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Organizations

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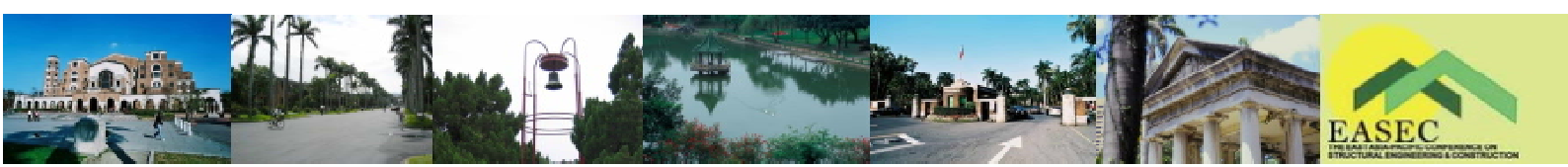
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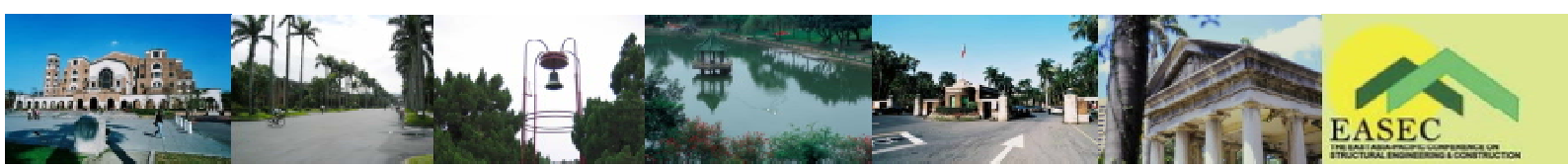
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General Information

■ Date

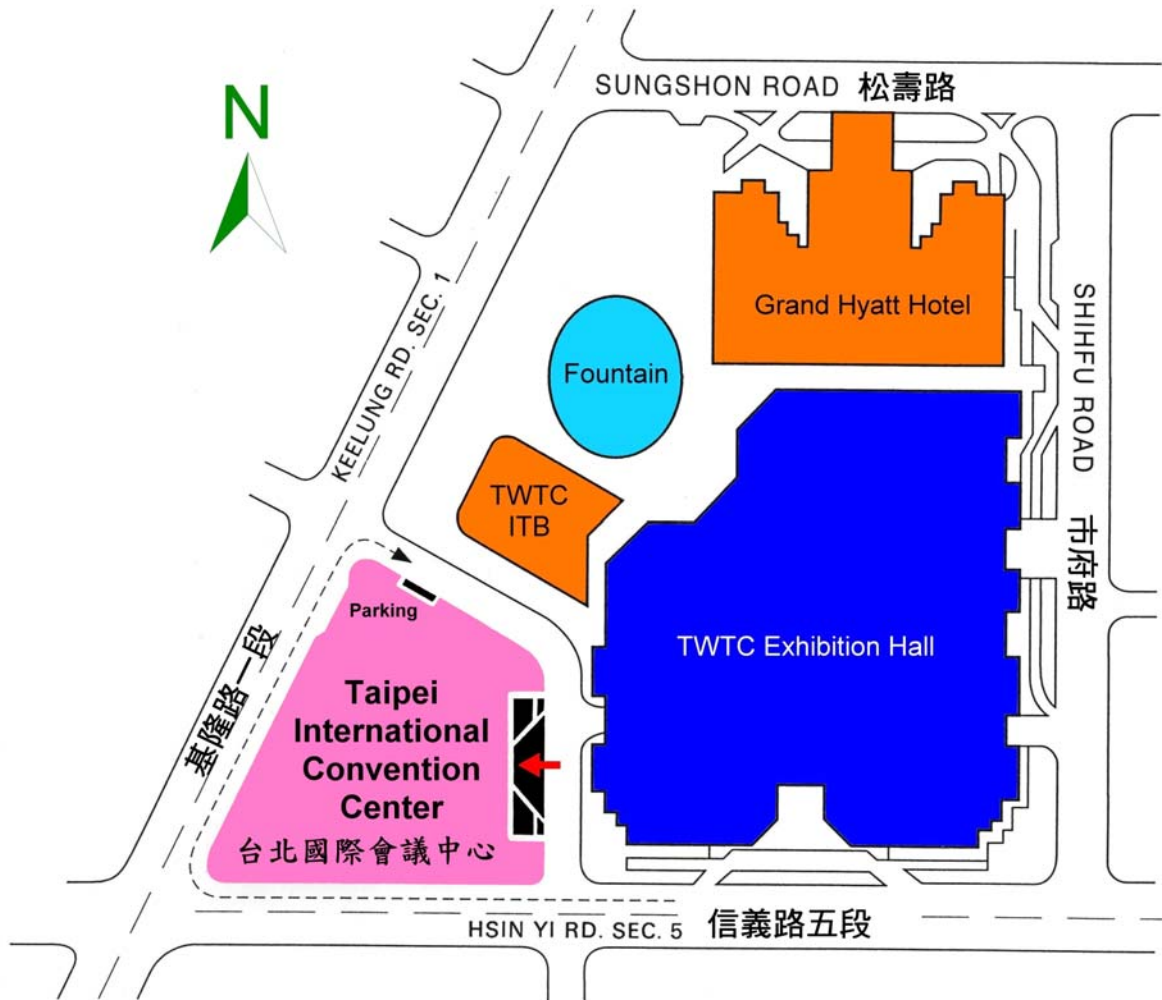
19-21 November, 2008

■ Venue

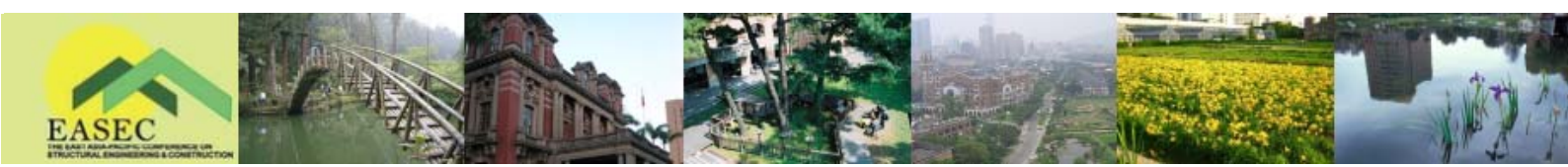
Taipei International Convention Center (TICC) 台北國際會議中心

Address: 1, Hsin-Yin Road, Sec.5, Taipei, 110, Taiwan 台北市信義路五段 1 號


■ Venue Map









General Info.



■ Organized by

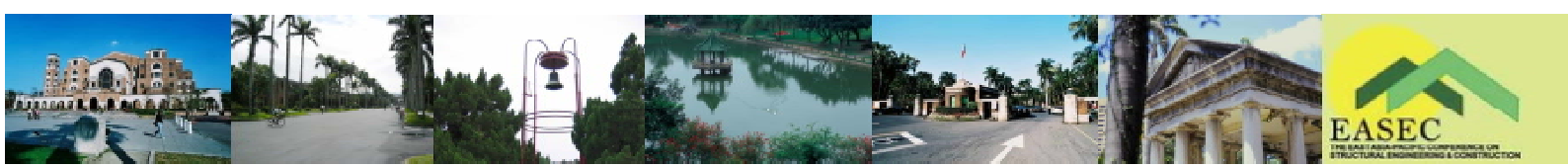
 Department of Civil Engineering, National Taiwan University










■ In collaboration with

-  School of Civil Engineering, Asian Institute of Technology, Thailand
-  Department of Civil Engineering, University of Tokyo, Japan
-  NTU Civil Engineering Culture & Education Foundation
-  National Center for Research on Earthquake Engineering
-  National Science and Technology Center for Disaster Reduction
-  National Science Council

■ Under the auspices of

-  American Society of Civil Engineers
-  Architectural Institute of Japan
-  Asian Concrete Federation
-  Association of Structural Engineers of the Philippines
-  Canadian Society for Civil Engineering
-  China Civil Engineering Society
-  Chinese Institute of Civil and Hydraulic Engineering
-  Chinese Society of Structural Engineering
-  Chinese Taiwan Society for Earthquake Engineering
-  Consulting Engineers Association of Thailand
-  Engineering Institute of Thailand
-  Engineers Australia
-  Indian Association of Structural Engineers
-  Indonesian Society of Structural Engineers
-  Institute of Engineers, Malaysia
-  Institution of Engineers, Singapore
-  International Association for Bridge & Structural Engineering
-  International Association for Computational Mechanics
-  International Association for Shell and Spatial Structures



- 
International Center for Numerical Methods in Engineering
- 
Japan Concrete Institute
- 
Japan Society of Civil Engineers
- 
Japan Steel Bridge Engineering Association
- 
Korean Society of Civil Engineers
- 
Korean Society of Hazard Mitigation
- 
Korean Society of Steel Construction
- 
Singapore Concrete Institute
- 
Society of Structural Engineers, Sri Lanka

