

CCOP-DANIDA
Institutional Capacity Building Project ICB-CCOP 1
Petroleum System Modeling Software User Training &
Application Training
May 8-13, 2006, Hanoi, Vietnam

Date and Venue:

The two back to back training courses were held in Hanoi, Vietnam from 8th to 13th May 2006 at the Hanoi Horison Hotel, Address: #40 Cat Linh St., Hanoi, Vietnam

Tel. 844 7330808 Fax: 844 7330688 Email: res@hanoihorisonhotel.com.vn

Website: http://www.swiss-belhotel.com/hanoi_location.html

Local Organizer: Vietnam Petroleum Institute (VPI)

Participants:

Twenty four (24) geoscientists from Cambodia, China, Indonesia, Malaysia, the Philippines, Thailand and Vietnam, seven (7) CCOP Member Countries attended the training courses. Among them, eight (8) participants are female.

The detailed list of participants is attached as Annex 1.

Program:

The two back to back training courses supplemented each other. The detailed program of the training courses are provided as Annex 2.

Background of the Training Courses:

The petroleum system modeling software user training and application training are the planned training courses during the implementation of the ICB-CCOP1 Project. The petroleum system modeling software is one of the most important prevailing tools for the petroleum systems analysis in the oil industry nowadays. Therefore, the training courses are designed for the new technology transfer as well as focusing on assisting in accomplishment of the second phase research (petroleum system analysis) of the case studies. Mr. Ioannis Abatzis, the ICB-CCOP1 Project resource person, using the good connection between Geological Survey of Denmark and Greenland (GEUS) and IES software company helped to conduct the purchasing the academic version of the IES petroleum system modeling software (PetroMod) to the ICB-CCOP1 Project

case study host countries. He also helped invite good, informative and experienced instructors from IES, GEUS and VPI as the resource persons to the training courses, all these efforts brought the success to the training courses later on. The software and the licenses were issued to all case study host countries during the training courses.

The original planned venue for the training was in The Philippines. The local organizer was supposed to be the Department of Energy (DOE), Philippines, which is one of the partner agencies of the ICB-CCOP1 Project case studies. However, to their regret, they cannot help carry out the activity this time due to the shortage of the staff and tight working schedule of DOE. The venue was changed to Hanoi, Vietnam, which was discussed and decided during the ICB-CCOP 1st Malaysia workshop. The objectives are as followed:

1. To deliver and transfer the petroleum system modeling technology;
2. To share the existing knowledge experience on application of the software;
3. To deliver the purchased PetroMod to the ICB-CCOP1 Project case study host countries;
4. To exchange the geoscientific views through the discussion during the training courses;
5. To enhance the cooperation relationship, establish the academic linkage and develop the friendship among the geoscientists from IES, GEUS and the CCOP Member Countries as well as promoting the future cooperation.

Record of the Training Courses:

During the 6 full-day training courses, under the invited instructors' informative instructions, participants learned not only the basic theory of the petroleum system, but also the application of the petroleum system as well as the petroleum system modeling software. The training courses are composed of three parts: lecture, discussion and exercise. During the training courses, the software has been installed to all participants' laptop, so that the participants could run the software program on their own computers with the different kinds of parameters selected and prepared by themselves. Dr. Bjorn Wygrala, Managing Director of Technology Transfer IES, is an excellent speaker in the field of petroleum system modeling. He gave a very comprehensive and detailed instruction, and the participants are enjoyed his presentation very much. Mr. Anders Mathiesen, the resource person from GEUS, is an excellent expert in petroleum system modeling. His lecture is mostly focused on analysis of petroleum modeling results and the correlative between the parameters and results. He generously contributed his rich experiences in petroleum system modeling to all participants. His experience is the most important part to application of the petroleum system modeling. Mr. Pham Van Tiem, the resource person from VPI, who was trained in GEUS before, gave a wonderful lecture on the real case study of the petroleum system modeling software application in the Phu Khanh Basin, Vietnam. On the one hand, it shows that the software can be used in our region successfully. On the other hand, it is a very good example to show how the new technology transfer from GEUS to local regional institute and pass to all geoscientists in this region later on. Mr. Pham Van Tiem also introduced and shared his experience on how to select and prepare the parameters for the petroleum system modeling, as well as provided some raw data for participants practice and exercise. All the participants were really involved in the training courses, no one was absent during the 6-day training, and most of them asked the questions interactively to the instructors. On the last day of the training, the certificates have been issued to all participants. And the evaluation form of the training courses has been

