3 - 4 February 2024

Fifth Sino-Africa Forum on Marine Science and Technology

Agenda

Saturday, 3 Feb. 2024 09h30-17h30 DAY1
09h30-12h20: OPENING SESSION
Moderator: **Dr. Suzan El Gharabawy**
Welcome remarks:(09h30-10h30) **About 7-10 officers** • **Prof. Amr Hamouda** – President of NIOF - Egypt • **Prof. Prof. AFFIAN Kouadio**, Chair of IOC Africa- Côte d'Ivoire • **Dr. Nuria Sanz** – Director of UNESCO Regional Bureau for Science in the Arab States • **Dr. Bisher Imam -** Senior Programme Specialist, Regional Bureau for Science for the Arab States UNESCO – Egypt • **Mr. Liao Liqiang**, Ambassador of the People's Republic of China in the Arab Republic of Egypt • **Mr. Razananirina Henri Delice**, General Secretary of the Minister of Mines and Strategic Resources, the Republic of Madagascar • **H.E. Khalid Shoeib** – Governor of Matrouh • **H.E. Mohamed El-Sherief** – Governor of Alexandria. • **H.E. Mr. Sun Shuxian** - Vice Minister of the Ministry of Natural Resources – China. • **H.E. Prof. Mohamed Ayman Ashour** – Minister of Higher Education and Scientific research – Egypt
Cooperation Statement: (10h30-10h35)
10h35-10h40 Group Photo
10h40-11h00 Health Break

11h00-12h00: Keynote Presentations for the Forum
4 keynote presentations :
Prof. Qiao Fangli , First Institute of Oceanography (FIO), Ministry of Natural Resources (MNR)
by Prof. Li Jiabiao, Academician of Chinese Academy of Engineering, China, ***UN Ocean Decade Program: Digital DEPTH***

Prof. Prof. AFFIAN Kouadio, Chair of IOC Africa- Côte d'Ivoire
Prof. Amr Hamouda – President of NIOF – Egypt – **African Future of Ocean Decade**

12h00-12h20: Questions

15h30-18h00: PARALLEL SESSION ONE: MARINE GEOLOGICAL HAZARDS AND DYNAMIC DISASTER PREVENTION AND MITIGATION

Objective: Understanding Marine Geological Hazards: Provide a comprehensive overview of various marine geological hazards, including tsunamis, underwater landslides, and volcanic activities, to enhance participants' understanding of the diverse threats. Risk Assessment and Early Warning Systems: Discuss methodologies for risk assessment and the development of robust early warning systems, integrating geological data and technological advancements to enhance the timely prediction of marine geological hazards. Coastal Vulnerability and Resilience: Examine the vulnerability of coastal areas to marine geological hazards and propose strategies to enhance coastal resilience, including sustainable land-use planning, infrastructure design, and community preparedness. Innovative Technologies: Explore the latest technological advancements, such as remote sensing, artificial intelligence, and real-time monitoring, and their application in improving early detection and response capabilities for marine geological hazards. Networking and Collaboration: Facilitate networking opportunities among participants, encouraging the exchange of knowledge, experiences, and expertise to foster collaborative efforts in the field of marine geological hazard prevention and mitigation.

Moderator: **CHINA**

15h30-15h50: Keynote presentation
Smart Observation of Dynamic and Ecological Disaster and 3D Modeling for the Coastal Ocean by Prof. Chen Jianfang from the Second Institute of Oceanography, Ministry of Natural Resources of China.

15h50-16h35: Two Presentations
Africa : ***MARINE GEOLOGICAL HAZARDS along Bennin*** *by* Prof. Zacharie Sohou, Directeur de l'Institut de Recherches Halieutiques et Océanologiques du Bénin/Centre National de Données

Egypt : ***Delta Hazards Situation as a case study of Egyptian Coast*** by Dr. Mohamed Salah - Geophysics Laboratory – National Institute of Oceanography & Fisheries- Alexandria

16h35-16h55 Health Break

16h55-17h40: Two Presentations
Vulnerability Investigation and Hazard Assessment of Mega-deltas: the Huanghe (Yellow River) Delta Example by Prof. Qiao Shuqing from the First Institute of Oceanography, Ministry of Natural Resources of China.