■ Sponsoring Organizations

- Architecture and Building Research Institute, Ministry of the Interior
- Bentley System, Inc.
- C. L. Yang Building Structure Engineer Office
- CECI Engineering Consultants, Inc.
- China Engineering Consultants, Inc.
- Directorate General of Highways, MOTC.
- Envision Engineering Consultants Co.,Ltd.
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- National Science and Technology Center for Disaster Reduction
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- Professional Structural Engineer Society of R.O.C.
- Sinotech Engineering Consultants, Inc.
- Sinotech Engineering Consultants, Ltd.
- Supertech Consultants International
- Taipei Structural Engineers Association
- Taiwan Area National Freeway Bureau, MOTC
- Taiwan High Speed Rail Corporation
- Taiwan Structural Engineers Association
- Tec-Build United Building Structure Engineer Office
- Yong Shin Structural Engineering Consultants



■ Language

Official language of the conference is English

■ Conference Theme: *Building a Sustainable Environment*

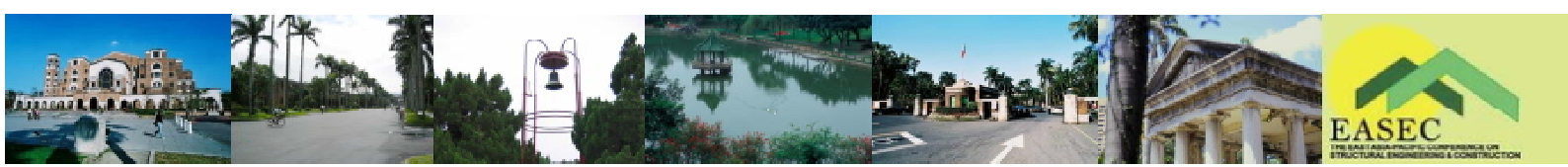
The areas of special interests include the following:

Structural Engineering:

- Analysis and Design Methods
- Bridge Engineering
- Composite Materials/Structures
- Concrete Material
- Concrete Structure
- Durability
- Earthquake Engineering
- Fatigue and Fracture
- Geotechnical Engineering
- Joint Behavior
- Micro/Nano Mech.
- Plates and Shells
- Repair and Retrofit
- Safety and Reliability
- Sensing & Monitoring Techniques
- Soil Structure Interaction
- Steel Structures
- Structural Control
- Structural Dynamics
- Structural Stability
- Thermal Behavior of Structures
- Wind Engineering

Construction Management:

- BOT and Financing
- Computer Application
- Construction Management
- Construction Technique
- Contract and Organization
- Infrastructure
- Knowledge Management
- Maintenance
- Scheduling and Risk
- Sustainability



■ Registration

Registration for the EASEC-11 will be operated at 1F and 2F of the Conference venue.

Opening hours will be:

18 November, 17:00-21:00 at 1F of the Conference venue.

19 November, 08:00-18:00 at 1F of the Conference venue.

20-21 November, 08:00-18:00 at the Secretariat Room (ROOM 106).

■ Secretariat Room

Secretariat room during the EASEC-11 will be operated at ROOM 106, 1F of the Conference venue. For any help and request during the conference, please come to the Secretariat Room.

Opening hours will be: 08:00-18:00

■ Preview Room

Preview room during EASEC-11 will also be operated at Room 106, 1F of the Conference venue.

Speakers can preview and upload their presentation files in this room.

■ Presentation Notes

For session keynotes: 20 minutes for presentation plus 5 minutes for Q&A.

For regular papers: 12 minutes for presentation plus 3 minutes for Q&A.

■ Internet Access

The wireless internet access is available at the Conference venue.

■ Welcome Reception

- ◆ 18:20-20:20, 19 November (Wednesday), VIP Room, 4F of the Conference venue.
- ◆ Free to registered participants.
- ◆ Standing buffet

■ Lunch

- ◆ 19 November (Wednesday), Banquet Hall, 3F of the Conference venue.
- ◆ 20 November (Thursday), Banquet Hall, 3F of the Conference venue.
- ◆ 21 November (Friday), Banquet Hall, 3F of the Conference venue.

■ Banquet

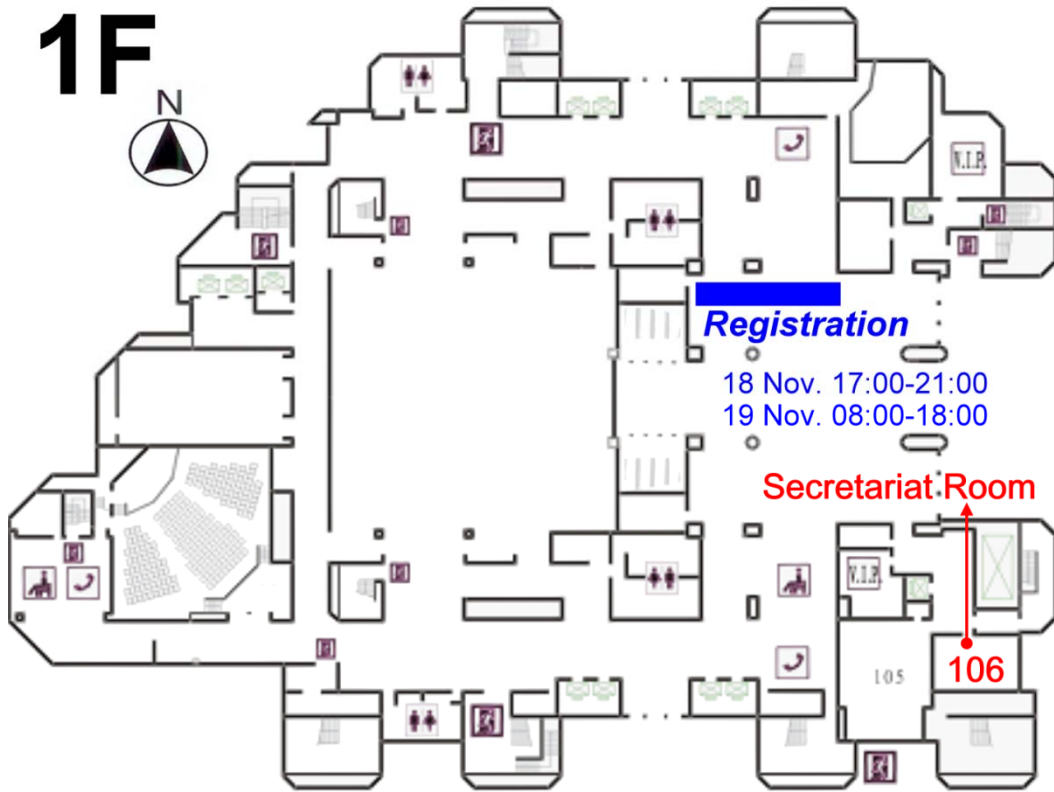
- ◆ 18:20-21:30, 20 November (Thursday), Banquet Hall, 3F of the Conference venue.
- ◆ Free to registered participants.
- ◆ Chinese Cuisines



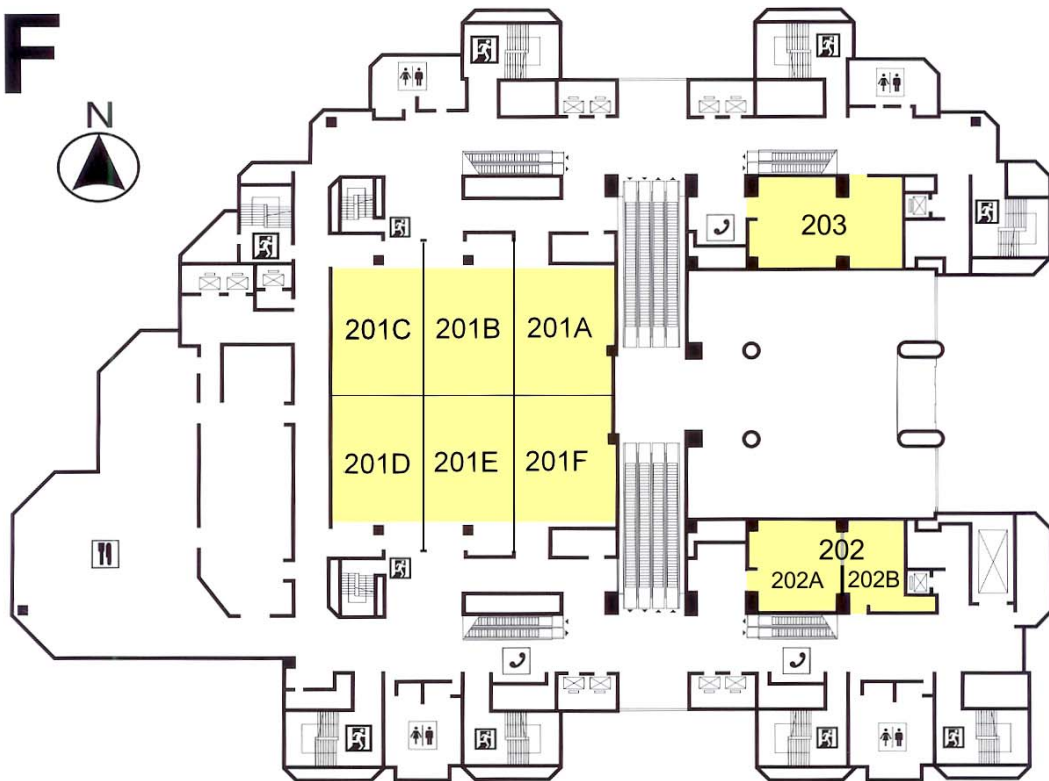
Floor Plan for the Conference Venue

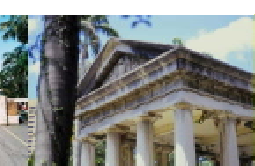
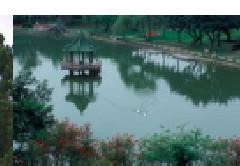
General Info.

