



Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP)

CCOP Annual Report 2012



*CCOP Technical Secretariat
Bangkok, Thailand*

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Picture on cover page: Geological Museums figured in the CCOP Book, Geological Museums in East and Southeast Asia. Established over an extensive period during the 20th and 21st Centuries, they display a wide variety of architectural styles reflecting the period of their construction. Older more conventional styles contrast with extremely new and adventurous purpose-built constructions some of which have been designed to reflect their special themes, such as 'coal', 'dinosaurs' or 'volcanoes'.

MESSAGE FROM THE CHAIRPERSON

On behalf of the CCOP Member Countries, it is indeed a great pleasure for me to thank the Director of CCOP Technical Secretariat and the staff for having successfully completed the CCOP Technical Secretariat (CCOPTS) Annual Report 2012.

The contents of the CCOP Technical Secretariat Annual Report 2012 reflect its integrity and loyalty for the enhancement of the CCOP's existence in the future. Being a non-profit geoscience organization in the East and Southeast Asia, CCOP has proved its meaningful presence in the globalization era. Under Dr. He Qingcheng's leadership, CCOPTS has been able to empower not only the Technical Secretariat but also the important role in advancing geoscience cooperation amongst the CCOP Member Countries in particular, and the World in general.



The projects initiated by CCOPTS were implemented smoothly, some of them include: 5 – 17 March 2012, EPPM P3W6: Workshop on Metadata Database Management, Phnom Penh, Cambodia; 28 - 29 March 2012, CGS-CCOP Geochemical Mapping Seminar, International Conference Hotel of Nanjing, China; and 12 – 14 September 2012, CCOP-EP-PM Program Seminar 6 (S6): Seminar/Workshop- CCS Opportunities in the CCOP Region, Bali, Indonesia. It showed the seriousness of the CCOP Technical Secretariat to foster geoscientific contribution to CCOP Member Countries in response to the global issues.

During Prof. He Qingcheng's tenure as the Director, he recorded a significant achievement, including: Implementing restructuring action plan on CCOPTS organization; Implementing a new balance budgetary system; Successfully encouraged Member Countries to increase their annual cash contribution and successfully invite new Member Countries to join CCOP. All these achievements done by the Director and his staff become a milestone for CCOP to be more effective, efficient and accepted as respected international organization with global influence.

In addition, the implementation of the 49th CCOP Annual Session and the 58th CCOP Steering Committee (SC) Meeting recently held in Langkawi, Malaysia also demonstrated the prominent cooperation between the host country Malaysia and the effective management of CCOPTS. Both Annual Session and CCOP SC Meeting were held very well and the agenda ran without any constraints. Finally, I do hope that such outstanding performance of the CCOP Technical Secretariat can be maintained and be continued in the future accordingly.

Dr. R. Sukhyar
Chairman, CCOP Steering Committee

CCOP: Vision, Mission and Strategy



CCOP: The Coordinating Committee for Geoscience Programmes in East and Southeast Asia.

Vision: A premier intergovernmental Earth science organization in East and Southeast Asia.

Mission: To contribute significantly to the economic development and sustainable management of the environment and improvement of the quality of life of its Member Countries by the application of Earth science knowledge.

Strategic Focus:

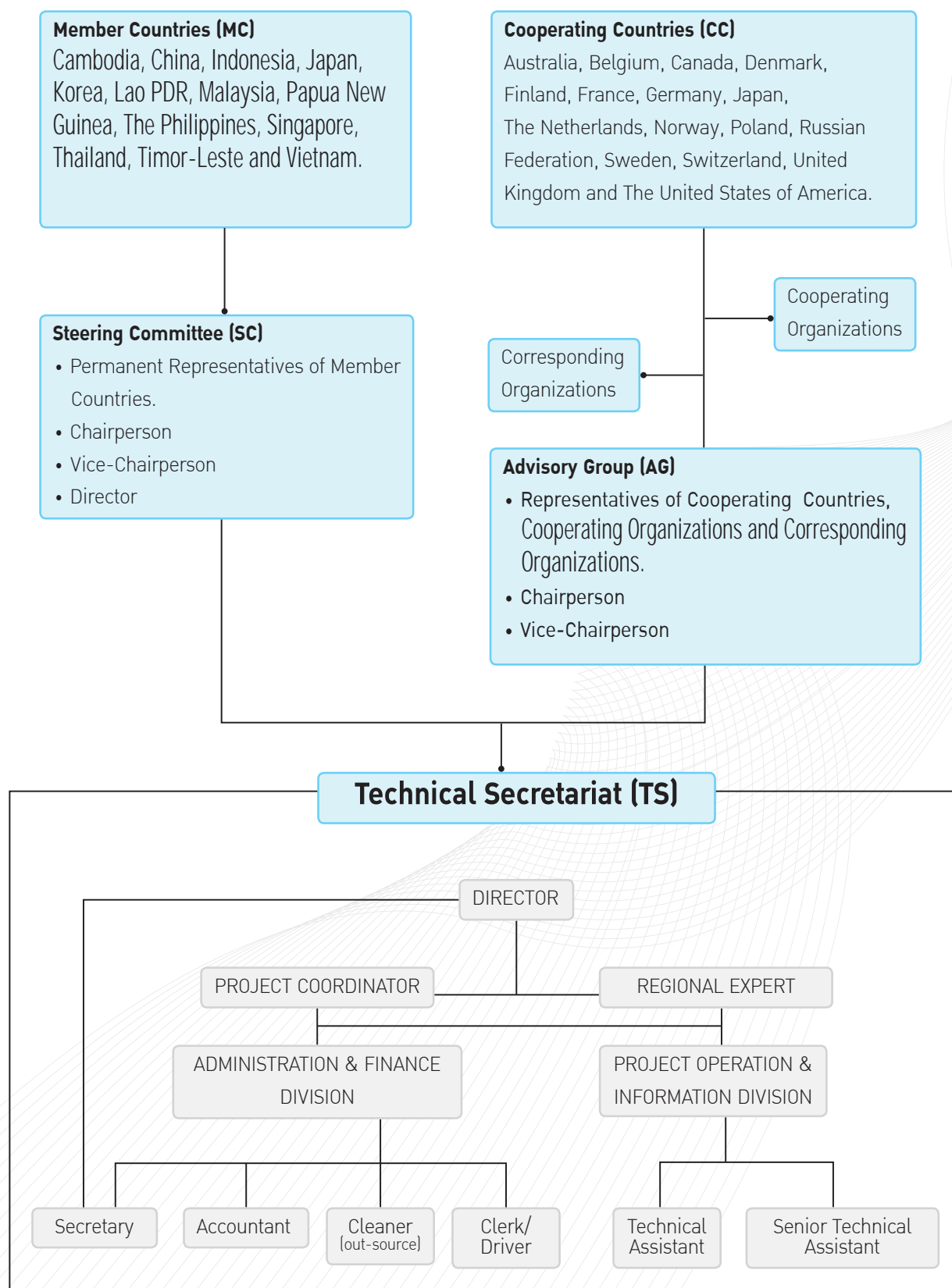
- **Outreach** – to enhance influence with decision makers, investors and the public through the provision of relevant Earth science information and to develop appropriate skills for communicating effectively with CCOP stakeholders.
- **Cooperation and Partnership** –to enhance the internal and external partnerships to improve the quality, reach, application and impact of our Earth science information and knowledge.
- **Knowledge Enhancement and Sharing** –to manage, promote, share and exploit the region’s Earth science information and skills.
- **Data and Information** –to advance sharing of data and information and integrate Earth science data across national boundaries.

Member Countries: Cambodia, China, Indonesia, Japan, Korea, Lao PDR, Malaysia, Papua New Guinea, Philippines, Singapore, Thailand, Timor-Leste and Vietnam.

Cooperating Countries : Australia, Belgium, Canada, Denmark, Finland, France, Germany, Japan, The Netherlands, Norway, Poland, Russian Federation, Sweden, United Kingdom and United States of America.

Cooperating Organizations : ASCOPE, CIFEG, CPC, EUROGEOSURVEYS, GETECH, IOC, IOMAC, IUGS, PETRAD, UKM, UN-ESCAP, UNEP, UNESCO, THE WORLD BANK.

MANAGEMENT AND ORGANIZATION



As of 31 December 2012, the CCOP Technical Secretariat has 9 personnel, comprising three professionals, five supporting staffs and one outsourced staff.

In 2012, **Dr. R. Sukhyar**, Chairman of the CCOP Steering Committee, Permanent Representative of Indonesia to CCOP, Head of the Geological Agency of Indonesia, continued his services as Chairman of the CCOP Steering Committee. **Mr. Leo L. Jasareno**, Director, Mines and Geoscience Bureau, Permanent Representative of the Philippines to CCOP also continued his service as Vice-Chairman of the Steering Committee.