distributed to all participants. The evaluation form is very integrative including the content of training, instructor, organizing, accommodation and impact, etc. The feedback has been received immediately which would help improving the organizing of the future training courses.

Input of the training courses is mainly derived from the knowledge and experience of the 3 invited resources persons. Actually, they are the best combination for this kind of training courses, including the whole expertise, software provider, excellent experts and regional user. The knowledge, new technology, and experience are delivered through the training. Experts' generous contributions are highly appreciated.

Through the common efforts, the training courses were conducted very successfully. The direct and indirect outputs are as followed:


- ❖ The petroleum system discipline was introduced to all participants in details so that all the participants got good understanding of it;
- ❖ All the participants have been trained on how to use the petroleum system modeling software PetroMod, now they are familiar with the software;
- ❖ The existing knowledge and experience in petroleum system modeling have been shared through the discussion and exercise, the participants can apply them for case study as well as other projects in hand.

The impact of the training courses is obvious. It is the first training courses conducted by the ICB-CCOP1 Project during the project implementation. All the participants are from the CCOP Member Countries, most of them are young geoscientists while one third of them are female participants. The 6-day indoor intensive training brought them the new technology and knowledge in petroleum system as well as familiarity with the petroleum system modeling software. The know how and experience of the software application have also been shared. As the participants mentioned in their evaluation form as feedback, all these knowledge, technology and experience will benefit them in their work and their colleagues in their institute in the near future for their research projects. Like most participants mentioned, they asked eagerly for advanced training course on 2D and 3D function of the software in the future. To our regret, due to the duration of the training courses very limited comparing to the whole package of the technology, during the training we just went through the 1D function of the software which is just the basic function of the software. It means these training courses really mobilized the participants' enthusiasm for the petroleum system software application. It was believed that the new technology of petroleum system would be applied broadly in our CCOP Member Countries, especially the ICB-CCOP1 Project case study host countries. These will produce the added value to their oil industry.

Annex1

**CCOP-DANIDA Institutional Capacity Building Project ICB-CCOP1
Petroleum System Modeling Software User Training & Application Training
May 8-13, 2006, Hanoi, Vietnam**

DISTINGUISHED GUEST






NAME	POSITION / ADDRESS
1) DR. NGUYEN HUY QUY 	Deputy General Manager Science Technology, Vietnam Oil and Gas Corporation, PETROVIETNAM, 22 Ngo Quyen Street, Hanoi, Socialist Republic of Vietnam Tel:(84-4) 934 7767 Fax:(84-4) 826 5942 E-mail: nhquy@hn.pv.com.vn








RESOURCE PERSONS

1) MR. IOANNIS ABATZIS 	Representative of Denmark to CCOP Senior Advisor Geological Survey Denmark & Greenland (GEUS) Oester Voldgade 10, 1350 Copenhagen K, Denmark Tel: (45) 3814 2516, Mobile: (45) 2030 7012 Fax: (45) 3814 2050 E-mail: ia@geus.dk
2) DR. BJORN WYGRALA 	Managing Director Technology Transfer IES Integrated Exploration Systems Ritter Str. 23, 52072 Aachen, Germany Tel:(49)-241-51586-10 Fax: (49)-241-51586-90 E-mail: b.wygrala@ies.de , Website: www.ies.de
3) MR. ANDERS MATHIESEN 	Senior Adviser, Geologist, Department of Geophysics Ministry of the Environment Geological Survey of Denmark and Greenland Øster Voldgade 10, DK-1350 Copenhagen K, Denmark Tel: (45) 38142523, 38142000 Fax: (45) 38142050 E-mail: anm@geus.dk Website: www.geus.dk
4) MR. PHAM VAN TIEM 	Deputy Manager of IT Department Vietnam Petroleum Institute Yen Hoa, Cau Giay, Hanoi, Vietnam Tel: (84-4) 7843663, Fax: (84-4) 7843663 E-mail: tiempv@vpihn.pv.com.vn

