



NO. 11 / JUNE 2017

OUTLOOK

For a Better Quality of Life

Message from the TCC Chairman

It was great to see you in Kathmandu, Nepal. Though I was not able to see the Himalayas, I enjoyed my first visit to Nepal. In the 21st Technical Coordinating Committee Meeting, we took a step forward to enhance TC activities. Thank you for your cooperation. The main contents of the proposed “A Guideline for ACECC TC activities” were approved though some expressions were revised in the ECM. It clarifies the characteristics of the ACECC TCs, which are different from existing committees of several professional organizations and deal with multidisciplinary, multi-sectoral and Asian-related issues. It also refers that the activities of TCs should be disclosed through the website of each TC or ACECC in order to share the discussion and transmit their outcomes effectively to the world. The guideline is a basic common recognition. We will keep discussing on how to enhance TC activities. Looking forward to seeing you in Mongolia.



Mr. Masaaki Nakano

Manager

Research and Development Center

Structural Analysis Group

Nippon Koei Co., Ltd.

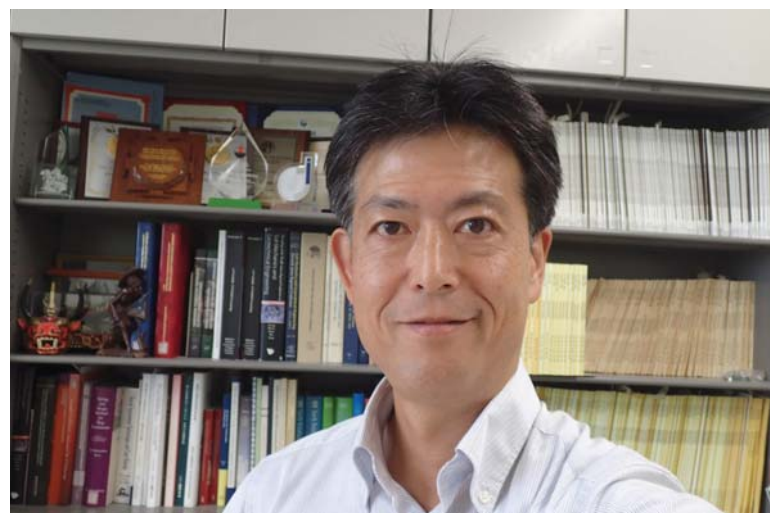


Message from the PCM Chair

The 32ECM and related events were successfully held in Kathmandu, Nepal last month. I would like to express my sincere thanks to the Nepal Engineering Association for hosting and the members of local organizing committee who had worked very hard to make this important event successful. I also deeply appreciate all the delegates from the member societies to attend the PCM for their kind cooperation. Personally, this was my fifteenth time coming to Nepal since 2005 and there was a pleasant surprise waiting for me. Nepal has been struggled with serious chronic shortages of electric power. Last time I visited Kathmandu on November 2016, daily power cuts in Nepal reached 12 hours a day. Nepalese people were forced to manage back-up power by installing diesel plants at their home and factories. Surprisingly enough, the Nepal Electricity Authority has just recently been achieving a miraculous feat of eliminating load-shedding at major places in the country. An additional hydroelectric power development, additional import from India as well as upgrading transmission line. I believe that this dramatically improves the daily life and social environment. Congratulations Nepal! I enjoyed a walk at night.

Dr. Mitsu Okamura

Graduate School of Science and Engineering,
Ehime Univ. Dept. of Civil & Environmental Engineering
Chair of Special Graduate Course on
Disaster Mitigation Study for Asian Students



The First Future Leader Forum in Kathmandu Nepal

Held on Saturday 22 April, 2017 19:00-21:00 during the 32nd Executive Committee Meeting (ECM) of the Asian Civil Engineering Coordinating Council (ACECC), the First Future Leader Forum (FLF) was a great success. Young engineer delegates from eight different economies presented at the forum organized by Nepal Engineering Association (NEA). The forum activities were designed to connect young engineers amongst the ACECC member societies, to draw ideas from the IT generation, and to allow ACECC leadership to reach out to young engineers. Impressed with their high quality performance, ACECC Chairman Dr. Osamu Kusakabe invited the young delegates to give a formal presentation at the end of the 32nd ECM. Mr. Oliver Hsu, the delegate from the Chinese Institute of Civil and Hydraulic Engineering (CICHE), received a standing ovation during his outstanding presentation. Aligning to its vision, the FLF strives to assist with the sustainable development of the next generation civil engineering leaders in the Asian region.



