

Japan Society of Civil Engineers

International Activities Center

IAC News No.47

Japanese Civil Engineers the Global Leaders Symposium Series No. 7 -India Delhi Metro, Present and Future -Yen Loan Metro Projects in Delhi, Bangalore, and Ahmedabad~

Japanese Civil Engineers the Global Leaders Symposium Series No. 7 was held at JSCE auditorium, organized by the International Activities Center, on 16 May 2016. Activities of Japanese enterprises for Indian metro projects, conducted as yen loan projects, were introduced by the Japanese engineers and researcher engaged in these projects. The number of participants was around one hundred, including students and young engineers, and nearly filled the auditorium to capacity.

After opening remarks, Mr. Katsuo Matsumoto, deputy director general for planning of the South Asia Department of JICA, made a presentation titled, "Yen Loan Projects in India, Especially around Railway Projects." He introduced a high-speed railway project, which connects the 500 km between Mumbai and Ahmedabad, and metro projects in many cities.

The next speaker, Dr. Reiko Abe, CEO of Oriental Consultants India Private Ltd. (an overseas subsidiary of Oriental Consultants Global), has abundant experience in the field of quality control and supervision of railway construction sites. She wittily introduced how she coped with the cultural gap between the two countries.

After a break, Prof. Shinichi Akutagawa, Department of Civil Engineering, Graduate School of Engineering, Kobe University, made a presentation on "on-site visualization". He introduced an attempt to create visualizations of soil or beam displacement for workers. This was intended to make potentially necessary evacuations possible and improve safety at the construction site.

Following that, two lecturers from supplier side of the metro projects made presentations. Mr. Koji Usui, manager of the Overseas Sales Department, Overseas Division of Nippon Signal Co., Ltd. was in charge of the delivery of an automatic ticket gate system for the metro projects. His presentation covered how they initiated the ticket gate system project, contracted with the Indian side, employed local staff, and formulated teamwork among members. Difficulties of the system installation were also addressed. Mr. Hirofumi Haga, a staff engineer for the Sensor Solutions Department, R&D Section No.3 of Akebono Brake Industry Co., Ltd., talked about topics such as the company's entrance into civil engineering field as a brake maker, the company's overseas business philosophies, and considerations when a company goes abroad.

The symposium was closed with ending remarks from Mr. Asao Yamakawa, Acting Director General of the International Activities Center. He said, "I learned that Indian safety management at construction sites is improved by Japanese efforts, and that business in India is very tough despite the fact that Indian people have a

good impression of Japan. Today's lectures were informative to industry-government-academy collaboration, which the International Activities Center advocates."





Mr. Katsuo Matsumoto (left) and Dr. Reiko Abe (right) deliver speeches.

[Reported by Yoshiaki Higuchi (Oriental Consultants Co., Ltd.), Group leader, Project Group, IAC]

Report of the 1st JSCE-CICHE Joint Workshop

After about 3 hours' flight, the author arrived at Taoyuan International Airport at 7 p.m. on May 21st, 2016. After arrival, it took the author 2 hours to reach Kaohsiung City by Taiwan High Speed Rail. And the 1st JSCE-CICHE Joint Workshop took place in Garden Villa Hotel Kaohsiung in Kaohsiung City from the next day on May 22nd.

The workshop started at 9:20 a.m. with a welcome speech from Prof. Liang-Jenq Leu, the President of Chinese Institute of Civil and Hydraulic Engineering (CICHE). The following speech was about recent Japanese disaster and actives of Japan Society of Civil Engineers, by Noriaki Hirose, director of Japan Society of Civil Engineers. Reviewing all kinds of disasters happened in these 20 years reminded the author how close we are from disasters. After that, speeches around the theme Sustainability and Disaster Reduction were made by Japanese and Taiwanese members. And one of those speeches was made by the author, about recent development in methane hydrate in Japan and seabed disasters related to methane hydrate.

The workshop was a great fruit for the author, not only the valuable speeches but also knowing so many young researchers and doctoral students from Taiwan. The author believes that new relationships made between Japanese and Taiwanese researchers will lead to a better 2nd and 3rd workshop.

On the second day, the author and other members took a field trip of 2 construction sites and Wushantou Dam in Taiwan. Especially, the Wushantou Dam site impressed the author the most. Yoichi Hatta, a former Japanese civil engineer, built the Wushantou Dam which turned fields around from nothing into a brilliant granary supporting Taiwanese economics and agriculture. The contribution of Yoichi Hatta was so great. Honestly, the author did not know this story. However, learning former exchange in civil engineering between Japanese and Taiwanese helped the author understanding the importance of the JSCE-CICHE Joint Workshop better.