Dr. David B. Prior continued his services as Chairman of the CCOP Advisory Group until 31 December 2012. The CCOP Advisory Group Meeting at the 48th CCOP Annual Session elected **Ms. Franca Schwarz**, Head of Sub-Department International Cooperation, Federal Institute for Geosciences and Natural Resources (BGR), Representative of Germany to CCOP as Chairperson and **Mr. Ioannis Abatzis**, Senior Geophysical Adviser, Department of Geophysics, Geological Survey of Denmark and Greenland (GEUS), Representative of Denmark to CCOP as Vice-Chairperson of the CCOP Advisory Group from 2013 onwards.

At the 58th CCOP Steering Committee Meeting, 26-28 March 2012, Nanjing, China, the Meeting accepted the Universiti Kebangsaan Malaysia (UKM) as a new CCOP Cooperating Organization. The Meeting also accepted **Dr. Hee Young Chun**, former CCOPTS Director, and **Dr. Jos Sonnevile**, former Representative of the Netherlands to CCOP, as new CCOP Honorary Advisors.

The following list summarizes the changes of Permanent Representative (PR) of Member Countries to CCOP in the year 2012.

COUNTRY	FORMER PR TO CCOP	SUCCESSORS
Japan	Mr. Yuji Kumamaru	Dr. Eikichi Tsukuda , Director-General, Geological Survey of Japan, National Institute of Advanced Industrial Science and Technology
Korea	Dr. Chang Ho-Wan	Dr. Hyo Sook Lee , President, Korea Institute of Geoscience and Mineral Resources (KIGAM)
Lao PDR	Ms. Chansavath Boupcha	Mr. Khampha Phommakaysone , Deputy Director-General, Department of Geology and Minerals, Ministry of Natural Resources and Environment (MONRE)
Papua New Guinea	Ms. Nellie James	Mr. Shadrach Himata , Acting Secretary, Department of Mineral Policy and Geohazards Management



COUNTRY	FORMER PR TO CCOP	SUCCESSORS
Thailand	Mr. Nitat Poovatanakul	Mr. Praneet Roibang , Director-General, Department of Mineral Resources (DMR)
Vietnam	Dr. Phung Dinh Thuc	Dr. Nguyen Quoc Thap , Vice-President, Vietnam Oil and Gas Group, PETROVIETNAM

Dr. Eikichi Tsukuda, Director-General, Geological Survey of Japan, National Institute of Advanced Industrial Science and Technology succeeded Mr. Yuji Kumamaru as Permanent Representative of Japan to CCOP. **Dr. Hyo Sook Lee**, President, Korea Institute of Geoscience and Mineral Resources (KIGAM) succeeded Dr. Chang Ho-Wan as Permanent Representative of Korea to CCOP. **Mr. Khampha Phommakaysone**, Deputy Director-General, Department of Geology and Minerals, Ministry of Natural Resources and Environment (MONRE) succeeded Ms. Chansavath Boupcha as Acting Permanent Representative of Lao PDR to CCOP. **Mr. Shadrach Himata**, Acting Secretary, Department of Mineral Policy and Geohazards Management succeeded Ms. Nellie James as Permanent Representative of PNG to CCOP. **Mr. Praneet Roibang**, Director-General, Department of Mineral Resources (DMR) succeeded Mr. Nitat Poovatanakul as Permanent Representative of Thailand to CCOP. **Dr. Nguyen Quoc Thap**, Vice-President, Vietnam Oil and Gas Group, PETROVIETNAM succeeded Dr. Phung Dinh Thuc as Permanent Representative of Vietnam to CCOP.



Highlights for the Year 2012

The 58th and 59th CCOP Steering Committee Meetings and The 48th CCOP Annual Session

The 58th Steering Committee Meeting:



Delegates from CCOP Member Countries and Vice-Chairman of CCOP Advisory Group at the 58th CCOP Steering Committee Meeting.

In cooperation with the Government of China through the China Geological Survey (CGS), Ministry of Land and Resources, the 58th CCOP Steering Committee Meeting was organized and held at the International Conference Hotel of Nanjing, China on the 26th to 28th March, 2012. The Meeting was attended by representatives of thirteen Member Countries (MC): CAMBODIA, CHINA, INDONESIA, JAPAN, REPUBLIC OF KOREA, LAO PDR, MALAYSIA, SINGAPORE, PAPUA NEW GUINEA, PHILIPPINES, TIMOR-LESTE, THAILAND and VIETNAM. Also in attendance as observers were delegates from Myanmar and Mongolia, the Vice Chairman of the Advisory Group, Ms. Franca Schwarz and the Director and members of the CCOP Technical Secretariat. Dr. Oystein Berg (Representative of PETRAD) was present as Resource Person.

Dr. Wang Min, Vice-Minister of the Ministry of Land and Resources, China, welcomed the representatives of the CCOP Member Countries. Dr. R. Sukhyar, Chairman of CCOP Steering Committee, Permanent Representative of Indonesia to CCOP and Head of the Geological Agency, Ministry of Energy and Mineral Resources (MEMR), opened the Meeting.

The Meeting discussed the administrative matters, business plan, as well as progress of projects and new initiatives.

The 48th CCOP Annual Session:

The 48th Annual Session was held at the Holiday Villa Beach Resort & Spa in Langkawi, Malaysia on 5-8 November 2012. It was organized by the Minerals and Geoscience Department Malaysia (JMG), Ministry of Natural Resources and Environment (NRE), Malaysia and the Technical Secretariat of CCOP in cooperation with PETRONAS.



Heads of Delegations at the 48th CCOP Annual Session and Chairman of the CCOP Steering Committee, with Honorable Tan Sri Datuk Sri Panglima Joseph Kurup, NRE Deputy Minister.

There were 109 delegates attending the Session from the following: Member Countries - CAMBODIA, CHINA, INDONESIA, JAPAN, REPUBLIC OF KOREA, LAO PDR, MALAYSIA, PAPUA NEW GUINEA, PHILIPPINES, SINGAPORE, THAILAND, and VIETNAM; Cooperating Countries - CANADA, DENMARK, FINLAND, GERMANY, JAPAN, THE NETHERLANDS, NORWAY and UNITED KINGDOM; Cooperating Organizations - PETRAD and Universiti Kebangsaan Malaysia (UKM); and Honorary Advisers of CCOP. The staff of CCOP Technical Secretariat (CCOPTS) and JMG provided the necessary conference services.

The Session was officially opened by the Honorable Tan Sri Datuk Sri Panglima Joseph Kurup, NRE Deputy Minister, on behalf of the NRE Minister, Honorable Dato Sri Douglas Uggah Embas. Welcome address was delivered by the Permanent Representative of Malaysia to CCOP, and Director General, Minerals and Geoscience Department Malaysia, Dato' Yunus Abdul Razak. Dr. R. Sukhyar, Chairman of the CCOP Steering Committee & Permanent Representative of Indonesia to CCOP and Ms. Franca Schwarz, Vice-Chairman of the CCOP Advisory Group & Representative of Germany to CCOP delivered special messages.

Dato' Yunus Abdul Razak, Head of the Delegation of Malaysia was elected Chairperson of the Session and Dr Eikichi Tsukuda, Head of the Delegation of Japan, was elected Vice-Chairperson. The Representatives from Vietnam (Dr. Nguyen Hong Minh) and Canada (Ms. Carmel Lowe) were elected as Rapporteurs.



Prof. Dr. He Qingcheng, CCOPTS Director presented the Progress Report of CCOP including organizational changes (personnel), the current financial position, technical activities and cooperation and support from Cooperating Countries and Organizations from 2010 to June 2012, with update to October 2012. Member Countries also reported on their geoscientific activities by sectors - geo-resources, geo-environment and geo-information. Cooperating Countries and Organizations also reported activities conducted with CCOP, as well as those bilateral activities with CCOP Member Countries. The Session was also updated by the CCOPTS Director of CCOP's workplan for 2013.

The Delegation of Japan updated the Session of its intention to host the 49th CCOP Annual Session on 20-24 October 2013 at Sendai International Center (SIC).

The EAGER Grant for 2012 was announced at the Session, and was awarded to **Mr. Ahmad Farid Abu Bakar**, a PhD student in the University of Malaya. The title of his research proposal is *"The transport and fate of selected acid mine ions in surface water and river sediment with regards to mining activities"*.

The Advisory Group (AG) consisting of representatives from Cooperating Countries and Organizations as well as Honorary Advisers, led by Ms Schwarz in the absence of the AG Chairman, met in private session, and reported back to the Annual Session its recommendations for CCOP. These recommendations are for consideration of the 59th CCOP Steering Committee Meeting held right after the Annual Session. The AG elected a new chairman, Ms Schwarz and vice-chairman, Mr Ioannis Abatzis, Representative of Denmark to CCOP, effective January 2013.

A thematic session was jointly organized by the Minerals and Geoscience Department, Malaysia (JMG), Ministry of Natural Resources and Environment, Universiti Kebangsaan Malaysia (UKM), PETRONAS and CCOP on the topic *"Geoscience Innovations for Sustainable Development – The Future We Want"*. There were 22 keynote and technical papers, and 2 posters presented at this session.