LIST OF PARTICIPANTS	
NAME	POSITION / ADDRESS
CAMBODIA	
1) MR. CHAP SAMNANG 	Geologist, Upstream Division Cambodian National Petroleum Authority (CNPA) #13-14, Russian Federation Blvd, Sangkat Kakab, Khan Dangkor, P.O. Box 1442, Phnom Penh, CAMBODIA Tel: (85-12) 943344, Fax: (855-23) 890569 E-mail : ppm_cambodia@online.com.kh
CHINA	
2) DR. CAI FENG 	Chief Researcher Qingdao Institute of Marine Geology 62 Fuzhou Rd., Qingdao, Shandong, 266071 People's Republic of China Tel: (86-532) 8575 5821, Fax: (86-532) 8572 0553 E-mail: qdcfeng@cgs.gov.cn
3) DR. WANG LIAOLIANG 	Deputy Director Guangzhou Marine Geological Survey, CGS No. 188, Guanghai Road, Huangpu District Guangzhou, 510760, People's Republic of China Tel: (86-20) 82251626, Fax: (86-20) 87765102 E-mail: liaoliangwang@163.com
4) MR. WAN RONGSHENG (OWN COST) 	Member Guangzhou Marine Geological Survey, CGS No. 188, Guanghai Road, Huangpu District Guangzhou, 510760, People's Republic of China Tel: (86-20) 82251626, Fax: (86-20) 87765102 E-mail: wansh@sohu.com
5) MR. HUANG YIWEN (OWN COST) 	Senior Geologist Technical Department CNOOC Ltd.(Zhanjiang) Zhanjiang, Guangdong, P.R. China Tel: 86-759-3901793, Fax: 86-759-3910300 E-mail: huangyw@cnooc.com.cn
6) MRS.YANG JINYU (OWN COST) 	Assistant Researcher Qingdao Institute of Marine Geology 62 Fuzhou Rd., Qingdao, Shandong, 266071 People's Republic of China Tel. 86-532-8577 7428, Fax. 86-532-8572 0553 E-mail: jydd@vip.sina.com

<p>7) MR. YAN GUIJING (OWN COST)</p> 	<p>Assistant Researcher Qingdao Institute of Marine Geology 62 Fuzhou Rd., Qingdao 266071, Shandong Province, P. R. China Tel: (86-532) 85755649, Fax: (86-532) 85720553 E-mail: qdyguijing@cgs.gov.cn</p>
<p>INDONESIA</p>	
<p>8) MR. ANJAR SUMARSONO</p> 	<p>Senior Geologist PPPTMGB “LEMIGAS“ JL. Cilbdug Raya Kav. 109, Cipulir, Kebayoran-Lama, Jakarta Selatan 12230, Indonesia Tel: (62-21) 7394422 ext. 1343, Fax: (62-21) 7226011 E-mail: anjars@lemigas.esdm.go.id</p>
<p>9) MRS. ISNAWATI</p> 	<p>Senior Geophysicist PPPTMGB “LEMIGAS“ JL. Cilbdug Raya Kav. 109, Cipulir, Kebayoran-Lama, Jakarta Selatan 12230, Indonesia Tel: (62-21) 7394422 ext. 1370, Fax: (62-21) 7226011 E-mail: isnawati@lemigas.esdm.go.id</p>
<p>MALAYSIA</p>	
<p>10) MR. ZULHAIMI BIN ABDUL RAHMAN</p> 	<p>Geoscientist PETROLEUM NASIONAL BERHAD PETRONAS Level 22, Tower 2, Petronas Twin Towers, 50088 Kuala Lumpur City Centre, Malaysia Tel: (603) 23315788, Fax: (603) 23313238 E-mail: zulhaimi_ar@petronas.com.my</p>
<p>11) MR. CHAN ENG HOE</p> 	<p>Geoscientist PETROLEUM NASIONAL BERHAD PETRONAS Level 22, Tower 2, Petronas Twin Towers, 50088 Kuala Lumpur City Centre, Malaysia Tel: (603) 23315890, Fax: (603) 23313238 E-mail: chaneng@petronas.com.my</p>
<p>PHILIPPINES</p>	
<p>12) MR. GUILLERMO H. ANSAY</p> 	<p>Senior Science Research Specialist Department of Energy (DOE) Petroleum Resources Development Division, Energy Center, Merritt Rd., Fort Bonifacio, Taguig City, Metro Manila, Philippines Tel: (63-2) 812 4016, 840 1401 to 21, local 237/285-287, Fax: (63-2) 840 2206</p>

