



**The First Training Workshop of
ISA - China Joint Training and Research Center
Mineral resources, environmental management and data**

24-26 May 2022

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| DAY 1 | Tuesday, 24 May 2022: Opening Ceremony <i>Chair: Mr. Wu Changbin, Director-General of China Deep Ocean Affairs Administration</i> <i>Opening remarks</i> | |
| 6:30-6:35pm ¹ | Ms. Gu Wu, Director of the JTRC | live |
| 6:35-6:40pm | Mr. Pan Xinchun, Vice President and Secretary-General of China Oceanic Development Foundation | live |
| 6:40-6:45pm | H.E. Mr. Michael Lodge, Secretary-General of the ISA | video |
| 6:45-6:50pm | Mr. Wang Hong, Vice Minister of Ministry of Natural Resources, P.R.C, Administer of State Oceanic Administration | video |
| 6:50-7:00pm | Break | |
| MODULE I | Survey and Assessment of Mineral Resources in the Area <i>Chair: Mr. Liu Feng, Chair of the JTRC Steering Committee</i> | |
| Session 1 7:00-7:25pm | <u>Lecture 1: Overview, distribution characteristics and the status quo of the exploration work of mineral resources in the Area</u> Lecturer: Georgy Cherkashov (Member of LTC, ISA; Member of Steering Committee of JTRC) | live |
| Group discussion 7:25-7:50pm | Group 1 (facilitator: Du Xinguang, China Ship Scientific Research Center) Group 2 (facilitator: Shen Honglei, China University of Mining and Technology) Group 3 (facilitator: Filipa Marques, Chief Research Officer, International Sharing University) | |
| 7:50-8:10pm | Break | |

¹ Time zone: Beijing, China (GMT+8)

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| Session 2 8:10-8:35pm | <u>Lecture 2: Assessment methodologies and investigation techniques of three types of mineral resources (PMN, PMS and CFC) in the Area</u> Lecturer: Tao Chunhui (Professor of Second Institute of Oceanography, Ministry of Natural Resources of China) | live |
| Group discussion 8:35-9:00pm | Group 1 (facilitator: Du Xinguang, China Ship Scientific Research Center) Group 2 (facilitator: Shen Honglei, China University of Mining and Technology) Group 3 (facilitator: Ren Xiangwen, First Institute of Oceanography, Ministry of Natural Resources of China) | |
| 9:00-9:20pm | Break | |
| Session 3 9:20-9:45pm | <u>Lecture 3: Status quo and development of mining technology for mineral resources in the Area</u> Lecturer: Li Xiangyang (Professor of China Ocean Mineral Resources R & D Association) | live |
| Group discussion 9:45-10:10pm | Group 1 (facilitator: Du Xinguang, China Ship Scientific Research Center) Group 2 (facilitator: Shen Honglei, China University of Mining and Technology) Group 3 (facilitator: Ren Xiangwen, First Institute of Oceanography, Ministry of Natural Resources of China) | |
| 10:10-10:15pm | Module closing remarks: <i>Mr. Liu Feng, Chair of the JTRC Steering Committee</i> | live |
| DAY 2 | Wednesday, 25 May 2022 <i>Chair: Qian Peiyuan, Professor of Hong Kong University of Science and Technology</i> | |
| MODULE II | Characteristics of Deep Sea Ecosystems and Environmental Management | |
| Session 1 6:30-6:55pm | <u>Lecture 1: Scientific knowledge on deep sea ecosystems and habitats in the Area</u> Lecturer: Malcolm Clark, Member of LTC, ISA | live |
| Group discussion 6:55-7:20pm | Group 1 (facilitator: Sun Jin, Ocean University of China) Group 2 (facilitator: Lan Yi, Hong Kong University of Science and Technology) Group 3 (facilitator: Liu Qian, Second Institute of Oceanography, Ministry of Natural Resources of China) | |
| 7:20-7:40pm | Break | |

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| Session 2 7:40-8:05pm | <u>Lecture 2: Protection of the marine environment in the Area through regional environmental management planning and impact assessments</u> Lecturer: Malcolm Clark, Member of LTC, ISA | live |
| Group discussion 8:05-8:30pm | Group 1 (facilitator: Sun Jin, Ocean University of China) Group 2 (facilitator: Lan Yi, Hong Kong University of Science and Technology) Group 3 (facilitator: Liu Qian, Second Institute of Oceanography, Ministry of Natural Resources of China) | |
| 8:30-8:50 | Break | |
| Session 3 8:50-9:15pm | <u>Lecture 3: Marine scientific research to enhance knowledge on deep-sea biodiversity</u> Lecturer: Qian Peiyuan, Professor of Hong Kong University of Science and Technology | live |
| Group discussion 9:15-9:40pm | Group 1 (facilitator: Sun Jin, Ocean University of China) Group 2 (facilitator: Lan Yi, Hong Kong University of Science and Technology) Group 3 (facilitator: Liu Qian, Second Institute of Oceanography, Ministry of Natural Resources of China) | |
| 9:40-9:45pm | Module closing remarks: <i>Qian Peiyuan, Professor of Hong Kong University of Science and Technology</i> | live |
| DAY 3 | Thursday, 26 May 2022 <i>Chair: Shi Xianpeng, National Deep Sea Center of China</i> | |
| MODULE III | Global Repository of Data from Exploration Activities in the Area | |
| Session 1 6:30-6:55pm | <u>Lecture 1: Structure and functionalities of DeepData</u> Lecturer: Sheldon Carter, Database Manager, ISA | live |
| Group discussion 6:55-7:20pm | Group 1 (facilitator: Liu Ying, China Ocean Mineral Resources R & D Association) Group 2 (facilitator: Zheng Hao, Changsha Research Institute of Mining and Metallurgy, China Minmetals Corporation) Group 3 (facilitator: Sun Miao, National Marine Data and Information Service of China) | |
| 7:20-7:40pm | Break | |
| Session 2 7:40-8:05pm | <u>Lecture 2: Reporting templates and database management strategy of DeepData</u> Lecturer: Ulrich Schwarz-Schampera, Programme Manager for Mining Geology, ISA and Sheldon Carter, Database | live |

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| | Manager, ISA | |
| Group discussion 8:05-8:30pm | Group 1 (facilitator: Liu Ying, China Ocean Mineral Resources R & D Association) Group 2 (facilitator: Zheng Hao, Changsha Research Institute of Mining and Metallurgy, China Minmetals Corporation) Group 3 (facilitator: Sun Miao, National Marine Data and Information Service of China) | |
| 8:30-8:50 | Break | |
| Session 3 8:50-9:15pm | <u>Lecture 3: Case study of data management of survey activities in the Area</u> Lecturer: Han Chunhua, (National Marine Data and Information Service of China) | |
| Group discussion 9:15-9:40pm | Group 1 (facilitator: Liu Ying, China Ocean Mineral Resources R & D Association) Group 2 (facilitator: Zheng Hao, Changsha Research Institute of Mining and Metallurgy, China Minmetals Corporation) Group 3 (facilitator: Sun Miao, National Marine Data and Information Service of China) | live |
| 9:40-9:45 | Module closing remarks: <i>Shi Xianpeng, National Deep Sea Center of China</i> | live |
| 9:45-9:50 | Workshop closing remarks: <i>Dr. Marie Bourrel-McKinnon, Senior Policy Officer & Special Assistant to the Secretary-General of the ISA</i> | live |