A field excursion was made on the last day in Langkawi Geopark, at Kilim Karst Geoforest Park Trail (boat cruise) and Machincang Cambrian Geoforest Park (cable car trail).

In conjunction with the Annual Session, the following were held: 59th CCOP Steering Committee Meeting (9-10 November 2012); CCOP-SEADPRI-GTK-JMG Workshop on Natural Hazards and Climate Change Adaptation; and DELTARES-JMG-CCOP Expert Meeting on Land Subsidence in Coastal Megacities (9 November 2012).

The 59th Steering Committee Meeting:



Heads of Delegations at the 59th CCOP Steering Committee Meeting with Chairman of the CCOP Steering Committee, Vice-Chairman of the CCOP Advisory Group and Director of CCOP Technical Secretariat.

Following the 48th CCOP Annual Session is the 59th CCOP Steering Committee Meeting held on 9-10 November 2012 at the same venue. The Meeting was attended by delegates of the following Member Countries (MC): CAMBODIA, CHINA, INDONESIA, JAPAN, REPUBLIC OF KOREA, LAO PDR, MALAYSIA, PAPUA NEW GUINEA, PHILIPPINES, THAILAND, and VIETNAM. Also present were Ms Franca Schwarz, Vice-Chairperson of the Advisory Group, and the Director and staff of the CCOP Technical Secretariat.

The Director presented the CCOP Progress Report covering the period 1 January 2012 to 30 June 2012. The report included the administration and personnel, finance, technical cooperation and project support, technical activities, fellowships and grants, publications and documentations. He also presented the proposed workplan, budget and new initiatives for 2013, which was consequently approved by the Meeting with some amendments.

Thailand, the host of the 60th CCOP Steering Committee planned to be held on 26-28 March 2013 in Ubon Ratchathani, updated the Meeting on its preparations.

CCOP New Membership

The CCOP TS continued its efforts in pursuing new memberships in particular, Myanmar, Brunei and Mongolia as new Member Countries.

TECHNICAL COOPERATION

In the year 2012, the Technical Secretariat has exceeded most of its planned targets under programmes of the three sectors on Geo-resources, Geo-environment and Geo-information. All the implemented CCOP activities strategically focused on enhancing coordination of the geoscience programmes of Member Countries, capacity building and advance sharing of data and information across national boundaries. Cooperating Countries and Organizations continued to provide financial and/or technical support for CCOP project activities. Member countries also provided in-kind support to CCOP work programmes to optimize the benefits of the support provided by the Cooperating Countries and Organizations. Moreover, dissemination workshops of bilateral cooperating projects and initiatives taken based on local sponsorship by some Member Countries were organized, contributing to enhance the technical information flow between the Member countries, Cooperating Countries and Organizations of CCOP. The table below summarizes principal CCOP technical activities and some reported bilateral cooperation projects within the CCOP region during the fiscal year 2012.

Summary of CCOP Technical Activities with Member Countries, Cooperating Countries and Organizations in 2012

Country/ Organization	CCOP Technical Activities
<i>1) Member countries</i>	
China	Supported 58 th SC Meeting in March 2012 in Nanjing, China Supported CCOP Geochemical Mapping Workshop in March 2012 in Nanjing, China Supports development of an office automation system (AMOS) for CCOPTS. Organized in cooperation with CCOP the 3 rd Training Course on Geological Mapping Capacity Building for ASEAN Countries in March 2012 in Nanjing, China. Provided experts for training of CCOP-GIMS at EPPM Program: P3 Special Training on the Usage of the CCOP Geo-Information Metadata System (GIMS), 13-14 March 2012 and P3W6 Workshop on Metadata Database Build-up and Management, 15-17 March 2012 in Phnom Penh, Cambodia. CGS has proposed a project on Integrated Geophysical Data Processing (IGDP) for CCOP in 2011. A training course is planned for 2013.
Indonesia	Organized in cooperation with CCOP the Training on ASEAN Mineral Database and Information System held in Yogyakarta, Indonesia on 26-29 June 2012. Supported printing of Proceedings of 47 th CCOP Annual Session Part II (Thematic Session)
Japan	GSJ/AIST supports for second phases of two projects: Groundwater & DeISEA. GSJ/AIST continues to be coordinator for Asia of OneGeology Steering Group. Financially and technically supported the Training Program on Mineral Resource Database for ASEAN, held on 18-26 September 2012 at AOTS Tokyo Kenshu Center, Japan, in cooperation with CCOP.



Country/ Organization	CCOP Technical Activities
Japan	<p>GSJ has been working as one of the node server-operating organizations, providing the metadata of GSJ's maps (5032 CCOP records as of March 2012)</p> <p>Cooperated with CCOP and Thailand in the CGI/IUGS – CCOP Asian Geoscience Information Workshop, held on 15-17 February 2012 in Bangkok, Thailand.</p> <p><u>Offering to CCOP:</u> Continuous support for the Environmental Analysis Support Programme in the CCOP and Other Regions under the auspices of Japan Radioisotope Association and Iwate Medical University (PIXE method)</p>
Korea	<p>Sponsored for CCOP Member Countries to take part in the Regular Training Courses in 2010-2012 (So far KIGAM has covered all expenses for at least one participant from each country except for Malaysia in some cases, Japan, and China).</p> <p><u>Offering to CCOP:</u> CCOP countries are invited for training courses for foreigners (focused on 4 research divisions of KIGAM, such as geology, mineral resources, petroleum & marine, geologic environment). KIGAM welcomes the participation by other CCOP Member Countries to the new started framework of 3-year project under the MKE which deals</p>
Malaysia	<p>Organized in cooperation with CCOP the Expert meeting on Land subsidence in Coastal Megacities in Langkawi, Malaysia on 9 Dec 2012 (hosted by JMG, Malaysia). Organized in cooperation with CCOP the JMG-SEADPRI-GTK-CCOP Workshop on Natural Hazards and Climate Change Adaptation on 9 November 2012 in Langkawi, Malaysia. (hosted by UKM-SEADPRI, co-supported by GTK, Finland).</p> <p><u>Offering to CCOP:</u> Offering technical assistance (advice and training) to fellow CCOP Member Countries intending to set up a laboratory for coal testing, as well as the implementation/ conduct of coal quality testing activities in the laboratory. Offering technical expertise to fellow CCOP Member Countries seeking assistance to set up a fire-assay laboratory for gold testing. Co-host the DelSEA II short course on Coastal geology and Management 10–16 March 2013 in Terengganu and Kota Bharu, Malaysia</p>
PNG	<p><u>Offering to CCOP:</u> Offering to share experiences in processing and interpreting of geophysical datasets, especially airborne magnetic and radiometric, and their usefulness in field geological mapping, can be highlighted or presented in a workshop to other CCOP members</p>
Philippines	<p><u>Offering to CCOP:</u> Proposal of compiling/consolidating the best practices on Mine Decommissioning and Rehabilitation Plan in the CCOP Region (including the Cooperating Countries). This project will be funded internally by the Mines and Geosciences Bureau - MGB".</p>
Thailand	<p>DMR continues to support for the Permanent Office Building for CCOP T/S in DMR Complex, Bangkok, Thailand.</p> <p>Cooperating with CCOP under the project entitled "CCOP-GSJ/AIST Groundwater Project Phase II".</p> <p>Cooperating with CCOP under the CCOP-CGS Metadata project.</p> <p>Cooperated with CCOP in the CGI/IUGS – CCOP Asian Geoscience Information Workshop, held on 15-17 February 2012 in Bangkok, Thailand.</p>
Vietnam	<p>Cooperating with CCOP under the OneGeology program</p> <p><u>Offering to CCOP:</u> - Co-host the CCOP-GSJ/AIST-CWRPI Groundwater Phase II Meeting in Hanoi, Vietnam in Feb 2013 – support by GSJ/AIST -Co-host the workshop Groundwater Management in Vietnam at the end of 2013/ beginning of 2014 – support by BGR, Germany</p>

