

53rd CCOP Annual Session

Thematic Session

“The Role of Geoscience in Safeguarding our Environment”

Waterfront Cebu City Hotel, Cebu City, Philippines

October 17-18, 2017

PROGRAMME

<p>PLENARY SESSION Opening Programme Arctic 1 and 2, Waterfront Cebu City Hotel October 17, 2017, 1:00pm-2:20pm</p> <p>Moderator: Ms. Lilian A. Rollan <i>Chief Geologist</i> Lands Geological Survey Division Mines and Geosciences Bureau Department of Environment and natural Resources Philippines</p>		
1:00pm-1:30pm	Registration	
1:30pm-1:40pm	Opening Address	Atty. Wilfredo G. Moncano <i>Director, Mines and Geosciences Bureau and Permanent Representative of the Philippines to CCOP</i>
1:40pm-1:50pm	Message	Dr. Adichat Surinkum <i>Director, CCOP Technical Secretariat</i>
1:50pm-2:20pm	Keynote Address: Sustainability in the Mining Sector: Geoscientific Contributions to Global Challenges	Dr. Ralph Martin Friedrich Watzel <i>President, Bundesanstalt für Geowissenschaften und Rohstoffe (BGR, Germany)</i>
2:20pm-2:30pm	Breakout	
<p>THEMATIC SESSION 1 Mineral and Energy Resource Development and Environmental Protection Arctic 1 and 2, Waterfront Cebu City Hotel October 17, 2017, 2:30pm-5:30pm</p> <p>Chairperson: Dr. Adichat Surinkum <i>Director</i> CCOP Technical Secretariat</p> <p>Co-Chairperson: Mr. Edwin G. Domingo <i>Director</i> Foreign Assisted and Special Projects Office Department of Environment and Natural Resources Philippines</p>		
2:30pm-2:40pm	Introduction of the Session	
2:40pm-3:00pm	A Showcase of Progressive Rehabilitation of Mined-out Areas: The Philippine Experience	Rodolfo L. Velasco, Jr. <i>Philippines</i>
3:00pm-3:20pm	Quaternion Model for Sustainable Exploration and Development of Mines	Shu Siqui , Zhang Hongtao, Pei Rongfu, Xiang Junfeng and Sun Zhangtao <i>People's Republic of China</i>
3:20pm-3:50pm	Poster Session and Coffee Break	
3:50pm-4:10pm	Artisanal and Small-scale Gold Mining and its Mercury Flows	Masaaki Fuse and Satoshi Murao <i>Japan</i>
4:10pm-4:30pm	Geochemical Interactions of Arsenic with Mackinawite under Changing Redox Conditions	Young-Soo Han , Ji-Hyun Park, Joo Sung Ahn and Dong-Hee Lim <i>Republic of Korea</i>
4:30pm-4:50pm	Miocene Clastic and Carbonate Plays in Southwest Palawan – Exciting Exploration Opportunities and Why They Will Be Important for the Philippines	Raymundo B. Savella <i>Philippines</i>
4:50pm-5:10pm	Biogenic Gas as an Alternative Energy for Remote Areas of Indonesia	Hananto Kurnio <i>Indonesia</i>

