

INTERNATIONAL SOCIETY FOR SOIL MECHANICS AND GEOTECHNICAL ENGINEERING



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3rd International Young Geotechnical Engineers Conference Troisième Congrès International des Jeunes Ingénieurs Géotechnicien

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1 INTRODUCTION

The International Young Geotechnical Engineer Conference is an official conference which has been held under the auspices of the International Society for Soil Mechanics and Geotechnical Engineering. Geotechnical people who are 35 years old or less are chosen by member geotechnical societies and stay together for several days so that they can achieve something during the period. The first conference took place in Southampton of U.K. in 2000 and was followed by Constanza-Mamaia of Romania in 2003. Being abbreviated as iYGEC in this report, this series of conference has two aims which are international familiarization among young engineers and developing international viewpoints in those engineers.

The Japanese Geotechnical Society and the organizing committee of the 16th International Conference on Soil Mechanics and Geotechnical Engineering were requested to hold the third iYGEC in Osaka at the same time as the International Conference. Hence, third iYGEC (3iYGEC) was scheduled to take place from Monday, September 12th, to Friday, September 16th, in Osaka. The idea behind this simultaneous schedule was to encourage young engineers not only to pursue the conventional aims of iYGEC but also to attend the main conference so that they could get more experiences and broader scope through interaction with senior people.

2 ORGANIZATION OF 3iYGEC IN OSAKA

The authors were appointed to manage the organizing committee of 3iYGEC. The organizing committee members whose names are mentioned at the end of this report were collected from Japanese delegates who attended past iYGECs as well as similar occasions which were held in the Asian region.

For the sake of international familiarization, it was absolutely important to receive many delegates. Hence, it was decided to invite one hundred delegates from member societies; two from each as regulated by the international society. It was also decided to make a special arrangement for the South Asian Society which is actually composed of five domestic geotechnical societies in Malaysia, Philippines, R.O.C. Taiwan, Singapore, and Thailand. Each domestic society was therefore asked to nominate two official delegates for each. In addition to these official delegates who pay 30,000 Japanese Yen as the registration fee, extra delegates were accepted. In contrast to the official delegates who paid 30,000 Yen to receive accommodations, three meals per day, local transportation, technical visits, and other social events, the additional delegates were asked to pay real costs. Except this point, there was no difference between official and additional delegates; both were able to make oral

presentations and discuss about many issues, while entering the main conference without paying additional fee. It seems reasonable that the young delegates could not either receive the proceedings or attend the banquet of the main conference because they did not pay necessary cost.

The organizing committee tried to encourage the young delegates to develop a broader scope in geotechnical engineering than the conventional one. This is because the world is now faced by such new important problems as those related with environmental issues, mega cities, food and energy supply, etc. and there will certainly be important roles in the coming years which have to be played by the next generations of geotechnical engineers. This idea is typically expressed by the symbol of 3iYGEC in Fig.1. The two components of this drawing come from an ancient Chinese calligraphy and stand for “grass.” The grass on the right hand side is a symbol of the conventional geotechnical engineering. Being thick, it looks tough but will not grow much. The one on the left is younger and stems from the conventional geotechnical engineering. It is hoped that this younger branch will grow towards the higher world.



Fig. 1. Symbol of 3iYGEC.

Another idea for encouragement was the preparation of “Osaka Manifesto” which states the future scope of geotechnical engineering. This issue will be described later on.

3 DIFFICULTIES IN ORGANIZING 3iYGEC

The organizing business encountered many difficulties. They may be classified into three categories which concerned venue, time, and financial issues. This situation may be called a triple handicap. Since the simultaneous organization of ICSMGE and iYGEC was the first attempt and may be planned again in future, it seems meaningful to describe here those difficulties as well as their solutions.

