



## **REPORT OF THE 38<sup>th</sup> MALAYSIA-THAILAND BORDER JOINT GEOLOGICAL SURVEY WORKING GROUP MEETING**

**Video Conference hosted by DMR, Thailand**

**14<sup>th</sup> March 2024**

### **INTRODUCTION**

The 38<sup>th</sup> Malaysia-Thailand Border Joint Geological Survey Working Group Meeting was held on 14<sup>th</sup> March 2024 by video conference hosted by DMR, Thailand. The meeting was attended by delegates of the Malaysia and Thailand Working Groups. Lists of delegates appear as per **ANNEX A**.

### **CHAIRMAN AND CO-CHAIRMAN**

The meeting was chaired by Dr. Apsorn Sardud, Department of Mineral Resources (DMR), Thailand, and co-chaired by Dato' Ir. Ahmad Zukni bin Ahmad Khalil, Department of Mineral and Geoscience Malaysia (JMG).

### **ADOPTION OF AGENDA**

The meeting considered and adopted the Agenda, which appears as per **ANNEX B**.

### **APPOINTMENT OF RAPORTEURS**

Mr. Kajornphat Suksriboonampai and Mr. Jakrapun Khamboonruang, Thai delegates, and Mrs. Nor Asmah binti Abdul Aziz and Mrs. Zamila binti Abdul Rahman, Malaysian delegates, were appointed as rapporteurs for the meeting.

**CONFIRMATION POINTS OF DISCUSSION OF THE 37<sup>th</sup> MALAYSIA-THAILAND  
BORDER JOINT GEOLOGICAL SURVEY WORKING GROUP MEETING, HELD  
ON 22<sup>nd</sup> AUGUST 2023 ORGANIZED BY DEPARTMENT OF MINERAL  
RESOURCES, THAILAND, IN SEESEEA RESORT, SATUN, THAILAND.**

## POINTS OF DISCUSSION

1. The meeting revised the activities of the work plan (the year 2022–2026) as appeared in **ANNEX C**.
2. The meeting agreed that the compilation of Malaysia-Thailand metallogenic maps including strategic minerals (REE) is carried out in the year 2020-2025 and final report will be completed in 2025.
3. The meeting agreed that the case study on REE in Malaysia and Thailand will start in 2026.
4. The meeting confirmed that the geoheritage mapping and geopark development in Malaysia and Thailand is carried out in 2023-2025. The Malaysian and Thai Working Group will share their activities on Geoheritage Mapping and Geopark Development in both countries. Joint report editing will be carried out in 2025.
5. The meeting confirmed the case study on Geopark development in Malaysia and Thailand will be carried out in 2026.
6. The meeting confirmed that the Stratigraphic Correlation and Fossil Assemblages between the Chuping Formation and the Khao Rub Chang Formation is carried out in 2023-2025. Joint report editing will be carried out in 2025.
7. The meeting confirmed that Granite correlation along Malaysia-Thailand border will be carried out in 2026.
8. The meeting confirmed that the Case Study on Geological Hazard: Debris Flow has been carried out in the year 2022-2024 and final report will be completed in 2024.
9. The meeting confirmed that the case study on Geological Hazard: Coastal erosion will be carried out in 2025-2026.
10. The meeting confirmed capacity buildings will be carried out as follows:
  - Training on Foraminifera will be held on 31<sup>st</sup> July 2024 hosted by Thailand (Online).
  - Training on Dinosaur Study will be held on 7<sup>th</sup> -11<sup>th</sup> October 2024 hosted by JMG Malaysia. The Thailand resource person will be invited to conduct the training. The actual date and venue will be confirmed later.
  - Training on Gemology (practical) in Thailand on 9<sup>th</sup>-13<sup>th</sup> September 2024.
  - Training on REE survey in Thailand in 2025 (invite 1-2 experts from Malaysia). The actual date and venue will be confirmed later.

