



TRAINING CENTER

(Guideline for Cooperation of DMR-KIGAM)

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Department of Mineral Resources, Thailand

MARCH 16, 2021

1st KIGAM and DMR Joint Workshop
on Training Center and Geological Museum

Online Meeting

12:30 ~ 16:00 (KST)



DMR Missions

Geology

Geological Mapping

Active Faults &
Earthquake
Monitoring

Fossil

Mineral Resources

Exploration
by Geo-physics &
Geo-Chemistry

Mineral Resource
Management

Geological Environment

Geo-Hazard

Geological
Environmental Risk
management

Geo-Eco System

Laboratories & Research centers

Mineral Resources
analysis and testing
- Services
- R&D

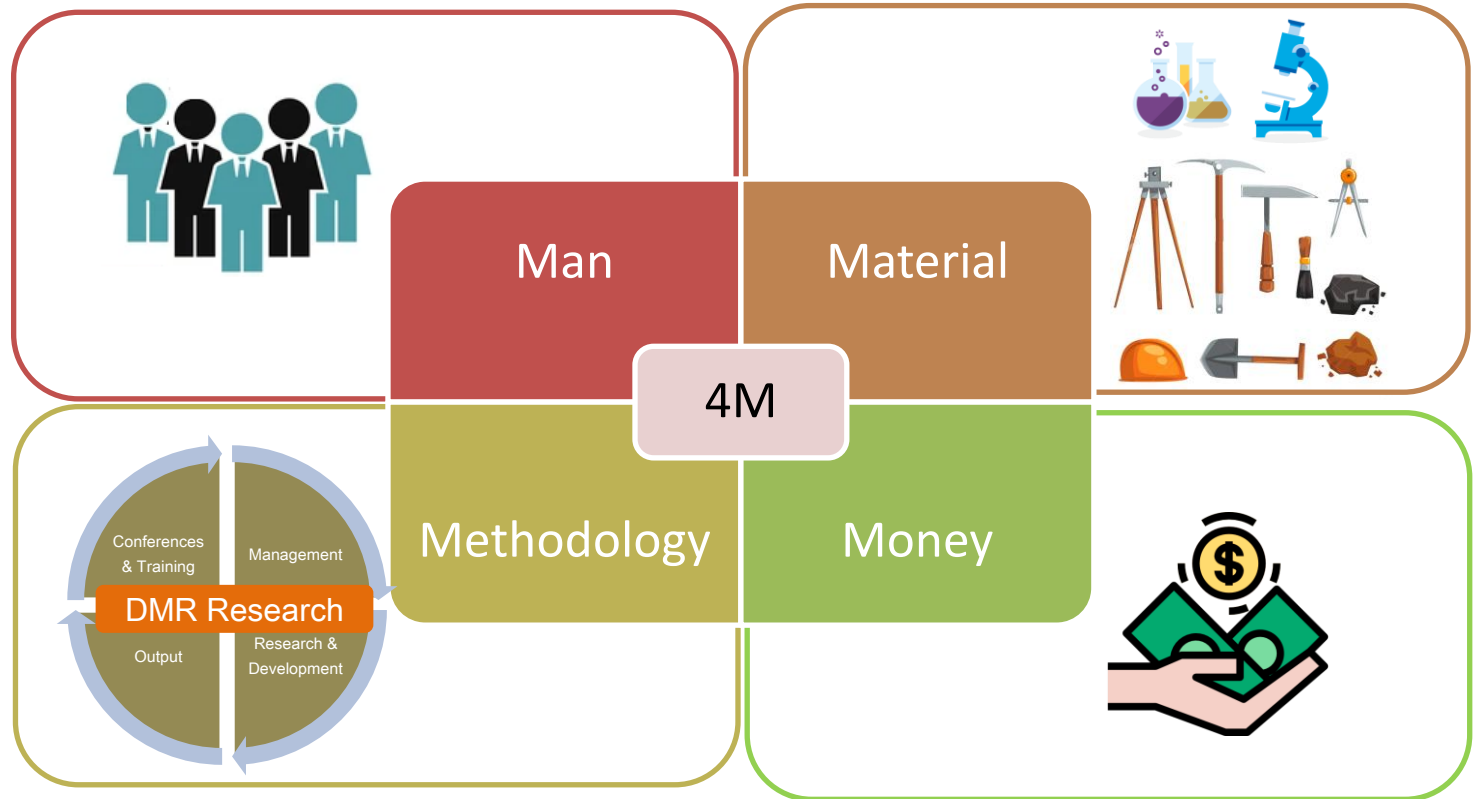
Research centers
- Management
- Doing Research