Country/ Organization	CCOP Technical Activities
<i>2) Cooperating countries</i>	
Australia	Reestablish cooperation with Geoscience Australia in future project on Environmental and Energy. Global Carbon Capture and Storage Institute (GCCSI) of Australia has indicated to support the Facilitation Phase of CCOP CO2 Storage Mapping Program (CCS-M) project in the amount AUD 0.5 Million
Canada	Developing new agreements with CCOP Member Countries, including Thailand in marine geohazards, geochemistry, 3-D geologic modeling and airborne geophysics. <i>Offering to CCOP:</i> Active transfer of domestically-developed technologies of interest and relevance to CCOP Member Countries, to engage in collaborative projects on issues of mutual interest Actively supported the training of highly qualified personnel from CCOP Member Countries in the geosciences and related fields
Finland	Organized in cooperation with CCOP the JMG-SEADPRI-GTK-CCOP Workshop on Natural Hazards and Climate Change Adaptation on 9 November 2012 in Langkawi, Malaysia (hosted by UKM-SEADPRI, Malaysia).
Germany	<i>Offering to CCOP:</i> BGR envisages conducting a workshop in cooperation with CCOP on Groundwater Management in Vietnam at the end of 2013/ beginning of 2014. The aim of the workshop is to facilitate exchange of experience among CCOP Member Countries regarding Groundwater Management. In cooperation with the BGR project partner Centre of Water Resources Planning and Investigation (CWRPI) the project concepts and results of the Vietnamese - German Technical cooperation project "Improvement of Groundwater Protection in Vietnam" could be presented and project activities in the project pilot area Nam Dinh demonstrated. - Holding a dissemination workshop for the Laos-Germany cooperation project: "Support for sustainable development of the mining sector" in 2014.
The Netherlands	Deltares organized in cooperation with CCOP the Expert Meeting on Land Subsidence in Coastal Megacities in Langkawi, Malaysia on 9 Dec 2012 (hosted by UKM-SEADPRI). Deltares assisted in seeking funding support for CCOP activities.
Norway	Cooperation and Support to the CCOP-Norway Program for Enhancing Public Petroleum Management (EPPM). Royal Norwegian Embassy – Jakarta's financial support to a CCS Seminar in ITB Bandung on 10-11 Dec 2012
United Kingdom	Cooperation with GETECH in the production and selling of aeromagnetic and gravity maps. OneGeology
United States of America	Annual EAGER Research Grant by the Geological Society of America for CCOP Annual Session host country.
<i>3) Cooperating organizations</i>	
Asean Council on Petroleum (ASCOPE)	Maintained close cooperation through jointly organizing seminars, information exchanges for the benefit of the Member Countries. Participation in ASCOPE Joint Committees Meeting to discuss current issues on CCOP and ASCOPE energy programmes. Invited Guest Speakers and Participants from ASCOPE Members to EPPM Programmes.
Economic and Social Commission for Asia and the Pacific (ESCAP)	Information exchange and discussion, cooperation on technical activities as well as organizing workshops and conferences. CCOP reports to the UN-ESCAP Commission Session and participates in the subcommittee meetings.



Country/ Organization	CCOP Technical Activities
International Union of Geological Sciences (IUGS)	CCOP is an Associate Member of IUGS and annually submit activity report. Cooperating with CCOP in the CGI/IUGS – CCOP Asian Geoscience Information Workshop, held on 15-17 February 2012 in Bangkok, Thailand (funded by CGI, the Commission for the Management and Application of Geoscience Information) in cooperation with GSJ, Japan & DMR, Thailand.
Universiti Kebangsaan Malaysia (UKM)	<p>Joint organization of the Workshop on Natural Hazards and Climate Change Adaptation held on 9 November 2012, in conjunction with the 48th CCOP Annual Session in Langkawi, Malaysia.</p> <p>Final report is under preparation for the CCOP-SEADPRI-UKM's collaborative project on "Feasibility of Networking Petroleum Geoscience Institutions in East and Southeast Asia".</p> <p><i>Offering to CCOP:</i></p> <p>A proposed 3-year project on "Enhancing Climate Change Adaptation in Southeast Asia" was submitted to the ASEAN Secretariat under the India-ASEAN Green Fund mechanism in 2011. The project has been endorsed by ASEAN and was submitted to the Indian Government for approval in August 2012.</p> <p>CCOP is invited to participate in the project whereby its Member Countries irrespective of their membership with ASEAN will be able to benefit from the project in various ways. CCOP Member Countries that are also Members of ASEAN will be able to participate directly in the project. CCOP Member Countries that are not in ASEAN can also benefit through sharing of information and knowledge, as well as participation in the dissemination seminars under the CCOP platform.</p>
United Nations Educational, Scientific & Cultural Organization (UNESCO)	Information exchange, discussion and cooperation on Geopark technical activities.

Other Cooperating Countries generally continued their technical support to a number of CCOP work programmes by providing valuable advice and guidance as well as the implementation of multilateral and bilateral technical assistance for CCOP Member Countries. Thanks are due to all the Cooperating Countries and Organizations for their provision of representatives to CCOP who have contributed in large measure to the review, assessment and formulation of CCOP work programmes and for the contribution of technical information.



TECHNICAL PROGRAMMES AND ACTIVITIES

During 1 January to 31 December 2012, a total of 11 activities were carried out and attended by 364 participants from the Member Countries, as well as from Brunei, Mongolia and Myanmar. With strategic focus on capacity building, knowledge sharing and technology transfer, a number of workshops, seminars, training courses, working group meetings and expert visits were conducted during the reporting period and were highly appreciated by the Member Countries participation.

Summary of CCOP Member Countries' Participation in Technical Activities

Sector	No. of activities	No. of participants
Geo-resources	8	281
Geo-environment	2	69
Geo-information	1	14
TOTAL	11	364

Including participants from Brunei (4), Mongolia (3) & Myanmar (6); 57 female participants out of 364.

GEO-RESOURCES SECTOR GEO-RESOURCES SECTOR: ENERGY PROGRAMME

CCOP-Norway Cooperation Program for Enhancing Public Petroleum Management of the CCOP Member Countries (EPPM Program)

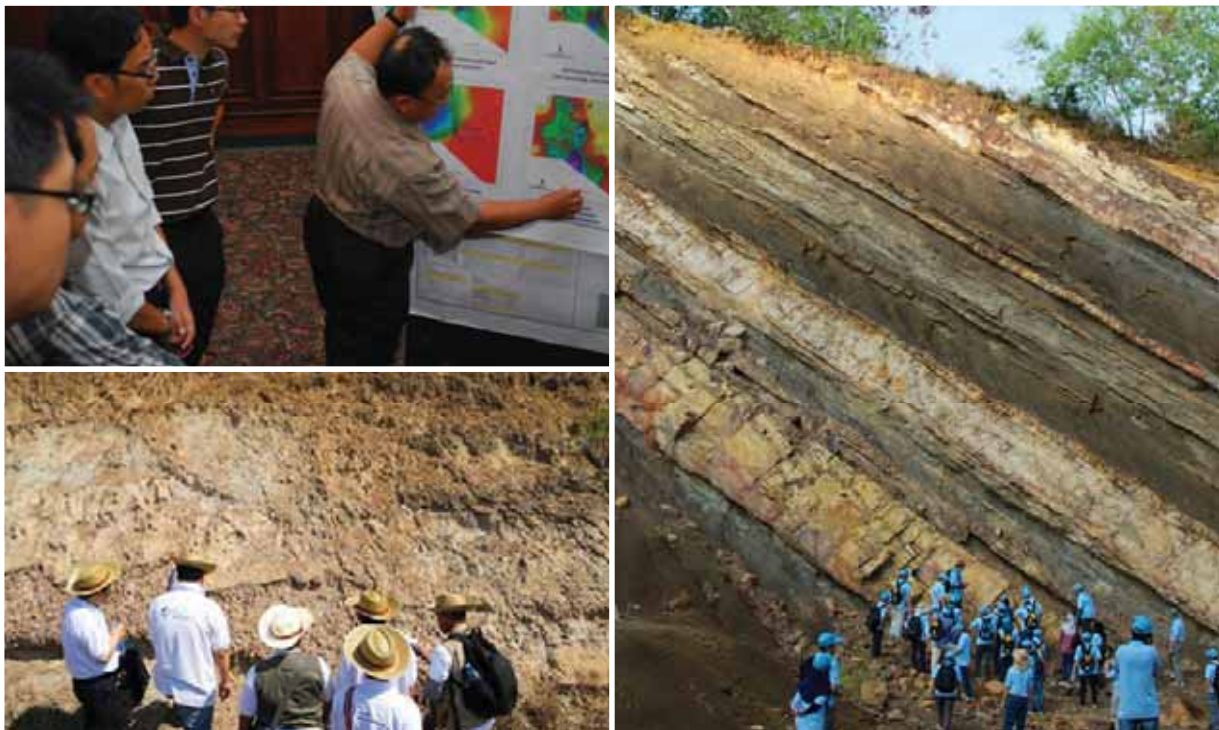
The CCOP TS continues the implementation of the 4-year EPPM Program that is funded by the Royal Norwegian Government in the amount NOK15 Million. The program incorporates three (3) Projects:

- Petroleum Resource Management with a focus on Natural Gas **(P1)**;
- Natural Gas Field Development and Environmental Issues **(P2)**;
- Metadata on Natural Gas Resources of the CCOP Region **(P3)**,

During the reporting period, a total of seven (7) capacity-building workshops/ seminars and training courses, were conducted. The specific titles of these activities are indicated below:

- a) CCOP-Norway EPPM Program: S4 EPPM Annual Seminar/Workshop on UNFC Resource Classification (for Oil, Gas and Minerals) – organized in cooperation with UNECE, 9-10 February 2012, Bangkok, Thailand (28 participants).
- b) CCOP-Norway EPPM Program: P3 Special Training on the Usage of the CCOP Geo-Information Metadata System (GIMS), 13-14 March 2012, Phnom Penh, Cambodia (22 participants).
- c) CCOP- Norway EPPM Program: P3W6 Workshop on Metadata Database Build-up and Management, 15-17 March 2012, Phnom Penh, Cambodia (38 participants).