1F

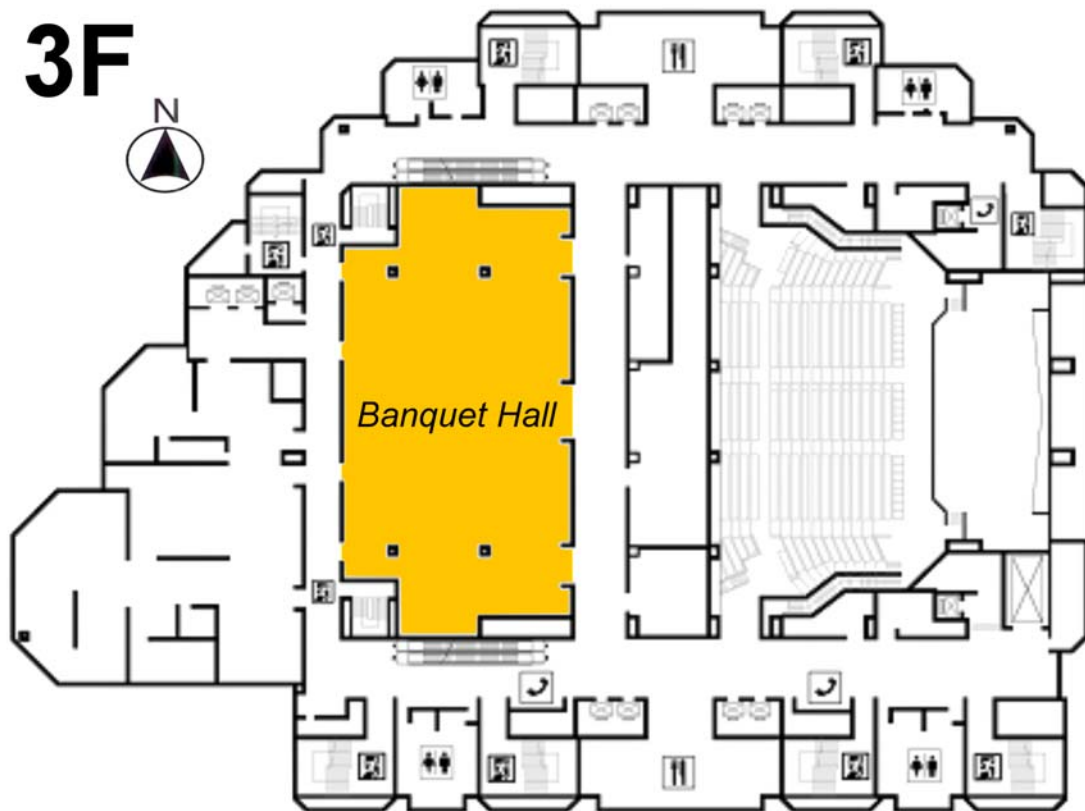


2F

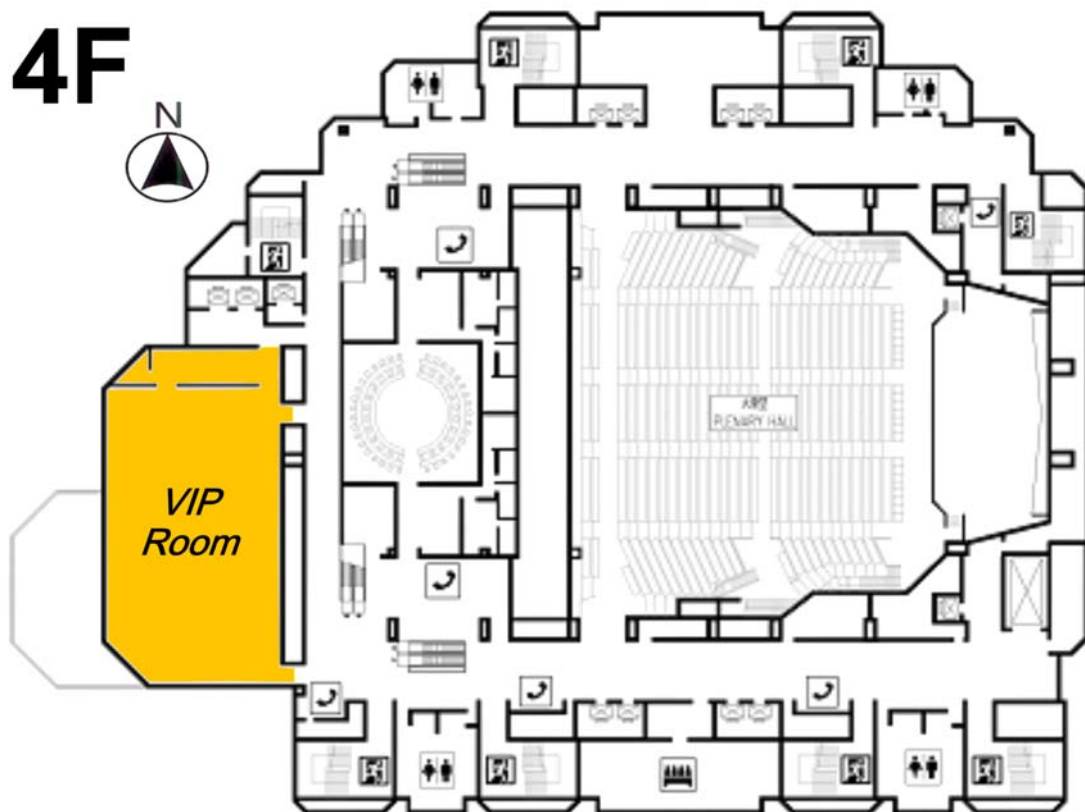




3F



4F



General Info.



Information about Taiwan

■ Climate

The average temperature is about 21°C (69.8°F) in November at Taipei.

For the current weather forecast, you could check on line <http://www.cwb.gov.tw/eng/index.htm>

■ Currency and Banks

The New Taiwan Dollar (NT\$) is the national currency. One US dollar is equal to about 33.6 NT dollars. Foreign currency can be exchanged at hotels, airports and government-designated banks. Major credit cards are widely accepted, and traveler's checks may be accepted by tourist-oriented shops and at most international tourist hotels and banks. Banks open whole day from 09:00 to 15:30, Monday-Friday and closed at weekend and public holidays.

■ Electricity

110 Volts / 60HZ A.C.

■ Time Zone

Taiwan is 8 hours ahead of Greenwich Mean Time (GMT)

■ Transportation

◆ MRT

The Taipei Metro or MRT (Mass Rapid Transit) run by the city government provides the most convenient commuting service in Taipei. Eight lines are presently operated. For more information please check on-line: <http://www.trtc.com.tw/>



◆ Bus

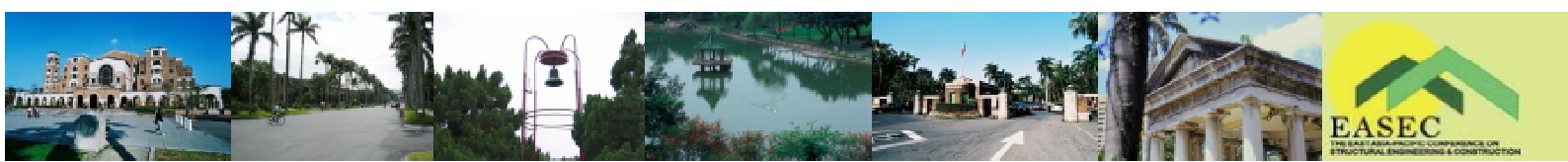
There are more than 300 bus lines and the major transfer hub is around Taipei Main Station. The bus system is extremely comprehensive, but can be difficult for non-Chinese speakers. Buses do not provide change. Most bus services run until 23:00.



