



# Japan Society of Civil Engineers

## International Activities Committee

# Newsletter

No. 15 June 2004

### Interview with New President, Prof. MORICHI



*JSCE President Shigeru MORICHI*

I believe that my foremost task as the new President of JSCE is to continue to implement the reform plans of JSCE 2005. However, on top of this task, I have set two specific missions during my term, which are to maintain and develop civil engineering technologies and to improve the social recognition / evaluation of civil engineers.

Today, there is a growing concern that the diminishing number of public works projects, reduction in research and development funds and public investment in the civil engineering field, as well as the phenomenon of diminishing population and the decreasing number of civil engineering students in universities might lead to the decline in the civil engineering technologies. This might in turn lead to difficulty in passing on the legacy of civil engineering technologies to future generations. Although these concerns have been pointed out for a long time, today, we are called upon to clarify which technologies are in decline and to discuss what should be done for those endangered technologies. Moreover, from my own experience working with JICA on Japanese ODA projects, I realize that Japanese civil engineering technologies developed in overseas are not passed on to the younger generations. There is a lack of involvement of young civil engineers in such overseas projects.

Therefore, I believe that the accumulation and transmission of technological know-how in this area is important as well.

As for the second task of improving the social recognition of civil engineers, it does not suffice to merely communicate the importance of building road or river facilities or earthquake-resistant structures because such appeals might be interpreted cynically as self-seeking on the part of civil engineers. Instead, the best way to communicate the importance of civil engineering technologies is to be involved in projects that are considered important by local or regional communities while keeping in mind that we are working for the pursuit of the happiness of the citizens as the name "civil engineer" reminds us. I believe that such grass root efforts on solving local or regional issues and providing answers that local residents seek would eventually lead to the improvement of the civil engineers' social recognition.

Another important issue in our age is the disaster countermeasures. However, despite the abundance of information in the society, it is hard to believe that the individuals are given the accurate information about disaster countermeasures. The individual awareness of this issue is declining as well. Therefore, I have in mind a system of disaster education for elementary, middle school and high school students. It is my hope to create teaching materials such as DVDs, which will be used in pilot programs in certain cities, before nation-wide diffusion. The first step in this initiative would be to set up an operational system within JSCE.

#### Profile:

Professor Shigeru MORICHI was appointed the 92<sup>nd</sup> JSCE President on May 28<sup>th</sup> 2004.

Having graduated from the Civil Engineering Department of the University of Tokyo, Professor Morichi has taught in the Civil Engineering Departments at the Tokyo Institute of Technology and at the University of Tokyo. He was also a visiting fellow at the Massachusetts Institute of Technology, U.S.A. and has also taught as a visiting professor at the University of Philippines. Prof. Morichi currently teaches at the National Graduate Institute for Policy Studies, while serving as the director of the Institute for Transportation Policy Studies.

### **3<sup>rd</sup> CECAR (3<sup>rd</sup> Civil Engineering Conference in the Asian Region) will be Held in Korea Soon**

The 3<sup>rd</sup> CECAR (Civil Engineering Conference in the Asian Region), organized by the Asian Civil Engineering Coordinating Council, ACECC, will be held in Seoul, Korea from August 16th to 19th, 2004.

ACECC was established in 1999 with the objectives to promote and advance the science and practice of civil engineering and related professions for sustainable development in the Asian region, as well as to improve, extend, and enhance activities such as infrastructure construction and management, preservation of the precious environment and natural disaster prevention.

ACECC now consists of 7 active societies and institutions, which are ASCE (American Society of Civil Engineers), CICHE (Chinese Institute of Civil and Hydraulic Engineering), Institution of Engineers- Australia, JSCE, KSCE (Korean Society of Civil Engineers), PICE (Philippine Institute of Civil Engineers), and VFCEA (Vietnam Federation of Civil Engineering Associations). So far, two CECARs have been held in Manila, 1998, and in Tokyo, 2001 respectively. It was a memorable event for JSCE that the 2<sup>nd</sup> CECAR in Tokyo attracted as many as 730 attendants from 14 countries and ended in a successful note.