- Training on igneous petrography & petrology hosted by Malaysia in 2025 (online). The actual date and venue will be confirmed later.
11. The meeting took note the information sharing and outreaching:
    - Regional Geoh heritage Conference (RGC) in Indonesia (depends on host)
    - GEOTHAI National Conference (2024-2026)
    - National Geoscience Conference in Malaysia (2024-2026)
  12. The meeting confirmed that the Development of Database on Geological Resources along the Malaysia-Thailand border (geology, minerals, geosites/fossil sites and geohazards) is ongoing using the webGIS/GSi platform which has been developed under the initiative of CCOP from the year 2021-2025. The meeting agreed that Malaysia and Thailand will use the same portal.
  13. The meeting confirmed that the Malaysia-Thailand Border Joint Geological Survey Working Group Meeting will be held online in March every year, beginning in 2024 and hosted alternately by Malaysia and Thailand.
  14. The meeting confirmed Joint report editing will be carried out online in May 2024:
    - Debris flow (hosted by Thai side on 23<sup>rd</sup> -24<sup>th</sup> May 2024)
  15. The meeting confirmed that the upcoming 39<sup>th</sup> Malaysia-Thailand Border Joint Geological Survey Working Group Meeting and 21<sup>st</sup> Committee Meeting will be held in Kangar, Perlis, Malaysia on 12<sup>th</sup> -16<sup>th</sup> August 2024.
  16. The meeting agreed to nominate Mr. Hamid bin Ariffin, as the new Malaysian Working Group Leader. The Malaysian Working Group will bring this matter up to the 21<sup>st</sup> MT-JGSC Meeting that will be held on 14<sup>th</sup> August 2024 for their endorsement.

**Other Matters:**

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## COMPLETION OF THE MEETING

The meeting completed and adjourned at 4:00 pm (Thai time).



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Dr. Apsorn Sardud  
For the Department of Mineral  
Resources,  
Ministry of Natural Resources and  
Environment, Thailand.  
14<sup>th</sup> March 2024



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Dato' Ir. Ahmad Zukni bin Ahmad Khalil  
For the Department of Mineral and  
Geoscience,  
Ministry of Natural Resources and  
Environmental Sustainability, Malaysia.  
14<sup>th</sup> March 2024



**THE 38<sup>th</sup> MALAYSIA-THAILAND BORDER JOINT GEOLOGICAL SURVEY  
WORKING GROUP MEETING**

1. **DATE:** 14<sup>th</sup> March 2024
2. **VENUE:** Video Conference hosted by DMR, Thailand
3. **TIME:** 08:30-16:30 (BKK time)

**THAI DELEGATION**

No.	Name	Position
1	Dr. Apsorn Sardsud	Director of Geological Survey Division <b>(Head of Thai Delegation)</b>
2	Dr. Dhiti Tulyatid	Senior Expert on International Cooperation
3	Prof. Emeritus Dr. Punya Charusiri	Senior Expert on Mineral Management
4	Dr. Tawatchai Chualaowanich	Senior Professional Geologist, Acting Senior Expert on Mineral Resources Management
5	Dr. Doungrutai Saesaengseerung	Geologist (Senior Professional Level) <b>(Thai Working Group Leader)</b>
6	Mr. Terapon Wongprayoon	Geologist (Senior Professional Level)
7	Mr. Kitti Khaowiset	Geologist (Senior Professional Level)
8	Mr. Denchok Manchai	Geologist (Senior Professional Level)
9	Mr. Jirasak Charoenmit	Mineral Resources Technical Officer (Senior Professional Level)
10	Dr. Sasiwimol Nawawitphisit	Geologist (Senior Professional Level)
11	Ms. Chanchana Khamcha	Geologist (Senior Professional Level)
12	Ms. Patchara Sangoen	Geologist (Senior Professional Level)
13	Mr. Jakrapun Khamboonruang	Scientist (Professional Level)
14	Mr. Anuwat Treerotchananon	Geologist (Professional Level)
15	Mr. Kajornphat Suksriboonampai	Geologist (Professional Level)
16	Ms. Amporn Chaikam	Geologist (Professional Level)
17	Mr. Surached Ruamtum	Geologist (Professional Level)
18	Ms. Jaripaporn Chailertwanitkul	Policy and Plan Analyst (Professional Level)
19	Ms. Thitikan Junrattanamanee	Geologist (Practitioner Level)
20	Ms. Matulada Katthasema	Geologist (Practitioner Level)
21	Dr. Kittichai Tongtherm	Research Lecturer, Pince of Songkla University



THE 38<sup>th</sup> MALAYSIA-THAILAND BORDER JOINT GEOLOGICAL  
SURVEYWORKING GROUP MEETING

1. **DATE:** 14<sup>th</sup> March 2024
2. **VENUE:** Video Conference hosted by DMR, Thailand
3. **TIME:** 08:30-16:30 (BKK time) 09:30-17:30 (KUL time)