Theme of the FLF, “Asian Talent Meeting Global Challenges” was chosen by Dr. Edward Wang, the Chair of the Cultivating the Next Generation of Engineers Committee of ACECC, after the last ECM in Honolulu in late 2016. Invitations were sent to 13 member societies at the last issue of ACECC OUTLOOK. Upon receiving nominations from member societies in early 2017, all nominees were contacted and multiple group emails were exchanged to ensure that all delegates were well prepared prior to the FLF. There were delegates nominated by nine member societies prior to the event but somehow only seven international delegates presented. The three days of ACECC meeting in Kathmandu facilitated the exchange of ideas and experience among the junior and senior engineers. The joint effort of the young delegates was highlighted in their final presentation. With active participation from each young delegate, FLF has created a multicultural environment for all young delegates to build soft skills and experience teamwork. One Facebook group was established soon after the FLF, linking the young leaders together for further communication. It is hopeful to see female engineers joining the next FLF. With the growth of the FLF program, ACECC may reach out to the young generation of engineers.

Announcing the 2nd Future Leader Forum (FLF) of Asian Civil Engineering Coordinating Council – Call for entry

Organized by Cultivating the Next Generation of Engineers Committee

Program Objectives The FLF aims to engage young engineers (age 25-30 at the early stage of engineering careers) within the ACECC member societies to participate in meetings and possibly to contribute to the growth of the organization.

Program Venue & Date Ulaanbaatar, Mongolia in 21 September, 2017

Participants 13 ACECC members include(minimum one) delegate(s) from ASCE, CICHE, EA, HAKI, ICE(I), IEB, IEP, JSCE, KSCE, MACE, PICE, NEA, VFCEA.

When to start Each ACECC member society needs to provide contact of the nominee by 31 July, 2017. ([see attachment for detail](#)) Chairman Ed Wang will initiate online discussion and interaction as soon as all participants are confirmed. FLF one day program will be held on 21 September 2017 immediate after the TCCM and PCM.

Terms of Reference An ideal delegate from either private or public sector, will display strong interpersonal skills and be willing to interact and network with other participants. The selected candidate must have a local group of young engineers behind her/him for some activities may require collective effort from domestic perspective group. Basic computer literacy is essential, including the production of Microsoft PowerPoint, microfilm and videos. Candidates who are talented in music, art and dance are strongly recommended. For non-native English speakers, English proficiency to participate in the program is required. To emphasize gender equality, the forum welcomes female participation.

Funding Mechanism In principle, each ACECC member society is to cover the cost of a round trip ticket to the 33rd Ulaanbaatar ECM. A travel scholarship may be available subject to the approval of ACECC Leadership.

***Contact** Edward H. Wang (ACECC Deputy Secretary General)
e-mail: ewang@must.edu.tw

ACECC Future Leader Forum Nomination Form

(use for one entry per sheet)

Date: (mm/dd/year)

Organization ☐ ASCE ☐ CICHE ☐ EA ☐ HAKI ☐ ICE(I) ☐ IEB ☐ IEP
☐ JSCE ☐ KSCE ☐ MACE ☐ PICE ☐ NEA ☐ VFCEA

Name (First; Given) (Family)

Gender ☐ Male ☐ Female

Date of Birth (mm/dd/year)

Marital Status ☐ Single ☐ Married

Special Diet ☐ No ☐ Yes (Specify)

Education ☐ Undergraduate (name) (country)