	E-mail: gansay@doe.gov.ph
13) MR. ROLANDO Z. MORALES 	Senior Science Research Specialist Department of Energy (DOE) Petroleum Resources Development Division, Energy Center, Merritt Rd., Fort Bonifacio, Taguig City, Metro Manila, Philippines Tel: (63-2) 812 4016, Fax: (63-2) 840 2206 E-mail: rmorales@doe.gov.ph
THAILAND	
14) DR. WANIDA CHANTONG 	Geologist Bureau of Technical Affairs, Department of Mineral Fuels 24 th Floor, Shinnawatra Tower III Building, Viphavadi Rangsit Road, Chatuckak, Bangkok 10900, Thailand Tel: (66-2) 7918300 ext. 5140 Fax: (66-2) 7918357 E-mail: wanida.c@dmf.go.th
15) MS. VARANGKANAR PHUANGKAEW (OWN COST) 	Geologist Petroleum Data Center Department of Mineral Fuels 26 th Floor, 1010 Shinnawatra Tower III Building, Viphavadi Rangsit Road, Chatuckak, Bangkok 10900, Thailand Tel: (66-2) 7918300 ext. 4111, 7918377 Fax: (66-2) 7918388 E-mail: varangkanar@dmf.go.th
VIETNAM	
16) DR. NGUYEN TRONG TIN 	ICB-CCOP1 National Coordinator Deputy Director, Vietnam Petroleum Institute Yen Hoa, Cau Giay, Hanoi, VIETNAM Tel: (84-4) 7844011, Fax: (84-4) 7841849 Mobile: 84-0904062646 E-mail: tinnt@vpihn.pv.com.vn
17) MR. VU ANH TUAN 	Geologist Petroleum Geology Department, Research team member of ICB-CCOP1 project Vietnam Petroleum Institute, Yen Hoa, Cau Giay, Hanoi, VIETNAM Phone: 84-4-7843061(138) Mobile: 0912056212, Fax: (94-4) 7844156 E-mail: tuanva@vpihn.pv.com.vn

