

TERM OF REFERENCE

The 3rd International Conference on Earth Resources and Geo-Environment Technology 2024 (EraGET 2024)

***“INNOVATIONS IN GEOSCIENCE AND ENGINEERING: CULTIVATING HUMAN
CAPITAL FOR SUSTAINABLE GROWTH”***

Organized by

**Institute of Technology of Cambodia
Faculty of Geo-resources and Geotechnical Engineering**



Co- Organized by



2024

1. About the Conference

International Conference on Earth Resources and Geo- Environment (EraGET) is annually event which is organized by Faculty of Geo-resources and Geotechnical Engineering (GGE), Institute of Technology of Cambodia (ITC). GGE has successfully established EraGET in 2022 through its strong collaborative partnerships with national and international institutions and private sectors. This remarkable achievement has been made possible with the invaluable contributions and support of Prof. Watanabe Koichiro, Senior Advisor JICA. One key aspect that has contributed to the establishment of EraGET is its alignment with the National Policy on Mineral Resources 2018-2028, formulated by the Ministry of Mines and Energy of Cambodia. This policy provides a clear vision for the development of mineral resources, focusing on economic and social benefits while emphasizing good governance and environmental responsibility.

2nd EraGET presents “Geo-resources and Geological Engineering for Sustainable Earth” as the main conference theme. In conjunction with the 14th AUN/SEED-Net Regional Conference on Geological and Geo-resources Engineering was organized on September 21 -22, 2023 for technical presentations and September 23 -25, 2023 for post-conference field trip to candidate of geopark in Siem Reap province. The 2nd EraGET was hug success, which received 115 research presentations and 475 participants from 15 international universities (Japan, Malaysia, Philippine, China, and Africa), 3 local universities, 16 private sectors, and 3 public sectors.

3rd EraGET is scheduled on December 12 -15, 2024 in conjunction with workshop on Paleozoic stratigraphic correlation and carbonate platform development, and Recycling (in cooperation with IGCP- 700). The conference theme in this year is “Innovation in Geoscience and Engineering: Cultivating Human Capital for Sustainable Growth”. The conference will be conducted two days for technical presentation, December 12 -13, 2023 at Institute of Technology of Cambodia (ITC), Phnom Penh and two days, December 13 -15, 2023, for post-conference field trip to candidate of geopark in Siem Reap province. This event provides to all participants the opportunities expand and strengthen their network, and sharing the recent research trend with national and international institutions, industry, and community.

Objectives

The main objectives of EraGET are:

- ✓ To create gathering opportunities for students, lecturers, and researchers.
- ✓ To share the recent research trend among researchers, industries, community, and international institutions.
- ✓ To reinforce and strengthen the collaboration with industries, community, and international institutions.

2. Topics of Interests

EraGET 2024 invites research papers n the topic of geo-resources engineering and geosciences and related filed of research including economic geology, petroleum geology, geophysics, geochemistry, geo-environment, and materials sciences.

Theme: Innovation in Geoscience and Engineering: Cultivating Human Capital for Sustainable Growth

The following is the list of topics of interest covered in the EraGET 2024

- ✓ Economic geology and geological engineering
- ✓ Geotechnical and Civil Engineering
- ✓ Environmental geology and rehabilitation
- ✓ Exploration and production of mineral and energy resources
- ✓ Geoheritage and geodiversity
- ✓ Geophysics, geospatial technology (GIS, Remote Sensing, Surveys)
- ✓ Groundwater resources
- ✓ Materials science and engineering
- ✓ Mineral processing, waste management, and recycling
- ✓ Mining engineering

3. Date and Venue

- ✓ December 12 -13, 2024: Conference at ITC
Venue: Institute of Technology of Cambodia (ITC)
Russian Federation Blvd, P.O. Box 86, Phnom Penh, Cambodia
- ✓ December 14 -15, 2025: Post- conference field trip to candidate of geopark in Siem Reap Province (Kulen Mt. national park, Angkor Wat, and Bayon Temples)

Note: Conference will be conducted onsite at ITC

4. Important Dates

- ✓ Abstract submission deadline : August 02, 2024
- ✓ Notification of acceptance : August 16, 2024
- ✓ Full paper submission deadline : November 01, 2024
- ✓ Extended abstract deadline : November 22, 2024
- ✓ Sponsor deadline : November 15, 2024

Noted:

- Submission of full paper will be double-blind in-depth review with appointed reviewers are from intended expertise. Best full papers will be published in Techno- Science Research Journal (<https://techno-srj.itc.edu.kh/>)
- There are three categories of sponsors: Diamond 2500\$; Gold 2000\$; and Silver 1500\$

5. Invited Keynote Speakers (TBC)

- **Asst. Prof. Sieng Peou**
Lecturer, Institute of Technology of Cambodia (ITC)
- **Prof. Watanabe Koichiro**
JICA Senior Advisor, JICA HQ Japan

- **Assoc. Prof. Yonezu Kotaro**
Kyushu University, Japan
- **Prof. Takeshi Tsuji**
The University of Tokyo, Japan
- **Prof. Uchida Etsuo**
Waseda University, Japan
- **Dr Zakaria bin Endut**
Universiti Sains Malaysia, Malaysia

6. Main Events and Tied-in Activities

The conference will consist of plenary session and parallel sessions. Other activity to the conference is also offered.

- **Plenary Session**

Invited keynote speakers from policy maker academia and private sector with general topic related to “Innovation in Geoscience and Engineering: Cultivating Human Capital for Sustainable Growth”.

- **Parallel Session**

Parallel session for registered participants through extended abstract and full paper, divided according to selected topics. Started with the speech of invited keynote speaker(s), followed by technical presentation of participants. The sub-themes of each parallel session are divided into:

- a. Economic Geology and Geological Engineering
- b. Geotechnical and Material & Science Engineering
- c. Geo-heritage and Geodiversity, Environmental Geology, Groundwater, and Mineral Processing
- d. Geophysics, Geospatial Technology (GIS, Remote Sensing, Surveys)
- e. Paleozoic stratigraphic correlation and carbonate platform development, and Recycling (in cooperation with IGCP- 700)

- **Student Best Presentation Awards**

Participating students in the conference have an opportunity to win the *BEST PRESENTATION*, *BEST POSTER*, and *BEST PAPER AWARDS*. All presenters will be judged by a panel of experts in their respective fields. The winners will be announced and awarded (certificate and trophy) during the closing ceremony of the conference on (December 13, 2024).

7. Advisory Board

- **Assoc. Prof. Dr. Bun Kim Ngun**
Institute of Technology of Cambodia (ITC)

- **Prof. Watanabe Koichiro**
Senior Advisor at JICA, Japan
- **Prof. Takeshi Tsuji**
The University of Tokyo, Japan
- **Assoc. Prof. Yonezu Kotaro**
Kyushu University, Japan
- **Prof. Mariatti Jaafar**
Universiti Sains Malaysia, Malaysia

8. Organizing Committee

- **Chair:**
Asst. Prof. Dr. Eng Chandoeun (Institute of Technology of Cambodia)
- **Members:**
Institute of Technology of Cambodia (ITC)
 1. Dr. Pech Sopheap
 2. Asst. Prof. Dr. Yos Phanny
 3. Assoc. Prof. Dr. Or Chanmoly
 4. Asst. Prof. Vamoeurn Nimol
 5. Asst. Prof. Dr. Por Sopheap
 6. Asst. Prof. Dr. Pich Bunchoeun
 7. Dr. Boeut Sophea
 8. Dr. Mao Pisith
 9. Dr. Seang Sirisokha
 10. Dr. Kret Kakda
 11. Dr. Horng Vuthy
 12. Dr. Chea Samneang
 13. Ms. Sio Sreymean
 14. Mr. Kaing Sainglong
 15. Mr. Hong Pisith
 16. Mrs. Sio Sreymean
 17. Mr. Heng Ratha
 18. Mr. Kong Sotheara

Universiti Sains Malaysia (USM)

1. Assoc. Prof. Dr. Hareyani Zabidi
2. Dr. Ku Esyra Hani Binti Ku Ishak
3. Dr. Nurul'Ain Jabit
4. Dr. Muhammad Irman Khalif Ahmad Aminuddin
5. Dr. Zakaria Endut
6. Dr. Suhaina Ismail
7. AP. Ir. Dr. Syed Fuad Saiyid Hashim
8. Major AP. Ir. Ts. Dr. Mohd Hazizan Mohd Hashim
9. AP Dr Hashim Hussin

- **Secretary**

Ms. Sreng Laymey Sophea (Institute of Technology of Cambodia)

9. Scientific Committee and Reviewer

- **Chair:**

Dr. Boeut Sophea (Institute of Technology of Cambodia)