The next 3<sup>rd</sup> CECAR will open with the main theme of 'Moving Asia into the Future'. The technical program is divided into the following 10 related themes of Infrastructure, Human Resources, Natural Disasters, Professional Issues, Project Management, Contracting Practice, Research and Development, Mega Projects, Inter-regional Cooperation, and Future of Engineering.

Among 138 papers presented during the parallel sessions, as many as 53 are from JSCE including those for poster sessions. The papers from industries, governments, and academics are well balanced, and the fruitful discussion and information exchange is expected.

In the beginning of the conference following the keynote address, Prof. Yutaka Takahashi, emeritus of the University of Tokyo will give a special lecture on *The Suggestion of the Civil Practical Education by 'The Civil Picture Book Series'*, which will surely be another topic of interest for the participants.

Two special forums and one TC workshop are also scheduled during the conference. Special forums will deal with the topics of the 'Great Mekong Sub-region (GMS)' and 'New Trends in the Construction Industry'.

The role of JSCE in the infrastructure development in the Asian region has been growing increasingly important. We believe that the number of participants from our society will be a key to the success of the 3<sup>rd</sup> CECAR.

The detailed information on the 3<sup>rd</sup> CECAR including technical visits and optional tours are on the website: <http://www.3rdcecar.com/>.

By Kenichi Horikoshi (Taisei Corporation)

### **“Special Roundtable Discussion on Women Civil Engineers’ Issues with the President of ASCE”**



ASCE President Ms. Galloway

On Tuesday, June 1<sup>st</sup>, 2004, a special roundtable discussion on issues surrounding women working in the civil engineering sector was held at the JSCE headquarters. For this event, entitled “Women Civil Engineers’ Mission: How to Contribute to the Realization of a Better World,” we have invited Ms. Patricia D. Galloway, the President of ASCE, and five other panellists from various civil engineering sectors such as universities, research institutions and a private company. The event was attended by almost 30 observers, many of them, female civil engineering students and young women working in the civil engineering sector.

During the first half of the event presided by Prof. Komatsu from Saitama University, the panellists presented their presentations. The first presenter, Dr. Kuwano from PWRI gave a briefing on the current working condition of Japanese female engineers. It was followed by a presentation of a survey on female graduates from civil engineering department by Dr. Okamura from Yamanashi University. Dr. Mayorca from the University of Tokyo made an interesting comparison of Japanese and Peruvian situations in her presentation. Ms. Galloway described various activities by the Committee on Diversity and Women in Civil Engineering of ASCE, for example, its effort to promote civil engineering to girls at early stages of their education and to mentor young female civil engineers.

During the Q&A session, many participants voiced their wish to create a forum for the communication among female civil engineers, where they can continue the discussion of the topics raised during this roundtable.

## Taipei 101 Skyscraper - Tallest Building in the World-



Taipei 101 under construction

At present, considered as the highest skyscraper (508 m in its total height) in the world, the construction of the Taipei Financial Center located near the eastern boundary of the Taipei City limit, was began in June 1999, and is now scheduled for completion by the end of this year. However, the first stage construction, including the whole basement, annexed podium and partial-building spaces below 6<sup>th</sup> floor was completed and formally inaugurated for use as a shopping mall in the late last year.

The building has 5-story basement and 101 stories above the ground with a total floor area of 412,500 m<sup>2</sup>. Annexed to the building is a podium, which also has 5-story basement, and has 7 floors above the ground. The basement of both the main building and the podium will be entirely used as parking lots, and all other floor spaces, including those of the podium, which was completed at the end of 2003 has been used as a shopping mall as mentioned before. Upon completion, the rest of the floor spaces of the main building above 6<sup>th</sup> floor will feature banks, stock exchange, financial-related business, restaurants, clubs, and fitness centers among other facilities.