At the end of the report, the author would like to express his gratitude to CICHE executives: Prof. Liang-Jenq Leu, the President, Prof. Chiwan Hsieh, Prof. Luh Maan Chang, and Prof. Edward Wang for great help during

the workshop. The author would also give an address of thanks to all the college students and people who helped operating the workshop, because the workshop could not be so fruitful without you. Thank you very much.





Participants of the Joint Workshop

Panelists from CICHE and JSCE

[Reported by Hiromasa Iwai (Nagoya Institute of Technology), Taiwan Group, Int'l Cooperation Group, IAC]

Introduction of Committee on Civil Engineering Informatics (CCEI) Activity

Committee on Civil Engineering Informatics (CCEI) has a 40-year-long history since its establishment in 1976. The CCEI initially was set up as "Committee on Electronic Computer. The committee changed its name several times in responding to the development of electronic computing systems and information and communication technologies before it fixed the CCEI in 2012. The CCEI defines civil engineering informatics as "Learning to explore theories and techniques to optimize for acquisition, generation, processing, storage, distribution and applications of information in the field of civil engineering. The CCEI's objective is to research and investigate civil engineering informatics issues and use the findings and result obtained effectively in civil engineering field.



Mr. Hiroshi Fukumori Chair of Committee on Civil Engineering Informatics

In June 2016, the CCEI reorganized its subcommittees based on review of their past functions and research activities (see Table 1). A new research system was built to

perform more efficiently in strategic and functional effectiveness taking into account research areas and challenges that the committee should focus in the future on the basis of mapping of civil engineering informatics techniques. The results of research activities could make contribution to the advancement of research fields, development of technical standards and codes, which will be beneficial to academic sectors and also to society. At the same time, JSCE sets up the FY2016 Presidential Task Force "Promoting Innovation at the Construction Site for the Next Generation", and the CCEI, as a WG leader, has started working on one of three themes of the Task Force, "Development of research and education for promoting and implementing the next generation of construction technologies such as ICT and robotics technology." The reorganized subcommittee will make good contribute to the Task Force.

In the meantime, the CCEI is making efforts to organize meetings and conferences with a global viewpoint. From 6 to 8 July this year, the committee held the 16th International Conference on Computing in Civil and Building Engineering (ICCCBE2016) with International Society for Computing in Civil and Building

Engineering (ISCCBE) in Osaka. The ICCCBE 2016 was the second conference held in Japan since the one was held in Tokyo 1991, co-hosted by Architectural Institute of Japan (AIJ) and JSCE. As many as 300 papers were presented and several unique discussions were held during the ICCCBE. Furthermore, Asian Group for Civil Engineering Informatics (AGCEI) was established as a sub-group of ISCCBE with the efforts of researchers in Asia in 2013, and that group held International Conference on Civil Engineering Informatics (ICCBEI2013) was held in Tokyo in 2013 and 2015. Then, it will hold the conference in Taipei in 2017 and in Japan in 2019.

In future, the role of information technology will be understood its importance widely in society. The CCEI will make further effort to advance and develop applications of information technology in the civil engineering field, responding to the needs of JSCE and its members.

Table 1. Reorganization of research subcommittee

Subcommittee name	Activity contents
Construction three-dimensional information	To conduct research and survey about three-dimensional
Utilization Research Subcommittee	information and their element technology with the purpose of
	productivity improvement and to spread the information to
	society
Construction ICT data Collaborative Research	To examine the data collaboration system in order to make use
Subcommittee	of information at each construction process for maintenance
Infrastructure Monitoring Technology Research	To examine budget, human resource, and operation for
Subcommittee	sustainable maintenance and monitoring methodology for
	efficient maintenance
Infrastructure Open and Big Data Research	To introduce the usefulness of open data to society through
Subcommittee	collection and practical use of infrastructure data
IoT Utilization Research Subcommittee	To explore the applicability of advanced information
	technology for the field of civil engineering and to develop
	information utilization vision in future society

[Reported by Hiroshi Fukumori (Shimizu Corporation), Committee on Civil Engineering Informatics]

Updates

- ◆The summary of feature articles in the JSCE Magazine is available on the JSCE website. http://www.jsce-int.org/pub/magazine
- ◆ Concrete Committee International Newsletter No. 46 http://www.jsce.or.jp/committee/concrete/e/newsletter/newsletter46/index.html
- ◆ Journal of JSCE

The Journal of JSCE is the collection of research papers which can be viewed on the JSCE website. https://www.jstage.jst.go.jp/browse/journalofjsce

◆ Disaster Fact Sheet

http://committees.jsce.or.jp/disaster/

◆ IAC Students and Alumni Network http://www.jsce-int.org/IAC network

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§ IAC Facebook §

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Comments and Questions

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