<p>18) MRS. LA THUY HANG</p> 	<p>Geologist Vietnam Petroleum Institute Trung Kinh, Yen Hoa, Cau Giay, Hanoi, Vietnam Tel: (84-4) 7844230 ext. 138, Fax: (84-4) 7844156 E-mail: hanglt@vpihn.pv.com.vn</p>
<p>19) MS. LE CHI MAI</p> 	<p>Geologist Vietnam Petroleum Institute Yen Hoa, Cau Giay, Hanoi, VIETNAM Tel: (84-4) 7843061 Fax: (84-4) 7844156 E-mail: mailc@vpihn.pv.com.vn, mailc999@yahoo.com</p>
<p>20) MR. NGO VAN HUNG</p> 	<p>Geologist Vietnam Petroleum Institute Yen Hoa, Cau Giay, Hanoi, VIETNAM Tel: (84-4) 7844230 Fax: (84-4) 7844156 E-mail: hungnv@vpihn.pv.com.vn</p>
<p>21) MRS. NGUYEN THI DAU</p> 	<p>Geochemistry Department Vietnam Petroleum Institute (VPI) Trung Kinh Street, Yen Hoa, Cau Giay District, HANOI, Vietnam Tel: (84-4) 7841849 Fax: (84-4) 7844156 E-mail: daunt@vpihn.pv.com.vn</p>
<p>22) MR. NGUYEN DUC DONG</p> 	<p>Geologist, Field Technology Department PetroVietnam Exploration and Production (PVEP) 12AB, Thanh Đa Complex, 27 Ward, Binh Thanh District, Ho Chi Minh City, Vietnam Tel : (84-8) 8990271 to 74; 8996502 to 05 Mobil 0904116260 Fax: (84-8) 8990259, 8990254, 8996501 Email: nddong_cnm@pvep.com.vn</p>
<p>23) MR. NGUYEN MINH HUNG</p> 	<p>Chief Specialist Exploration Department R D. NIPI VSP Vietsovpetro 105 Le Loi TP, Vung Tau, Vietnam Tel: 8913957591, (84-64) 839857 E-mail: hungnmrd@vietsov.com.vn</p>
<p>24) MS. HOANG THI MINH HUE</p> 	<p>Geologist R D. NIPI VSP Vietsovpetro 105 Le Loi TP, Vung Tau, Vietnam Tel: (84) 64 839871 ext. 2027 Fax: (84) 64 839857 E-mail: huehm.rd@vetsov.com.vn</p>

CCOP TECHNICAL SECRETARIAT

1) MR. CHEN SHICK PEI



Director, CCOP Technical Secretariat
Thai CC Tower
24th Floor, Suite 244-245
889 Sathorn Tai Road, Sathorn
Bangkok 10120, Thailand
Tel: (66-2) 672 3080, Fax:(66-2) 672 3082
E-mail: spchen@ccop.or.th

2) MR. LIU LIQUN



Project Coordinator ICB-CCOP1 Project
CCOP Technical Secretariat
Thai CC Tower
24th Floor, Suite 244-245
889 Sathorn Tai Road, Sathorn
Bangkok 10120, Thailand
Tel: (66-2) 672 3080, Mobile: 66-1 9855765
Fax: (66-2) 672 3082 E-mail: liu@ccop.or.th

3) MR. PIYAWATCHARA PRAMALNRUT



Assistant in IT
CCOP Technical Secretariat
Thai CC Tower
24th Floor, Suite 244-245
889 Sathorn Tai Road, Sathorn,
Bangkok 10120, THAILAND
Tel. 66-2-672 3080 to 81, Mobile: 66-1 6877029
Fax. 66-2-672 3082 E-mail: kapi@ccop.or.th

4) MS. PEERADA SRISOMBOON



Assistant to Technical Division
CCOP Technical Secretariat
Thai CC Tower
24th Floor, Suite 244-245
889 Sathorn Tai Road, Sathorn,
Bangkok 10120, THAILAND
Tel. 66-2-672 3080 to 81, Mobile: 66-1 9437313
Fax. 66-2-672 3082 E-mail: ann@ccop.or.th

Annex2

CCOP-DANIDA
Institutional Capacity Building Project ICB-CCOP1
Petroleum System Modeling Software User Training &
Application Training
May 8-13, 2006, Hanoi, Vietnam

Program

Day 1: 7 May

Traveling to Hanoi, Vietnam.
Arrival of Participants / Check-in Hotel

Day 2: 8 May

- 08:30 Registration CCOP TS
- 09:00 Opening Remarks
- Dr. Nguyen Huy Quy on behalf of the Permanent Representative of Vietnam to CCOP
 - Director of CCOP Technical Secretariat
- 09:20 Group Photo
- 09:30 Coffee/tea break
- 09:50 Introduction
- 10:00 **Petroleum System Modeling Software User Training Course**
Technology Review
Introduction to Basin and Petroleum Systems Modeling
Definitions and History
The role of basin and petroleum systems modeling
- 12:00 Lunch Break
- 13:30 **Petroleum Generation**
- Chemical principles of petroleum generation
 - Physical principles of thermal modeling
 - Boundary conditions for thermal modeling