The entire main building is founded on 3.5 m thick RC (Reinforced Concrete) slab mat, which is supported by long friction piles constructed by reversed circulating method with their pile tips penetrating into foundation bedrock as deep as 20 m. The basement of the building is constructed with SRC (Steel Reinforced Concrete), and the main building structural members above the ground, totally with steel members, which are filled with 10,000 psi concrete tubular for columns, and applied with shotcrete for the girders and beams. The working volumes and materials used for construction are; 55 m deep foundation excavation with a total excavated volume as much as 540,000 m<sup>3</sup>; structural steel 97,000 tons; concrete 350,000 m<sup>3</sup>; and steel bar 28,000 tons. For meeting requirements for structural stability, security, operation and maintenance of the building, a tuned mass damper, fire-fighting facilities, power and gas supply systems, elevators, water supply and

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drainage systems, tele-communication system, security-control system are all equipped or installed to become an intelligent building.

The construction work has been divided into about 10 packages for execution with a total contracted cost close to 600 million US dollars. The owner of the building is "Taipei Financial Center Corporation", which is formed by the joint venture of 14 large public utilities and private enterprises in Taiwan. The building is now becoming a highly impressive landmark of Taipei City, with a popular nickname of "Taipei 101", to attract many people and tourists everyday. This brings big business opportunities and prosperity to the vicinity of the building. With other big building complex within the vicinity, such as Convention Center, Taipei Hyatt Hotel, and several other famous department stores, this area is believed to become one of the downtown areas of Taipei City in a near future.

By Chi-Shou Hsieh (JSCE TaiwanSection)

## 2004 JSCE Annual Meeting

During the three days from September 8<sup>th</sup> until 10<sup>th</sup> 2004, JSCE Annual Meeting will be held in Aichi Institute of Technology in Toyota City near Nagoya, in the central part of Japan. The program includes Scientific Lecture, which is an occasion for JSCE members to present their research as well as Special Lecture, Special Panel Discussion, and Banquet among others.

As in previous years, we have invited overseas organizations with which JSCE has signed the Agreement of Cooperation. We are planning events with international character such as the Roundtable Meeting with the attendance of JSCE President, as well as Panel Discussion in English, English Common Session and the Welcome Reception to which international students attending this Meeting could participate. We truly look forward to your participation. Following is the tentative program of events:

1. Special Lecture by JSCE President (in Japanese), Sep. 9<sup>th</sup> (PM), Toyota Stadium
2. Special Panel Discussion (in Japanese), Sep. 9<sup>th</sup> (PM), Toyota Stadium
3. Banquet, Sep. 9<sup>th</sup> (Evening), Toyota Stadium

### International Events

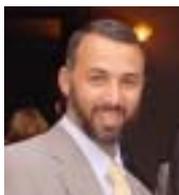
4. Roundtable Meeting (Invited Guests Only) Sep. 8<sup>th</sup> (PM), Aichi Institute of Technology.
5. English Research Panel Discussion: " New Paradigm of Civil engineering and Mission of Civil engineers " Sep. 8<sup>th</sup> (PM), A.I.T
6. Welcome Reception ( For Invited Guests ) Sep. 8<sup>th</sup> (Evening), venue TBA
7. English Common Session: " Sustainable Development in Asia - Environmental Protection, Natural Disaster Mitigation and Project Management -" Sep. 9<sup>th</sup> (Morning), A.I.T

Please visit JSCE website (<http://www.jsce.or.jp>) for more information.