- d) CCOP – Norway EPPM Program: S5 Seminar/Workshop - How Should Governments manage the End of Concession Period and Decommissioning of Oil and Gas Installations? 12-14 June 2012, Bangkok, Thailand (57 participants).
- e) EPPM P1W6: North Sumatra – Mergui Basin Case Study: Risking of petroleum plays and prospects, 4-7 September 2012, Labuan, Malaysia (41 participants).
- f) CCOP-Norway EPPM Program Seminar (S6): Seminar/Workshop on CCS Opportunities in the CCOP Region, 12-14 September 2012, Bali, Indonesia (38 participants).
- g) Seminar/Workshop on Evaluation of CO₂ Storage Potential, 10-11 December 2012, Bandung, Indonesia (26 participants).



EPPM P1: Basin modeling in the class-room setting & geological field work in Thailand and Malaysia

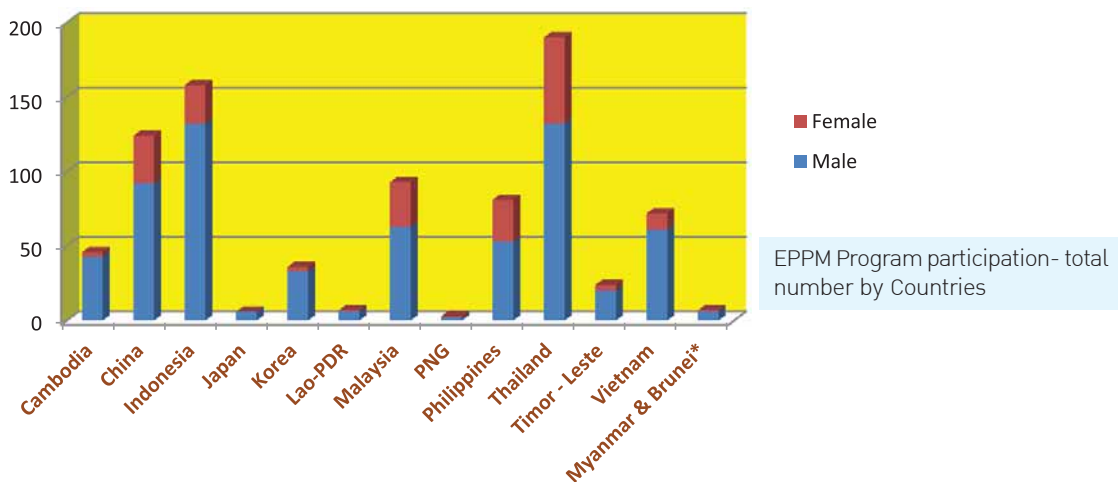
All the activities achieved its objectives of creating awareness on the current issues related to natural gas development, cooperation and exchange of technical knowledge in a cross border study, effective data sharing and management, and added knowledge about sustainable resource management. The presentations and discussions supports the on-going activities in many Member Countries (MC), particularly in the areas of technology research, best practice and policy development for energy security and climate change impact mitigation. The documents from the activities were distributed to all the participants and also posted in the EPPM Program website <http://www.ccop.or.th/eppm/> - providing free and useful references for the MC.



EPPM homepage www.ccop.or.th/eppm

For the reporting period, a total of 250 participants attended in the EPPM Program technical activities. As usual, they are mostly management representatives of regulatory and research organizations dealing with upstream oil and gas, as well as from environmental agencies, academes and national oil companies of CCOP MC. This brings the total number of 1042 participants since the start of EPPM Program. It is important to note that representatives from Myanmar have also participated in the technical activities with financial support from the budget of the EPPM Program. Myanmar is in the process of becoming a new member country of CCOP.

The female participants represent ~30% of the total number of participants – highest among CCOP technical activities.



The CCOP TS is also preparing for the implementation of the new 4-year CCOP CO₂ Storage Program (CCS-M) that is planned to be launched in early 2013. CCS-M is another regional capacity building program that will benefit the Member Countries and the Global CCS Institute of Australia has signified its intention to fund the Facilitation Phase (1st year) of CCS-M in the amount AUD0.5 Million. Norway, through the Royal Norwegian Embassy – Jakarta has also contributed some funds for the preparation of CCS-M, particularly for workshops to benefit the CCS-M case study team of Indonesia. The International Energy Agency – Green House Programme (IEAGHG) committed to provide in-kind support through experts / resource persons during technical activities on their own cost.

GEO-RESOURCES SECTOR: MINERAL PROGRAMME

Geochemical Baseline Project

The project is technically and financially supported by China Geological Survey (CGS) for global-scale sample analyses and pilot study national/regional scale sample analyses and training courses.

The kick-off meeting: CGS-CCOP Seminar on Geochemical Mapping was organized in 28-29 March 2012, Nanjing, China with 52 participants.

GEO-RESOURCES SECTOR: GROUNDWATER PROGRAMME

CCOP-GSJ/AIST Project on Groundwater Assessment and Control in the CCOP Region

The Geological Survey of Japan (GSJ), AIST generously continues its support for CCOP-GSJ/AIST Project on Groundwater, Phase II. The planned meeting of CCOP-GSJ/AIST Groundwater Project in Vietnam on September 2011 was postponed to 26- 28 February 2013 due to the 2011 Tsunami in Japan.

GEO-ENVIRONMENT SECTOR

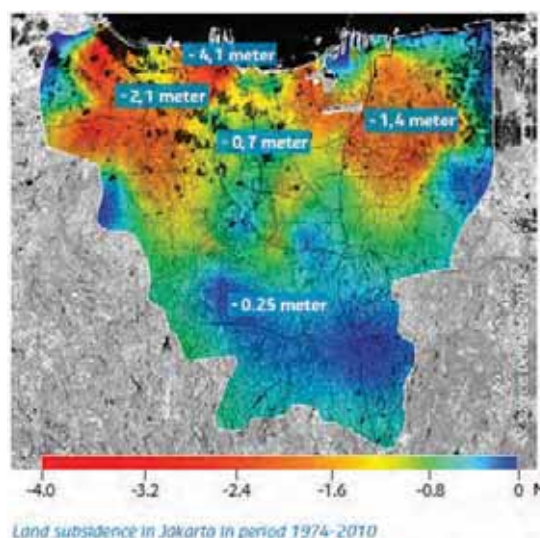
GEO-ENVIRONMENT SECTOR: GEOHAZARDS PROGRAMME

CCOP - Panya Consultant - DGR Land Subsidence Monitoring System Design Project

Phase 1 - Comprehensive countermeasure against land-subsidence in delta region was completed in 2012. Phase 2 - Land-subsidence Monitoring Station Constructing for the period of 2012-2014 is pending for funding support from DGR.

The Expert meeting on Land subsidence in Coastal Megacities

The CCOP-Deltares-JMG Expert meeting on Land subsidence in Coastal Megacities was held on 9 November 2012 in Langkawi, Malaysia in conjunction with the 48th CCOP Annual Session and 59th CCOP Steering Committee Meeting with 28 participants from CCOP Member and Cooperating Countries. The Meeting was organized by the CCOP Technical Secretariat in cooperation with Deltares and Minerals and Geoscience Department of Malaysia (JMG).





The Expert Meeting also referred to the UNESCO Working Group on Land Subsidence that will pay attention to the interaction between groundwater management and land subsidence. During the meeting, a proposal on Capacity building of land subsidence in the CCOP region which was prepared by CCOPTS has been discussed for seeking recommendations and funding.

GEO-ENVIRONMENT SECTOR: COASTAL ZONE PROGRAMME

CCOP-GSJ/AIST Project on Integrated Geological Assessment of Deltas in Southeast Asia Phase 2 (DeISEA II Project)

DeISEA Project has been generously supported by GSJ/AIST, Japan since 2008. DeISEA II project which is one of the Geo-Environment programs has been conducted jointly with IGCP-475 DeltaMAP project for annual meetings and seminars in order to foster exchange of modern knowledge on deltas, Quaternary geology, sequence stratigraphy, and geological coastal management and to enhance joint study for better understanding of deltaic coasts and geological assessment for coastal management.

The planned training course on Coastal Geology Mapping in Malaysia at the end of 2011 has been postponed to 10 – 16 March 2013.

GEO-ENVIRONMENT SECTOR: ENVIRONMENTAL GEOLOGY PROGRAMME

Environmental Analysis Support Programme in the CCOP and Other Regions

The 48th CCOP Steering Committees Meeting in Daejeon, Korea endorsed the Environmental Analysis Support Programme in the CCOP and Other Regions proposed by GSJ/AIST under the auspices of Japan Radioisotope Association and Iwate Medical University. This programme has continued supporting in-kind services on environmental specimens, which are analysed by PIXE method. The service is still open up to the maximum number of 500 samples per year and it will be continued annually.