MALAYSIAN DELEGATION

No	Name	Position
1.	Dato' Ir. Ahmad Zukni bin Ahmad Khalil	Senior Director, Technical Services Division <b>(Head of Delegation)</b>
2.	Mr. Mat Niza bin Abdul Rahman	Director Planning and Management, JMG Headquarters
3.	Mr. Hamid bin Ariffin	Principal Assistant Director, Technical Services Division, JMG <b>(Malaysian Working Group Leader)</b>
4.	Mrs. Nor Asmah binti Abdul Aziz	Principal Assistant Director, Technical Services Division, JMG
5.	Mr. Ahmad Zamani bin Samat	Deputy Director (Geoscience), JMG Kedah/Perlis/P. Pinang States
6.	Mrs. Nur Susila binti Md. Saaid	Senior Assistant Director, JMG Kedah/Perlis/P. Pinang States
7.	Mr. Mohammed Syahrizal bin Zakaria	Senior Assistant Director, JMG Kedah/Perlis/P. Pinang States
8.	Mrs. Zamila binti Abdul Rahman	Senior Assistant Director, Technical Services Division, JMG
9.	Mr. Farid bin Zainudin	Senior Assistant Director, JMG State of Perak
10.	Mr. Saiful bin Abdullah	Senior Assistant Director, JMG State of Perak
11.	Mr. Fakhruddin Afif bin Fauzi	Senior Assistant Director, JMG Kedah/Perlis/P. Pinang States
12.	Mrs. Nurul Amalina binti Md Nor	Assistant Director, JMG State of Perak
13.	Mr. Muhammad bin Abdullah	Assistant Director, JMG State of Pahang
14.	Mrs. Atilia binti Bashardin	Assistant Director, JMG Kedah/Perlis/P. Pinang States
15.	Mr. Muhammad Sufi bin Musa	Assistant Director, Technical Services Division, JMG

16.	Dr. Che Aziz bin Ali	Geology Expert
17.	Assoc. Prof. Dr. Meor Hakif bin Amir Hassan	Associate Professor, Department of Geology, University of Malaya



**THE 38<sup>th</sup> MALAYSIA-THAILAND BORDER JOINT GEOLOGICAL SURVEY  
WORKING GROUP MEETING**

**AGENDA**

- ITEM 1 Assumption of the Chairmanship
- ITEM 2 Adoption of Agenda
- ITEM 3 Confirmation of Points of Discussion of the 37<sup>th</sup> Malaysia-Thailand Border Joint Geological Survey Working Group Meeting
- ITEM 4 Matters arising from the Points of Discussion of the 37<sup>th</sup> Malaysia-Thailand Border Joint Geological Survey Working Group Meeting
- ITEM 5 Review of Work Plan for the year 2022-2026
- ITEM 6 Appointment of the new Head of Malaysian Working Group Leader
- ITEM 7 Date and venue of the oncoming 39<sup>th</sup> Malaysia-Thailand Border Joint Geological Survey Working Group Meeting, hosted by DMR, Thailand in March 2024
- ITEM 8 Date and venue of the oncoming 39<sup>th</sup> Malaysia-Thailand Border Joint Geological Survey Working Group Meeting and the 21<sup>st</sup> MT-JGSC Meeting, hosted by JMG, Malaysia in August 2024
- ITEM 9 Other matters