☐ Graduate ☐ Master ☐ Ph.D. (name) (country)

Career ☐ Architect ☐ Engineering Design Consultant ☐ Contractor

☐ Government Agency ☐ Research Institute ☐ Academia ☐ Developer ☐ Others

Specialty in training ☐ Civil ☐ Construction Management ☐ Environmental

☐ Geotechnical ☐ Hydraulics ☐ Structural ☐ Surveying ☐ Transportation

Professional Licensure ☐ None ☐ Engineer-in-Training ☐ PE/Chartered

Oversea experience ☐ No ☐ Short-term ☐ Long-term ☐ Frequent traveller

Personal Sketch (Describe one's character and talent below)

Contact Information:

Mailing Address:

Phone: e-mail address:

Names on the following account: (specify preference by numbers)

☐ Facebook : ☐ Skype :

☐ LinkedIn : ☐ Blog :

☐ Twitter : ☐ Website :

ACECC Event Calendar

As of May 23, 2017

Date	Name of Events	City, further information
June 15, 2017	2017 PICE National Midyear Convention http://pice.org.ph/event/2017-pice-national-midyear-convention/	Manila, Philippines
Aug. 22-23, 2017	HAKI Annual Seminar 2017	Jakarta, Indonesia
Aug. 22-25, 2017	(ACECC Sponsored Event) The 6th International Conference of Euro Asia Civil Engineering Annual Seminar 2017 http://eacef2017.hanyang.ac.kr/	Seoul, Korea
Sept. 11-13, 2017	JSCE Annual Convention	Fukuoka, Japan
Sept.21-23, 2017	ACECC 33rd Executive Committee Meeting	Ulaanbaatar, Mongolia
Oct. 8–11, 2017	ASCE 2017 CONVENTION	New Orleans, Louisiana, USA
Oct. 18-20, 2017	KSCE 2017 CONVENTION	Busan, Korea
Nov. 26-Dec. 2, 2017	WFEO General Assembly 2017 and the World Engineering Forum (WEF2017)	Rome, Italy
Dec. 1-2, 2017	CICHE 2017 CONVENTION	Taipei, Taiwan
Dec. 12 - 14, 2017	(ACECC Sponsored Event) ASCE India Conference 2017 Urbanization Challenges in Emerging Economies http://asceindiaconference.org/	New Delhi, India
December, 2017	(ACECC Sponsored Event) 9th International Civil Engineering Congress	Karachi, Pakistan
Apr. 12-15, 2018	ACECC 34th Executive Committee Meeting	Hanoi, Vietnam
Sept-. 19-21, 2018	(ACECC Sponsored Event) 1st International Conference on Press-in Engineering 2018 (1st ICPE 2018)	Kochi, Japan
Apr. 16-18, 2019	Civil Engineering Conference in the Asian Region : CECAR 8	Tokyo, Japan
Nov. 18-24, 2019	World Engineers Convention http://wec2019.org.au/	Melbourne, Australia

ACECC's 33rd Executive Meeting & MACE Annual Meeting 2017

The 33rd ACECC Executive meeting will be held on September 20-23, 2017 at the Ramada Ulaanbaatar Hotel, Ulaanbaatar, Mongolia.

Ulaanbaatar, also known as Ulan Bator or simply just UB, is the capital of Mongolia. With a population of around 1.3 million, it is the largest city in Mongolia, standing as its political, commercial, industrial and cultural hub. For business and pleasure trips alike, you will find yourself coming to the city at least once. Knowing and exploring the city properly can help you understand the country's history and its wonderful people. One will often see the past and the present are still living side by side.



Alongside the meeting, the MACE Annual meeting 2017 will also be held on September 22-23, 2017 at the Construction Development Center, located next to the ECM venue.

Program:

20, September

- Future Leaders Forumw

21, September

- 22th TCC Meeting
- 27th PC Meeting
- Welcome reception

22 September

- 33rd EC Meeting
- MACE Annual Meeting 2017 & International seminar
- Banquet

23 September

- MACE Annual Meeting 2017 & International Roundtable meeting
- Sightseeing tour

For information on visa application, please visit the following website- <http://consul.mn/01visae.php>, and inform MACE beforehand, if any documents are required to secure visa before your departure date.