Petroleum Migration

- Expulsion (primary migration)
- Principles of secondary migration

15:00 Coffee/tea break

15:15 Discussions

Exercises

17:00 End of Day 2

19:00 Welcome Dinner

Day 3: 9 May

08:30 **Constructing Basic Basin and Petroleum Systems Models**

General Input Data Requirements

- 1D models
- 2D models
- 3D models

10:00 Coffee Break

10:15 **Property editing**

- Lithologies
- Chemical parameters

12:00 Lunch Break

13:30 Discussions

15:00 Coffee/tea break

15:15 Exercises

17:00 End of day 3

Day 4: 10 May

08:30 **Workflows in Basin and Petroleum Systems Models**

From Input to Output

- Editing input models
- Simulation and simulation controls
- Output displays in 1D, 2D and 3D

10:00 Coffee Break

10:15 Calibrating Models

- Thermal calibration
- Pressure calibration (compaction/porosity modeling)

Migration Modeling

- Drainage area analysis
- Pre-assessment with multi-1D models
- Volumetrics modeling

12:00 Lunch Break

13:30 Discussions

15:00 Coffee/tea break

15:15 Exercises

17:00 End of day 4

Day 5: 11 May

**08:30 Constructing Complex Basin and Petroleum Systems Models
Special Modeling Requirements**

- Facies maps
- Faults and fault properties
- Uplift and erosion
- Salt movements
- Igneous intrusions
- Links to structural models

10:00 Coffee Break

- 10:15 - Salt movements
- Igneous intrusions
 - Links to structural models

12:00 Lunch Break

13:30 Discussions

15:00 Coffee/tea break

15:15 Exercises

17:00 End of day 5

Day 6: 12 May

08:30 Migration Modeling Theory and Methods

Types of Migration Modeling

- Darcy flow
- Flowpath
- Others
- Mathematical approaches

PVT controls

- Hydrocarbon components and phases
- Modeling methods for component/phase controls
- Prediction of Petroleum properties

10:00 Coffee Break

10:15 Seals and Seal Efficiencies

- Column height and breakthrough calculations
- Comparison of different methods

12:00 Lunch Break

13:30 Discussions

15:00 Coffee/tea break

15:15 Exercises

17:00 End of day 6

19:00 Farewell Dinner

Day 7: 13 May

08:30 Application of Basin and Petroleum Systems Models

Risk and Uncertainty Analysis

- Principles of risk analysis
- Risk analysis tools

10:00 Coffee Break

10:15 Applications and Case Studies

- Petroleum Systems Modeling as a Guidance Tool
- Comparison of 2D and 3D modeling
- Charge risking and history modeling
- Local E&P risking, e.g. for satellite structure assessments
- Large scale models (resource assessments)

12:00 Lunch Break

13:30 Review of current developments/Preview of future developments
Final Discussions

15:00 Coffee/tea break

15:15 Summary of Training Course
Closing and Certification Presentation

17:00 End of day 7

Day 8: 14 May

Check out from Hotel, Back Home Trip

Note:

1. For more information about the software please browse the software vender's website at: <http://www.ies.de/>, please download the software from this website
2. For participants who will attend this training course are strongly recommended to bring the laptop PC with them with the Windows XP/2000 Operation System

Annex 3

SPEECH BY DIRECTOR OF CCOP TECHNICAL SECRETARIAT

MR. CHEN SHICK PEI

**at the opening of ICB-CCOP 1
Petroleum System Modeling Software User Training & Application Training
May 8-13, 2006, Hanoi, Vietnam**

**Dr Nguyen Huy Quy, Deputy General Manager, Science-Technology Division, PetroVietnam
Dr Nguyen Trong Tin, Vice Director, Vietnam Petroleum Institute
Mr Ioannis Abatzis, Representative of Denmark to CCOP
Mr Liu Liqun, ICB-CCOP 1 Coordinator
Resource Persons Dr Wygrala, Dr Mathiesen and Mr Tham Van Tiam
Distinguished participants
Ladies and Gentlemen**

Good Morning and Cin Cao (Chao)

On behalf of CCOP, I would like to extend a very warm welcome to everybody to this User and Application Trainings on Petroleum System Modeling Software under the ICB-CCOP 1 Project. In this august opening ceremony this morning, we would like to express our deep appreciation to Dr. Nguyen Huy Quy for giving us his valuable time to be with us to grace this opening ceremony and to deliver the opening speech.