Museum & Mineral Resource Sample Library

Museums

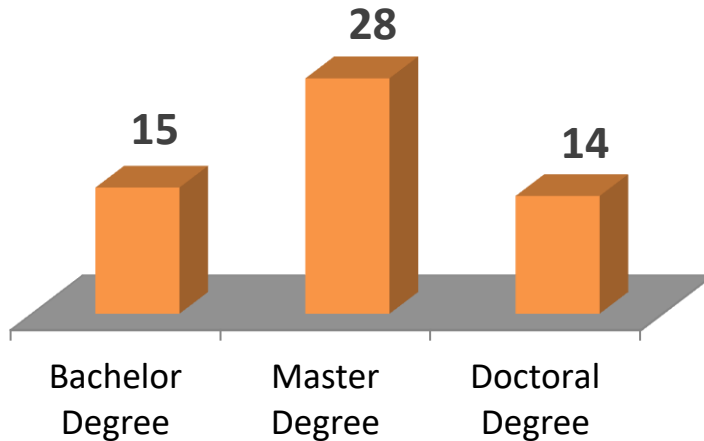
Sample library –
Rocks, Soils,
Sediments &
Minerals

DMR's Research Management Resources

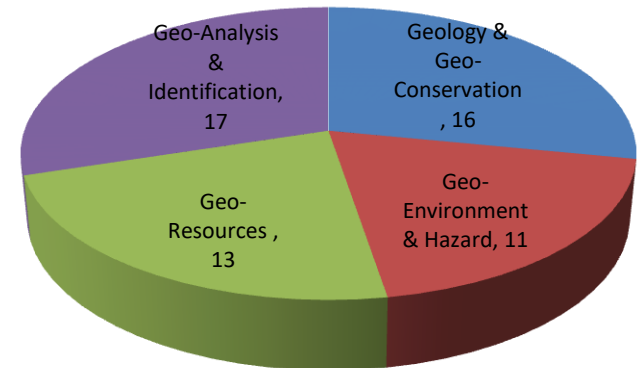


DMR's Man: Researchers & Academicians

Number classified by degree



Number classified by special sector



Total Numbers = 57

DMR's Materials



Central & regionals

- Places
- Data & Information
- Survey instruments



Laboratories

- Lab rooms
- Lab instruments



Museums

- Rock and Minerals Museum, Rama 6 road, Bangkok
- National Geological Museum Pathum Thani
- Sirindhorn Museum, Kalasin province
- Fossil, Geology and natural History Museum (Lampang province)
- Fossil, Geology and natural History Museum (Surat Thani province)



Research centers & Sample

- Rayong Rocks and Minerals Research Center
- Phu Wiang Fossil Research Center and Dinosaur Museum
- **Mineral Resources Research and Development Center**

Division of Mineral Resources Analysis and Identification

Mineral Resources Research and Development Center (MRDC) since 2017



Responsibility:

- DMR **research and innovation projects management**
 - Thai Geoscience Project (TGP) for research and innovation
- The **study, research and development of**
 - **analytical method** for geological materials analysis and identification services.
- **Thai Geoscience Journal (TGJ)**
- Other tasks are assigned.



