55th CCOP Annual Session: Thematic Session
“Geoscience for Sustainable Development”
Kantary Hills Hotel, Chiang Mai, Thailand
5-6 November 2019, 13:30-18:30 & 08:30-12:10

THEMATIC SESSION: Sub-Theme I: Geo-Resources for the Society
2nd Floor Meeting Room Doi Luang, Kantary Hills Hotel, Chiang Mai, 5 November 2019, 13:30-18:30

Chairperson: Dr. Toshihiro Uchida
Position: Leader, International Coordination Group
Affiliation: Geological Survey of Japan, AIST

Co-Chairperson: Dr. Apsorn Sardsud
Position: Director of Division of Mineral Resources Analysis and Identification
Affiliation: Department of Mineral Resources

13:30-13:50
The Volcanic Facies and their Reservoirs Characteristics in Eastern China Basins
Chunshuang Jin, Dewu Qiao & Wenli Pan
People's Republic of China

13:50-14:10
Early-mid Eocene climate in west China and its response to the global climate-Insight of the continental record from Aeolian deposit
Jianxing Li, Feng Pan, Y. Xu & Qingsong Liu
People's Republic of China

14:10-14:30
Pyroclastic rocks in the mapped Silurian-D Devonian unit, Kanchanaburi Province, Thailand
Suwijai Jatupohnkhongchai, Sirot Salyapongse & Burapha Phajuy
Thailand

14:30-14:50
The 3D crust and upper mantle velocity model of South China Sea and surrounding region
Liaoliang Wang, Haopeng Chen, Zhiwei Li, Feng Bao & Guanghong Tu
People's Republic of China

14:50-15:10
Discovered brackish gastropods in Northern Thailand : Indicator of middle Miocene marine incursion and their effects on fossil fuel quality
Benjavun Ratanasthien, Yupa Thasod & Pankan Pemsuk
Thailand

15:10-15:30
Poster Session and Coffee Break

15:30-15:50
Non-targeted HNMR profiling: A novel methodology for multiple-approaches to characteristic analysis of crude oil
Kenta Asahina & Tadashi Nemoto, Japan

15:50-16:10
Source rock potential of coal and coaly mudstones from the Eocene Urahoro Group in the Kushiro Basin, eastern Hokkaido, Japan
Koji U. Takahasi, Takeshi Nakajima, Yuichio Suzuki, Sumito Morita, Takayuki Sawaki & Yasuaki Hanamura, Japan

16:10-16:30
The gravelly sedimentology of the Changcheng System and its petroleum geological significance
Yinye Wu & Jianzhong Li
People's Republic of China

16:30-16:50
Geological and geochemical approach for the binary power generation experiment at Matsunoyama hot spring area, Niigata, Japan
Norio Yanagisawa, Munetake Sasaki, Hajime Sugita, Akinobu Miyakoshi, Masatake Sato, Kazumi Osato, Sei-ichiroloka & Hirofumi Muraoka, Japan

16:50-17:10
Application of ore microscopy and geochemistry for better understanding of gold and tin mineralization of Peninsular Malaysia: Exploration implications for new potential deposits
Jasmi Hafiz Abdul Aziz, Bernd Lehmann, Zakaria Endut, Abdul Halim M. Assadiqi & Syazwan Ab, Rahman
Malaysia

17:10-17:30
Basin scale Modelling for groundwater resource: Numerical groundwater flow modelling for Sungai Muda basin, Kedah DarulAman, Malaysia
Mustapha Atta, Abd Rasid Jaapar & Ahmad Zamani Samat
Malaysia

17:30-17:50
Jadeitite Deposits from Myanmar
Thet Tin Nyunt
Myanmar

17:50-18:10
Progress in Exploration and Development of CUCBM
Long Cai, People’s Republic of China

18:10-18:30
UNFC – meeting the need to manage resources sustainably and attain the SDGs.
Per Blystad, PETRAD; Sigurd Heiberg, PETRAD; Harikrishnan Tulsidas, UNECE; Charlotte Griffiths, UNECE
## THEMATIC SESSION: Sub-Theme II: Geo-Environments for the Society

*Floor Meeting Room Doi Nang*, Kantary Hills Hotel, Chiang Mai, Tuesday, 5 Nov 2019, 13:30-17:30

**Chairperson: Dr. Kyoochul Ha**  
Position: Researcher, Director of Geologic Environment Division  
Affiliation: Korea Institute of Geoscience and Mineral Resources (KIGAM)