Contact person: Ms. Khongorzul. Kh- mace@mace.org.mn



Activities of TC21 “Transdisciplinary Approach (TDA) for Building Societal Resilience to Disasters” in association with the ACECC ECM in Nepal, April 2017

Senro Kuraoka, Yoshihiro Katsuhama (TC21 Secretariat)

TC21 members performed productive activities in association with the 32nd ACECC ECM in Nepal, April 2017. The activities included site survey, meetings, and symposium as shown in **Table 1**. TC21 would like to note that Nepal Engineers’ Association (NEA) has provided significant support with exceptional kindness and efforts in coordinating the meetings with local stakeholders and maximizing the outcome of the symposium.

Table 1 Activities of TC21 in Association with the 32nd ACECC ECM in Nepal

Date	Activities
April 19 (Wed)	Observation of earthquake induced damages to the historical buildings at the former Prime Minister’s Office in Kathmandu
April 20 (Thu)	Preparation for technical survey in Chautara, meetings with the local government officers, and symposium
April 21 (Fri)	Technical survey in Chautara, Sindhupalchowk District to understand the status, policies, and institutional schemes of the Department of Urban Development and Building Construction (DUDBC), which is performing the reconstruction of the housings.
April 22 (Sat)	Observation of damages to the historical buildings in Bhaktapur
April 23 (Sun)	* Reporting of TC21 activities at ACECC ECM * TC21 internal meeting
April 24 (Mon)	* Meeting between TC21 members and stakeholders of disaster risk reduction in Nepal * TC21 2nd Symposium on “ Scientific Knowledge-Based Decision-Making Schemes for Disaster Reduction”

1. Site Surveys on April 19th

Observation of the damages to the historical buildings of former Prime Minister’s Office in Kathmandu was made. Debris that fell from the walls and roofs were seen and some of the main columns had deformed, exhibiting clear shear cracks (**Photo 1**). We understood that main issues are to decide whether the old building should be demolished and be replaced with modern buildings or to retrofit the building while maintaining the historical architecture. Towards this end, significant efforts are spent by the National Reconstruction Authority (NRA) in coordinating the differences in opinions of stakeholders. We comprehended that scientific methods are needed in validating the visually evaluated conditions of damages and help making the decision.





Photo 1 TC21 members, Dr. Netra Prakash Bhandary and Dr. Senro Kuraoka, were participated in the interview by press persons regarding the historical former Prime Minister's Office buildings, which is under ongoing discussion whether they should be conserved or demolished.

2. Technical survey in Chautara on April 21st

The TC21 team visited Chautara in Sindhupalchowk district to study the recovery status of after the Gorka earthquake (25th April 2015). We met with Dr. Youb Raj Paudyal, Division Chief of DUDBC (Department of Urban Development and Building Construction) and his associates, who kindly hosted the TC21 team and briefed us regarding the status, design methods, and funding schemes for the reconstruction of the housing (*Photo 2*).



Photo 2 Dr. Youb Raj Paudyal, Division Chief of Department of Urban Development and Building Construction (DUDBC), Sindhupalchowk, made a presentation titled "Damage situation and reconstruction activities at Sindhupalchowk district. Dr. Senro Kuraoka, secretariat of TC21, made presentation to describe why transdisciplinary approach is needed.

DUDBC is collaborating with the village community, local NGOs, and international agencies to develop the design and build the capacity as well as subsidy schemes to implement the reconstruction projects. The basic design principle is to use the local resources and the indigenous knowledge, which is validated with the modern engineering assessment. This approach is consistent with one of the guiding concepts stated in Sendai Framework (2015-2030). The team of TC21 noted that these technical schemes are close to in-house development of DUDBC, with the help of international experts, and do not necessarily have formal collaboration with the universities and national research agencies.