◆ Taxi

Taxis are plenty, fast transportation in Taipei, and the rate is reasonable. English Taxi Driver Association (Tel: (02)27-997-997) provides taxi drivers with a certificate for speaking English. However, most taxi drivers cannot speak or read English, so providing the destination in Chinese characters or a map is helpful.





Conference Program Overview

Nov. 19

Room Time	201A	201B	201C	201D	201E	201F	202	203
09:00-09:15	Welcome speech (Prof. Yeong-Bin Yang , Prof. Yozo Fujino)							
09:15-10:00	Nishino medal and prize presentation ceremony Nishino lecture: Prof. Worsak Kanok-Nukulchai (Chaired by Prof. Sritawat Kitipornchai)							
10:00-10:40	Plenary speech I: Prof. Herbert Mang							
10:40-11:00	<i>Coffee break</i>							
11:00-11:40	Plenary speech II: Prof. Wai-Fah Chen							
11:40-12:20	Plenary speech III: Prof. Manabu Ito (in memory of Prof. Arthur Chiu)							
12:20-13:45	<i>Lunch</i>							
13:45-15:30	EE I	WE	SR	CM: CM	SD I	SS I	CM/S I	FF
15:30-16:00	<i>Coffee break</i>							
16:00-17:45	EE II	BE I	SM I	CM: CT	SD II	SS II	Special I	PS

Nov. 20

09:00-09:40	Semi-plenary speech I: Prof. Chang-Koon Choi			Semi-plenary speech II: Prof. Yozo Fujino				
09:40-10:20	Semi-plenary speech III: Prof. Norden E. Huang			Semi-plenary speech IV: Prof. S. Kitipornchai				
10:20-10:50	<i>Coffee break</i>							
10:50-12:35	EE III			BE II			SM II	CM: CO
12:35-13:45	<i>Lunch</i>							
13:45-15:30	EE IV	SC	SM III	CM: CA	AD I	ConS I	CM/S II (202A)	M/NM
15:30-16:00	<i>Coffee break</i>							
16:00-17:45	EE V	BE III	RR I	CM: S&R	AD II	ConS II	CM/S III (202A)	TBS

Program



Nov. 21

09:00-10:30	EE VI	BE IV	RR II	CM: B&F	SST I	JB	ConM I	
10:30-10:50	<i>Coffee break</i>							
10:50-12:35	EE VII	BE V	SM IV	CM: I	SST II	D I	Special II	
12:35-13:45	<i>Lunch</i>							
13:45-15:30	EE VIII	BE VI	SM V	CM: KM	CM: S	D II	ConM II	
15:30-16:00	<i>Coffee break</i>							
16:00-17:45	EE IX	GE	SM VI	CM: M	SSI	D III	ConM III	

Structural Engineering

- AD Analysis and Design Methods
- BE Bridge Engineering
- CM/S Composite Materials/Structures
- ConM Concrete Material
- ConS Concrete Structure
- D Durability
- EE Earthquake Engineering
- FF Fatigue and Fracture
- GE Geotechnical Engineering
- JB Joint Behavior
- M/NM Micro/Nano Mech.
- PS Plates and Shells
- RR Repair and Retrofit
- SR Safety and Reliability
- SM Sensing & Monitoring Techniques
- SSI Soil Structure Interaction
- SS Steel Structures
- SC Structural Control
- SD Structural Dynamics
- SST Structural Stability
- TBS Thermal Behavior of Structures
- WE Wind Engineering

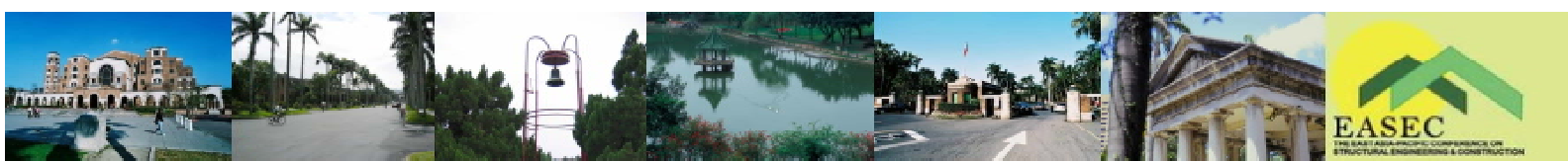
Construction Management (CM)

- CM: B&F BOT and Financing
- CM: CA Computer Application
- CM: CM Construction Management
- CM: CT Construction Technique
- CM: C&O Contract and Organization
- CM: I Infrastructure
- CM: KM Knowledge Management
- CM: M Maintenance
- CM: S&R Scheduling and Risk
- CM: S Sustainability

Special Session

- Special I Special Session on Shield Tunnel
- Special II CICHE/TCI-JSCE-KSCE Joint Seminar on Hybrid Structures

Program



Plenary & Semi-plenary Speech

Nishino Lecture

Room: 201

Time: 19 Nov., 09:35-10:00

Chair: Sritawat Kitipornchai

Rethinking of shape functions employment in FEM

W. Kanok-Nukulchai

EASEC11-720* (128**)

Plenary Speech I

Room: 201

Time: 19 Nov., 10:00-10:40

Chair: Yeong-Bin Yang

Computational multiscale analysis in civil engineering

H.A. Mang, E. Aigner, J. Eberhardsteiner, C. Hackspiel, C. Hellmich, K. Hofstetter, R. Lackner, B. Pichler, S. Scheiner, and R. Stürzenbecher

EASEC11-key1 (3)

Plenary Speech II

Room: 201

Time: 19 Nov., 11:00-11:40

Chair: Edmond Cheng

Seeing the big picture and making a difference in structural engineering

W. F. Chen

EASEC11-key2 (15)

Plenary Speech III

Room: 201

Time: 19 Nov., 11:40-12:20

Chair: Yew-Chaye Loo

Wind-induced vibrations of structures and their control

M. Ito

EASEC11-key3 (31)

Semi-Plenary Speech I

Room: 201ABC

Time: 20 Nov., 09:00-09:40

Chair: Kuo-Chun Chang

An intelligent, integrated building design system

C. K. Choi and J. Jeong

EASEC11-key4 (39)

Semi-Plenary Speech II

Room: 201DEF

Time: 20 Nov., 09:00-09:40

Chair: Worsak Kanok-Nukulchai

Structural health monitoring for risk assessment of bridges:

Concept and implementations

Y. Fujino and D.M. Siringoringo

EASEC11-key5 (47)

Semi-Plenary Speech III

Room: 201ABC

Time: 20 Nov., 09:40-10:20

Chair: Kuo-Chun Chang

Structural health monitoring based on HHT

N. E. Huang

EASEC11-key6 (59)

Semi-Plenary Speech IV

Room: 201DEF

Time: 20 Nov., 09:40-10:20

Chair: Worsak Kanok-Nukulchai

An innovative approach for structural engineering education

S. Kitipornchai, H. F. Lam, T. Reichl, and F. Albermani

EASEC11-key7 (67)

* Paper number in EASEC-11 online system and EASEC-11 CD-ROM

** Page number in EASEC-11 Keynote Lectures and Extended Abstracts

Special Session

Special Session on Shield Tunnel

Room: 202

Time: 19 Nov., 16:00-17:45

Chair: Kyung-Ho Park

Session Keynote:

STUDY ON INFLUENCE OF CONSTRUCTION LOADS ON SHIELD SEGMENT

Mitsutaka Sugimoto

EASEC11-428 (78)

Investigations on the railroad shield tunnels and reinforcement work by the installation of the secondary lining - maintenance work on the Tokyo tunnel

Tatsuya Shino, Takuo Shinomiya, Koichiro Mizuno, Yutaro Koyanagi, and Naotoshi Okamura

EASEC11-393 (80)

Evaluation of splice effect on shield tunnel lining assembled in staggered pattern

Linxing Guan, Masahiro Shibata, and Astushi Koizumi

EASEC11-397 (82)

Effect of drainage condition on lining stresses: a case study of Bangkok south blue line extension subway tunnel

Ponlawich Arjnoi, Jae-Suk Kim, Joo-Gong Lee, and Kyung-Ho Park

EASEC11-406 (84)

Buckling investigation and design consideration for new water tunnel structure

Jian-Hong Wang, Norio Mitsuda, Yuki Amano, and Atsushi Koizumi

EASEC11-418 (86)

Effect of tunnel excavation on pre-existing underground structure

Jung-In Choi, Seok-Kyu Song, and Seok-Won Lee

EASEC11-466 (88)

Long-term durability of concrete lining in tunnel

Dong-Gyou Kim and Ho-Seop Jung

EASEC11-488 (90)

Mechanical behavior of arch type cut and cover tunnel structure considering of eccentric earth pressure

Gyu-Phil Lee, Jae-Hong Hwang, Sung-Won Lee, Hyu-Soung Shin, and Chang-Yong Kim

EASEC11-495 (92)

CICHE/TCI-JSCE-KSCE Joint Seminar on Hybrid Structures

Room: 202

Time: 21 Nov., 10:50-12:35

Chair: Shyh-Jiann Hwang

Session Keynote:

INTRODUCTION TO DRAFT OF JSCE STANDARD SPECIFICATION FOR HYBRID STRUCTURES

Shun-Ichi Nakamura, Akinori Nakajima, Tadatomo Watanabe, and Hiroshi Shima

EASEC11-574 (96)

Design of precast piers using steel-embedded composite sections

Y. S. Chung and Chang-Su Shim

EASEC11-47-2 (98)

Design and analysis of precast prestressed concrete pavement

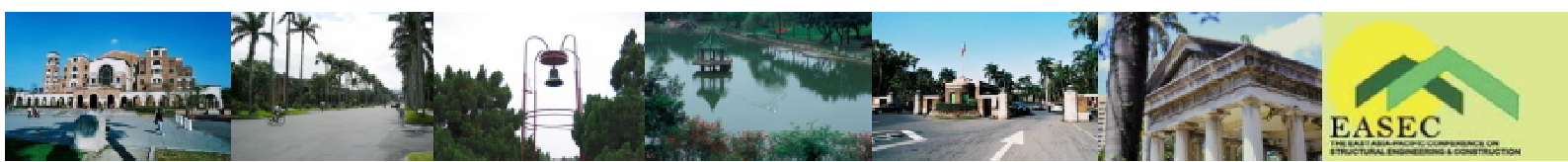
Ha-Won Song, Sang-Hyuk Nam, Sanaul H. Chowdhury, and Jung-Kyu Park

EASEC11-194 (100)

Flexural characteristics of the R/C beams strengthened with stirrup-cutting near surface mounted (CNSM) CFRP plate

Do Young Moon and Hongseob Oh

EASEC11-472 (102)



A study on the super composite slab bridge of taxiway designed for hypothetical aircraft load

Tomoo Tomoda, Shinichi Hino, Kohei Yamaguchi, Shenghua Guo, Yukio Iwasaki, and Satoru Oosiro

EASEC11-567 (104)

Recent progress of hybrid structures and its design methods in Japan

Kenji Uehira and Soichi Ito

EASEC11-584 (106)

An introduction of highway composite bridges design and construction project in Taiwan

Jaw-Liang Wang, Wen-Chih Fang, Kuo-Long Chen, Cheng-Wei Lin, and Shuen-Shin Wu

EASEC11-673 (108)

The behavior of the foam-filled GFRP bridge deck in the transverse direction

Goangseup Zi, Do Young Moon, Yoon-Koogn Hwang, Jin Gu Kang, and Seung Jung Lee

EASEC11-674 (110)

Schedule in Detail

Earthquake Engineering I

Room: 201A

Time: 19 Nov., 13:45-15:30

Chair: Hans Irschik

Session Keynote:

SEISMIC RISK OF THE REGION SURROUNDING SINGAPORE

T.-C. Pan, K. Megawati, and B. Li

EASEC11-589 (376)

Seismic risk management for existing lifeline systems

Toshio Imai and Takeshi Koike

EASEC11-49 (378)

Seismic performance analysis of water-supply system considering interactions of water-electric systems

Ai-ping Tang, Yi-Xue Wu, Ai-Hua Wen, and L. F. Wang

EASEC11-82 (380)

Seismic shutoff characteristics of intelligent gas meters in multistory buildings based on actual earthquake data and GIS

Yoshihisa Maruyama, Tetsuhiro Nitto, Fumio Yamazaki, and Naoyuki Hosokawa

EASEC11-143 (382)

Evaluation of seismic risk of water supply system by PML index

K. Yamamoto, O. Maruyama, M. Hoshiya, and H. Take

EASEC11-499 (386)

Wind Engineering

Room: 201B

Time: 19 Nov., 13:45-15:30

Chair: Chii-Ming Cheng

Session Keynote:

GUST WIND SPEEDS' DOMAIN OF ATTRACTION

Edmond D.H. Cheng

EASEC11-285 (848)

Effects of multiple canopies attached to the gable roof buildings

R. Goyal, A.K. Ahuja, and R.M. Vasan

EASEC11-36 (850)

Wake galloping of tandem circular cylinders equipped with helical wires

Nobumitsu Fujisawa, Kazutaka Tanaka, Yusuke Tanaka, and Michio Okamoto

EASEC11-77 (852)

Investigation on effect of rational function approximation error for response of long-span bridge

Nguyen Danh Thang, Hiroshi Katsuchi, Hitoshi Yamada, and Eiichi Sasaki

EASEC11-156 (854)

A trial manufacture of a wind tunnel that can simulate the direction fluctuation of natural wind

Kichiro Kimura, Yoshinobu Kubo, and Kusuo Kato

EASEC11-212 (856)

Time domain vibration control using aerodynamic wind tunnel model study measurements

Kam-Tim Tse, Charles Chor-Kwan Cheng, and Yat-Sun Lee

EASEC11-561 (860)

Safety and Reliability

Room: 201C

Time: 19 Nov., 13:45-15:30

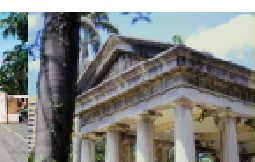
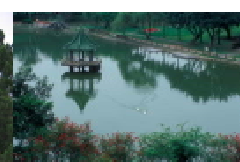
Chair: Gregory Chiu

Session Keynote:

PROGRESSIVE COLLAPSE ANALYSIS AND SAFETY ASSESSMENT FOR LARGE-SPAN STEEL TRUSS ROOF

Xiaofeng Jiang and Yiyi Chen

EASEC11-261 (612)



Fatigue reliability index of jacket offshore platform based on fracture mechanics

Ricky L. Tawekal and M. Aliuddin Iqbal

EASEC11-44 (614)

Uncertainty propagation by advanced simulation with spreadsheet

Siu-Kui Au, Yu Wang, and Zi-Jun Cao

EASEC11-358 (616)

Initial time prediction on corrosion of reinforced concrete structure attacked by carbonation

Chongsin Sookoomjariyapong, Sanguan Vongchavalitkul, and Sun Sayamipuk

EASEC11-396 (618)

Reliability of shallow foundations

Mahua Chakrabarti, Niraj Mawale, and Balaji Hudge

EASEC11-474 (620)

Multi mapping in condition assessment of two city bridges

Aleksander Wawrusiewicz

EASEC11-503 (622)

Reliability analysis for a bridge structure based on condition assessment results

Jun Li and Siu-Seong Law

EASEC11-605 (624)

Construction Management

Room: 201D

Time: 19 Nov., 13:45-15:30

Chair: Sy-Jye Guo

Session Keynote:

SELECTION BETWEEN DESIGN-BUILD AND DESIGN-BID-BUILD THROUGH UTILITY FUNCTION

Luh-Maan Chang

EASEC11-635 (896)

Improved capital procurement through increased use of quantitatively-based decisions

Ming Xu and Colin Duffield

EASEC11-173 (898)

Experimental study on the effect of fall protection of scaffolds by plastic sheets

Katsutoshi Ohdo, Yasuo Toyosawa, Seiji Takanashi, Yasumichi Hino, and Hiroki Takahashi

EASEC11-174 (900)

Strategic management of Thai rural infrastructure development

Suchanya Posayanant and Chotchai Chareonngam

EASEC11-524 (902)

The framework of contingency cost determination in the construction execution

J. E. Latupeirissa, P. F. Marzuki, and R. D. Wirahadikusumah

EASEC11-533 (904)

Interpretation of qualitative and quantitative information for project reviews: a fuzzy-based approach for OGC™ gateway review (GR) colour code system (CCS)

Ming Xu, Colin Duffield, and Nick Pelham

EASEC11-173-2 (906)

Financeability of desalination project: case study of Israel and Singapore

Abu Naser Chowdhury and Po-Han Chen

EASEC11-636 (908)

Structural Dynamics I

Room: 201E

Time: 19 Nov., 13:45-15:30

Chair: Chung-Che Chou

Dynamic response of rigid concrete pavement under dynamic traffic loads

Sofia W. Alisjahbana and Wiratman Wangsadinata

EASEC11-3 (772)

Effect of curvature on dynamic response of horizontally curved bridges under moving vehicle

Trong Le Ngo-Tran and Toshiro Hayashikawa

EASEC11-30 (774)

Computational softness rendering of textile materials in nonlinear dynamics

Fumio Fujii, Masami Satoh, Yuki Nishina, Koji Yoshida, and Toshio Honma

EASEC11-67 (776)

Program - 19 Nov.