- **Members:**

Prof. Watanabe Koichiro (JICA Senior Advisor)

Assoc. Prof. Dr. Yonezu Kotaro (Kyushu University, Japan)

Assoc. Prof. Dr. Hareyani Zabidi (Universiti Sains Malaysia)

Dr. Ku Esyra Hani Binti Ku Ishak (Universiti Sains Malaysia)

Dr. Nurul'Ain Jabit (Universiti Sains Malaysia)

Dr. Muhammad Irman Khalif Ahmad Aminuddin (Universiti Sains Malaysia)

Dr. Zakaria Endut (Universiti Sains Malaysia)

Dr. Suhaina Ismail (Universiti Sains Malaysia)

AP. Ir. Dr. Syed Fuad Saiyid Hashim (Universiti Sains Malaysia)

AP Dr Hashim Hussin (Universiti Sains Malaysia)

Major AP. Ir. Ts. Dr. Mohd Hazizan Mohd Hashim (Universiti Sains Malaysia)

Dr. Hung Vo Thanh (Seoul National University, South Korea)

Dr. Ngo Ichhuy (China University of Mining and Technology)

Dr. Muhammad Irman Khalif bin Ahmad Aminuddin (Universiti Sains Malaysia, Malaysia)

Dr. Afikah Rahim (Universiti Teknologi Malaysia, Malaysia)

Dr. Myo Kyaw Hlaing (Banmaw University, Myanmar)

Dr. Tomy Alvin Rivai (Kyushu University, Japan)

Dr. Chhun Chanmaly (Connel University, USA)

Dr. Sreu Tola (CCOP, Thailand)

10. Tentative Schedule

Tentative Agenda for the 3rd International Conference on Earth Resources and Geo-Environment Technology (EraGET2024)

Jointly held with IGCP- 700

Venue: Institute of Technology of Cambodia

Theme: *Innovations in Geoscience and Engineering: Cultivating Human Capital for Sustainable Growth*

December 12 -13, 2024

DAY 1: Thursday, December 12, 2024			
Time	Activities	Guest Speakers	Exhibition
07:30 – 08:30	Registration	All participants	
08: 30 -08: 35	Introduction and National Anthem	All participants	
08: 35 -08: 45	Welcome remark by the Institute of Technology of Cambodia	Prof. PO Kimtho Director General of ITC	
08: 45 -08: 55	Welcome remark by JICA	Prof. Watanabe Koichiro JICA Senior Advisor	
08:55 – 09:15	Opening remarks by the Ministry of Education, Youth and Sport (MoEYS) of Cambodia	TBC	
09: 15 -09: 25	Group Photo	All participants	
09: 25 -09: 40	Coffee Break & Refreshment Break	All participants	
09: 40 -10: 00	Keynote Speaker 1	Assoc. Prof. Yonezu Kotaro Kyushu University, Japan	
10: 00 -10: 20	Keynote Speaker 2	Dr Zakaria Endut Universiti Sains Malaysia, Malaysia	
10: 20 -10: 40	Keynote Speaker 3	TBC	
10: 40 -11: 00	Keynote Speaker 4	Asst. Prof. Sieng Peou Institute of Technology of Cambodia	
11: 00 -11: 20	Keynote Speaker 5	TBC	
11: 20 -13: 00	Lunch Break		
13: 00 -16: 20	Technical Parallel Session (05 Parallel Sessions) a. Session 1: Economic Geology and Geological Engineering		

	<div><div>b. Geotechnical and Material & Science Engineering</div><div>c. Geoheritage and Geodiversity, Environmental Geology, Groundwater, and Mineral Processing</div><div>d. Geophysics, Geospatial Technology (GIS, Remote Sensing, Surveys)</div><div>e. Paleozoic stratigraphic correlation and carbonate platform development, and Recycling (in cooperation with IGCP- 700)</div></div>		Exhibition
16: 20 -18: 00	<div>Poster Presentation</div> <div>Venue: Under the Auditorium of Samdach Akka Moha Sena Padei</div> <div>Techo HUN SEN (Near exhibition booth zones)</div>		
DAY 2: Friday, December 13, 2024			
08: 00 -11: 00	<div>Technical Parallel Session (05 Parallel Sessions)</div> <div><div>a. Session 1: Economic Geology and Geological Engineering</div><div>b. Geotechnical and Material & Science Engineering</div><div>c. Geoheritage and Geodiversity, Environmental Geology, Groundwater, and Mineral Processing</div><div>d. Geophysics, Geospatial Technology (GIS, Remote Sensing, Surveys)</div><div>e. Paleozoic stratigraphic correlation and carbonate platform development, and Recycling (in cooperation with IGCP- 700)</div></div>		Exhibition
11:00 -11: 20	<div>Student Awards Session (Best Paper, Best Poster Presentation, and Best Oral Presentation)</div>	<div>All participants</div>	
11:20 -11:30	<div>Closing Remark</div>	<div>Assoc. Prof. Dr. Bun Kim Ngun</div> <div>Deputy Director of ITC</div>	

Note: The detailed schedule is subjected to change.