**Co-Chairperson: Mr. Naramase Teerarungsigul**  
Position: Senior Expert (Mineral Resources Management)  
Affiliation: Department of Mineral Resources

### 13:30-13:50
**Disaster risk reduction for sustainable development**  
Choun-Sian Lim, Yunus Abdul Razak & Joy Jacqueline Pereira  
*Malaysia*

### 13:50-14:10
**Capacity building for arsenic safe groundwater in Nepal**  
Philipp Schmidt-Thomé, Anu Eskelinen & Jussi Ahonen  
*Finland*

### 14:10-14:30
**Progress on geological mapping at scale 1:50.000 in Indonesia and its role for land-use planning**  
*Indonesia*

### 14:30-14:50
**Overview of GOCI and GOCI-II**  
Joo-Hyung Ryu  
*Republic of Korea*

### 14:50-15:10
**Estimating Terrestrial Water and Groundwater Storage Variability using GRACE Time-Variable and GLDAS-LSM Derived Data in Thailand**  
Aksara Puththividhya, Akarapol Amto, Piyaphat Chaemchueng & Piyoros Limsakul  
*Thailand*

### 15:10-15:30
**Poster Session and Coffee Break**

### 15:30-15:50
**Investigation of acid mine drainage (AMD) with long-term release of As at Kyaukpahto gold mine, Myanmar**  
Shinji Matsumoto, Akihiro Hamanaka, Thant Swe Win, Hiroto Yamasaki, Takashi Sasaoka & Hideki Shimada  
*Japan*

### 15:50-16:10
**Potential contribution of geosciences to Mekong’s environmental problems founded on cooperation of the CCOP member countries**  
Toru Tamura  
*Japan*

### 16:10-16:30
**The hybrid earthquake early warning system with combining regional seismic network and local on-site station to give alert for national key industrial facilities**  
Jung-ho Park, Jin-soo Shin, In-Seub Lim & Yun Jeong Seong  
*Republic of Korea*

### 16:30-16:50
**Geoscience inputs for land use and urban planning in Malaysia: Another leap**  
Abd Rasid Jaapar, Zakaria Mohamad & Zamri Ramli  
*Malaysia*

### 16:50-17:10
**The effectiveness of riverbank filtration for the sustainable domestic water supply at Linggi River, Negeri Sembilan**  
Muhammad Fawwaz Zainal Abedin, Hisam Hj. Ahmad & Ismail Hj. Tawnie  
*Malaysia*

### 17:10-17:30
**Risk-informed development planning and investment: Learning from 100 years experiences in Cameron highlands, Pahang, Malaysia**  
Mohd Farid Abdul Kadir, Khamarrul Azahari Razak, & Dzul Khaimi Khallani  
*Malaysia*
# THEMATIC SESSION: Sub-Theme III: Geo-Education for the Society

**2nd Floor Meeting Room Doi Luang**, Kantary Hills Hotel, Chiang Mai, 6 November 2019, 08:30-12:10

**Chairperson:** Dr. Zhang Minghua  
**Position:** Deputy Chief Geoscientist  
**Affiliation:** Development Research Center China Geological Survey (CGS)

**Co-Chairperson:** Mr. Anukoon Wongyai  
**Position:** Director of Division of Geotechnology  
**Affiliation:** Department of Mineral Resources