DMR

Scientific Instruments



X-ray
Diffractometer
(XRD)



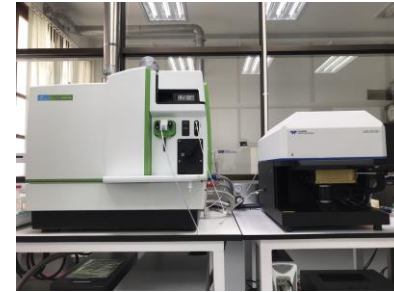
Graphite Furnace-Atomic
Absorption Spectrometer
(GF-AAS)



Inductively Coupled Plasma
Optical Emission
Spectrometer (ICP-OES)



Wavelength
dispersive
X-ray fluorescence
spectrometer
(WD-XRF)



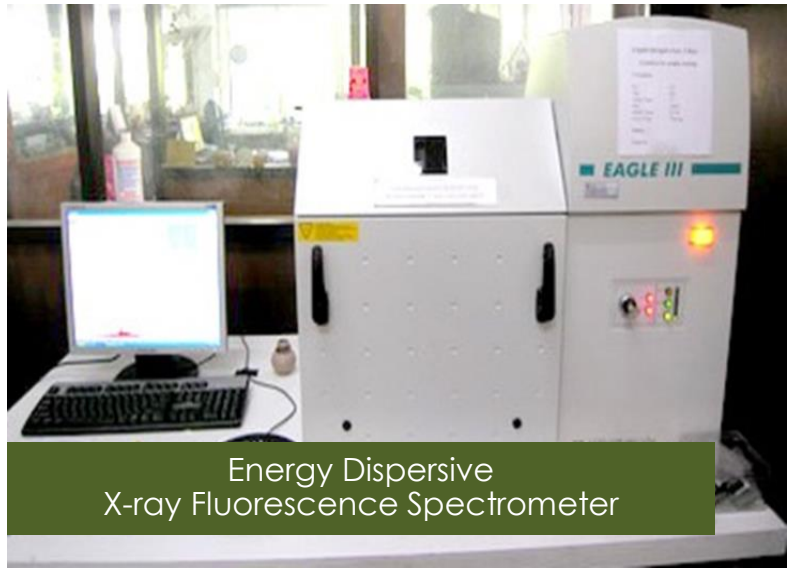
Laser
Ablation Inductivel
y Coupled Plasma
Mass
Spectrometry (LA-
TCP-MS)



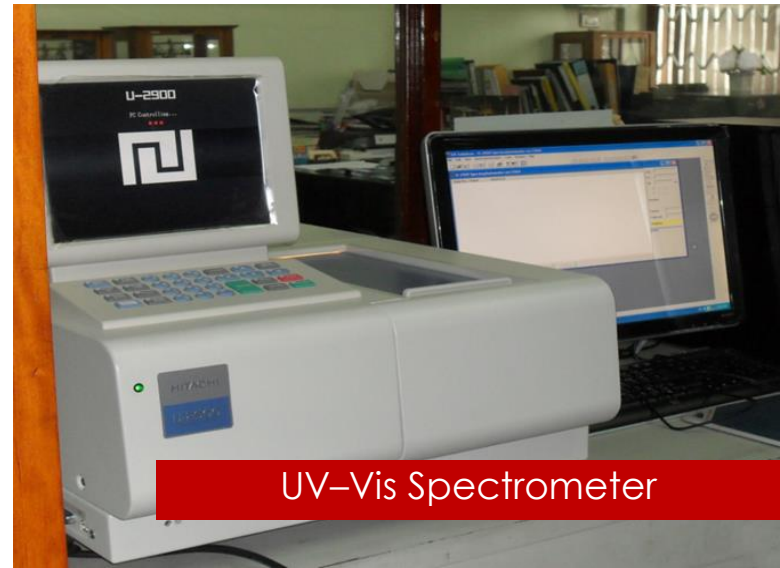
Fourier Transform Infra-red Spectrometer