Photo 3 Reconstruction works of housings being performed in Irkhu Village, Sindhupalchowk District. (a) Housing under construction, showing the horizontal concrete reinforcement (band) placed between stone layers in contrast to the old warehouse without the horizontal reinforcement (b).

3. Technical Survey in Bhaktapur on April 22nd

A technical survey in Bhaktapur, an ancient city in the east corner of the Kathmandu Valley, was performed on April 22nd with the supports of a lecturer and students of local university and college.

A number of buildings were damaged by the 2015 earthquake while some historical buildings such as the five-story pagoda of the Nyatapola Temple built in 1702 remained less damaged. We also observed that some of the victims of 2015 earthquake still reside in temporary housings in difficult condition as shown in **Photo 4**.



Photo 4 A number of historical buildings are being reconstructed in the ancient city, Bhaktapur. The left photo shows a building supported by timbers for anti-earthquake purpose. The right photo shows the temporary housings for the 2015 earthquake victims.

4. TC21 Internal Meeting on April 23rd

TC21 internal meeting was held on April 23 among representatives from Taiwan, Indonesia, Japan, Nepal, and Indonesia to share case studies from each member state and discuss about TC21 activities toward CECAR8 (**Photo 5**). We agreed to work together to produce either a book or booklet as the deliverables.

5. Reporting of TC21 Activities at the 32nd ACECC ECM

Co-Chair of TC21, Dr. Kuniyoshi Takeuchi and the secretariat, Dr. Senro Kuraoka, reported the activities of TC21 since the last ACECC ECM, which included the site surveys in Tacloban and Ormoc cities in the Leyte Island and the “Symposium: International Comparison of Scientific Knowledge-Based Decision-Making Schemes for Disaster Reduction” held in Davao city, the Philippines in November 2016. Dr. Takeuchi emphasized cooperation and participation from the member societies. Institution of Engineers, Bangladesh (IEB) expressed their interest in participating in the TC21 activities.

As a part of activities of the ACECC ECM, a meeting with DRR stakeholders of Nepal and the TC21 symposium were performed on April 24 as described below.

5.1 Meeting with DRR Stakeholders of Nepal

On April 24 morning, a meeting between TC21 members and stakeholders of disaster risk reduction (DRR) in Nepal was performed as shown in **Photo 6** with representatives from the Government of Nepal, international agencies, academia, and NGOs including National Reconstruction Authority (NRA), Central Level Project Implementation Unit of the Ministry of Urban Development (CLPIU-MOUD), Armed Police Force (APF), Comprehensive Disaster Risk Management Programme of the United Nations Development Programme (CDRMP/UNDP), Institute of Engineering of Tribhuvan University, and National Society of Earthquake Technology-Nepal (NSET).

The participants shared present situation of DRR in Nepal and discussed how scientific knowledge could be reflected in the decision-making processes of the government. A representative from APF mentioned about the difficulty of coordination among agencies concerned for disaster preparedness. In addition, an unsystematic situation of scientific knowledge transfer from academia to the government in Nepal was pointed out.



Photo 5 Thirteen representatives from CICHE, HAKI, JSCE, NEA, and PICE presented to the TC21 internal meeting on April 23 and made an intensive discussion for three hours



Photo 6 A number of agencies regarding the DRR including National Reconstruction Agency (NRA), Ministry of Urban Development, UNDP, and universities joined the stakeholders meeting on April 24th morning.

5.2 TC21 Symposium

“TC21 2nd Symposium on Scientific Knowledge-Based Decision-Making Schemes for Disaster Reduction” took place on April 24 afternoon. There were 65 international delegates and more than 200 experts from Nepal participated in the symposium (*Photo 7*). The symposium commenced with the welcome speech by Er. Hare Ram Shrestha, NEA President.