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30-08:50</td>
<td>How to disseminate geological knowledge: an attempt in the Miné-Akiyoshidai Karst Plateau Geopark</td>
<td>Koji Wakita, Takanori Nakagawa, Hokuto Obara &amp; Tristan Gray</td>
<td>Japan</td>
</tr>
<tr>
<td>08:50-09:10</td>
<td>GSJ international training course for the CCOP member countries, its follow-up and collaboration research between GSJ and GDMR in Cambodia</td>
<td>Hidetoshi Hara, Tsuyoshi Ito, Sitha Kong, Pagna Lim &amp; GSJ International Coordination Group</td>
<td>Japan</td>
</tr>
<tr>
<td>09:10-09:30</td>
<td>Educational activities of the Geological Museum of the Geological Survey of Japan</td>
<td>Sumito Morita, Osamu Fujiwara &amp; Seiichi Toshimitsu</td>
<td>Japan</td>
</tr>
<tr>
<td>09:30-09:50</td>
<td>Recent activity of geoparks in Japan</td>
<td>Mahito Watanabe</td>
<td>Japan</td>
</tr>
<tr>
<td>09:50-10:10</td>
<td>Geo-education programs at the IS-Geo, KIGAM</td>
<td>Samgyu Park, Eunsoo Lee, Yunsu Lee, Minsun Kim &amp; Chanung Park</td>
<td>Republic of Korea</td>
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<tr>
<td>10:10-10:30</td>
<td><strong>Poster Session and Coffee Break</strong></td>
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<tr>
<td>10:30-10:50</td>
<td>Geo-education by field work: An example of coastal field trip in Vung Tau and Binh Thuan Province, Vietnam</td>
<td>Nguyen Thi Que Nam, Ha Quang Hai &amp; Hoang Thi Phuong Chi</td>
<td>Vietnam</td>
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<tr>
<td>10:50-11:10</td>
<td>CAMDC a cooperation platform under CCOP</td>
<td>Xiwu Luan</td>
<td>People’s Republic of China</td>
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<tr>
<td>11:10-11:30</td>
<td>Introduction to international geoscience data sharing standards</td>
<td>Zhang Minghua, François Robida &amp; Oliver Reymond</td>
<td>People’s Republic of China</td>
</tr>
<tr>
<td>11:30-11:50</td>
<td>Constructing a comprehensive geoscience database in East and Southeast Asia: CCOP Geoinformation Sharing Infrastructure for East and Southeast Asia (GSi) Project</td>
<td>Shinji Takarada, Joel Bandibas &amp; Toshihiro Uchida</td>
<td>Japan</td>
</tr>
<tr>
<td>11:50-12:10</td>
<td>Formulating Web Processing Service (WPS) and Web Map Service (WMS) for the processing and sharing of ASTER satellite data using the GSi Information System</td>
<td>Joel Bandibas &amp; Shinji Takarada</td>
<td>Japan</td>
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<tr>
<td>12:10-13:30</td>
<td><strong>Lunch</strong></td>
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</tbody>
</table>
# Thematic Session: Sub-Theme II: Geo-Environments for the Society

**2nd Floor Meeting Room Doi Nang**, Kantary Hills Hotel, Chiang Mai, Wednesday, 6 November 2019, 08:30-12:10

**Chairperson: Mr. Zamri Bin Ramli**  
Position: Deputy Director, Geoscience Planning Unit  
Affiliation: Department of Mineral and Geoscience Malaysia

**Co-Chairperson: Mr. Mahippong Worakul**  
Position: Senior Geologist  
Affiliation: Bureau of Groundwater Resources Region 1 Lampang, Department of Groundwater Resources