5:10pm-5:30pm	The Ancient Marine Environment and its Petroleum Significance in Beijing-Tianjing Area, China	Yinye Wu , Jianzhong Li, Jialei Lyu, Xiang Fang, Zhi Yang and Kun Liang <i>People's Republic of China</i>
THEMATIC SESSION 1 (Continuation) Mineral and Energy Resource Development and Environmental Protection Arctic 1 and 2, Waterfront Cebu City Hotel October 18, 2017, 8:00am-10:20am Chairperson: Mr. Simplicio Caluyong <i>CCS-M Project Coordinator</i> <i>CCOP Technical Secretariat</i> Co-Chairperson: Mr. Ismael Ocampo <i>Assistant Director</i> <i>Energy Resource Development Bureau</i> <i>Department of Energy</i> <i>Philippines</i>		
8:00am-8:20am	Multilateral Environmental Agreements: Boost or Blow to Mineral Resource Development?	Jonas R. Leones, Antonia Corinthia Naz and Likha Alcantara <i>Philippines</i>
8:20am-8:40am	Environmental Conservation in Consideration of Regional Characteristics in Open-pit Coal Mine in Southeast Asia	Shinji Matsumoto , Hideki Shimada, Takashi Sasaoka, and Ginting Jalu Kusuma <i>Japan</i>
8:40am-9:00am	Environmental Impact of the Nido and Matinloc Oil Platforms Offshore Northwest Palawan	Gaea Marie B. Rosell , Karla Valdellon and Lara Mambuary <i>Philippines</i>
9:00am-9:20am	Gas Hydrate Distribution in Indonesia: Between the Future Energy and Global Warming Catastrophic Potentials	Panuju , Egie Wijaksono, Ginanjar Rahmat and Ongki Ari Prayoga <i>Indonesia</i>
9:20am-9:40am	Right Choice, Optimal Design, and Long-term Performance Monitoring of Geothermal Heat Pump Systems	Seong-Kyun Kim and Youngmin Lee <i>Republic of Korea</i>
9:40am-10:00am	Sinopec's CO ₂ - EOR Application in Yaoyingtai Oilfield and Its Significance of Low- Carbon Economy	Haiying Liao , Chengyuan Lv, Shuxia Zha, Rui Wang, Yingfu He and Yinbang Zhou <i>People's Republic of China</i>
10:00am-10:20am	Biogenic Gas Potential in Nias Basin Offshore West Sumatra	Egie Wijaksono and Panuju <i>Indonesia</i>
THEMATIC SESSION 2 Geohazard Risk Reduction Caspian Room, Waterfront Cebu City Hotel October 17, 2017, 2:30pm-4:50pm Chairperson: Dr. Kamaludin Bin Hassan <i>Regional Expert</i> <i>CCOP Technical Secretariat</i> Co-Chairperson: Ms. Liza Socorro J. Manzano <i>Supervising Science Research Specialist</i> <i>Mines and Geosciences Bureau</i> <i>Department of Environment and Natural Resources</i> <i>Philippines</i>		
2:30pm-2:40pm	Introduction of the Session	
2:40pm-3:00pm	Coastal Geo-hazard Reduction: Practical Examples in China	Ping Yin <i>People's Republic of China</i>
3:00pm-3:20pm	3D Geological Map of Coastal Urban Area	Masahiko Makino , Tsutomu Nakazawa and Susumu Nonogaki <i>Japan</i>
3:20pm-3:50pm	Poster Session and Coffee Break	
3:50pm-4:10pm	Geohazards: The Role of Citizen Science and Mobile Technologies in Risk and Recovery	Martin Smith <i>United Kingdom</i>
4:10pm-4:30pm	Assessment of High-resolution LiDAR-DEMs and Soil Strength on Shallow Landslide Instability Mapping	MinSeok Kim <i>Republic of Korea</i>
4:30pm-4:50pm	Channelized Debris Flow in Baco, Oriental Mindoro, Philippines	Maneka Kristia B. Alemania , Arnold A Villanueva, Francis Jay F. Escal, Jan Albert Macario B. Galang and Edwin M. Mojares <i>Philippines</i>

THEMATIC SESSION 2 (Continuation)
Geohazard Risk Reduction
 Caspian Room, Waterfront Cebu City Hotel
 October 18, 2017, 8:00am-12:00nn

Chairperson:

Dr. Kamaludin Bin Hassan
Regional Expert
CCOP Technical Secretariat

Co-Chairperson:

Ms. Liza Socorro J. Manzano
Supervising Science Research Specialist
Mines and Geosciences Bureau
Department of Environment and Natural Resources
Philippines