Workshop on Natural Hazards and Climate Change Adaptation

The JMG-SEADPRI-GTK-CCOP Workshop on Natural Hazards and Climate Change Adaptation was jointly organized by the Minerals and Geoscience Department of Malaysia (JMG), Southeast Asia Disaster Prevention Research Institute of Universiti Kebangsaan Malaysia (SEADPRI/UKM), Geological Survey of Finland (GTK) and CCOP Technical Secretariat, in conjunction with the 48th CCOP Annual Session held on 9 November 2012 in Langkawi Island, Malaysia, with 33 participants from CCOP Member Countries. The workshop aims to sensitize the geoscience community to risk and vulnerability assessments with respect to disasters and climate change as well as to improve the identification of socio-economically feasible adaptation options.



Top: Participants of the JMG-SEADPRI-GTK-CCOP Workshop on Natural Hazards and Climate Change Adaptation; Bottom: Participants in discussion.

GEO-INFORMATION SECTOR

CGI/IUGS – CCOP Asian Geoscience Information Workshop

Endorsed by the 56th CCOP Steering Committee Meeting held in Manado, Indonesia, 22-23 October 2010, the CGI/IUGS – CCOP Asian Geoscience Information Workshop was organized on 15-17 February 2012 in Bangkok, Thailand. This is with the funding support of the CGI, the Commission for the Management and Application of Geoscience Information, in cooperation with the Department of Mineral Resources, Thailand.

The workshop focused on the following topics: CGI and GeosciML, Mineral Resources Database, Geological Maps on the Web, and CCOP Geo-Information Activities in Asia. It was a forum where experts in geo-information gathered and shared experience and knowledge in current technologies applicable to geoscience.

The workshop was attended by 20 participants from China, Indonesia, Japan, Korea, Malaysia, Thailand, Vietnam and United Kingdom, as well as CCOPTS staff. The participants wished that similar forums be conducted regularly within CCOP.

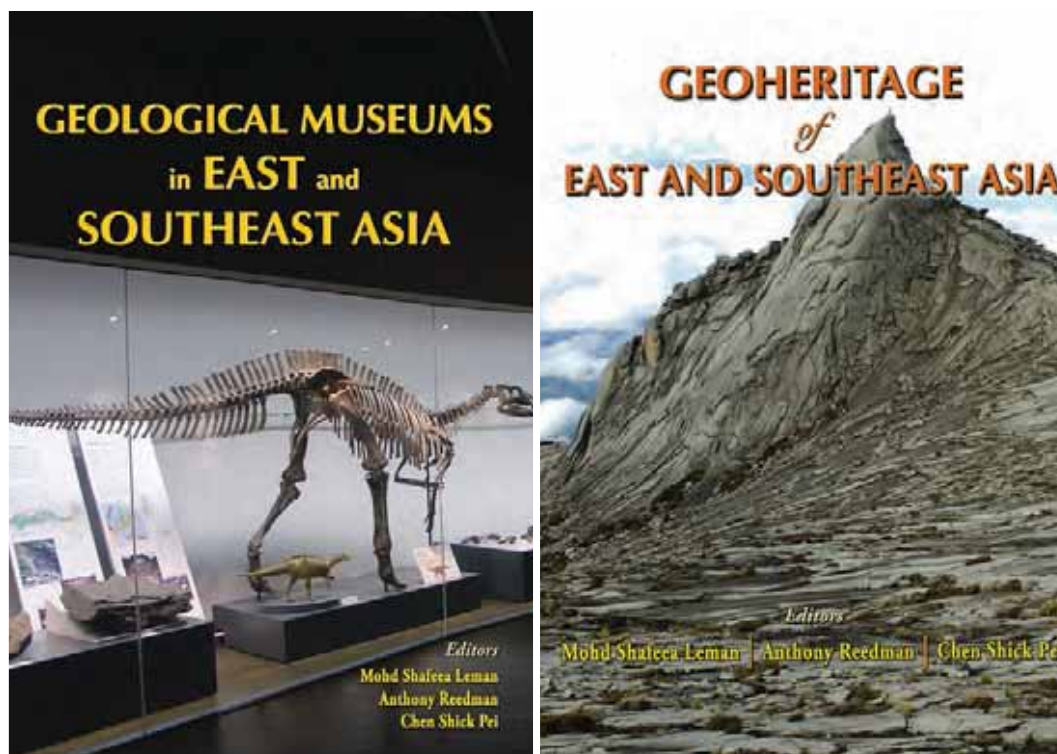


Dr Tim Duffy of the British Geological Survey giving lecture at the workshop.

CCOP Book Project 2009: “Geological Museums of East and Southeast Asia”

This book is aimed at being a companion volume for the 2008 CCOP book entitled “Geoheritage of East and Southeast Asia” which was published in December 2008 and has generally been well received. Taken together these two books will complete CCOP’s central contribution to the United Nations’ International Year of Planet Earth (IYPE).

At the 58th CCOP Steering Committee Meeting held on March 2012, Nanjing China, the book has been distributed to all the Member Countries present. The Meeting applauded Malaysia through the Universiti Kebangsaan Malaysia (UKM) for this publication. Several copies of this book and of the CCOP Geo-heritage book have been freely made available at the 48th CCOP Annual Session held in Langkawi, Malaysia on November 2012.



Front Covers of the two CCOP books for IYPE: (1) Geological Museums in East and Southeast Asia; (2) Geoheritage of East and Southeast Asia

OneGeology-CCOP

The 49th CCOP Steering Committee Meeting endorsed the OneGeology Project, an international initiative of the geological surveys of the world led by the British Geological Survey (BGS) and a flagship project of the 'International Year of Planet Earth'. Its aim is to create dynamic geological map data of the world available via the web.

To date, CCOP's 1:2M Geologic Map of East and Southeast Asia and the 1:1M Geologic Maps of Indonesia, Japan, Korea, Laos, Malaysia, Philippines and Thailand have been made available and accessible through the portal, <http://portal.onegeology.org/>. CCOP acknowledges the Geological Survey of Japan, AIST in its support for this international initiative. Related to this project, GSJ/AIST has been active in transferring web technologies adopted by OneGeology through funding training programme for ASEAN Mineral Resources Database. This training programme has been conducted since 2011, in cooperation with ASEAN and CCOP. For 2012, it was organized by the Overseas Human Resources and

Industry Development Association (HIDA) on 18 to 26 September 2012 at AOTS Tokyo Kenshu Center, Japan, with the financial support from the Government of Japan and technical support of the Geological Survey of Japan, AIST. CCOP Member Countries benefiting from this programme are Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand and Vietnam.



Participants of the Training Program on Mineral Resource Database for ASEAN, September 2012 at AOTS Tokyo Kenshu Center, Japan.

CCOP Metadata Phase II

The CCOP Metadata Project Phase II was approved by the 48th CCOP Steering Committee Meeting held in Daejeon, Korea on November 2006, with the financial support of China Geological Survey (CGS). It is the objective of this phase to develop a comprehensive CCOP Metadata Standard for Geoscience in conformity with ISO19115 International Metadata Standard. CGS had not only provided financial support, but also resource persons for the project, and shared their vast experience in metadata development with the CCOP Member Countries.

The Project produced two concrete products, the web-based CCOP Geoinformation Metadata System (CCOP-GIMS) installed at the CCOP TS server, as well as the CCOP S01 Edition 2 Standard for Geo-Information Metadata.

In 2012, CGS continued providing training support on metadata by sending its metadata experts as trainers in the CCOP-Norway EPPM Program: P3 Special Training on the Usage of the CCOP Geo-Information Metadata System (GIMS), 13-14 March 2012 and P3W6 Workshop on Metadata Database Build-up and Management, 15-17 March 2012 in Phnom Penh, Cambodia. CGS continues offering its support for GIMS training for Member Countries when required.



Dr Zhang Minghua of CGS guiding the participants at the EPPM hands-on training on the usage of GIMS, March 2012, Cambodia.

Integrated Geophysical Data Processing (IGDP) for CCOP

The 57th CCOP SC Meeting held on March 2011 in Chiangmai, Thailand endorsed this project, proposed and funded by China Geological Survey. This project aims to enhance the ability and capacity in the field of geo-data management and processing. Software modification and translation into English has been done and a user manual is also ready. A training course planned in 2012 in China for CCOP and also ASEAN countries has been postponed to 2013.

Automated Management and Operation System (AMOS)

China Geological Survey (CGS) has finished the design of an office automation system for CCOP Technical Secretariat, and the system development is ongoing.

FELLOWSHIPS AND GRANTS

East Asia Geoscience and Environmental Research (EAGER) Project

The EAGER Project is a trust fund set up in the Geological Society of America with personal contribution of Dr. Maurice "Ric" Terman, CCOP Honorary Advisor, to be used for funding research in geoscience in the region. Under the programme, a grant will be made available for research on Geoscience and Environment in East and Southeast Asia to candidates from the Member Country hosting the CCOP Annual Session since 2003.

