

## **Symposium on Massive Sulfide and Manganese Nodule Exploration and Environmental Studies**

June 7<sup>th</sup> 2017, BGR

### **Introduction and Current Status of Exploration**

09:00 U. Schwarz-Schampera and INDEX team (BGR): Current Status of Polymetallic Sulfide Exploration

09:20 C. Rühlemann (BGR): Current Status of Manganese Nodule Exploration

### **Bathymetry**

09:40 W. Weinrebe (Kiel): Beyond Bathymetry: Water Column Imaging with Multibeam Echo Sounder Systems

### **10:00 Break**

### **Plumes**

10:30 D. Garbe-Schönberg (Universität Kiel): Geochemistry of hydrothermal fluids from the INDEX license area: A comparison of on-axis and off-axis sites

10:50 A. Noowong & A. Koschinsky (Jacobs University Bremen): Origin and bioavailability of metals and dissolved organic matter in Kairei and Pelagia vent fluids and plumes

11:20 C. Kriete (BGR): Spectrometric in-situ measurements of marine environmental parameters

11:40 B. Gillard, L. Thomsen (Jacobs University Bremen): Characterization and hydrodynamic behavior of plume sediments from the Clarion Clipperton fracture zone (CCFZ)

12:00 A. Vink (BGR): Sediment plume transport in the deep Pacific Ocean caused by deep-sea mining

### **12:20 Break**

### **Environmental Studies - Biodiversity**

13:30 K. Geerdes (DZMB): Faunal Microdistribution of the new hydrothermal vent field Pelagia on the south eastern spreading axis in the Indian Ocean: A 3D reconstruction approach

13:50 K. Kniesz (DZMB): Macrofauna and Peracarida diversity from Edmond Vent Field of the Central Indian Ridge

14:10 T. Kihara (DZMB): Understanding the benthic biodiversity of seafloor massive sulfides in the Indian Ocean – morphology, molecular and beyond....

14:30 P. Martinez (DZMB): Biodiversity in the German License Area and potential ecological consequences of manganese nodule mining

### **Environmental Studies - Microbiology**

14:50 M. Perner, N. Adam & Y. Han (Universität Hamburg): The role of hydrothermal venting and deposits for microbial community compositions in the Kairei and Pelagia fields

### **15:10 Break**

### **Environmental Studies – Biogeochemistry on Sediments and Nodules**

15:40 N. Harms & N. Lahajnar (Universität Hamburg): INDEX-Area - Particle transport in an oligotrophic region

16:00 K. Schier: Sorption of germanium, gallium and antimony by marine iron and manganese (oxyhydr)oxides: first results

### **Beneficiation**

16:20 D. Friedmann & B. Friedrich (RWTH Aachen): Current and future research on the beneficiation and metallurgical processing of nodules and sulfides at RWTH Aachen

### **Geophysics**

16:40 K. Schwalenberg & H. Müller (BGR, Universität Bremen): The GOLDEN EYE CSEM profiler: Results from the INDEX 2015 cruise to the Edmond-Gauss-Score Field

17:00 K. Reeck & H. Müller (Universität Bremen): In-situ conductivities and magnetic properties of rock samples from the German licence areas

### **Discussion**