Programmes	Year 2022 (2565)	Year 2023 (2566)	Year 2024 (2567)	Year 2025 (2568)	Year 2026 (2569)
1. Geology and mineral resources along Malaysia-Thailand border	Compilation of Malaysia - Thailand metallogenic maps including strategic minerals (REE)				Case study on REE in Malaysia and Thailand
2. Geo-conservation and Geo-Tourism Activities	Compilation of geological sites potential for geotourism along Malaysia-Thailand border	Geoheritage mapping and geopark development in Malaysia and Thailand			Case study on sustainable development of Geopark and impacts in Malaysia and Thailand
3. Cooperative study and geological research in term of stratigraphy, paleontology, and sedimentology.	Stratigraphic correlation and fossil assemblages between the Timah Tasoh Formation and the Pa Samed Formation.	Stratigraphic correlation and fossil assemblages between the Chuping Formation and the Khao Rub Chang Formation			Granite characteristics along Malaysia-Thailand border
4. Study on geological hazards	Case study on Geological Hazard: Debris Flow			Case study on Geological Hazard: Coastal Erosion	
5. Capacity building	<ul style="list-style-type: none"> <li>• Training on Karst Morphology Mapping using LIDAR Technology in Bangkok, Thailand -expert from Malaysia</li> <li>• Training on Gemology in Thailand</li> </ul>	<ul style="list-style-type: none"> <li>• Training on Remote Sensing in Thailand, online</li> <li>• Training on Palynology in Malaysia, online</li> <li>• Training on Geoheritage Mapping in Malaysia</li> <li>• Training on REE determination in geological samples</li> </ul>	<ul style="list-style-type: none"> <li>• Training on Foraminifera in Thailand (Online)</li> <li>• Training on Dinosaur in Malaysia – expert from Thailand (7<sup>th</sup>-11<sup>th</sup> October)</li> <li>• Training Gemology (practical) in Thailand (9<sup>th</sup>-13<sup>th</sup> September)</li> </ul>	<ul style="list-style-type: none"> <li>• Training on REE survey in Thailand (invite 1-2 experts from Malaysia)</li> <li>• Training on igneous petrography &amp; petrology hosted by Malaysia (Online)</li> </ul>	
6. Information sharing and outreaching	<ul style="list-style-type: none"> <li>• The 7<sup>th</sup> Asia Pacific Geoparks Network (APGN) Symposium in Satun, Thailand, 4<sup>th</sup> -11<sup>th</sup> September 2022</li> <li>• XVII GEOSEA 2022 &amp; 34<sup>th</sup> National Geoscience Conference in Langkawi, Malaysia, 17<sup>th</sup> -21<sup>st</sup> October 2022.</li> </ul>	<ul style="list-style-type: none"> <li>• GEOTHAI National Conference (Online), 5<sup>th</sup>-7<sup>th</sup> September 2023</li> <li>• National Geoscience Conference in Putrajaya, Malaysia, 7<sup>th</sup> -10<sup>th</sup> November 2023</li> <li>• Regional Geoheritage Conference (RGC) in Indonesia (depends on host)</li> <li>• 10<sup>th</sup> GGN Conference in Morocco, 7<sup>th</sup>-9<sup>th</sup> September 2023</li> <li>• CCOP Thematic Session in Thailand, 1<sup>st</sup> November 2023</li> </ul>	Presenting papers at national and international seminars/conferences <ul style="list-style-type: none"> <li>• GEOTHAI National Conference</li> <li>• National Geoscience Conference in Malaysia</li> <li>• 18<sup>th</sup> GEOSEA 2024 Conference in Khon Kaen, Thailand (20<sup>th</sup> - 23<sup>rd</sup> February 2024)</li> </ul>	Presenting papers at national and international seminars/conferences <ul style="list-style-type: none"> <li>• GEOTHAI National Conference</li> <li>• National Geoscience Conference in Malaysia</li> </ul>	Presenting papers at national and international seminars/conferences <ul style="list-style-type: none"> <li>• GEOTHAI National Conference</li> <li>• National Geoscience Conference in Malaysia</li> </ul>
7. Development of database on geological resources along the Malaysia-Thailand border	Development of database on: a. geology    b. minerals    c. geosites/fossil sites    d. geohazards				
8. Working Group Meeting and Committee Meeting	<ul style="list-style-type: none"> <li>• The 34<sup>th</sup> Working Group Meeting, 24<sup>th</sup> March 2022, online, hosted by Thailand</li> <li>• Joint report editing in Malaysia, 5<sup>th</sup> -7<sup>th</sup> July 2022</li> <li>• The 35<sup>th</sup> Working Group Meeting, 9<sup>th</sup> August 2022, online, hosted by Malaysia</li> <li>• The 19<sup>th</sup> Committee Meeting, online, hosted by Malaysia</li> </ul>	<ul style="list-style-type: none"> <li>• The 36<sup>th</sup> Working Group Meeting, 6<sup>th</sup> – 10<sup>th</sup> March 2023, Sungai Petani, Kedah, Malaysia</li> <li>• The 37<sup>th</sup> Working Group Meeting and the 20<sup>th</sup> Committee Meeting, 21<sup>st</sup> – 25<sup>th</sup> August 2023, in Satun, Thailand</li> </ul>	<ul style="list-style-type: none"> <li>• The 38<sup>th</sup> Working Group Meeting hosted by Thailand (Online), 14<sup>th</sup> March 2024</li> <li>• Joint report editing online in May: -Debris flow (hosted by Thai side, (23<sup>rd</sup>-24<sup>th</sup> May)</li> <li>• The 39<sup>th</sup> Working Group Meeting in Kangar, Perlis, Malaysia in August 2024.</li> <li>• The 21<sup>st</sup> Committee Meeting in Malaysia</li> </ul>	<ul style="list-style-type: none"> <li>• The 40<sup>th</sup> Working Group Meeting hosted by Malaysia (Online)</li> <li>• Joint report editing in Thailand</li> <li>• The 41<sup>st</sup> Working Group Meeting in Thailand</li> <li>• The 22<sup>nd</sup> Committee Meeting in Thailand</li> </ul>	<ul style="list-style-type: none"> <li>• The 42<sup>nd</sup> Working Group Meeting hosted by Thailand (Online)</li> <li>• Joint report editing in Malaysia</li> <li>• The 43<sup>rd</sup> Working Group Meeting in Malaysia</li> <li>• The 23<sup>rd</sup> Committee Meeting in Malaysia</li> </ul>