Research progress on marine heatwaves and their impacts in the coastal China sea by Prof. Cai Rongshuo from the third Institute of Oceanography, Ministry of Natural Resources of China.

Africa : ***MARINE GEOLOGICAL HAZARDS AND DYNAMIC DISASTER PREVENTION AND MITIGATION along Tanzania*** *by* Prof. Zakaria Khamis, Zanzibar Fisheries and Marine Resources Research Institute

17h40-18:00 Questions

15h30-17h30: PARALLEL SESSION TWO: MARINE ECOLOGICAL DISASTER AND RESTORATION

Objective: Comprehensive Understanding of Marine Ecological Disasters: Provide participants with a thorough understanding of various marine ecological disasters, including oil spills, coral bleaching, and habitat destruction, to build awareness about the environmental challenges faced by marine ecosystems. Ecological Impacts Assessment: Discuss methodologies for assessing the ecological impacts of marine disasters, emphasizing the importance of accurate and comprehensive assessments to guide effective restoration efforts. Collaborative Approaches: Highlight the significance of collaborative approaches involving scientists, policymakers, environmental organizations, and local communities in developing and implementing effective restoration plans for marine ecosystems. Monitoring and Adaptive Management: Address the need for continuous monitoring of restored ecosystems and the implementation of adaptive management strategies to respond to changing environmental conditions and emerging challenges. Long-Term Sustainability: Focus on the integration of sustainability principles in marine ecological restoration, considering the long-term health and resilience of ecosystems, and promoting practices that prevent future disasters.

Moderator: **Egypt**

15h30-15h50: Keynote presentation
Egypt: Marine Pollution: Sources and Restoration by Prof. Abeer Mounir – Marine Environment Division – National Institute of Oceanography & Fisheries - Alexandria

15h50-16h35: Two Presentations
Satellite remote sensing technology and marine ecological restoration by Prof. Zou Yarong from National

Satellite Ocean Application Service, China.

Coral Reef Rehabilitation in the Red Sea by Dr. Huessin Nasr Mohamed - National Institute of Oceanography & Fisheries .

16h35-16h55 Health Break

16h55-17h40: Two Presentations
Monitoring and early warning of marine ecological disasters based on bio-ecological study —Take the cooling water and warm drainage of the coastal power plants as an example Africa by Prof. Zeng Jiangning from the Second Institute of Oceanography, Ministry of Natural Resources of China.

Building China-Africa Blue Partnership by Dr. Li Shuangjian from National Marine Data and Information Service, China.

17h40-18:00 Questions

Sunday, 4 Feb. 2024 09h30-12h00 DAY2

09h30-12h00: SESSION THREE: MARINE PREDICTION AND CAPACITY BUILDING

Objective: Advancing Understanding of Marine Predictive Sciences: Foster a deep understanding of the various predictive sciences relevant to marine environments, including oceanography, meteorology, and climate science, to lay the foundation for effective prediction and early warning systems. Integrated Approach to Marine Security: Explore the integration of marine prediction and early warning systems into a comprehensive approach for enhancing maritime security, encompassing threats such as extreme weather events, piracy, and illegal fishing. Innovations in Predictive Technologies: Showcase the latest advancements in predictive technologies, such as satellite monitoring, sensor networks, and modeling techniques, that contribute to the development of accurate and timely marine prediction systems. Collaborative Data Sharing: Emphasize the importance of collaborative data sharing among nations, research institutions, and maritime organizations to improve the accuracy and reliability of marine predictions and early warnings. Risk Mitigation Strategies: Discuss strategies for utilizing predictive information to develop proactive risk mitigation plans, safeguarding maritime assets, coastal communities, and ecosystems against potential threats. Sustainability and Environmental Monitoring: Highlight the role of marine prediction in promoting sustainability by monitoring and addressing environmental changes, including sea-level rise, ocean acidification, and other factors affecting marine ecosystems. Emergency Response Preparedness: Address the integration of marine prediction systems into emergency response preparedness, enabling timely and effective responses to marine-related disasters such as storms, oil spills, and tsunamis.