8:00am-8:20am	Characteristics of the 2016 Kumamoto Earthquake and Some Comparisons with Historic Earthquakes in Japan	Eikichi Tsukuda <i>Japan</i>
8:20am-8:40am	Seismotectonic, Active Fault and Microzonation Surveys for Potential Earthquake Hazard and Risk Assessment in West Sumatera Province, Indonesia	A. Soehaimi <i>Indonesia</i>
8:40am-9:00am	Coulomb Stress Transfer Modelling of Intra-plate Earthquakes in the Visayas in the Last Five Years: Implications to Earthquake Hazard Assessment of Seemingly Seismically Quiet Regions	Mario A. Aurelio and John Agustin P. Escudero <i>Philippines</i>
9:00am-9:20am	Near Real-time Monitoring of Volcano Deformation Using GPS	Kang Hyeun Ji <i>Republic of Korea</i>
9:20am-9:40am	Asia-Pacific Region Earthquake and Volcanic Hazards Mapping Project and G-EVER Volcanic Hazard Assessment Support System	Shinji Takarada , Joel Bandibasand G-EVER Promotion Team <i>Japan</i>
9:40am-10:00am	The Effects of Land Cover/Land Use on Flashflood: A Case Study of Marikina River Basin, Philippines	Beverly Mae Brebante <i>Philippines</i>
10:00am-10:20am	Full-scale GPR Experiments on Simulated Cavity Detection	Changryol Kim <i>Republic of Korea</i>
10:20am-10:40am	Subsidence Due to Pseudokarst Piping in Barangay Virac, Itogon, Benguet, Philippines	Liza Socorro J. Manzano, Kevin L. Garas, Ross Dominic D. Agot, April C. Ondona , Abraham R. Gatdula and Mel Anthony A. Casulla <i>Philippines</i>
10:40am-11:00am	A Case Study on Geological and Geophysical Investigation of Sinkholes for Geohazard Risk Reduction in Kanchanaburi Province, Thailand	Dhiti Tulyatid , Aphidet Jindaudomsak and Tanad Soisa <i>Thailand</i>
11:00am-11:20am	Subsidence Susceptibility Assessment: The Case of Mabini, Bohol, Philippines	Lawrence R. Zamoras , Kristalyn B. Jarical, Ollyn T. Balignot, Jordan B. Gahisan and Danilo De Guzman <i>Philippines</i>
11:20am-11:40am	Application of Ground Penetrating Radar and Georesistivity Equipment in Geohazard Assessment of a Resettlement Site in Lupang Arenda, Barangay Sta. Ana, Taytay, Rizal, Philippines	Liza Socorro J. Manzano, Lilian A. Rollan, Perlito A. Angeles, Kevin L. Garas, Ross Dominic D. Agot , Abraham R. Gatdula, Mel Anthony A. Casulla, April C. Ondona, Julius Vincent Umali and Catherine F. Rivas <i>Philippines</i>
11:40am-12:00nn	The Case of a Recurring Ten-year Mass Movement in Barangay Sirao, Cebu City, Philippines	Liza Socorro Manzano, Ross Dominic D. Agot, Madonna Feliz B. Madrigal and Catherine F. Rivas <i>Philippines</i>
12:00nn-1:00pm	Lunch	

THEMATIC SESSION 3
Geoscience Information Management
 Arctic 1 and 2, Waterfront Cebu City Hotel
 October 18, 2017, 10:20am-11:50am

Chairperson:
Dr. Adichat Surinkum
Director
CCOP Technical Secretariat

Co-Chairperson:
Mr. Antonio N. Apostol, Jr.
Supervising Geologist
Lands Geological Information Management Section
Lands Geological Survey Division
Mines and Geosciences Bureau
Department of Environment and Natural Resources
Philippines

10:20am-10:30am	Introduction of the Session	
10:30am-10:50am	CCOP Geoinformation Sharing Infrastructure for East and Southeast Asia	Joel Bandibas and Shinji Takarada <i>(Japan)</i>
10:50am-11:10am	Spatial Data Infrastructure (SDI) for a Wide-Array of Mobile and Web-based Hazard and Natural Resources Information System Applications	Joel Bandibas <i>Japan</i>
11:10am-11:30am	Outline of the CCOP-ASEAN Harmonized Geological Map (1:1,000,000) Project	Yutaka Takahashi , Yasukuni Okubo, Tetsuji Ohno, Joel Bandibas and Sompob Wongsomsak <i>Japan</i>
11:30am-11:50am	China National Geosciences Database and Geo-Cloud for Society	Zhang Minghua , Liu Rongmei, Miao Jinli and Yu Menglian <i>China</i>
12:00nn-1:00pm	Lunch	

THEMATIC SESSION 4
Groundwater Resource Development and Environmental Protection
 Arctic 1 and 2, Waterfront Cebu City Hotel
 October 18, 2017, 1:00pm-2:50pm

Chairperson:
Dr. Rien Dam
Waterland Experts

Co-Chairperson:
Dr. Sevilleo D. David, Jr.
Executive Director
National Water Resources Board
Department of Environment and Natural Resources
Philippines

