Workshop For The Establishment Of Environmental Baselines At Deep Seafloor Cobalt-Rich Crusts And Deep Seabed Polymetallic Sulphides Mine Sites In The Area, For The Purpose Of Evaluating The Likely Effects Of Exploration And Exploitation On The Marine Environment

6-10 September, 2004 Kingston, Jamaica

# AGENDA











INTERNATIONAL SEABED AUTHORITY WORKSHOP FOR THE ESTABLISHMENT OF ENVIRONMENTAL BASELINES AT DEEP SEAFLOOR COBALT-RICH CRUSTS AND DEEP SEABED POLYMETALLIC SULPHIDES MINE SITES IN THE AREA, FOR THE PURPOSE OF EVALUATING THE LIKELY EFFECTS OF EXPLORATION AND EXPLOITATION ON THE MARINE ENVIRONMENT

6 - 10 September 2004, Kingston, Jamaica.

## **AGENDA**

# Monday, 6 September 2004

09.00 - 10.00	REGISTRATION
10.00 - 10.30	Welcoming remarks  Ambassador Satya N. Nandan, Secretary-General, International Seabed  Authority
10.30 - 11.30	IMAX presentation on hydrothermal vents  Professor Peter Rona, Institute of Marine & CoastalSciences, Rutgers University, USA
11.30 - 12.00	COFFEE BREAK
	LEGAL AND ECONOMIC FRAMEWORK FOR POLYMETALLIC SULPHIDES AND COBALT-RICH FERROMANGANESE CRUSTS EXPLORATION & MINING IN THE AREA
12.00 - 13.00	Draft regulations for prospecting and exploration of polymetallic sulphides and cobalt-rich ferromanganese crusts produced by the LTC (ISBA/10/C/WP.1).  Mr. Albert Hoffman, Chairman, LTC
13.00 - 14.30	LUNCH
14.30 - 15.30	Proposed exploration and mining technologies for polymetallic sulphides.  Professor Steven Scott, Scotiabank Marine Geology Research Laboratory, Univ. of Toronto
15.30 – 16.00	COFFEE BREAK

16.00 – 17.00 Proposed exploration and mining technologies for cobalt-rich crusts.

Dr Rahul Sharma, National Institute of Oceanography, Dona Paula, Goa, India

## Tuesday, 7 September 2004

09.00 - 10.00

The physical environment of polymetallic sulphide deposits, the potential impact of exploration and mining on this environment, and data required to establish environmental baselines in exploration areas.

Dr Andreas Thurnherr, Lamont - Doherty Earth Observatory, Columbia University, New York, USA

10.00 - 11.00

The biological environment of polymetallic sulphide deposits, the potential impact of exploration and mining on this environment, and data required to establish environmental baselines in exploration areas.

Professor Cindy Lee Van Dover, College of William and Mary, Virginia, USA

#### 11.00 - 11.30 **COFFEE BREAK**

11.30 - 13.00

The Work of InterRidge and its potential relevance to the establishment of environmental baselines, including the voluntary code of conduct for scientific research at hydrothermal vents, and potential collaborations with the Authority.

Professor Colin Devey, InterRidge / Leubniz - Institut für Meereswissenschaften, IFM - GEOMAR, Germany

#### 13.00 - 14.30 **LUNCH**

14.30 - 15.30

ChEss, Biogeography of Chemosynthetic Ecosystems - The work of Census of Marine life and potential collaborations with the Authority.

Dr Lúcia de Siqueira Campos, Census of Marine Life / Universidade Federal do Rio de Janeiro, Brazil

#### 15.30 - 16.00 **COFFEE BREAK**

16.00 - 18.00

Other programmes of relevance to the establishment of baselines, to the development of appropriate databases and to an increased understanding of the natural variability of Polymetallic sulphides ecosystems.

Elva Escobar - Briones, Instituto de Ciencias del Mar Y Limnologia. Universidad Nacional Autonoma de Mexico

# Wednesday, 8 September 2004

09.00 - 10.00	The chemical environment of cobalt-rich ferromanganese crust deposits, the potential impact of exploration and mining on this environment, and data required to establish environmental baselines in the exploration areas.  Professor Huai-Yang Zhou, Second Institute of Oceanography, State Oceanic Administration, People's Republic of China
10.00 - 11.30	The biological environment of cobalt-rich ferromanganese crust deposits, the potential impact of exploration and mining on this environment, and data required to establish environmental baselines.  *Dr. J. Anthony Koslow, CSIRO Marine Research, Australia*
11.30 - 12.00	COFFEE BREAK
12.00 - 13.00	The proposed Census of marine Life seamounts project: towards a global baseline and synthesis of seamount community data - Its applicability in minimizing impacts from crusts mining and potential collaborations with the Authority.  **Dr Malcolm Clark*, CoML / National Institute of Water & Atmospheric Research*, New Zealand**
13.00 - 14.30	LUNCH
14.30 - 15.30	Other programmes of relevance to the establishment of baselines, to the development of appropriate databases and to an increased understanding of the natural variability of cobalt-rich ferromanganese crust ecosystems.  *Dr Tomohiko Fukushima, Ship and Ocean Foundation, Tokyo, Japan*
15.30 - 16.00	COFFEE BREAK
16.00 - 17.30	Hydrothermal vents and associated polymetallic sulphide deposits in the Area with a special emphasis on the chemical environment.  *Professor Peter Herzig, Leibniz-Institut für Meereswissenschaften, IFM-GEOMAR, Germany

### Thursday, 9 September 2004

09.00 - 10.00

The physical environment of cobalt-rich ferromanganese crust deposits, the potential impact of exploration and mining on this environment, and data required to establish environmental baselines.

Professor Aike Beckmann, Department of Physical Sciences, University of Helsinki, Finland

#### 10.00 - 11.00 Formation of Working Groups

During this part of the workshop, participants will be divided into three working groups. The subjects of the working groups will be:

 Guidelines for acquiring the physico-chemical environmental data required for establishing environmental baselines at polymetallic sulphides and cobalt-rich ferromanganese crust deposits, and the data collection requirements for a monitoring programme.

> Dr Andreas Thurnherr, Lamont-Doherty Earth Observatory, Columbia University, New York, USA

 Guidelines for acquiring biological data required for establishing environmental baselines at polymetallic sulphide deposits and the data collection requirements for a monitoring programme.

Professor Cindy Lee Van Dover, College of William and Mary, Virginia, USA

 Guidelines for acquiring biological data required for establishing environmental baselines at cobalt-rich ferromanganese crust deposits, and the data collection requirements for a monitoring programme.

Dr. J. Anthony Koslow, CSIRO Marine Research, Australia

11.00 - 11.15	COFFEE BREAK
11.15 - 13.30	"Working Group Deliberations"
13.30 - 14.30	LUNCH
14.30 - 16.45	"Working Group Deliberations"

16.45 - 17.00	COFFEE BREAK
17.00 - 18.00	Working Groups - Finalization of Recommendations

# Friday, 10 September 2004

	Workshop Recommendations
09.00 - 10.30	Presentations of Working Groups
10.30 - 11.00	COFFEE BREAK
11.00 - 11.30	Finalization of guidelines, recommendation on research, collaboration and other matters.
13.00 - 14.30	LUNCH
14.30 - 16.00	Workshop Recommendations
16.00	Closing Remarks