

SEG, GAC Asian Region Activity Report

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Membership by Country in Asia and Pacific Regions									
	<u>AC</u>	<u>AS</u>	<u>CO</u>	<u>EM</u>	<u>GL</u>	<u>HO</u>	<u>LA</u>	<u>ST</u>	<u>Total</u>
AUSTRALIA	256	235	0	13	0	1	2	60	567
BANGLADESH	1	0	0	0	33	0	0	1	35
BRUNEI	9	9	0	0	0	0	0	7	25
BRUNEI DARUSSALAM	0	1	0	0	0	0	0	0	1
CHINA	187	149	1	0	514	0	2	275	1,128
HONG KONG, CHINA	8	1	0	0	0	0	0	1	10
INDIA	153	142	0	3	323	0	1	270	892
INDONESIA	18	51	0	4	151	0	0	125	349
JAPAN	93	196	1	6	0	0	0	35	331
MALAYSIA	33	130	0	0	1	0	0	2	166
MONGOLIA	1	2	0	0	2	0	0	0	5
MYANMAR	0	1	0	0	0	0	0	0	1
NEPAL	0	1	0	0	1	0	0	0	2
NEW ZEALAND	8	10	0	2	0	0	0	22	42
PAKISTAN	6	11	0	0	74	0	0	22	113
PAPUA NEW GUINEA	0	1	0	0	7	0	0	0	8
PHILIPPINES	1	3	0	0	11	0	0	13	28
S. KOREA	22	21	0	2	0	0	0	18	63
SINGAPORE	13	18	0	0	0	0	0	2	33
SRI LANKA	1	0	0	0	1	0	0	0	2
TAIWAN, CHINA	8	20	0	0	0	0	0	31	59
THAILAND	13	18	0	0	3	0	0	0	34
VIETNAM	3	13	0	0	8	0	0		
	834	1,033	2	30	1,129	1	5		
	6,793	7,726	45	1,044	1,671	64	43		
	12%	13%	4%	3%	68%	2%	12%		

Close Cooperation between SPG (China) and SEG

Reported by SEG Beijing

President Nixon visited China in 1972, improving Sino-U.S relationship. SEG President J. Dan Skelton appointed Mr. Stanly Jones as President of SEG Chinese Committee in 1975. Then, Chinese delegation appeared in SEG annual meeting at first time (San Francisco) in 1978. Large-scaled Sino-U.S symposium took place in Beijing Friendship Hotel in 1981 and Mr. Kevin M. Barry was a leader of SEG. Vice-Premier Yu Qiu-li of State Council of PRC interviewed and entertained all delegates.

At the end of 1981, SPG sent a delegation of 6 persons headed by Mr. Pan Yuan to visit SEG headquarters (see photo) and many petroleum companies and geophysical companies. During more than one month' trips, the delegation had received warmly welcome everywhere. SEG President D.D. Barman kindly entertained Chinese delegation in his Los Angeles' home.

In autumn of 1982, Mr. D.D. Barman visited China and brought 8 kinds of SEG continuing education materials, promoting the progress of Chinese geophysical technique.

In summer of 1984, SPG-SEG Seismic Interpretation Symposium was held in Zhuozhou City, China. Mr. Norman T. Crook was president of SEG delegation.

In 1985, International Geophysical Conference and Exhibition was held in Beijing, the SEG leader was Mr. A. M. Olander, Chinese State Councilor Kang Shi-en and Minister of Petroleum Industry Dang Ke warmly interviewed all delegates.

In 1986, aiming at complex seismic-geologic conditions in the west of China, SPG-SEG Seminar was held in Urumqi City of Western China, the head of SEG delegation was Mr. P. L. Goullaud (see photo).

In summer of 1987, Mr. Cecil H. Green, the SEG creator, accompanied by SEG president Robert J. Graebner visited China (see photo), Chinese State Councilor Kang Shi-en interviewed Mr. Green and asked the newest development of geophysical technology, the main topic is development seismology.

In SEG annual meeting (1987), Mr. Robert J. Graebner, SEG President, and Mr. Meng Er-sheng, SPE President jointly signed a protocol for long-term cooperation between two parties (see photo, the right is Mr. Chen Kun-hua, the Chief of SEG International Committee), both sides agreed that a large-scale and high-level technical conference and exhibition will be held in every four years and small-scale technical symposium will be held in every one or two years.

Following the protocol, the large-scale technical meetings had held was as follows:

- a. The meeting was held in Beijing Library in 1989, the head of SEG was Professor Ken Lerner;
- b. The meeting was held in Beijing International Trade Center in 1992, the head of SEG was Mr. William S. French;

- c. The meeting was still held in Beijing International Trade Center in 1998, the head of SEG was Mr. Rutt Bridges;
- d. The meeting was held in Beijing International Conference Center in 2004, the head of SEG was Mr. Peter M. Duncan.