1:00pm-1:10pm	Introduction of the Session	
1:10pm-1:30pm	Groundwater Resources in GMS: Regional Collaboration to Achieve Sustainable Development	Eunhee Lee <i>Thailand</i>
1:30pm-1:50pm	Towards Higher Adaptive Capacity in Urban Water Management	Philipp Schmidt-Thomé <i>Finland</i>
1:50pm-2:10pm	Safeguarding Groundwater Resources in Thailand	Jittrakorn Suwanlert and Mahippong Worakul <i>Thailand</i>
2:10pm-2:30pm	Coastal Deep Groundwater Research on Japanese Radioactive Waste Depository Program	Atsunao Marui <i>Japan</i>
2:30pm-2:50pm	Aquifer Characterization Utilizing Geo-electrical Sounding in Southwestern Bohol, Philippines	Mel Anthony A. Casulla , Aniano D. Torres, Lilian A. Rollan and Princess Danielle B. Matas <i>Philippines</i>

THEMATIC SESSION 5**Geoheritage**

Aegean Room, Waterfront Cebu City Hotel
 October 17, 2017, 2:30pm-4:30pm

Chairperson:

Dr. Dhiti Tulyatid

*Lecturer and Acting Head, Geoscience Division
 Mahidol University, Kanchanaburi Campus, Thailand
 CCOP Technical Secretariat Editor*

Co-Chairperson:

Dr. Yolanda M. Aguilar

*Supervising Geologist and OIC-Chief
 Marine Geological Survey Division
 Mines and Geosciences Bureau
 Department of Environment and Natural Resources
 Philippines*

2:30pm-2:40pm	Introduction of the Session	
2:40pm-3:00pm	The Inventory of Preliminary Geological Sites Assessment in Myanmar	Myint Soe , Naw Diana, Zaw Win Lwin and Ye Myint Swe <i>Myanmar</i>
3:00pm-3:20pm	Masungi Karst as a Central Point of Geological Interest for a Geopark in Rizal Province, Philippines	Rolando E. Peña and Ann Adeline Dumaliang <i>Philippines</i>
3:20pm-3:50pm	Poster Session and Coffee Break	
3:50pm-4:10pm	Seismic imaging of the crust and upper mantle structures with seismic ambient noise	Wang Liaoliang , Li Zhiwei, Zhao Jianzhong and Tu Guanghong <i>China</i>
4:10pm-4:30pm	Diel variations of electrical conductivity and calcite precipitation in Chaotian River, Guilin, China	Cheng Zhang , Jinliang Wang and Qiong Xiao <i>China</i>

**CCOP-IUGS TASK GROUP ON GEOHAZARDS
 JOINT SEMINAR**

Caspian Room, Waterfront Cebu City Hotel
 October 18, 2017, 1:00pm-3:10pm

Chairperson:

Dr. Yakusuni Okubo

*Technical Counsellor
 Japan Space Systems
 Japan*

1:00pm-1:10pm	Introduction of the Joint Seminar	
1:10pm-1:25pm	Earthquake (Mw 6.8) on 24th March 2011 Caused by "International Active Fault" Extending in Myanmar, Laos and China	Yakusuni Okubo , Myint Soe, Masaru Fujita and Kazuyo Hirose <i>Japan</i>
1:25pm-1:40pm	Overview of Philippine Geohazards Programs	Renato U. Solidum, Jr. <i>Philippines</i>
1:40pm-1:55pm	The Greening of Slopes—Public Works Department of Malaysia (JKR) Experiences towards Sustainable Development	Nicholas Jacob <i>Malaysia</i>
1:55pm-2:10pm	Importance of Geologic Evidence to Keep Memories of Tsunami Disasters	Kazuhisa Goto and Fumihiko Imamura <i>Japan</i>
2:10pm-2:25pm	Basic Research and Development Plan for Korean Active Faults Map	Young-Seog Kim and Jai Bok Kyung
2:25pm-2:40pm	Geo-hazards Learning Centre: The New Scheme to Integrate Technical Knowledge with Local Wisdom for Creating Geo-hazards Mitigation Network and Resilience Community	Somsak Wathanaprida , Tippawan Suthisuk and Charuwan Netpab <i>Thailand</i>
2:40pm-2:55pm	Information Dissemination Strategies Utilizing Geohazard Maps for Community-based Disaster Risk Reduction and Management	Liza Socorro J. Manzano, Lilian A. Rollan, Ranajae N. de Lara and Ross Dominic D. Agot <i>Philippines</i>
2:55pm-3:10pm	Geohazard Information: An Indispensable Tool for Land Use Planning and Disaster Risk Resiliency Implementation	Leo Van V. Juguan <i>Philippines</i>