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Japan Society of Civil Engineers

*International Activities Center*

## IAC News No. 22

### **Building the Foundation for a Sustainable Society by Transcending Traditional Boundaries of Civil Engineering**

JSCE marks its centennial this year. JSCE, stemming from The Japan Federation of Engineering Society (JFES) which was established in 1879 (Meiji 12), was founded in 1914 (Taisho 3). Baron Koi Furuichi the 1st JSCE President stressed in his speech at the first General Meeting that civil engineering was a wide ranging profession and needed to link to other disciplines. With disciplinary development of engineering, many professional societies stemmed from the JFES. Over half of the members who remained with JFES happened to be civil engineers and became the founders of JSCE. Although they might seem later comers, they were well aware what the civil engineering profession was. We civil engineers should pay a tribute to them, at the same time, take pride in being their successors.



**Masahiko ISOBE, Dr. Eng.,  
102nd JSCE President**

Civil engineering is the professional engineering discipline that designs, constructs and maintains the safe, comfortable and sustainable environment in which people enjoy their daily lives without stress, worry, fear and anxiety. I will take in what Baron Furuichi said and share the beliefs and principles that Mr. Hashimoto and presidents have held. I will work to open up the boundaries between civil engineering and other disciplines to acquire wider knowledge and wisdom, to push my boundaries of possibility in other areas, and to support young engineers to achieve their full potential and to increase professional capabilities. I will also pursue my ultimate goal of building the foundation for a sustainable society.

I am making necessary arrangements for JSCE's 100th Anniversary Commemorative Ceremony at Tokyo International Forum to be held on November 21. This ceremony will be an opportunity for not only JSCE members but also many people to celebrate JSCE's centennial. I hope to, by celebrating the anniversary with those people, build communication with them and tell them how important part the civil engineering profession takes on the development of society and where it should go in the future. I would appreciate all your help and support.

Thank you very much.

## INSIDE JSCE series2 Activities of Rock Mechanics Committee

The JSCE's Rock Mechanics Committee was founded in 1963. In the half century since then, its scope of work has ranged from basic research, such as dynamic theory and rock testing methods, to practical structural applications such as surveying, design, construction, and maintenance management. The committee's work has covered structures built on or in rock such as dams, tunnels, bridge foundations, large underground caverns like underground power stations and slopes. The results of these activities have been compiled into technical guidelines, case study collections, and other formats so as to broadly serve society.

In recent years, however, there has been a diminishing number of large projects to which rock mechanics can contribute, leading to concern about a stagnating of the committee's activities. For the past decade, the committee has been considering how to rejuvenate the rock mechanics sector. The course of action decided upon was to focus effort in three areas: (1) to break into new fields of application, (2) to respond to new demands in society, and (3) to consolidate, follow up, and publish the results of work by the committee. Efforts in these areas began a few years ago.

A number of specific projects have been undertaken. In an effort to enter new fields, research has been under way into civil engineering technologies for the International Linear Collider (Fig. 1), where the aim is collaboration and convergence among multiple disciplines. In response to new demands in society, research has focused on assessing the seismic performance of deep underground structures to take a measure against large earthquakes. In the area of publishing research results, the committee has compiled a case study collection related to the construction and maintenance management of large underground caverns, taking as examples those projects where the concept of design, construction, and maintenance management merit transmission. Further, in 2013, a subcommittee was set up to consider two new areas, rock slopes and rock dynamics, with a view to meeting growing demand for the realization of a safe and secure society.

The committee understands the importance of exploring new areas and taking on new challenges, all the while keeping its eyes on future changes and needs of society. We intend to continue working in all fields to which rock mechanics applies, such as maintenance management of the social infrastructure, environment and energy issues, and assistance for international activities.

Hideto Mashimo, National Institute for Land and Infrastructure Management  
Chairman of JSCE's Rock Mechanics Committee



Figure 1 : Conceptual Rendering of Linear Collider (courtesy of KEK: High Energy Accelerator Research Organization)

## Message from JSCE Korea Section

From August 28 to 30, 2014, Japan · Korea · Taiwan Civil Engineers International Conference will be held in Busan, Korea, organized by KSCE Busan branch, JSCE Seibu Branch, and Taiwan Society & Public Work (TSPW). On the occasion of the fifth meeting, I would like to trace the history of the International Conference in IAC NEWS.

Technical Cooperation and Exchange Agreement between KSCE Busan Branch and JSCE Seibu Branch was signed on November 12, 2004. The chief of KSCE Busan Branch was Mr. Yong-Hee Kim, and the one of JSCE Seibu branch was Mr. Yukio Tanaka in those days.



**Dr. Dong-Uk LEE**  
JSCE Korea Section  
President

Mr. Kim and Mr. Tanaka decided that the agreement was effective for three years; it would be automatically renewed for another years if not terminated by either organization; it could be terminated six months prior to the expiration date via written notice.