The small-scale meetings interluding in this period were:

- a. The development seismic seminar was held in Daqing City in 1988, SEG delegates were William S. French and David H. Johnston etc. (see an enclosed photo);
- b. A seminar about seismic methods for carbonate was held in Chengdu City, Sichuan Province in 1990, before seminar, Mr. Tom Davis and Mr. Dale Stone had lectures for two days;
- c. Second development seismic seminar was held in Daqing City in 1994. SEG President Michael Schoenberg announced establishment of SEG Beijing section;
- d. A seminar about electromagnetic survey methods was held in Hangzhou City, Zejiang Province in 1996, Prof. G. V. Keller and H. Frank Morrison etc. attended meeting as SEG delegates;
- e. A seminar about seismic methods in Xinbei area was held in Urumqi City in 1996, many enthusiastic Chinese American delegates attended meeting;
- f. In winter of 2000, a symposium of seismic methods was held in Shenzhen City, Guangdong Province, Ms. Sally G. Zink and Mr. Brain H. Russell etc attended meeting.

Since 1978, SPG (China) has annually sent delegation to attend SEG annual meeting. In Chinese part, Mr. Meng Er-sheng (1992 Life Membership Award), Mr. Weng Wen-bo (1994 Honorary Membership Award), Mr. Chen Zu-chuan (1998 Life Membership Award) and Lu Bang-gan (2000 Special Commendation Award) successively attended the meeting.

Since 1998, SEG has successively sent five specialists famous in geophysical field to teach DISC lectures that received warmly welcome by Chinese colleagues.

Nicer cooperation between SPG and SEG is unusual, the reason perhaps lies on that both sides have great interested in geophysical science, especially both sides have enthusiastic and friend persons, among whom there were all previous SEG presidents, Mr. Johr Hyden and Mr. David Yowell in executive headquarters, in Chinese part, there were Mr. Meng Er-sheng and Mr. Pan Yuan etc. The new generation of workers in both parties has already carried forward the spirit, and SPG & SEG will realize more closer and more effective cooperation in the future.

Report of the Activities of Chinese Geophysical Society (CGS) in Taiwan

Report by Professor C. H. Yang

In 1989, the senior geophysicists in Taiwan realized that there should be some organizations providing academic training and exchange working experience to the young geophysicists. The Chinese Geophysical Society (CGS) was thus established and headquartered in the Institute of Geophysics of the National Central University. Professor Chieh-Hou Yang was elected as the first CGS President. The mission of CGS is to provide the geophysicists with the opportunities to exchange their ideas and experience through CGS activities, such as the CGS publications, conferences, forums and educational opportunities. After 16 years' effort, the number of the CGS members has been increasing from 80 to 600. The spectrum of the members extended from geophysicists and geologists to hydrologists, civil engineers, as well as geoscience's teachers. Because of the geographically unique location of Taiwan on the Pacific earthquake belt, it attracts international seismologists to join in the CGS for investigating the earth activities in this area. The successful CGS growing is attributed to the good performance of its five committees, namely executive, membership, education, technical, and honors and awards. President Kuo-Liang Wen and Vice President Lun-Tao Tong have been carrying out their two-year duties since 2004.

In order to awaken Taiwan people's interest to the earth science, CGS stresses on the geo-science training for the middle and high school teachers through its continuing education programs and workshops. A popular college freshman textbook entitled "Introduction to Geophysics" that comprehensively embraces fundamental principles as well as practical local examples was edited and published by the CGS members in 1997. In addition, the society offers scholarships and financial supports to the college students who have satisfactory performance in their geophysics studies and/or present their papers in international journals or conferences.

A peer reviewed journal, "Terrestrial, Atmospheric and Oceanic Sciences (TAO)", is jointly published quarterly via the TAO office. A newsletter is produced quarterly and distributed via conventional mail as well as a downloadable file through the society's web page (<http://www.cgs.org.tw>).

CGS Annual Meeting is held in the autumn. A "Symposium on Geophysics in Taiwan" conference on the application of seismology, structural geology, resource exploration, and environmental and engineering investigations has been held every two years starting in 1985. It lasts for two days with approximately 70 oral and 50 poster presentations. The educational workshops and a commercial exhibition are also included. Technical papers are edited and compiled as a book and CD.

The 7.3 magnitude 1999 shallow earthquake in the Chi-Chi area of Taiwan attracts many international and domestic seismologists to study; papers related to this topic have grown rapidly. The Taiwan Chenlungpu-fault Drilling Project (TCDP) and the Active Fault Monitoring and Evaluation on Potential Earthquake Project are two of the most important researches supported by the National Science Foundation of Taiwan. The TCDP project cooperated with the scientists from US, Japan and French etc is carried out by the seismologist of National Central University and National Taiwan University. The results are presented at the society's annual meeting and conference.