The ICB-CCOP 1 project is of great importance for the region. Besides the geoscientific aspects, it has great significance in promoting cross-border understanding and cooperation. We are pleased to share with you the fact that it is the first time that cross-border case studies have been jointly conducted by the neighboring countries, and other non case study Member Countries have also an opportunity to participate under the ICB-CCOP 1 Project. This working arrangement will enable the better integration and greater enhancement of existing knowledge of the petroleum systems in the region that can contribute to attracting investment for the sustainable development of the hydrocarbon potentials. This cross border case study model could well serve as the model for case studies of other CCOP projects in the future.

This User and Application Trainings on Petroleum System Modeling Software is part of the technology transfer component of the ICB-CCOP 1 Project. Under this component, trainings will be conducted to provide knowledge and technology that can help in the conduct of the case study and to enhance the expertise of Member Countries' scientists. To complement this, the project will support the provision of relevant software. It is also heartening for us to note that Member Countries in addition, have also suggested and offered the sharing of some specialized and high cost facilities to other CCOP Member Countries which do not possess them.

The ICB-CCOP 1 project is now at the half way implementation stage of the 3-year project. I am pleased to say that with the good cooperation and support of the Member Countries, it has made excellent progress, despite its inherent complex nature, and all the activities are being implemented as planned. We foresee that the project can fully attain its objectives and make the impact as expected.

To conclude, we would like to say a big thank you to PetroVietnam and Vietnam Petroleum Institute for hosting these trainings and providing a resource person. On behalf of the participants, we would like to thank the resource persons, Dr. Bjorn Wygrala from IES Integrated Exploration Systems, Germany, Mr. Anders Mathiesen, from the Geological Survey of Denmark and Greenland, and Mr. Tham Van Tiam from the Vietnam Petroleum Institute for sharing with us their valuable knowledge in the conduct of the trainings. We also thank Mr. Liu Liqun, the ICB-CCOP1 Project Coordinator for the efficient coordination of the project, and the staff of the CCOP Technical Secretariat for their hard work in the overall arrangement for this event.

On behalf of CCOP, we would like to thank the Royal Danish Government through the Royal Danish Embassy in Bangkok for the generous support for this Project.

Before I end, I would, once again, like to thank Dr. Nguyen Huy Quy for his interest and support, and his gracious presence in this ICB-CCOP1 Opening Ceremony of the Training Workshop. Our special appreciation goes to Mr. Ioannis Abatzis, Representative of Denmark to CCOP, Senior Advisor of the Geological Survey of Denmark and Greenland (GEUS) for his untiring efforts in rendering useful advice and guidance for the project. I would also like to thank our CCOP Member Countries, the national project coordinators and their colleagues for their cooperation, support and participation in the project activities and the case studies.

I wish you all a successful Training Workshop

Thank you and Cam Mon

May 2006



**INSTITUTIONAL CAPACITY BUILDING IN CCOP COUNTRIES,
PHASE 1 (ICB-CCOP1)**



Group photo of all the ICB-CCOP1, 1st Vietnam Training Courses participants



Opening Ceremony on 8th May, 2006.



Opening Ceremony on 8th May, 2006.



Instruction



Learning

**CCOP-DANIDA Institutional Capacity Building Project ICB-CCOP1
Petroleum System Modeling Software User Training & Application Training
May 8-13, 2006, Hanoi, Vietnam**



Discussion & Consulting



Issue the Software



Issue the Software



Issue the Software



Issue the Software



Issue the Software



Certification



Certification