## "From Djurjura to Fujiyama: A story of my life"

TAREK MERABTENE

*Special Researcher  
Secretariat for Preparatory  
Activities of UNESCO-PWRI  
Center, PWRI*



I was born on a snowy day of December 23, 1963 in a small village called Ait-Yacoub, located in the mountainous region of the Larger Kabylia also known as Djurdjura in the north-eastern Algeria, about 200 km from the capital city of Algiers. The people of my region are called Berbers, and the spoken language is called Kabyle. Up to the age of 6, it was the only language that I knew how to speak. In fact, as Muslims, my people and members of my family, who have lived under French rule for 130 years, only learned Arabic as a mean to understand the divine teaching of Islam. Later at school, I learned Arabic and French as the two concurrent languages of education. Nothing special has marked my childhood beside the fact that my mother taught me to grow strong and be kind at heart, especially towards my two brothers and my sister after the death of our father. Although I have grown up in poverty, I have learned, as Japanese friends say, to always keep a smile on my face.

After obtaining my Master's degree in 1990, I worked as Assistant Professor at Ecole Nationale Polytechnique (ENP). It was in spring 1995 that my brother-in-law visited the Embassy of Japan to Algeria with my resume in his hand to ask for a scholarship. Few months later, the dream of my wife since when she was 6 years old came true and we were called to get ready to depart to the "end of the earth" as it was named in her dream.

Today, nine years have passed since I first landed in Fukuoka Airport on a very beautiful autumn day.

The day after our arrival, a group of Japanese volunteers took us for a tour in the city. The first advice I received was to be diligent at studying Japanese. However, under the direction of Professor Kenji Jinno at the Institute of Environmental Systems in Kyushu University, I did not feel the necessity of using Japanese for my doctoral research in water resources and drought risk management. But if you live in Japan, you will quickly realize that the only way to build friendship is to master the language. One year later, the Associate Professor, Akira Kawamura, who has returned from his sabbatical year in New Zealand added new touches to my research program. It was to come out with a fully integrated decision support system for the drought risk management of Fukuoka City. Prof. Jinno and I have introduced our concept at many occasions, but despite the clump, the notion of risk was still new and it was not yet a famous approach for water hazard management. In the year 2000, after one year as research assistant at

Kyushu University, I started my job as the engineer at CTI (Construction Technique Institute Engineering: Kensetsu Gijutsu Kenkyujo). The beginning was difficult but the work with delightful team was very pleasant. Apart from the professional aspect of my work, I have not only improved my Japanese language skills but I have also enjoyed speaking French with Mr. Fujikawa, head of my department. In 2001, I moved from the Department of Water Resources in Kyushu Branch to the 3rd Water Forum Preparatory Activities Division in the Tokyo Headquarters. President Mr. Ishi and the Division Head, Mr. Nobukazu Koreeda have given me the opportunity to acquire a new international experience and meet water scientists from all around the globe. Since 2003, I have started my new job as the specialist researcher at the Secretariat for Preparatory Activities of PWRI-UNESCO Centre for Water Hazards and Risk Management at the Public Works Research Institute in Tsukuba City.

Since the very first day of my arrival, I have been fascinated by the water scenes in the Japanese mountains. Japanese gardens are another piece of art that touched my heart, wishing to have one for myself. In my work, I have acquired a great experience, but differences in traditions and concepts of life have created difficult moments too. I realize that my life would be easier if I could further master Japanese and better understand the people around me. My wife would be happier if I had the choice to choose a different educational system for my children.

Reference:

My web page: <http://www.geocities.jp/merabtene1/>

### Publications

**ARTICLES (From March, 2004 to May, 2004)**

Structural Engineering/Earthquake Engineering, Vol.21 No.1, JSCE, May 2004, Pages 95, Price: JPY2,039.-, [ISSN0289-8063](http://www.geocities.jp/merabtene1/)

Structural Engineering Series 15, Practical Methods for Impact Test and Analysis, JSCE, April 2004, Pages 403 with CD-ROM, Price: JPY6,615.-, [ISBN4-81-6-0412-8](http://www.geocities.jp/merabtene1/)

Bridges in Japan 2002-2003 (in Japanese), JSCE, March 2004, Pages 151, Price: JPY9,000.-, [ISBN4-8106-0448-9](http://www.geocities.jp/merabtene1/)

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