Of the least difficulty was the choice of iYGEC venue. Since it has been a tradition for all the delegates to stay in the same place day and night, a relatively big accommodation had to be sought. On the other hand, from the viewpoint of presentation and discussion sessions, it seemed desirable that iYGEC took place near the venue of ICSMGE in the center of Osaka. This idea was certainly impossible with the limited budget of iYGEC. The solution was that the major parts of iYGEC took place in the southern suburb of Osaka where relatively cheap accommodation was available, while delegates commute everyday to the center of Osaka for attending ICSMGE. Fig.2 shows the conference venue where air-conditioned single rooms were sufficiently available and good conference facilities were supplied at acceptable costs. Since these facilities were designed for international training courses, good conference environment was there. Moreover, its restaurant served, among other kinds of cuisines, Islamic food which was important for many delegates with Islamic religion. It was believed that tasty and satisfactory food encourages hard workers. Although local transportation was needed everyday, subway commuting was founded to be acceptable. Arrangement of special bus service was not feasible due to financial reasons.



Fig. 2. Building of Association for Overseas Technical Scholarship (AOTS) in Osaka.

The second problem concerned scheduling. Different from past two iYGECs, young delegates were supposed to spend much time on ICSMGE, while participating in iYGEC sessions and making oral presentations in late afternoon and evening. When each of the 100 delegates needs 10 minutes for oral presentation and 5 minutes for discussion, the total time needed is 25 hours. Together with the concluding session of a few hours which was scheduled on the fourth day of ICSMGE, it seemed impossible to allocate such a long time in the first two or three days. This problem was somehow solved by organizing two 90-minute plenary sessions as well as four parallel sessions after supper. Those parallel sessions lasted until 11:30 pm, and the summarization work continued until 4 or 5 am. The organizing committee is deeply grateful to the powerful contribution of young participants.

The financial problem was most difficult; the registration fee of 30,000 Yen for each could not cover the expenditures. But there is always a solution. Although the organizing committee applied for a governmental aid for international conference organization, it was declined for the reason that the number of Japanese delegates, two out of one hundred, was too small. Request of support from private sectors was not accepted due to recent economic conditions. In this respect, the organizing committees deeply appreciate the support given by ISSMGE. In this difficult situation, the organizing committee decided to make a very strict budget control, although some participants may suffer from inconvenience. Examples of the control included no pick-up service at the airport, commuting on foot between subway stations and conference venues, and no conference proceedings except an extended abstract, among others. Efforts were made, however, to arrange good meals so that delegates could maintain spiritual toughness throughout the week. Even from the

budget viewpoints, the voluntarily people who made a tremendous contribution to the sightseeing trip to Nara are deeply acknowledged.

4 DISTRIBUTION OF DELEGATES

Since the conference was supposed to be "international", much efforts were made to attract young people from all the regions in the world. Table 1 shows the societies which sent delegates to 3iYGEC. This table shows the total number of official delegates who were nominated by member societies and those additional delegates who paid cost for themselves. As mentioned before, the conference treated both groups of people equally except the payment.

It should be stated that a special consideration was made of the South East Asian Geotechnical Society which is actually made of five domestic societies. Since the distance from South East Asia to Osaka was short, and the local engineering community seemed to have financial capability to send their own delegates, the organizing committee decided to invite two official delegates from each societies.

In spite of these efforts, the number of registration was still less than the target number of one hundred and names of many member societies were still missing. Hence, a request was circulated to Japanese universities and research institutes whether or not their international young members and students could participate in the conference. To make those participants official, those who come from missing societies / nations were given with the priority. In this manner, delegates from African societies joined Table 1. Consequently, 88 delegates were registered, and by adding the number of young organizing committee members, the total number became close to 100. It was a pity that one Venezuelan delegate could not come due to accident, and that one from Iraq could not come due to domestic reasons.

Table 1. Distribution of participants from different member societies.

Society	Number	Society	Number	Society	Number
Asia		Europe		Slovenia	1
Bangladesh	1	Albania	2	Spain	3
China	1	Austria	2	Sweden	2
Hong Kong	2	Belgium	2	Switzerland	2
Indonesia	1	Bulgaria	1	Turkey	2
Iran	3	Czech and		United Kingdom	2
Japan	2	Slovakia	2	Africa	
Kazakhstan	2	Croatia	3	Ghana	1
Korea	2	France	1	Kenya	1
Malaysia*	3	Germany	2	Senegal	1
Nepal	2	Greece	1	South Africa	2
Pakistan	1	Ireland	1	Oceania	
R.O.C. Taiwan*	2	Italy	2	Australia	1
Singapore*	4	Netherlands	3	America	
Sri Lanka	3	Norway	2	Brazil	2
Syria	1	Poland	1	Canada	2
Thailand*	2	Romania	2	Mexico	3
Vietnam	2	Russia	2	Total	88

* Each member society of the South East Asian Geotechnical Society was requested to send its own delegates.