Laser Raman Spectrometer



Energy Dispersive
X-ray Fluorescence Spectrometer



UV-Vis Spectrometer

Methodology

Conferences & Training

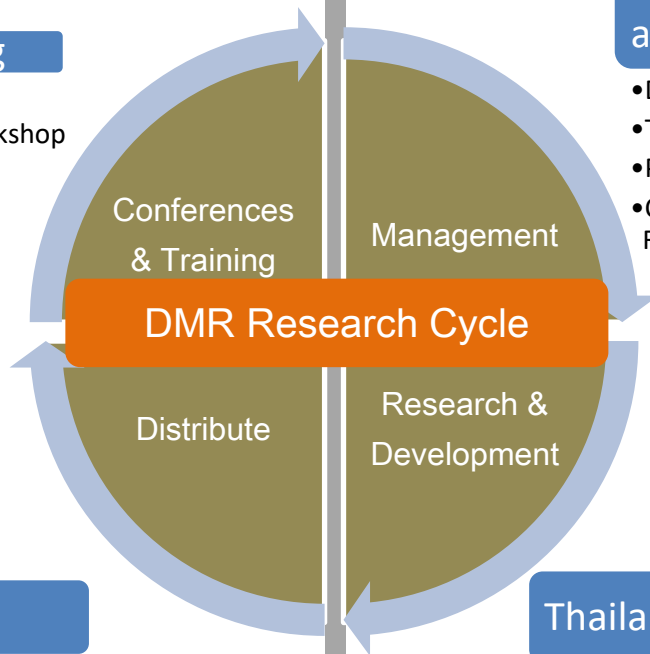
- International conferences
- International Symposium & Workshop
- International Technical Seminar
- International Exhibition
- In-house Training
- International Training

Distribute

- Thai Geoscience Journal
- Exhibition in DMR Museums
- Policy

Output

Input



Mineral Resources Research and Development Committee

- DMR research management
- Theme Classification
- Project selection
- Connection with the Thailand Science Research and Innovation (TSRI)

Thailand Geoscience Project (TGP)

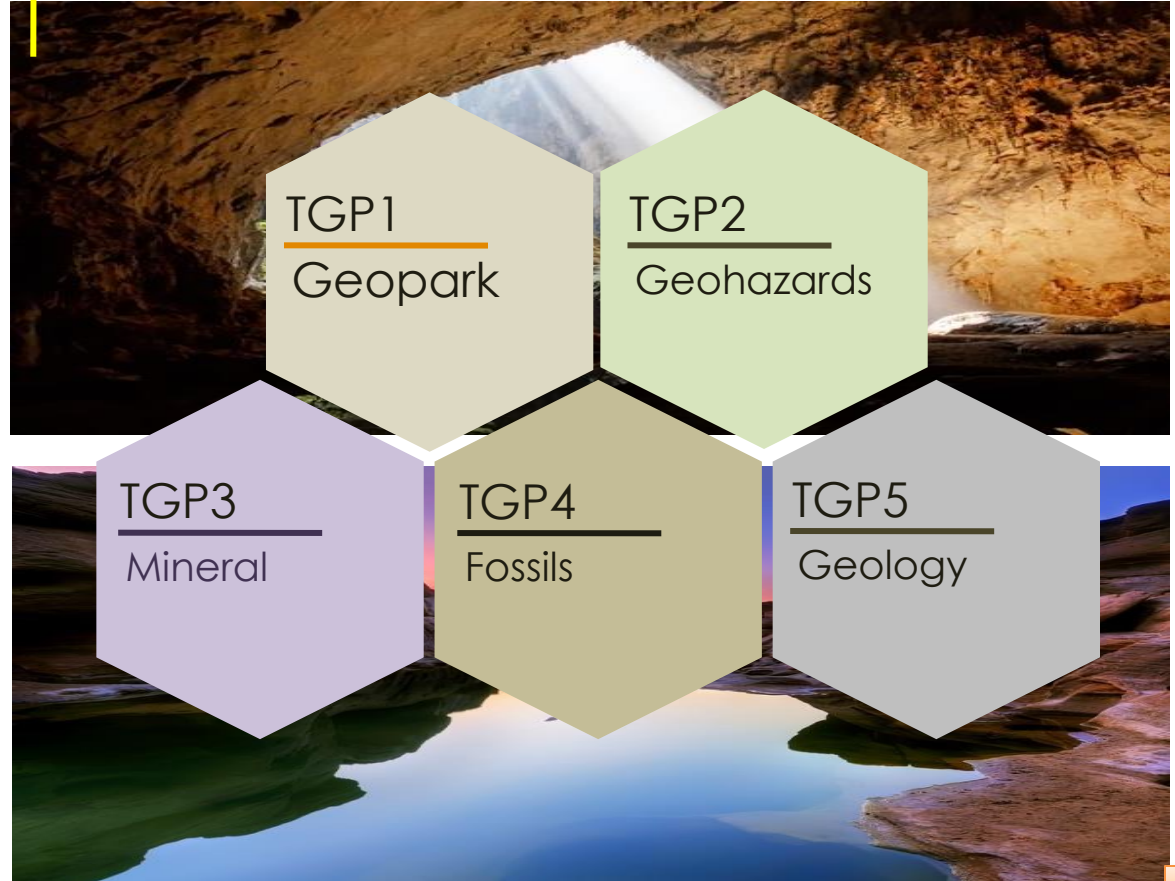
Doing research & connection (MOU)