Since the agreement was signed, there had not been enough contact and interactions between the two branches. Around August 2006, the contact was barely resumed and the first Joint Seminar was held at Busan Metropolitan City International Conference Room on November 24 of that year. Two years later, the second Joint Seminar was hosted by JSCE Seibu Branch from August 28 to 29, 2008. At the time, I was the chief of KSCE Busan Branch and decided to host the next Joint Seminar. The planned event was successfully held at Pukyung University from August 26 to 27; Prof. Toshimitsu Komatsu and I agreed to hold the joint Seminar every two years.

Since then, the Joint Seminar hosted by the two organizations has been on the right track. Prof. Toshimitsu Komatsu and I as the JSCE International Activity Center Korea Section President met in September 2011 and decided to hold Civil Engineers International Conference in which three organizations would participate including TSPW. Prof. In-Joon Kang as the chief of KSCE Busan Branch and I visited Taiwan in February, and Prof. Toshimitsu Komatsu in May 2012. In discussions with Prof. Der-Her Lee (Cheng-Kung University) and Assist. Prof. Wu-Te Ko (Cheng Shiu University) the JSCE Taiwan Section President and Secretary General respectively, we made an agreement on the attendance of TSPW as an observer in the fourth International Conference and as an official participant in the fifth Conference.



J-K-T Civil Engineers Int'l Conference at  
Kumamoto Kotsu Center in August 2012



Prof. Lee (center) with Int'l Conference  
organizers and speakers.

From August 28 to 30, 2014, Civil Engineers International Conference is held at Pukyung University , in which JSCE Seibu Branch, KSCE Pusan Branch, and Taiwan Society & Public Work will participate. It is the fruitful result of discussion and cooperation among Prof. Toshimitsu Komatsu, Prof. Der-Her Lee, Assist. Prof. Wu-Te Ko and me. I sincerely wish for more active interchange among the three organizations and our future development.

## What's Happening

- 2014/8/26 - 28 . . . . 2014 HAKI Annual Meeting in Jakarta, Indonesia
- 2014/8/28 - 30 . . . . JSCE Seibu branch-KSCE Pusan-Ulsan-Kyungnam Sections-Taiwan Society & Public Works Joint Seminar in Pusan, Korea  
<http://www.jsce.or.jp/branch/seibu/index.html> (Japanese Only)
- 2014/9/1 - 2 . . . . Special Summer Program on the Management of Civil Structures, 2014 (Venue : JSCE Headquarters) <http://www.jsce.or.jp/committee/struct/intedu/index.html>
- 2014/9/10 . . . . The 16th International Summer Symposium in 2014 (Osaka - Osaka University)  
<http://www.jsce-int.org/ISS2014>
- 2014/9/10 - 13 . . . . 2014 International Workshop for Young Civil Engineers (Osaka - Osaka University)  
<http://www.jsce-int.org/node/249>
- 2014/9/13 . . . . The 8th JFES-AIJ-JSCE-WFEO Joint International Symposium on Disaster Risk Management (Kobe - Kobe University) <http://www.jsce-int.org/node/279>

## 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. 37  
<http://www.jsce.or.jp/committee/concrete/e/newsletter/Newsletter.htm>
- 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>
- JSCE 100<sup>th</sup> Anniversary Postal Stamp will be released in September, 2014.  
<http://jsce100.com/node/250> (Japanese Only)

## IAC News Subscription

The IAC News is one of the communication tools to share information and ideas with the members. We would like to invite you, your friends and colleagues to join the communication and to subscribe the IAC News. Please register online: (<http://www.jsce-int.org/node/150>). We look forward to meeting you.

## Y's Murmuring

It's news! Indonesia Section has reopened an office in Jakarta. The office is located in the office of Indonesia-Japan JV project. The Indonesia Section has stayed dormant and members have left due to various reasons. The section president Dr. Sutanto Soehodho, the Deputy Governor of Jakarta for Industry, Trade and Transportation, is willing to work with Dr. Sone of IAC Indonesia Group Leader. They are men of will, wisdom, vision, and action. They will make things happen. Please let them know when you have the opportunity to go to Jakarta.

Indonesia Section: Mr. Suzuki, Secretary Generaal, Jl. Karet Pasar Baru Barat VII Rt. 009/03 Kel. Karet Tengsin Lec., Taanh Abang Jakarta Pusat. C/o Construction of Jakarta Mass Rapid Transit Project

Mr. Shigeo Isojima a former JSCE board member and Mr. Takehiko Ono the 100th President, thank you very much for all of your support and assistance on this matter.

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### 【Comments and Questions】

Please send us your feedback and comments to help us improve the IAC news. We look forward to hearing from you. JSCE IAC: [iac-news@jsce.or.jp](mailto:iac-news@jsce.or.jp)