Responses of blast loading by hyperbolic - trigonometric cosine acceleration method

Trong Phuoc Nguyen

EASEC11-68 (778)

Time-domain finite element analysis of soil-structure interaction problems

Shen-Haw Ju and Shao-Fan Tung

EASEC11-214 (780)

Free vibrations of elastica shaped arches formed by post-buckled bar without pre-stress

Byoung Koo Lee, Sang Jin Oh, Tae Eun Lee, and Gwon Sik Kim

EASEC11-341 (782)

Free vibrations of non-circular arches with general boundary conditions

Sang Jin Oh, Hee Min Yoon, Kwang Kyou Park, and Byoung Koo Lee

EASEC11-489 (784)

Effect of moving load on flexible pavement with soft subgrade using nonlinear finite element analysis

Jawed Qureshi

EASEC11-511 (786)

Steel Structures I

Room: 201F

Time: 19 Nov., 13:45-15:30

Chair: Mahen Mahendran

Session Keynote:

STRUCTURAL CONCEPTUAL DESIGN OF TOWER INFINITY-THE NEXT LANDMARK IN KOREA

King-Le Chang, Wythe Chen, Chung-Yu Shen, and Hsiu-Hsin Yeh

EASEC11-700 (732)

Experimental investigation of cold-formed stainless steel tubular X-joints with chord preload

Ran Feng and Ben Young

EASEC11-9 (734)

Evaluation of material properties of structural welding steels based of statistical methods

Chang-Won Sun, Kab-Soo Kyung, Jun-Ho Lee, and Hee-Hyun Lee

EASEC11-122 (736)

Empirical models for prediction of flexural resistance and initial stiffness of welded beam-column joints

Amir Hossein Gandomi, Amir Hossein Alavi, Mohammad Ghasem Sahab, Mostafa Gandomi, and Meisam Safari Gorji

EASEC11-459 (738)

Experimental study on bending behavior of box section column with transversely profiled steel plates

Masaya Shirotnani, Takashi Yamaguchi, Yasuo Suzuki, Kunitaro Hashimoto, Kunitomo Sugiura, and Takuji Kumano

EASEC11-486 (740)

Case study on application of high strength steel in building structure

Min Yan, MingZhuo Rui, Yu Zhang, MingGu Liu, LiShu Li, and Ying Huang

EASEC11-554 (742)

Composite Materials/Structures I

Room: 202

Time: 19 Nov., 13:45-15:30

Chair: Helmut J. Boehm

Thermal compatibility of highway wearing surfaces and GFRP bridge decks

Riyad Aboutaha

EASEC11-15 (228)

Fatigue performance of different FRP bonding systems

Yan-Chun Yun, Yu-Fei Wu, and Wai-Ching Tang

EASEC11-118 (230)

Numerical evaluation of bolted and welded connections

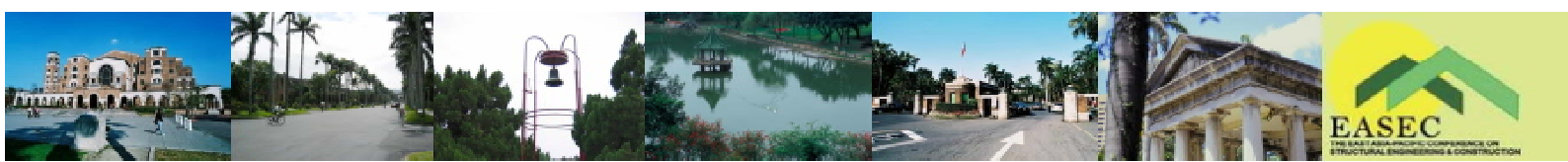
Ching H. Lin, Wei T. Hsu, and Dung M. Lue

EASEC11-148 (232)

Shear design of corrugated steel webs

Jongwon Yi, Jiho Moon, Byung H. Choi, and Hak-Eun Lee

EASEC11-150 (234)



Structural characteristics of FRP corrugated sandwich structure

Takatoshi Tokunaga, Tsunemi Shigematsu, and Takashi Hara

EASEC11-236 (236)

Perfobond rib shear connection for composite beams made of UHPC – experimental study

N.V.Tue, B.D.Vinh, and M. Küchler

EASEC11-331 (238)

A simple tension experimental study on structural performance of the two-seam cold formed square CFT column to beam connections with internal anchors

Seong-Hui Lee, Sung-Mo Choi, Hun-Mo Jung, Se-Jung Lee, and Jin-Ho Kim

EASEC11-685 (240)

Fatigue and Fracture

Room: 203

Time: 19 Nov., 13:45-15:30

Chair: Jui-Lin Peng

Session Keynote:

STRESS SINGULARITIES AT INTERFACES IN STRUCTURES – DESIGN CHARTS

Robert D. Bitsche and Franz G. Rammerstorfer

EASEC11-598 (494)

Fatigue under shear in concrete walls

Hans De Backer, Amelie Outtier, and Philippe Van Bogaert

EASEC11-167-2 (496)

Prediction of double-K fracture parameters for notched concrete beams

Shailendra Kumar and S. V. Barai

EASEC11-218-2 (498)

Multi-region elastoplastic analysis by BEM using iterative domain decomposition method

Adisorn Owatsiriwong, Bupavech Phansri, and Kyung-Ho Park

EASEC11-406-2 (500)

Stress measurement and fatigue durability evaluation of scallop details in plate girder web

Kentaro Yamada, Takumi Kakiichi, Toshiyuki Ishikawa, Tatsuya Ojio, and Akimasa Kondo

EASEC11-448 (502)

Fatigue test on t-shape side welded gusset to plate under bending and its application

T. Kakiichi, K. Yamada, T. Ishikawa, T. Ojio, and A. Kondo

EASEC11-463 (504)

Modeling of cracks in 3D anisotropic, piezoelectric finite body by weakly singular SGBEM

Weeraporn Phongtinnaboot, Jaroon Rungamornrat, and Chatpan Chintanapakdee

EASEC11-521 (506)

Earthquake Engineering II

Room: 201A

Time: 19 Nov., 16:00-17:45

Chair: Yew-Chaye Loo

Experimental study on behaviour of reinforced concrete shear walls subjected to three-directional loading

Koshiro Nishimura, Katsuki Takiguchi, and Kazuteru Kojima

EASEC11-56 (388)

Prediction of real seismic behavior for buildings by using nonlinear static and dynamic analyses

Chia-Wei Wu and Qiang Xue

EASEC11-96 (390)

Quantification of the contribution of non-structural components to the structural performance of high-rise buildings

Bing Li, Colin F.Duffield, and Graham L.Hutchinson

EASEC11-172 (392)

Program - 19 Nov.



Performance of partial capacity design on fully ductile moment resisting frame in highly seismic area in Indonesia

Ima Muljati and Benjamin Lumantarna

EASEC11-206 (394)

Experimental verification of using viscous damper for response mitigation of isolation systems subjected to near-fault earthquakes

Lyan-Ywan Lu, Ming-Hsiang Shih, Shih-Wei Yeh, Ging-Long Lin, and Shiu-Wen Tzeng

EASEC11-256 (396)

Bridge Engineering I

Room: 201B

Time: 19 Nov., 16:00-17:45

Chair: Kentaro Yamada

Study on method of total probability seismic vulnerability analysis for RC bridge

Qing Hai Feng and Wan Cheng Yuan

EASEC11-11 (142)

Effect of the tension stiffening on the design of continuous composite girders for railways

Nozomu Taniguchi, Masato Nakahara, Manabu Ikeda, and Teruhiko Yoda

EASEC11-94 (144)

The evolution of bridge information modeling

Dorian Janjic, Heinz Bokan, and Ronald Love

EASEC11-240-2 (146)

The design of Jianshe bridge

Hui-Li Wang, Zhe Zhang, Si-Feng Qin, and Jun Chen

EASEC11-383 (148)

Comparison of highway bridge designs between Japan and USA in case of continuous composite girders

Shouji Toma, Hiroaki Yoshida, and Lian Duan

EASEC11-384 (150)

Strength and ductility of steel plate girders with tapered web plate

Takashi Yamaguchi, Kosuke Otsuka, Yasuo Suzuki, Kunitaro Hashimoto, Kunitomo Sugiura, and Takuji Kumano

EASEC11-449 (154)

Sensing & Monitoring Techniques I

Room: 201C

Time: 19 Nov., 16:00-17:45

Chair: Christoph Adam

Identification of cavities beneath concrete pavement slab using impulse response methods

C. C. Cheng, C. P. Yu, and K. Y. Huang

EASEC11-144 (628)

Infrared imaging of interface delamination using phase detection techniques

Chih-Hung Chiang, Wei-Hua Yu, Wei-Yuan Chiang, and Yi-Yin Chang

EASEC11-161 (630)

Vibration measurement of an existing steel truss bridge for structural health monitoring

Takeshi Miyashita, Masatsugu Nagai, and Masato Tazawa

EASEC11-188 (632)

Steel rebar monitoring system by using FBG sensor system

Ki-Tae Park

EASEC11-192-2 (634)

