

VentBase 2012 Report to InterRidge

VentBase is a forum for scientists, commercial enterprises and both governmental and non-governmental bodies involved or interested in assessing the environmental impact of mining seafloor massive sulfides (SMS) deposits in the deep-sea. VentBase uses themed breakout sessions to allow stakeholders in the deep-sea to engage with each other in an informal, yet productive, manner. A primary goal of VentBase is the production of a best practice documents that can inform stakeholders and highlight the most up to date methodologies, both current and soon to be available.

The VentBase 2012 workshop, held in National University of Ireland, Galway, had the primary aim of standardizing methods used for assessing the ecological impacts of commercial mineral extraction at seafloor massive sulfides (SMS) deposits. The workshop was supported by InterRidge, INDEEP and the International Seabed Authority (ISA). Thirty-two experts on marine science (biodiversity, oceanography, ecology, etc) from twelve countries convened from 10 to 12 April 2012.

The workshop conducted three simultaneous breakout sessions. Documents from each of the Breakout sessions have been submitted to the legal technical council of the ISA. The *Environment Impact Assessment* session, chaired Bob Kennedy, discussed on the conceptual recommendations for EIA at SMS deposits with suggested amendments for the ISA document (ISBA/16/LTC/7, 2010). The *Oceanographic and Geography* group, chaired by Peter Croot, also proposed amendments to the ISA document (ISBA/16/LTC/7, 2010) from an oceanographic and geological perspective. The *Sampling Methods* session, chaired by Patrick Collins, submitted a document outlining sampling guidelines for biological survey at SMS's. The guidelines outline methods for appropriate survey design, state of the art molecular approaches for assessing geneflow and connectivity, plankton/larval sampling, macrofaunal studies, video/photographic time series and statistical approaches.

VentBase realised the need for international collaboration and made progress in the standardisation of methodologies used for EIA at deep-sea SMS deposits. Subsequent collaborations resulting from the workshop have led to the writing of two peer reviewed manuscripts: an EIA primer for SMS deposits and sampling guidelines for biological survey at SMS deposits. A follow up VentBase workshop is planned for 2013.

VentBase 2012 Scientific Committee

Patrick Collins, Bob Kennedy, Jens Carlsson

Participants

Sam Smith & Alison Swaddling, Adam Cook, Kanae Komaki, Christian Mohn, Pierre Marie Sarradin, Peter Croot, Eamon Kelly, Anthony Grehan, Aodhan Fitzgerald, John Morris, Adrian Patterson, James Forde, Mark Johnson, Hiroyuki Yamamoto, Hirome Watanabe, Dhugal Lindsay, Se-Jong Ju, Kiseong Hyeong, Wonnyon Kim, Ashley Rowden, Nicholas Fleming, Ana Colacao, Patricia Conceicao, Miguel Souto, Jon Copley, Verity Nye, Leigh Marsh, Rachel Boschen, Andrew Thaler.