5 OPENING SESSION

The opening session and the orientation were held after supper on Monday, September 12th, at AOTS meeting room (Fig.3). After the significance and aims of the present iYGEC were explained by the authors, the secretary of ISSMGE, Prof. Neil

Taylor, made the opening address. It was stressed in his talk that ISSMGE are always supporting the activity of younger generations who will bear the future of the geotechnical engineering. Another guest during this occasion was Dr. S. Lacasse, the director of Norwegian Geotechnical Institute, who also pointed out the importance of this conference.



Fig. 3. Delegates and Dr. S. Lacasse slightly before opening ceremony.

6 ORAL PRESENTATION AND SUMMARY SESSION

Since four parallel sessions were planned for the evening time, 3iYGEC had four themes which are shown in Table 2. Although more or less equal numbers of application were expected to each of the themes, more than half of the delegates were interested in the third theme. Hence, the themes 1 and 2 were combined to form one group, while the third one was divided into two groups. Fig.4 illustrates the time schedule of sessions on 13th and 14th of September. The plenary session took place in the same building as the main conference for the convenience of the moving between two conferences. On the other hand, four parallel sessions were held in the AOTS lodge so that discussion and summary work could continue until mid night. Each presentation had 10 minutes allocated and discussion spent 5 minutes each. Figs 5 and 6 indicate plenary and parallel sessions, respectively.

The summary session which took place in the afternoon of September 15th was made possible by hard working of young delegates who made a good summary of presentations and discussion in spite of the time limitation.

The summary session was conducted in the main hall of ICSMGE venue by selected young delegates (Fig.7). They showed the overall summary of the opinions and problems which the young delegates believed to be important in the coming future. This occasion was characterized by the special lecture by Dr. S. Lacasse on the state-of-the-art geotechnical engineering as well as the encouraging attendance of Prof. R.B. Peck. Entitled as "Geotechnical Engineering in the Design and Maintenance of Infrastructure," Dr. Lacasse's lecture concerned railway construction on Scandinavian soft clays, and gave a wisdom on combining excellent geotechnical knowledge and good design. It is believed that the contributions made by these two people cannot be appreciated too much.

The summary session tried to build up the Osaka Manifesto after all the programs. However, the time shortage did not allow this idea to be completed, and the manifesto was finally made after the conference through e-mail communication. This issue will be presented in the next section. At the end of the time, all the delegates took a group photograph (Fig.8).

7 THIRD IYGEC OSAKA MANIFESTO

Osaka manifesto is an appeal to the international geotechnical community as well as to both private and public sectors which are responsible for the better future of the world. It is intended therein to show that young geotechnical engineers can make more contributions to the development of better world not only

Table 2 Themes of 3iYGEC.

Themes	Number of presentations
1) Environmental	20
2) Disaster mitigation	
3) Frontiers in geotechnical engineering such as analysis, soil improvement, field investigation, etc.	42
4) Engineering practice such as design principle and liability	21

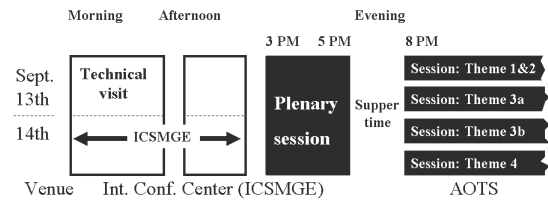


Fig. 4. Time schedule of 3iYGEC presentation sessions on September 13th and 14th.



Fig. 5. Plenary session of 3iYGEC in the main conference venue.



Fig. 6. Parallel session in night time in AOTS venue.