Construction structural monitoring on the Busan-Geoje fixed link bridges

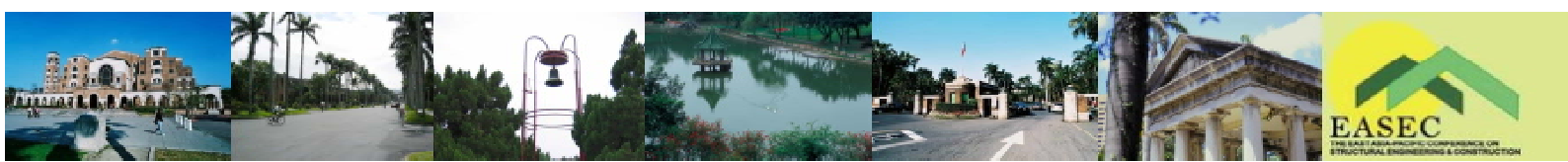
Young-Min KIM, Young-Hak Kwak, Dae-Young Kim, Jacob Andersen, Peter Frederiksen, and Lars Hauge

EASEC11-232 (636)

Development and application of road monitoring system using dynamic response of vehicles

Hiroyuki Asakawa, Yozo Fujino, Tomonori Nagayama, and Michio Ohsumi

EASEC11-237 (638)



Damage identification of existing highway bridge based on modal strain energy and Monte-Carlo method

Deshan Shan and Qiao Li

EASEC11-298 (640)

Construction Technique

Room: 201D

Time: 19 Nov., 16:00-17:45

Chair: LuhMaan Chang

Scheduling utility permits for reducing pavement utility cuts

Y. P. Chen, C. M. Chiu, S. M. Tseng, and C. C. Chou

EASEC11-76 (912)

Dynamic classification of reinforced concrete bridges based on the deterioration patterns

Rong-Yau Huang, I-Shiang Mao, and Hao-Kang Lee

EASEC11-200 (914)

Developing a RFID based automatic system for tracking construction residual soil

Rong-Yau Huang, Ping-Fu Chen, and Tsung-Yi Tsai

EASEC11-205 (916)

Structural behaviors of modular falsework under pattern and path loads

Jui-Lin Peng, Tsong Yen, Ching-Chi Kuo, and Chung-Sheng Wang

EASEC11-299 (918)

Installation concerns of construction using precast large panel system

Bhargab .M. Das

EASEC11-349-2 (920)

An analysis of design and contractor errors influence on a failure of an apartment house from 1930s

T. Z. Blaszczyński and P. W. Sielicki

EASEC11-371 (922)

Development of GPS-based target positioning system for marine construction

Kai-Wei Weng, Yu-Cheng Lin, Cha-Hsing Pan, and Hui-Ping Tserng

EASEC11-536 (924)

Structural Dynamics II

Room: 201E

Time: 19 Nov., 16:00-17:45

Chair: Fumio Fujii

Local dynamic characteristics of train-induced vibration of high-speed railway bridge

Di Su, Yozo Fujino, Tomonori Nagayama, and Takeshi Miyashita

EASEC11-117 (788)

Effect of traveling condition of vehicles on low-frequency sound radiated from steel highway bridge

Toshiyuki Sugiyama and Junji Yoshida

EASEC11-128 (790)

A semi-analytical solution method for static and dynamic problems of 2-D multi-body elastic continua

Yaubin Yang and Bingen Yang

EASEC11-353 (792)

Application of a new transmitting boundary for the numerical simulation of wave propagation in infinite domains

Lutz Lehmann

EASEC11-581 (796)

Reduction and recovering methods of degree-of-freedom in structural dynamic analysis

Kazutaka Sugiyama, Mitsuharu Kurata, Buntara S. Gan, and Eiji Nouchi

EASEC11-591 (798)

Nonlinear free vibration of an elastically-restrained cantilever beam with a point mass via the Newton-harmonic balancing approach

C.W. Lim, K.M. Liew, and R. Xu

EASEC11-644 (802)

**Steel Structures II****Room: 201F***Time: 19 Nov., 16:00-17:45*

Chair: Yang Xiang

Session Keynote:**EFFECT OF MOMENT GRADIENT ON THE STRENGTH OF LITESTEEL BEAMS***Cyrilus Winatama Kurniawan and Mahen Mahendran*

EASEC11-627 (744)

Inquisition into the ultimate capacity of steel transmission tower*Chia-Yu Lee and Ching-Churn Chern*

EASEC11-513 (746)

Steel green building framing systems*T K Bandyopadhyay and Arup Saha Chaudhuri*

EASEC11-607 (750)

Local failures of steel monopole transmission line towers*SwaminathanJagan Mohan, Napa Prasadrao, RajendraPeethambar Rokade, and RajaGopal Balagopal*

EASEC11-613 (752)

An experimental study on the block shear strength of coped beams with welded double clip angle connections*Michael C.H. Yam, Feng Wei, K.F. Chung ,and G.Y. Grondin*

EASEC11-640 (754)

Plates and Shells**Room: 203***Time: 19 Nov., 16:00-17:45*

Chair: Hans De Backer

Free vibration of circular shells*M. A. Chakrabarti and Yogesh V. Rangari*

EASEC11-443 (560)

Shear buckling of thin plates using spline collection method*L. Y. Wu, L. L. Chung, and H.H. Huang*

EASEC11-193 (562)

Development of higher-order triangular elements for better prediction of stress-resultants in plate*Sai Sudha Ramesh, C. M. Wang, J. N. Reddy, and Ang Kok Keng*

EASEC11-350 (564)

Free vibration analysis of plates*Nishant Thakur and Mahua. A. Chakrabarti*

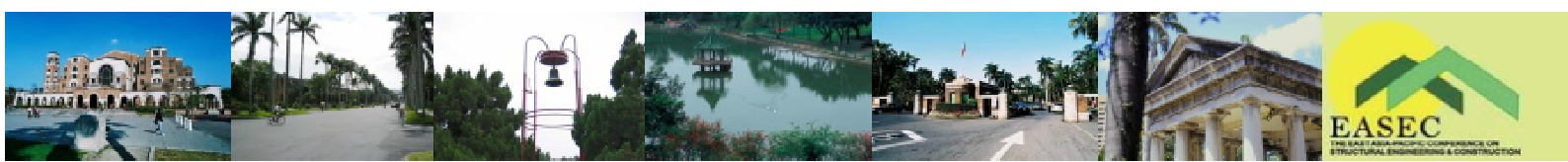
EASEC11-445 (566)

Behavior of R/C cylindrical shell structure with gable wall*Norimasa Hashimoto, Takashi Hara, and Tsunemi Shigematsu*

EASEC11-387 (568)

Free vibrations of composite cross-ply annular circular plates including the effects of shear deformation and rotary inertia: spline method*K.K.Viswanathan , Kyung Su Kim, Jae Beom Lee and Sung Hawn Boo*

EASEC11-634 (572)



Earthquake Engineering III

Room: 201A-C

Time: 20 Nov., 10:50-12:35

Chair: Keh-Chyuan Tsai

Session Keynote:

APPLICATION OF MULTIBODY DYNAMICS FOR THE ANALYSIS OF HISTORICAL MONUMENTS UNDER EARTHQUAKES

Johannes Gerstmayr and Hans Irschik

EASEC11-357 (400)

Dynamic collapse test of reinforced concrete frames

Wu-Wei Kuo, Chiun-lin Wu, Yuan-Sen Yang, and Shyh-Jiann Hwang

EASEC11-98 (402)

Experimental study on dynamic collapse of RC short columns and comparison with ASCE 41-06 criteria

Chiun-lin Wu, Ruei-Shiang Su, Shyh-Jiann Hwang, and Yuan-Sen Yang

EASEC11-201 (404)

Progressive collapse resistance analysis of a RC building

Meng-Hao Tsai

EASEC11-241 (406)

Effect of loading history on softening of load-displacement curve of reinforced concrete columns

Hiroshi Shima and Kazuki Hatanaka

EASEC11-494 (408)

Experimental study on the behavior of RC frames in-filled with lightweight materials subjected to in-plane lateral loads

I. Imran and A. Aryanto

EASEC11-586 (410)

Bridge Engineering II

Room: 201D-F

Time: 20 Nov., 10:50-12:35

Chair: Kunitomo SUGIURA

Torsionally-loaded response of web-tapered I-beams using iterative approach

Jong-Dar Yau

EASEC11-124 (156)

Nonlinear seismic dynamic analysis of expansion joint damage on curved highway bridges

Carlos Mendez Galindo, Toshiro Hayashikawa, and Daniel Ruiz Julian

EASEC11-139 (158)

Seismic response analysis and damage verification of Notojima bridge during Noto Peninsula earthquake

Saiji Fukada, Koji Maegawa, Hidezo Sako, and Yasushi Yamazaki

EASEC11-142 (160)

The seismic behavior of reinforced concrete bridge pier with debonded reinforcements and interface dowels

Panuwat Joyklad and Amorn Pimanmas

EASEC11-147 (162)

Seismic performance of spiral steel pipe piers under cyclic loading

Atsushi Yabumoto, Kiyoshi Ono, Mitsuyoshi Akiyama, and Nobuo Nishimura

EASEC11-202 (164)

Seismic assessment of foundation exposed bridges using pushover analysis

Dyi-Wei Chang, Ming-Yuan Cheng, I-Chau Tsai, and Yen-Hao Chen

EASEC11-325 (166)

Seismic performance evaluation of reinforced concrete pier-shaft system considering interaction with multi-layered soil

Ha-Won Song, Sung-Hwan Jang, and Sang-Hyeok Nam

EASEC11-633 (168)

Program - 20 Nov.