11. Post- Conference Field Trip

EraGET 2024 will be organized a post-conference field trip to a candidate of geopark in Siem Reap province, the heart of the ancient Khmer Empire. This trip will take place from December 13 (afternoon) to December 15, 2024, following the technical presentation on December 12 -13, 2024 at Institute of Technology of Cambodia, Phnom Penh.

As we know, a Geopark is a designated area that encompasses sites of geological significance, along with their cultural, ecological, and historical value. These areas are managed with a holistic approach, aiming to conserve geological heritage while promoting sustainable development through education, tourism, and community engagement.

Kulen Mountain National Park has a hug potential to be transformed into a Geopark due to its:

- **Geological Significance:** Kulen Mountain National Park's boasts a rich geological heritage, with unique sandstone formations and other geological processes, as well as natural spring and waterfall that provide valuable insights into Earth's history.
- **Cultural, Religious and Historical Value:** In addition to its geological significance, the region is also home to rich cultural, religious and historical sites of Cambodia that are great importance to local communities since the ancient time until the present day.
- **Tourism and Management:** the proposed region is located in Siem Reap Province which is the number one tourist destination in Cambodia due to our world heritage Angkor Wat. We also have comprehensive management plan and APSARA national authority, which include conservation efforts, and community-based projects, leading to socio-economic benefits for the region.

Tentative Agenda for Post- Conference Field Trip

Venue: Candidate of Geopark, Siem Reap Province, Cambodia

December 13 -15, 2024

Time	Activities	Guest
13: 30	Departure from ITC by Bus	All participants
17: 30	Arrived Siem Reap City	All participants
17: 30 – 18: 30	Hotel Check in	All participants
18: 3	Dinner at Siem Reap City	All participants
DAY 2: Saturday, December 14, 2024		
07: 00 -08: 00	Breakfast	All participants
08: 00 -11: 00	Visit Kulen National Park	All participants

	<ul style="list-style-type: none"> - Sandstone valley - Waterfall 1 - Waterfall 2 	
11: 00 -13: 00	Lunch Break at Kulen Mt.	All participants
13: 00 -15: 30	Visiting Angkor Wat Temple	All participants
15: 30 -18: 00	Visiting Bayon Temple	All participants
18: 00	Dinner in Siem Reap City	All participants
DAY 3: Sunday, December 15, 2024		
	All participant returns to home country and Phnom Penh	

12. Guidelines

Guidelines for Extended Abstract and Full Paper Submission

1. Submission must be written in English and conform with scope of the conference
2. Authors must be followed the provided **template of Extended Abstract and Full Paper**, with Microsoft word format. The length of Extended Abstract and Full Paper are no longer than 4 pages and 8 pages, respectively, including all figures, tables, and photos.
3. Abstract should be no more than 250 words (excluding title, authors, affiliations), should not contain any undefined abbreviations or unspecified references.
4. Maximum 5 keywords with indexing purpose
5. Title must be concise and informative
6. The name of authors and co-authors and affiliations should be clear with active email of the corresponding author
7. Figures and tables are placed within the text, not collected at the end of the paper
8. Extended Abstract will be reviewed the format by the scientific committee
9. Full Paper will be double-blind in-depth review with appointed reviewers are from intended expertise.

Guidelines for Presentation during the conference

1. All plenary and parallel session will be guided by moderator.
2. Allocation time for technical presentations in parallel session is 20 minutes each, including Q & A
3. Presentation file should be submitted during the registration at the desk (Onsite participating) before the session started
4. The presentation format should be compatible with Microsoft power point 2010

13. Contact info

Ms. Sreng Laymey

Secretariat of EraGET

Faculty of Geo-resources and Geotechnical Engineering, ITC

Email: EraGET2024@itc.edu.kh

Tel: +855 92 366 077