***Moderator:* CHINA**
09h30-09h50: Keynote presentation ***Research on Capacity Building of Marine Scientific Research Ships under Disaster Prevention and Reduction*** by Prof. Zhu Yongling from the Second Institute of Oceanography, Ministry of Natural Resources of China.
09h50-10h35: Two Presentations **Egypt: GOOS Programme along African Coast** by Prof. Suzan Mohamed El Gharabawy- Head of Geophysics Laboratory- National Institute of Oceanography & Fisheries – Alexandria **Africa : MARINE SECURITY, SUSTAINABILITY AND CAPACITY BUILDING along Africa** by Prof. AFFIAN Kouadio, Chair of IOC Africa- Côte d'Ivoire
10h35-10h55 Health Break
10h55-11h40: Three Presentations ***Mazu'Ocean Numerical Models and its application prospects in China-Africa marine science and technology cooperation*** by Prof. Gao Zhiyi from National Marine Environmental Forecasting Center, China. ***Recently Ocean and Climate Observation Activities over the western Indian Ocean*** by Yang Yang from the First Institute of Oceanography, Ministry of Natural Resources of China. ***Potential and prospect of applying China-Africa Marine literacy cooperation to disaster prevention and reduction*** by Prof. Sun Qiuci from the Second Institute of Oceanography, Ministry of Natural Resources of China.
11h40-12h00: Questions
09h30-12h00: SESSION FOUR: COOPERATION PROPOSAL WITHIN THE FRAMEWORK OF CAMC
Objective: Understanding the Importance of Capacity Building: Convey the significance of capacity building in the context of marine disaster prevention and mitigation, emphasizing its role in strengthening the resilience of coastal communities and institutions. Assessment of Current Capacities: Conduct an assessment of existing capacities at various levels, including local communities, governmental agencies, and non-governmental organizations, to identify strengths and areas that require enhancement. Empowering Local Communities: Discuss strategies for empowering local communities through knowledge transfer, training programs, and community engagement, enabling them to actively participate in disaster prevention and mitigation efforts. Technical Skills Development: Focus on the development of technical skills among professionals involved in marine disaster management, including geologists, emergency responders, and environmental scientists, to enhance their effectiveness in crisis situations. Application of Advanced Technologies: Introduce and train participants in the use of advanced technologies, such as satellite imagery, GIS (Geographic Information System),

and real-time monitoring systems, to improve early detection and response capabilities. International Collaboration: Encourage collaboration and knowledge exchange on a global scale, emphasizing the importance of international cooperation in capacity building for marine disaster prevention and mitigation.
Moderator: **EGYPT**
09h30-09h50: Keynote presentation **Egypt : Blue Economy along African Coast** by Prof. Amr Zakaria Hamouda – the President of National Institute of Oceanography & Fisheries- Egypt
09h50-10h35: one Presentation ***Monitoring and Prediction System for Marine Ecosystem Disasters in the Red Sea*** by Prof. Wang Yuntao from the Second Institute of Oceanography, Ministry of Natural Resources of China
10h35-10h55 Health Break
10h55-11h40: Three Presentations ***The Proposal of China- Africa Marine Spatial Planning Cooperation Project under Ocean Decade*** by Teng Xin from National Ocean Technology Center of China. ***The geotectonic characteristics of NE Africa continental margin and its risk to earthquakes and tsunamis*** by Prof. Yu Xing from the Second Institute of Oceanography, Ministry of Natural Resources of China **International**
11h40-12h00: Questions
12h00-12h20: CLOSING SESSION
12h00-12h10: Closing remarks
12h10-12h20: Action Plan