Van Wambeke, T Moutin

1600h **IT14A-03** Abundance and culturable diversity of aerobic anoxygenic phototrophs in the Mediterranean Sea: **D Lamy**, A Lehours, M Cottrell, F Van Wambeke, J Ras, D L Kirchman, P Lebaron, C Jeanthon

1615h **IT14A-04** Contribution of Aerobic Anoxygenic Phototrophs in the organic carbon cycling in the Mediterranean and the Sargasso Sea: **M Koblizek**, E Hojerova, J Gasol

1630h **IT14A-05** Sargasso Sea phosphorus biogeochemistry: An important role for dissolved organic phosphorus (DOP): **D A Lomas**, D W Bell, A L Burke, C Shen, **M W Lomas**, S Dyhrman, J W Ammerman

1645h **IT14A-06** Microbial production of phosphonate in marine systems: **S Dyhrman**, E Verdeny, E Orchard, S Haley, P Pellechia

1700h **IT14A-07** Enhancement of in situ nitrogen fixation in response to phosphate and phosphonate additions in the North Pacific Subtropical Gyre: **K S Watkins**, A White, Y H Spitz, D M Karl, R M Letelier

1715h **IT14A-08** ALKALINE PHOSPHATASE ACTIVITY AND REGULATION IN THE NORTH PACIFIC SUBTROPICAL GYRE: **S Duhamel**, S Dyhrman, K M Bjorkman, D M Karl

IT15B Poster Hall E Monday 1730h

Interactions Between Biogeochemistry and Ecosystems in Low-P Oligotrophic Areas III Posters

Presiding: **T Moutin**, Laboratoire d'Océanographie Physique et Biogéochimique; **B Van Mooy**, Woods Hole Oceanographic Inst; **F T Thingstad**, Bergen University; **M W Lomas**, BIOS

1730h **IT15B-01 POSTER** Modeling the coupling of carbon and nutrients in the upper Mediterranean Sea : preliminary results from the BOUM cruise: **R Mauriac**, M Baklouti, T Moutin

1730h **IT15B-02 POSTER** 3D physical-biogeochemical coupled model of the NW Mediterranean Sea (MARS-3D/Eco3M): **V Raybaud**, R Mauriac, N Boussez, F Carlotti, P Garreau, M Baklouti

1730h **IT15B-03 POSTER** SPECIES-SPECIFIC SILICIFICATION RATES IN A LONGITUDINAL NUTRITIONAL GRADIENT IN THE MEDITERRANEAN SEA DURING THE BOUM CRUISE: **K Leblanc**, Y Crombet

1730h **IT15B-04 POSTER** Bacteria and phytoplankton abundance and viability across the Mediterranean Sea: **S Lasternas**, S Agusti, C M Duarte

1730h **IT15B-05 POSTER** Is Nitrogen Fixation a Major Biogeochemical Process in the Mediterranean Sea during the stratification Period?: **S Bonnet**, O Grosso, P Raimbault, T Moutin

1730h **IT15B-06 POSTER** Dissolved Organic Phosphorus: Isolation and Chemical Characterization: **T B Meador**, D Repeta, C Johnson, S Dyhrman

1730h **IT15B-07 POSTER** Phospholipid production and turnover in a nutrient addition microcosm experiment in the Mediterranean: **K Popendorf**, T Tanaka, F Van Wambeke, M Pujo-Pay, C Courties, T Moutin, B Van Mooy

1730h **IT15B-08 POSTER** Diazotrophic unicellular cyanobacteria (UCYN2-Fix) across an oligotrophic gradient in the Mediterranean Sea: preliminary results from the BOUM cruise: **M Le Moal**, H Collin, C Ridame, S Bonnet, I C Biegala

1730h **IT15B-09 POSTER** Zooplankton abundance, biomass and metabolic rates along an eastern and western basin transect in the Mediterranean Sea: **A Nowaczyk**, F Carlotti, D Botha

1730h **IT15B-10 POSTER** Temporal changes on the vertical distribution of dissolved oxygen and nutrients in the oligotrophic Levantine Basin of the Eastern Mediterranean: **N Kress**, I Gertman, B Herut

1730h **IT15B-11 POSTER** Mesozooplankton biomass and taxonomic distribution across the Mediterranean sea during the PROSOPE survey (PROSOPE): **F Carlotti**

1730h **IT15B-12 POSTER** Microbial community responses and trophic shifts (autotrophy vs. heterotrophy) upon addition of limiting nutrients -N. vs. P. - in oligotrophic Mediterranean surface waters: the BOUM microcosm experiments: **S Psarra**, A Lagaria, D Lefevre, F Van Wambeke, U Christaki, C Courties, M Pujo-Pay, L Oriol, T Tanaka, T Moutin

1730h **IT15B-13 POSTER** Phosphorus Cycling in the Red Sea: New Insights on Phosphorus Limitation in Oligotrophic Environments: **L Yum**, S Bashir Ali, A Heithoff, S Dyhrman, B Van Mooy