The EAGER Grant for 2012 was awarded to **Mr. Ahmad Farid Abu Bakar**, a PhD student in the University of Malaya at the 48th CCOP Annual Session held in Langkawi, Malaysia, November 2012. The title of his research proposal is *"The transport and fate of selected acid mine ions in surface water and river sediment with regards to mining activities"*.



Ms Franca Schwarz, Vice-Chairman of the CCOP Advisory Group presenting the award to Mr Ahmad Farid Abu Bakar, the successful EAGER grantee for 2012.

MEETING AND MISSIONS

Mission to Member Countries:

- ▶ Courtesy visit to Yunnan Province Institute of Geothermal Investigation and Exploration, 23-26 April 2012, Yunnan, China.
- ▶ Courtesy visit to the newly appointed Permanent Representative of Papua New Guinea to CCOP, Mr. Shadrach Himata, 12-14 August 2012, Port Moresby, Papua New Guinea.
- ▶ Courtesy visit to Myanmar Oil and Gas Enterprise (MOGE), Ministry of Energy and the Department of Geological Survey and Mineral Exploration (DGSE), 21-23 August 2012, Naypyitaw, Myanmar.



Mission trip for participation in Conferences / Organizations / Meetings:

- ▶ The Japan-supported Training Program on Mineral Resource Database for ASEAN [ENMD], 11-20 January 2012, Tokyo, Japan.
- ▶ The GSJ/AIST First Workshop of Asia-Pacific Region Global Earthquake and Volcanic Eruption Risk Management (G-EVER1), 21-24 February 2012, Tsukuba, Japan.
- ▶ The 58th CCOP Steering Committee Meeting, 26-28 March, 2012 Nanjing, China.
- ▶ The 3rd Session of the UNECE Expert Group on Resource Classification, 2-4 May 2012, Geneva, Switzerland.
- ▶ The 5th International UNESCO Conference on Geoparks, 11-15 May 2012, Unzen Volcanic Area Global Geopark, Japan.
- ▶ The ASCOPE-CCOP-PETRAD E&P BDC-Joint Committee Meeting, 17-21 May 2012, Manila, Philippines.
- ▶ The 68th Session of the UN Economic and Social Commission for Asia and the Pacific (ESCAP), 17-23 May 2012, Bangkok, Thailand.
- ▶ The Workshop on ASEAN Mineral Database and Information System, 26-29 June 2012, Yogyakarta, Indonesia.
- ▶ The 34th International Geological Congress (IGC), 5-10 August 2012, Brisbane, Australia.
- ▶ The Training Program on Mineral Resource Database for ASEAN (ENMD) 18-26 September 2012, AOTS Tokyo Kenshu Center, Japan.
- ▶ The International Conference on Groundwater Science and Technology, 1-4 October 2012, Changchun, China.
- ▶ The Coordination Meeting with China Geological Survey (CGS) and China Petroleum & Chemical Corporation (SINOPEC), 23-25 October 2012, Beijing, China.
- ▶ The 48th CCOP Annual Session, 4-8 November 2012 and the 59th CCOP Steering Committee Meeting, 9-10 November 2012, Langkawi, Malaysia.
- ▶ The 2nd Liaison Official's China-ASEAN Mining forum (CAMF), 14-15 November 2012, Bangkok, Thailand.
- ▶ The 2nd IGES Evening Café: "What happened and what comes next in the next decade after Rio+20?", 20 November 2012, Bangkok, Thailand.
- ▶ The Project Inception Workshop: "Comparative Research of Groundwater Management in the Coastal Areas in Southeast Asia", 3-7 December 2012, Amsterdam, the Netherlands.
- ▶ The 12th ASEAN Senior Officials Meeting on Minerals (ASOMM) and the 5th ASOMM Plus 3 (China, Japan and Republic of Korea) Consultations, 5-6 December 2012, Bandar Seri Begawan, Negara Brunei Darussalam.



PUBLICATIONS

The following publications were produced during the year. The workshop and seminar reports and proceedings of the CCOP-Norway Cooperation Program for Enhancing Public Petroleum Management of the CCOP Member Countries (EPPM Program) were published on the CCOP website.

General Publication

CCOP E-News Vol. 3 No. 1, July 2012

The CCOP E-News is meant to give the latest news and information on CCOP activities around the region and worldwide. This replaces the former printed CCOP Newsletter and will be issued several times a year. The Vol.3 No.1 can be downloaded at CCOP website in PDF format from this link: http://www.ccop.or.th/download/e-news/CCOP_e-news2012-06v3n1.pdf

CCOP E-News Vol. 3 No. 2, October 2012

This volume can be downloaded at CCOP website in PDF format from this link: http://www.ccop.or.th/download/e-news/CCOP_e-news2012-10v3n2.pdf

Book - Geological Museums in East and Southeast

This book is for the International Year of the Planet Earth, featuring geological museums in China, Indonesia, Japan, Korea, Philippines, Papua New Guinea, Thailand and Vietnam. Published in late 2011, the book has been distributed at the 58th CCOP Steering Committee Meeting held in Nanjing China, 26-27 March 2012. An electronic copy of this book will be soon made available at the CCOP website.

CCOP Annual Session Proceedings

Proceedings of the 47th CCOP Annual Session Part II

This publication is the proceedings of the Thematic Session on “Understanding the Climatic Change in order to Enhance Geoscientific Contribution for Society and Its Environments” at the 47th CCOP Annual Session held in Manado, North Sulawesi, Indonesia on 17-21 October 2010. Published in late 2011, the printed copies of this proceeding have been distributed at the 58th CCOP Steering Committee Meeting in Nanjing, China. Printing was sponsored by the Geological Agency of Indonesia. The PDF file of this proceeding can be downloaded from this link: http://www.ccop.or.th/download/pub/47as_ii.pdf

CCOP Steering Committee Meeting Reports

Report of the 58th CCOP Steering Committee Meeting

Report including the minutes of the Steering Committee Meeting held in Nanjing, China on 26-28 March 2012 has been published electronically in PDF format.

Technical Activities Reports/Proceedings

EPPM Program

The workshop and seminar reports and proceedings of these activities were published at the CCOP website, <http://www.ccop.or.th/eppm/>.

FINANCIAL HIGHLIGHTS

From January 1 to December 31, 2012, Member Countries' total cash contributions amounted to **USD 360,000**, of which Papua New Guinea (USD 10,000) was received since 2011. The cash contribution for 2012 received during the period consists of Cambodia (USD 5,000), China (USD 50,000), Indonesia (USD 40,000), Japan (USD 40,000), Korea (USD 60,000), Laos (USD 10,000), Malaysia (USD 50,000), Philippines (USD 40,000), Thailand (USD 40,000), Timor-Leste (USD 10,000), Vietnam (USD 15,000) (**Table 1**).

In addition to Member Countries' contributions, the amount of **USD 38,140.69** earned from the management of projects during January-December 2012 period of which (USD 13,672.92) from GAI-BGR-CCOP Workshop on Landslides in Southeast Asia: Management of a prominent Geohazard, (USD 1,411.54) from 4th CCOP-Panya Consultant: DGR Land Subsidence Monitoring System Design, (USD 2,550.00) from CGI/IUGS-GSJ/AIST-CCOP Asian Geoscience Information Workshop, (USD 2,077.92) from CCS Workshop ITB: Evaluation of CO₂ Storage Potential, (USD 14,050.86) from MFA Norway 8th Installment EPPM Program, (USD 8,241.76) cash received in advance from Panya Consultant and (less) expenses of Panya Consultant (USD 3,864.31) (**Table 2**).

Other income during the period amounted to **USD 10,181.08** from interest earned, gain on exchange, and miscellaneous income. The total income during the period was **USD 408,332.49**. The expenditure of **USD 408,095.44** was incurred from operation and administrative support. The cash balance at the end of December 2012 amounted to **USD 705,682.41**

The Technical Secretariat office premise has been continuously provided by the Royal Thai Government, through the kind arrangements of the Department of Mineral Resources (DMR), Ministry of Environment and Natural Resources, at the CCOPTS Building, DMR Complex, Rama VI Road, Bangkok, Thailand.