- Organizations
- Universities

Methodology

Input

Thailand Geoscience Project (TGP)



Thai Geoscience Journal

TGJ

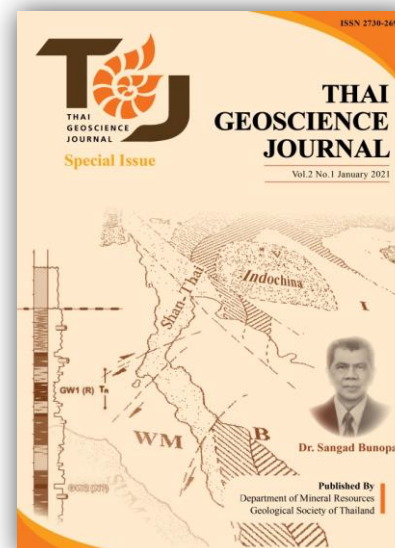
Publication

- 📄 Thai Geoscience Journal (TGJ) Vol.1 (2020)
- 📄 Thai Geoscience Journal (TGJ) Vol.2 No.1 (2021)

Vol.1 No.1



Vol.2 No.1



Methodology

Output

Exhibition

DMR Museums



Methodology

Output

International

Conference

Workshop

Field trip

Excursion

Technical Seminar

Exhibition

Training



International Symposium & Workshop Advancing Paleontological Research and Specimen Conservation in Southeast Asia

17-19 December 2019, The Berkeley Hotel Pratunam, Bangkok

International Conference & Workshop & Field Trips

Conference





International Symposium & Workshop Advancing Paleontological Research and Specimen Conservation in Southeast Asia

17-19 December 2019, The Berkeley Hotel Pratunam, Bangkok

International Conference & Workshop & Field Trips

Workshop





International Symposium & Workshop Advancing Paleontological Research and Specimen Conservation in Southeast Asia

7-15 December 2019, Chaiyaphum

International Conference & Workshop & Field Trips

Field trip





International Geological Correlation Programme (IGCP) 668: Equatorial Gondwanan history and Early Palaeozoic Evolutionary

29-30 November 2018, Asia Hotel, Bangkok

International Conference & Excursion

Conference





International Geological Correlation Programme (IGCP) 668: Equatorial Gondwanan history and Early Palaeozoic Evolutionary

29-30 November 2018, Tarutao, Satun

International Conference & Excursion

Excursion





The Amazing ASIAN DINOSAURS @ SIAM 2015

20-29 November 2015, Siam Paragon, Bangkok

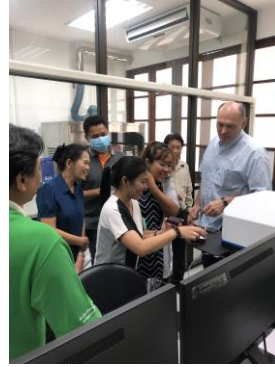
International Exhibition





The training DMR's geologist for preparing zircon dating

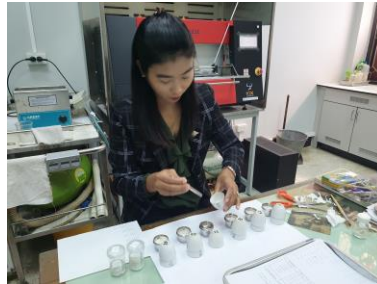
In-house Training





The CLMTV's training on Mineral Analysis techniques

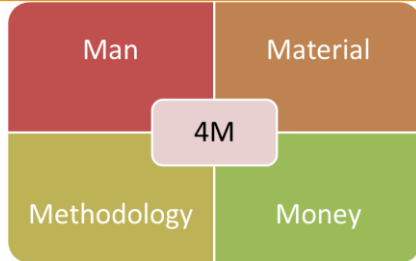
International Training



DMR's Training Center



DMR's Research Management Resources



Strong Points

4M Research management

Meeting Organized Team

Places

Reasonable accommodations and facilities



**KIGAM and DMR Joint Workshop
on Training Center and Geological Museum**



Thank You

Any...