The symposium was comprised of three sessions. The first session started with the keynote speech entitled, “Efforts and challenges of recovery in Nepal from the 2015 Gorka Earthquake”, which was delivered by Er. Dipendra Nath Sharma, the Secretary of Ministry of Urban Development, Nepal. In the second session, presentations were made by the international members of TC21. For example, a good DRR practice of Tacloban city in the Philippines was presented by the officer, Mr. Leonard Tedence A. Jopson, of Tacloban city government. The city, which was devastated by the storm surge in 2013, is under extensive recovery projects. Mr. Jopson stated that “Build Back Better” principle is practiced, owing to the development of the livelihood projects concurrent with DRR activities. He also explained that an institutional system is established such that scientific information of hazards and risks from the national institutions can be provided to the city, who then will modify the information so that the local communities can understand and work with the city to better perform DRR. In the final third session, the panel discussion regarding transdisciplinary approach to implement scientific knowledge-based decision-making for disaster risk reduction was performed among presenters from Indonesia, Nepal, Japan, Pakistan, the Philippines, Taiwan, Vietnam, and a special guest, who is the representative of disaster cell of World Federation of Engineering Organizations (WFEO), Er. Ashok Kumar (*Photo 8*). Concluding remarks were made by Dr. Takeuchi, stating that one of the factors impeding the DRR may be traced down to poverty which in turn is closely related to practice of governance. Transdisciplinary approach will help improve the governance as it will not only help optimize the coordination but also make the decision-making process transparent.

The presentation documents can be downloaded from the flowing TC21 website:

<http://www.acecc-world.org/TC21/index.htm>



Photo 7 More than 250 experts participated in the TC21 symposium on April 24 afternoon with the considerable contribution of Nepal Engineers' Association (NEA).



Photo 8 Panelists from eight ACECC member states discussed in the TC21 symposium about how to implement scientific knowledge-based decision-making for disaster risk reduction.

SAVE THE DATE!



URBANIZATION CHALLENGES IN EMERGING ECONOMIES ASCE INDIA CONFERENCE 2017

New Delhi, India | 12-14 December 2017

Moving Towards Resilient Sustainable Cities and Infrastructure

**ABSTRACTS
ARE DUE
8 JUNE 2017**

ASCE's India Conference on Urbanization Challenges in Emerging Economies will cover a broad array of infrastructure challenges due to rapid growth of major metropolitan areas.

Global professionals involved in developing resilient sustainable cities and infrastructure in emerging economies will find this conference a home to conduct policy, technical, and scientific discussions and exchanges.

The conference will feature keynote addresses by prominent government and industry leaders in infrastructure development.



www.asceindiaconference.org

Moving Towards Resilient Sustainable Cities and Infrastructure

TOP REASONS TO ATTEND

1. Learn from and network with government and industry leaders and sustainable infrastructure practitioners from around the world
2. Learn from successful case studies and examples of sustainable infrastructure development in emerging economies
3. Understand industry trends and policies leading to resilient sustainable cities and infrastructure development
4. Share latest advances in sustainable infrastructure planning, design, and construction
5. Learn about new tools and latest research to address urbanization challenges in emerging economies
6. Learn how to plan infrastructure for climate change and resiliency
7. Learn about innovative approaches to infrastructure project financing
8. Be a contributor to the comprehensive conversation on urbanization challenges and infrastructure sustainability for an uncertain world

PHOTO CREDITS FRONT IMAGES FROM LEFT TO RIGHT:
Jubin Dave Bandra, Worli sea link; Ashwin Kumar, Mumbai Monorail
and Edmund Gall, South Noida, India.

CALL FOR ABSTRACTS

ASCE and the ASCE India Section, in collaboration with IIT Delhi and Institution of Engineers (India), invite you to submit an abstract. The conference will focus on infrastructure challenges being faced due to the rapid expansion of major metropolitan areas in emerging economies.

The conference will be divided into four major tracks:

1. Planning and financing to meet the growing demand
2. Transportation around & beneath existing cities
3. Energy and water infrastructure needed to meet the demands of exploding population in urban areas
4. Resilience and sustainability of infrastructure in a changing environment for the next 100 years