In July 9th, 2005, the seismologists from the government research centers and universities have a preliminary meeting to organize the "Taiwan Earthquake Center (TEC)". The National Science Council of Taiwan promises to provide a five-years term grant to TCE, there will be 110 to 160 million NT dollars per year to support the activities of TCE. The mission of TCE is to stress the corporation of those seismologists to reduce the disaster of earthquake in Taiwan. TCE will carry

its duties in the next year.

The members of CGS focus on many geophysical research disciplines. Since Taiwan is located in a major earthquake zone, seismology is the major field among the society's members. Half of the members specialize in seismology and publish more than 100 papers each year. Near surface geophysics is another important branch of the society's activities, and there are about one third of CGS members involved in this field. Shallow seismic reflection/refraction, ground penetrating radar (GPR), and the resistivity image profiling (RIP) techniques are of greatest interest to these members. Most of these techniques are applied to the civil engineering problems, such as locating active faults and detecting underground pipelines etc. The application of GPR has increased greatly during the past five years; it is used to locate underground utilities. Since the background is too noisy to image the pipelines clearly in Taiwan, combining the GPR, pipeline locators and RIP is often used in this field. The surface wave seismic method and borehole logging are also growing steadily to obtain more detailed information of the shallow subsurface.

Chinese Petroleum Corporation (CPC) is a government owner company for oil exploration in Taiwan. Since most of the reservoirs in Taiwan are gas, the company makes great efforts to overseas oil exploration. The Energy Resource Council of Taiwan provides some grants to CPC and universities to do some research for the oil explorations in a complex structure at foothill.

Environmental geophysics is not widely used in Taiwan. Some preliminary applications are conducted by the scientists of ERL/ITRI and Ching Yun University (CYU). Electromagnetic (EM), geomagnetic, RIP and GPR are typically used for this type of application. Integration of EM, geomagnetic and RIP have been very successful for locating steel drums in the ground, to delineate the boundaries of landfills, and to estimate the volume of underground waste. The soil/groundwater pollution caused by NAPLs is successfully delineated by combining EM, RIP and soil gas investigations. It is still a challenge for environmental geophysicists to delineate DNAPL source areas. Several geophysical methods had been evaluated at some DNAPL-contaminated sites. Thermal water is another application of geophysics, for several hot water resources were discovered by using integrated of EM, radio, RIP and self-potential techniques. Electrical Resistance Tomography (ERT) joint inverted with Hydraulic Tomography data is another area of the ongoing study. It is expected that environmental geophysics will become a significant component of site characterization programs in the near future.

Professor C. H. Yang

Report from Vietnamese Association of Geophysics (VAG)

Reported by Prof. Cao Dinh Trieu

First of all I want to introduce to you: I am Cao Dinh Trieu (Prof.), the Chief of the VAG Secretariat. Regret that our VAG President, Prof. Tang Muoi has not healthy, therefore to reply your emails so late.

Concerning with your question I have some following opinions:

1. There are nearly 500 member in the VAG but only ten from them are SEG members: Prof. Tang Muoi; Prof. Truong Minh; Prof. Bui Cong Que; Prof. Mai Thanh Tan; Prof. Nguyen Thi Kim Thoa; Prof. Cao Dinh Trieu; Prof. Nguyen Ngoc Thuy; Dr Nguyen Tran Tan; Dr Nguyen Hong Phuong; and Dr Hoang Van Quy.
2. I am appealing to our VAG members to participate in SEG with 5\$ annual due. At present I have not the list of SEG participation but I think its may be 50-60 persons will be.
3. One geophysical student section and six another sections are there in VAG. Prof. Mai Thanh Tan (Hanoi University of Mining and Geology) is the Adviser.
4. Fourth National Conference of VAG will be carry out in Hanoi at the end of September/ 2005. On this occasion we invite the SEG leaders to visit Hanoi and some Vietnamese Geophysical organs. If you arrange the time to visit Vietnam, please to inform me soon. I think that is the better way to develop our future cooperation.
5. SEG can help VAG in:
 - Training of young scientists by financial supporting them to participate in the training courses of Geophysics.
 - Enhance the scientific ability of the VAG scientists by supply with: publication of the fields of pure and apply geophysics (Journal of Geophysics ...); some software of geophysical analyze and interpretation.
6. Almost of VAG member are under the situation of pinch and save. VAG can fund only the return tickets for two or three scientists to participate the SEG Houston 2005 anniversary (November 6-11, 2005). We ask for SEG sponsor for accommodations?

Prof. Cao Dinh Trieu