Table 1. Cash Contributions of Member Countries for 2011-2012
(Ending 31 December 2012)

Member Countries	2010 Contribution Received in 2011	2010 Contribution Received in 2011	2011 Contribution Received in 2010	2011 Contribution Received in 2011	2012 Contribution Received in 2011	2012 Contribution Received in 2012	2013 Contribution Expected to Receive
Cambodia	5,000.00**	5,000.00**	-	5,000.00	-	5,000.00	5,000.00
China	-	-	-	50,000.00	-	50,000.00	50,000.00
Indonesia	-	-	-	40,000.00	-	40,000.00	40,000.00
Japan	-	-	-	40,000.00	-	40,000.00	40,000.00
Korea	-	-	-	60,000.00	-	60,000.00	60,000.00
Laos	-	-	-	10,000.00	-	10,000.00	10,000.00
Malaysia	-	-	-	50,000.00	-	50,000.00	50,000.00
Papua New Guinea	-	-	-	10,006.65	10,000.00	***	10,000.00
Philippines	-	-	-	40,000.00	-	40,000.00	40,000.00
Singapore	-	-	-	-	-	-	-
Thailand	-	-	40,000.00	*	-	40,000.00	40,000.00
Timor-Leste	-	-	-	10,000.00	-	10,000.00	10,000.00
Vietnam	-	-	-	15,000.00	-	15,000.00	25,000.00
Total	5,000.00	5,000.00	40,000.00	330,006.65	10,000.00	360,000.00	380,000.00

*Thailand cash contribution for 2011 was received in advance since 2010

**Cambodia cash contribution (USD 5,000) for 2009 and (USD 5,000) for 2010 was received in 2011

***Papua New Guinea cash contribution for 2012 was received in advance since 2011

Table 2. Management Income from Execution of Project and Activity
(January 1 - December 31, 2012)

Organized with	Activities	Country	Period	Amount (USD)
BGR	GAI-BGR-CCOP Workshop on Land-slides in Southeast Asia: Management of a prominent Geohazard	Bandung, Indonesia	November 28-December 01, 2011	13,672.92
PANYA	4 th CCOP-Panya Consultant: DGR Landsubsidence Monitoring System Design	Bangkok, Thailand	May 2012	1,411.54
CGI	CGI/IUGS-GSJJ/AIST-CCOP Asian Geoscience Information Workshop	Bangkok, Thailand	February 15 -17, 2012	2,550.00
CCS	CCS Workshop ITB: Evaluation of CO2 Storage Potential	Bandung, Indonesia	December 10-11, 2012	2,077.92
MFA Norway	8 th Installment EPPM Program	-	FY 2012	14,050.86
Total Project Management Income				33,763.24
Cash Received in Advance from Panya Consultant				8,241.76*
(Less) Expenses from Panya Consultant				(3,864.31)
Net Total Project Management Income for Budget Year 2012				38,140.69

Target revenue of Project Management Income FY 2012, USD 115,000.00

**Criteria for received the fund without refund*

Table 3: CCOP Financial Statement
For the year ended 31 December 2012
(amount in US Dollars)

Description	2011		2012	
	USD	%	USD	%
Fund Balance	770,510.45		780,827.95	
Income:				
Member Countries' Contributions	350,006.65	75.31	360,000.00	88.17
Publications sales	21,212.00	4.56	-	-
Project management	96,792.68	20.83	38,140.69	9.34
Others	(3,256.81)	(0.70)	10,181.08	2.49
Total Income	464,754.52	100.00	408,322.49	100.00
Expenditures :				
Personnel expenses	357,409.66	78.22	267,974.37	65.76
Meeting / travel expenses	50,388.86	11.03	91,931.08	22.56
General administrative expenses	24,701.07	5.41	21,059.71	5.17
Publications	2,616.44	0.57	4,013.89	0.99
Technical activity support	184.36	0.04	-	-
Special expenditures	21,625.99	4.73	22,507.46	5.52
Others	-	-	-	-
Total Expenditure	456,926.38	100.00	407,486.51	100.00
Income over/(under) expenses	7,828.14		835.98	
Total Fund Balance before adjustment.	778,338.59		781,663.93	
Adjusting entries				
Unrealized gain/(loss) on exchange rate for Retained Earning	2,489.36		-608.93	
Tax payable	-		-	
Year-end Balance	780,827.95		781,055.00	
Adjustment to reflect actual cash inflow/(outflow) :				
Received in Advance GEM	5,000.00		3,408.57	
Received in BGR-Georisks	40,645.89			
Office equipment (net)	(30,188.23)		(74,452.37)	
Advance	(7,130.15)		(4,513.41)	
Tax deductible	934.64		184.62	
Year-end Cash Balance	790,090.10		705,682.41	

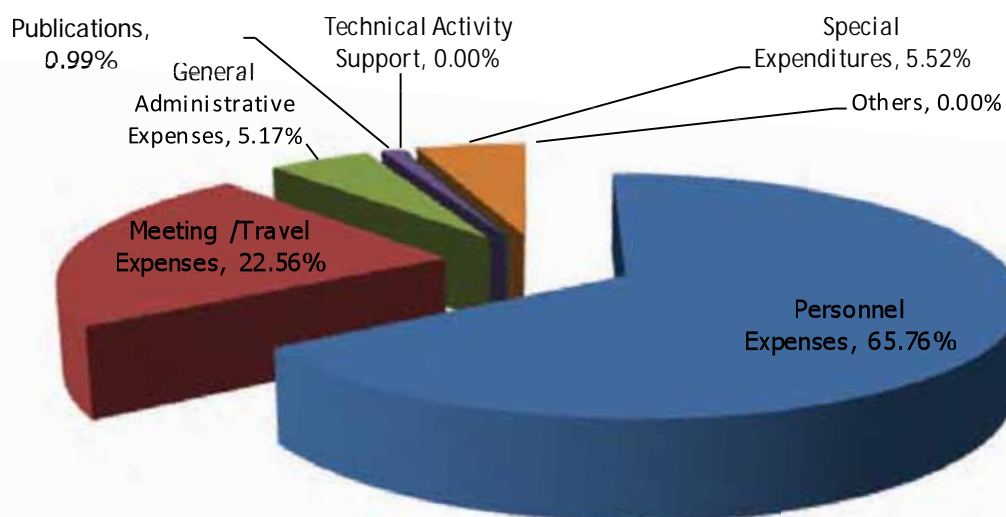
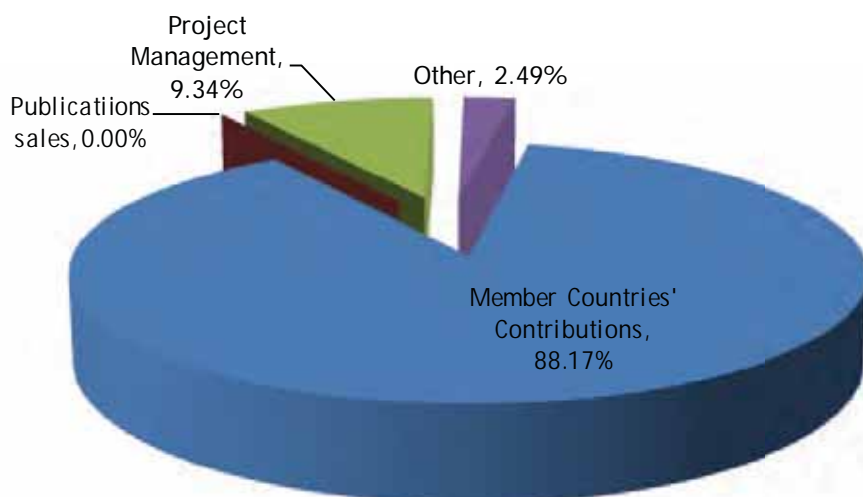


Table 4: CCOP MFA-NORWAY Projects Financial Statement
For the year ended 31 December 2012
(amount in US Dollars)

<i>Description</i>	EPPM Fund				
	2008 USD	2009 USD	2010 USD	2011 USD	2012 USD
<i>Fund Balance</i>	-	355,260.87	132,940.82	299,254.60	391,613.11
<i>Income :</i>					
<i>Received from Fund</i>	370,919.88	503,494.51	780,304.48	543,724.68	175,635.80
<i>Others</i>	106,578.63	3,019.85	5,273.26	(734.40)	34,997.08
<i>Total Income</i>	477,498.51	506,514.36	785,577.74	542,990.28	210,632.88
<i>Expenditures :</i>					
<i>Technical Activities Expenses</i>	123,205.05	725,971.30	613,677.83	452,104.08	400,180.83
<i>Total Expenditure</i>	123,205.05	725,971.30	613,677.83	452,104.08	400,180.83
<i>Income OVER/(under) expenses</i>	354,293.46	(219,456.94)	171,899.91	90,886.20	(189,547.95)
<i>Adjusting entries :</i>					
<i>Unrealized gain/(loss) on exchange rate for Retained Earning</i>	967.41	(2,863.11)	(5,586.13)	1,472.31	(1,407.54)
<i>Year-end Balance</i>	355,260.87	132,940.82	299,254.60	391,613.11	200,657.62
<i>Adjustment to reflect actual cash inflow/(outflow):</i>					
<i>Tax deductible</i>	-	-	22.57	-	-
<i>Advance</i>	(3,635.31)	-	-	-	-
<i>Remittance to CCOP General Fund</i>	-	-	-	-	-
<i>Year-end Cash Balance</i>	351,625.56	132,940.82	299,277.17	391,613.11	200,657.62



LIST OF CONTACTS

CCOP STEERING COMMITTEE MEMBER COUNTRIES PERMANENT REPRESENTATIVES (13)

The Steering Committee is a policy making body of CCOP, which shall establish policies and principles for CCOP activities, approve work plan, budget, accounts for each year, new programme proposals, establish subsidiary bodies, appoint the Director, receive and consider the reports of Director on the functions delegated to him.

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Permanent Representative of
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