Question? & Discussions

KIGAM-DMR Initiatives for Cooperation

Topics	Activities
Geological Museum/ Learning Center	<ol style="list-style-type: none">1. Exchange of information and experience in Geological Museum Management2. Exchange of information and experience in Geological Data Repository
Training/ Research Center	<ol style="list-style-type: none">1. Setting up of Research and Training Center in Rayong Rocks and Mineral Research Center, Rayong Province<ul style="list-style-type: none">- Master plan of Rayong Rocks and Mineral Research and Training Center Development2. Capacity building in geosciences<ul style="list-style-type: none">- DMR-KIGAM training courses on marine/ coastal geology, urban geology, etc3. Exchange of information and experience in research and survey management
Meeting/ workshop	Exchange of visits between DMR and KIGAM
Other matter	

DMR's Training Center



Strong Points

4M Research management

Meeting Organizer Team

Places

Reasonable accommodations and facilities

Call for Cooperation

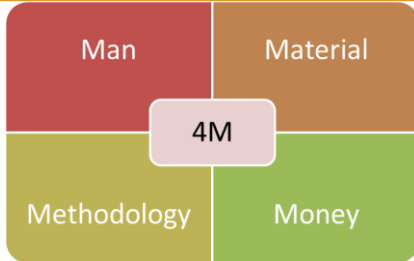
Budget

Contents

Trainer specialists

Trainees

DMR's Research Management Resources



**KIGAM and DMR Joint Workshop
on Training Center and Geological Museum**

(Draft) KIGAM-DMR Initiatives for Cooperation 2021-2025

Activities	Year 2021	Year 2022	Year 2023	Year 2024	Year 2025
Learning/Training Center	<p>Training on Fossil excavation <u>Site:</u> Sirindhorn Museum, Kalasin Province</p>	<p>Training on: - Geopark Development - Coastal geology management <u>Site:</u> 1. Geopark Sites 2. Rayong Province</p>	<p>Training on: - Urban Geology - Data Repository <u>Site:</u> 1. Central Plain 2. Rayong Rocks and Mineral Research Center, Rayong Province</p>	<p>Training on: - Mineral Exploration - Geohazards <u>Site:</u> Northern part of Thailand</p>	<p>Training on: - Geological mapping - Geohazards <u>Site:</u> Bangkok, Central part of Thailand</p>
Geological Museum	<p>Exchange of Technology and Exhibition <u>Site:</u> 1. Sirindhorn Museum, Kalasin Province and 2. Phuwiang Fossil Research Center and Dinosaur Museum, Khon Kaen Province 3. Golden Jubilee National Geological Museum, Pathum Thani</p>	<p>Exchange of Technology and Exhibition <u>Site:</u> 1. Golden Jubilee National Geological Museum, Pathum Thani Province and 2. Rayong Rocks and Mineral Research Center, Rayong Province</p>	<p>Exchange of Technology and Exhibition <u>Site:</u> Fossil Geology and Natural History Museum, Surat Thani Province</p>	<p>Exchange of Technology and Exhibition <u>Site:</u> Fossil Geology and Natural History Museum, Lampang Province</p>	<p>Exchange of Technology and Exhibition <u>Site:</u> Rock and Mineral Museum, Bangkok</p>
Workshop/Meeting	<p>Online workshop</p>	<p>-Workshop in Thailand -Meeting in Korea</p>	<p>-Workshop in Korea -Meeting in Thailand</p>	<p>-Workshop in Thailand -Meeting in Korea</p>	<p>-Workshop in Korea -Meeting in Thailand</p>