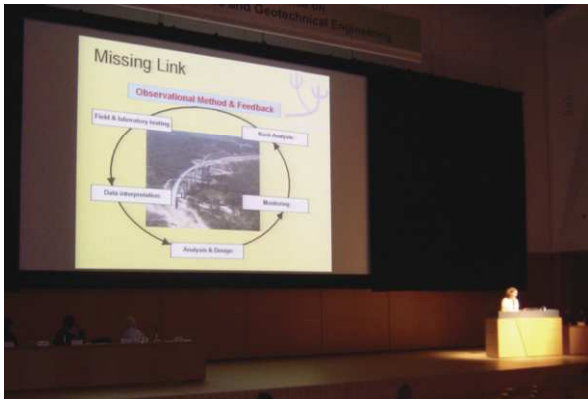


Fig. 7. Summary presentation on Thursday.



Fig. 8. Group photograph of participants.

through conventional construction technologies but more directly to people. Readers are requested to read the followings.

The delegates who attended the Third International Young Geotechnical Engineers' Conference in Osaka, Japan, from September 12 to 16, 2005 (3rd iYGEC) wish to express their commitment to face the challenges of the 21st century, which are numerous and varied. Challenges such as the rapid increase in population, demands for further provision of infrastructure, major natural disasters, and the need to protect and improve our environment have strained resources and increased social problems. We recognize that the international geotechnical community plays a role in reducing the impact of such challenges, but consider that this contribution should be more widely acknowledged and can be further developed and enhanced.

At the 3rd iYGEC discussions among delegates from seven continents were centered on the themes of Environment and Disaster Prevention, Frontiers in Geotechnical Engineering and Engineering Practice. Despite the cultural variations and differing themes, several common objectives arose. These focused on knowledge transfer, our obligations to future generations and developing nations, and the issues of sustainable development and efficient use of natural resources. With these points in mind, the participants of the 3rd iYGEC present the following Appeals to the international geotechnical community:

A. Worldwide, the volume of information relevant to geotechnical engineers is enormous, and yet much of this information is out of reach or difficult to access, especially for those in developing nations. The followings are suggested to resolve this situation:

- Consolidate information into international databases - including journals, conference proceedings, past and present research, laboratory methods, data, practical guidelines, project experience, and government sponsored reports.
- Reduce and ultimately remove the linguistic and financial barriers to obtaining this information.

B. Promote interdisciplinary collaboration and improved communication between academics and practitioners.

C. The quantity of site investigation, instrumentation, laboratory testing and experimental work is constantly being influenced by political and financial constraints. We should continue to resist this trend.

D. Reach out to international, national and local media and policy-makers. Promote the important contribution of geotechnical engineering and raise the profile and standing of the profession in society.

E. Provide developing nations with engineering assistance, support and solutions that are sustainable at the local level. Create research partnerships between developed and developing countries to solve regional problems in a locally achievable manner.

F. Encourage the development of open-source engineering software applications, to be distributed via international databases.

G. The knowledge and experience of our senior colleagues is invaluable. Experienced engineers should be encouraged to pass their knowledge to the next generation of engineers.

H. Encourage every engineer to provide feedback from project experience to the geotechnical community.

The realization of these goals will require continual oversight and support from an international body. In this context, we suggest that they be developed as a working group of the ISSMGE. Furthermore, to maintain the momentum of these efforts we encourage a programme of regular iYGE conferences, with sufficient time and scope within the framework of each conference to monitor and develop these Appeals.

8 OTHER ACTIVITIES

The academic part of the conference was completed by the official dinner with a variety of traditional Japanese foods and drinks. Moreover, 3iYGEC organized two visits to outside; technical visit to underground railway construction in the center of Osaka and a cultural visit to a historical city of Nara. The technical visit showed the participants that cleanliness of a construction site is a key issue to achieve safety as the number one issue. During the cultural visits, the organizer tried to show delegates that Buddhism and traditional religion of Japan were mixed into a single system in order to avoid religious conflicts. This idea worked well for more than one thousand years, although it is not applicable universally to the present world.

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