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08:30-08:50</td>
<td>Purification of Zeolite from Mae Moh power plants coal fly ash by microwave synthesis for improvement of Sulfate removal from wastewater</td>
<td>Kiattipong Khamngoen</td>
<td>Thailand</td>
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<tr>
<td>08:50-09:10</td>
<td>Studying the pH effect for sulfate removal in water by using electrocoagulation method</td>
<td>Jaturong Kongwutthivech</td>
<td>Thailand</td>
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<tr>
<td>09:10-09:30</td>
<td>Arsenic and Cadmium: under the DMR Hazardous elements project</td>
<td>Apsorn Sardsud &amp; Jitisak Premmanee</td>
<td>Thailand</td>
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<tr>
<td>09:30-09:50</td>
<td>Managed aquifer recharge to ensure sustainable groundwater availability and quality under ongoing climate change and fast economic development in Vietnam (Viet MAR)</td>
<td>Nguyen Thi Ha, JaanaJarva, Kristiina Nuottimäki, Pham Thanh Long, Dang Tran Trung, Hoang Van Duy &amp; Nguyen Kim Hung</td>
<td>Vietnam</td>
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<tr>
<td>09:50-10:10</td>
<td>Potential hazard from the M8.7 Sunda strait mega thrust earthquake: a deterministic approach</td>
<td>Amalfi Omang, Akhmad Solikhin, Athanasius Cipta &amp; Supartoyo</td>
<td>Indonesia</td>
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<td>10:10-10:30</td>
<td><strong>Poster Session and Coffee Break</strong></td>
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<td>10:30-10:50</td>
<td>Reducing carbon dioxide emission by mineral carbonation using epsome and rock salts of Thailand: A preliminary study</td>
<td>Prayath Nantasin, Thaschanok Datsuwan &amp; Patnaree Nopmongkolsit</td>
<td>Thailand</td>
</tr>
<tr>
<td>10:50-11:10</td>
<td>Impacts of ore export ban to development of metal industry in Indonesia</td>
<td>Raden Sukhyar</td>
<td>Indonesia</td>
</tr>
<tr>
<td>11:10-11:30</td>
<td>The study of temperature effect on Q-seam of Mae Moh Mine’s coal pyrolysis</td>
<td>Nucharin Whangdeeniran</td>
<td>Thailand</td>
</tr>
<tr>
<td>11:30-11:50</td>
<td>Yogyakarta geological conservation area, 2018</td>
<td>Dita Arif Yuwana &amp; Visky Afrida Pungkisari</td>
<td>Indonesia</td>
</tr>
<tr>
<td>11:50-12:10</td>
<td>Sediment Dispersion at small river mouth under flood Events-A case Study of Dagu River mouth of Jiaozhou Bay</td>
<td>Chen Xiaoying</td>
<td>People’s Republic of China</td>
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<tr>
<td>12:10-13:30</td>
<td><strong>Lunch</strong></td>
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<tr>
<td>1</td>
<td>The volcanic facies and their reservoir characteristics in Eastern China basins</td>
<td>Chunshuang Jin, Dewu Qiao &amp; Wenli Pan</td>
<td>People’s Republic of China</td>
</tr>
<tr>
<td>2</td>
<td>Value adding of activated carbon from leonardite Mae Moh mine by product</td>
<td>Kanitta Wongyai</td>
<td>Thailand</td>
</tr>
<tr>
<td>3</td>
<td>The shale gas characteristics of upper Ordovician Wefeng formation-lower Silurian Longmaxi formation in Southwestern Sichuan basin</td>
<td>Wang Chao, Li Wentao, Yu shufang, Chen Xianlin, Guo Tianxu &amp; Yuan Kun</td>
<td>People’s Republic of China</td>
</tr>
<tr>
<td>4</td>
<td>Paleoceneology and Paleoenvironment of proboscidean fossil sites in Northern Thailand</td>
<td>Yupa Thasod &amp; Benjavun Ratanasthien</td>
<td>Thailand</td>
</tr>
<tr>
<td>5</td>
<td>Organic and elemental matters of asphaltene fractions in crude oil and oil sandstone from Fang basin, Chiang Mai province</td>
<td>Ploypannatorn Tonam &amp; Sarunya Promkotra</td>
<td>Thailand</td>
</tr>
<tr>
<td>6</td>
<td>Climate-resilient groundwater management strategy: Assessment of groundwater vulnerability to climate change</td>
<td>Eunhee Lee, Esther Shin, Kyoochul Ha &amp; Yongcheol Kim</td>
<td>Republic of Korea</td>
</tr>
<tr>
<td>7</td>
<td>Study on possible sources of elevated arsenic level in water, Amphoe Banrai, Changwat UthaiThani</td>
<td>Apsorn Sardsud, Onuma Khumphleang &amp; Jitisak Premmanee</td>
<td>Thailand</td>
</tr>
<tr>
<td>8</td>
<td>The roadside Geotourism along Route 12 for geological perspective in Phetchabun province, Thailand</td>
<td>Natapan Paungya, Vimoltip Singtuen &amp; Krit Won-In</td>
<td>Thailand</td>
</tr>
<tr>
<td>9</td>
<td>New approaches of identification of the gold mineralization perspective localities in medium-scale geochemical prospecting works (on the examples of the Chukchi and Magadan areas, Arctic region)</td>
<td>A.G. Pilitsyn, T.A. Pavlova &amp; A.A. Kremenetsky</td>
<td>Russia</td>
</tr>
<tr>
<td>10</td>
<td>An environmental geology study for potential waste disposal site selection I Khon Kaen province</td>
<td>Namphon Khampilang, Supamitr Jantakham, Kanokporn Phimphasak, &amp; Ngamphan Wongorn</td>
<td>Thailand</td>
</tr>
<tr>
<td>11</td>
<td>Petrology, geochemistry and age of volcanic rocks in Phayao province, Northern Thailand</td>
<td>Marutphong Srichan, Phisit Limtrakun, Weerapan Srichan, Kwan-Nang Pang, Boontarika Srithai, Pitaksit Ditbanjong &amp; Somboon Khositanont</td>
<td>Thailand</td>
</tr>
<tr>
<td>12</td>
<td>Mafic hypabyssal rocks from Phu Fai volcanic plug in Si Sa Ket province, Southern margin of NE Thailand</td>
<td>Pitch Atayos, Weerapan Srichan, Phisit Limtrakun &amp; Thikapong Tha,</td>
<td>Thailand</td>
</tr>
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</table>