



**CONTRIBUTED SESSION:
BIOGEOCHEMICAL CYCLES OF TRACE
ELEMENTS AND IMPLICATIONS FOR MARINE
ECOSYSTEMS – PART 2**

Co-Chairs: Robert Anderson (USA), Timothy Jickells (UK)

WEDNESDAY, JUNE 8

- 2.00-2.15 **FLUVIAL FLUX TO THE NORTHERN INDIAN OCEAN FROM THE BRAHMAPUTRA-GANGES: IMPACT ON C-N-P BIOGEOCHEMICAL CYCLES**
C. Mahanta, R. K. Goswami, and U. Dutta
- 2.15-2.30 **CHEMICAL FLUXES FROM SUBMARINE GROUNDWATER DISCHARGE ON THE SOUTHERN BRAZIL COAST TO THE SOUTH ATLANTIC OCEAN**
Willard S. Moore, Luis Felipe Niencheski, and Herbert Windom
- 2.30-2.45 **FRESHWATER-SEAWATER MIXING IN COASTAL PERMEABLE SANDS ALONG THE SOUTHERN COAST OF BRAZIL: IMPLICATION TO IRON INPUT TO THE OCEANS**
Herbert Windom, Felipe H. Niencheski, and Willard S. Moore
- 2.45-3.00 **STABLE NITROGEN ISOTOPES, MICROBES AND MICROSENSOR OXYGEN CONCENTRATION GRADIENTS IN SPONGES DOMINATING REEFS OF THE FLORIDA KEYS**
Christopher S. Martens, Melissa Southwell, Jeremy B. Weisz, and Niels Lindquist
- 3.00-3.15 **BIOGEOCHEMICAL CYCLES OF TRACE CHEMICAL COMPONENTS IN ACTIVE HYDROTHERMAL PLUMES IN THE SOUTHERN OKINAWA TROUGH, JAPAN**
Toshitaka Gamo, Yayoi Hongo, Takashi Doi, Hajime Obata, Urumu Tsunogai, and Takuro Nunoura
- 3.15-3.30 **A MYR RECORD OF COCCOLITHOPHORE SR/CA AND OCEANIC PRODUCTIVITY**
Rosalind E.M. Rickaby, Edouard Bard, and Stephen Barker
- 3.30-3.45 **$^{234}\text{Th} / ^{238}\text{U}$ DISEQUILIBRIUM AS AN INDICATOR OF PARTICLE EXPORT AND CARBON FLUXES IN THE NORTH AND SOUTH ATLANTIC SUBTROPICAL GYRES**
Sandy Thomalla, Mike Lucas, Robert Turnewitsch, and Howard Waldron
- 3.45-4.00 **A TRACE ELEMENT AND ISOTOPE PROXY APPROACH FOR THE STUDY OF THE BIOLOGICAL PUMP: A SOUTHERN OCEAN CASE STUDY**
Frank Dehairs, Damien Cardinal, Nicolas Savoye, Stéphanie Jacquet, Luc André, and Marc Elskens
- 4.00-4.15 **MODULATION OF PARTICLE SCAVENGING IN THE OCEAN INTERIOR IN RESPONSE TO SURFACE FORCING**
Maureen H. Conte, Suilou Huang, John C. Weber, and Thomas M. Church