Sensing & Monitoring Techniques II

Room: 202

Time: 20 Nov., 10:50-12:35

Chair: Somsak Swaddiwudhipong

Application of on-line RLS on parameter identification of benchmark building structure on shaking table test

S.C. Lo and S.Y. Chu

EASEC11-228 (642)

The detection of the anomalies in the health condition of a curved cable-stayed bridge from vibration records during earthquakes

Theeraphong Chanpheng, Eiichi Sasaki, Hitoshi Yamada, Hiroshi Katsuchi, and Kenta Takahashi

EASEC11-252 (644)

Determination of modal parameters of a cable-stayed bridge using continuous wavelet transformation

Chern-Hwa Chen, Chiung-Shiann Huang, and Chia-I Ou

EASEC11-258 (646)

Monitoring and assessment of prestressing force loss on prestressed cantilever bridge - a case study of Xin-Sheng bridge

Meng-Hsun Hsieh, Yao-Min Fang, and Bing-Jean Lee

EASEC11-267 (648)

Development of relative load carrying capacity evaluation system using analysis of bridge ambient vibration

W.S. Lee, K.T. Park, and B. C. Joo

EASEC11-304 (650)

Fiber optic sensors for monitoring of civil structures

Gilles Hovhanessian, Jack Lai, and Yu-Sheng, Chen

EASEC11-320-2 (652)

System equivalent reduction expansion process: an experimental validation

Nam Hoang, Wei Song, Anthony Friedman, Justin Char, Zachary Feinstein, Yozo Fujino, and Shirley J. Dyke

EASEC11-347 (654)

Contract and Organization

Room: 203

Time: 20 Nov., 10:50-12:35

Chair: Chotchai Charoenngam

Developing performance framework and measures for construction projects

Andrew S. Chang and Ya-Wen Tsai

EASEC11-93 (928)

The influence of market forces to construction companies' performance in Indonesia

Sudarto, Ismeth Abidin, Bambang Trigunarsyah, and Leni S.Riantini

EASEC11-95 (930)

Business process management adoption and improving functions in construction companies

Jin Man Kim and Yoon Ki Choi

EASEC11-159 (932)

Exploring coordination goals of construction projects

Fang-Ying Shen and Andrew S. Chang

EASEC11-231 (934)

Necessity of contract administration education program for developing countries

Rajendra Niraula, Takashi Goso, and Shunji Kusayanagi

EASEC11-233 (936)

Identifying critical failure factors of partnering for Taiwanese construction projects

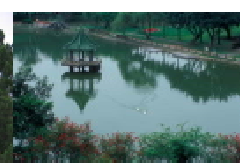
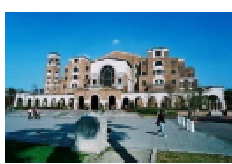
Wei Tong Chen, Po-Yi Chang, Tung-Tsan Chen, and Leonard Mortis

EASEC11-243 (938)

An empirical analysis of the organizational governance structure choices in international construction joint ventures

Yi-Hsin Lin, S. Ping Ho, and Hsueh-Liang Wu

EASEC11-336 (940)



Consequences of withdrawal in Negotiation

Pui Ting Chow, Sai On Cheung, and Ming Sum Chiang

EASEC11-699 (942)

Earthquake Engineering IV

Room: 201A

Time: 20 Nov., 13:45-15:30

Chair: Yuan-Sen Yang

Seismic resistant capability analysis for moment-resisting frames of reinforced concrete structure with consideration of member displacement reaction

Wen-Pei Sung, Ming-Hsiang Shih, and Chang-Liang Chen

EASEC11-40 (412)

Seismic performance of precast steel-embedded composite columns

C.S. Shim, Y.S. Chung, and J.Y. Yoon

EASEC11-47 (414)

A study on pushover analysis of reinforced concrete frame with shear failure at beam-column joints

Yu-Chi Sung, Chia-Ching Hsiao, and I-Chau Tsai

EASEC11-114 (416)

Approximation of the seismic response of vibration prone nonstructural elements attached to ductile multi-story frame structures

Christoph Adam and Thomas Furtmüller

EASEC11-364 (418)

Estimation of story drift contributed by beam deformation in reinforced concrete frames

Huan-jun Jiang and Xi-lin Lu

EASEC11-385 (420)

On the seismic behavior of tall buildings with possible foundation uplift

Mehrdad Lotfollahi and Massood Mofid

EASEC11-523 (422)

Structural Control

Room: 201B

Time: 20 Nov., 13:45-15:30

Chair: Chin-Hsiung Loh

Session Keynote:

DESIGN AND CONSTRUCTION OF TAIPEI 101 – THE WORLD' S TALLEST BUILDING

Shaw-Song Shieh and Ching-Chang Chang

EASEC11-683 (758)

Robust h^∞ controller synthesis for MDOF structures with nonlinear behavior

S.Pourazarm, A. Khaki Sedigh, and F. Amini

EASEC11-38 (760)

A hybrid control algorithm of MR-TMD(semi-active TMD) for floor vibration control

Gee-Cheol Kim and Joo-Woon Kang

EASEC11-132 (762)

Tuned mass systems for the dynamic upgrade of buildings and other structures

Peter Nawrotzki

EASEC11-160 (764)

Smart structure under dynamic loading

Herlien D. Setio, Rahmat Widarbo, Pasca Rante Patta, and Sangriyadi Setio

EASEC11-469 (766)

Sensing & Monitoring Techniques III

Room: 201C

Time: 20 Nov., 13:45-15:30

Chair: Chia-Chi Cheng

Session Keynote:

STRUCTURAL HEALTH MONITORING USING SMART SENSORS

Tomonori Nagayama, B. F. Spencer Jr., and Yozo Fujino

EASEC11-204 (656)



- Developing of.net based imote2 data logging and signal processing system for wireless structural health monitoring sensor networks**
Shih-Lin Hung, Tzu-Hsuan Lin, and Fei Qin EASEC11-103 (660)
- Identification of modal parameters of a time variant structure via TVARX model**
W. C. Su and C. S. Huang EASEC11-129 (662)
- Standardized design algorithm of bridge monitoring system for safety network integration in Korea**
Ki-Tae Park, Woosang Lee, Bong-Chul, Joo, Yoon-Koog, and Hwang EASEC11-192 (664)
- Electromagnetic sensors for monitoring of cables**
Gilles Hovhannessian, Jack Lai, and Yu-Sheng, Chen EASEC11-320 (666)
- Fundamental study on health monitoring of bridge by using vehicle-bridge interaction**
Kei Kitagaki, Takashi Yamaguchi, Toshiyuki Kitada, Kunitomo Sugiura, Yoshinobu Oshima, and Kunitaro Hashimoto EASEC11-485 (668)

Computer Application

Room: 201D

Time: 20 Nov., 13:45-15:30

Chair: Hui-Ping Tserng

- Tracking changes in structural models using xml-based representation**
Naveed Anwar and Sara Ghadimi Khasraghy EASEC11-8 (878)
- Developing a workflow for implementing a 4D construction-management tool in a construction firm**
Meng-Han Tsai, Shih-Chung Kang, and Shang-Hsien Hsieh EASEC11-133 (880)
- Developing decision-making support system using risk efficiency with building projects in Taiwan**
Min-Lan Yang, and Tsung-Cheih Tsai EASEC11-238 (882)
- Vispmis: a visual project management information system**
I-Chen Wu and Shang-Hsien Hsieh EASEC11-275 (884)
- Implement case of 4d construction management tools**
Teng-Jau Pei, Shih-Chung Kang, Shang-Hsien Hsieh, Menghan Tasi, and Kai-Chen Yeh EASEC11-429 (886)
- Decision support system for property valuation in Hong Kong**
Chen-Yun Yu, Ka-Chi Lam, and Goran Runeson EASEC11-471 (888)
- Improving quality of graphical representation of barchart scheduling**
Biemo W. Soemardi EASEC11-478 (890)
- Interface Integration of MEP systems in Building Construction**
Chi-Su Tai, Hsiao-Ching Chen, and Sy-Jye Guo EASEC11-715 (892)

Analysis and Design methods I

Room: 201E

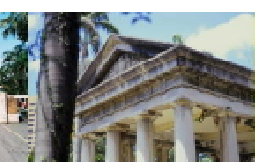
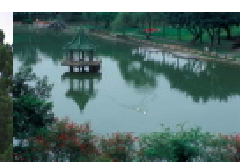
Time: 20 Nov., 13:45-15:30

Chair: Deh-Shiu Hsu

Session Keynote:

FINITE ELEMENT APPLICATIONS IN DENTAL IMPLANTOLOGY

- Hong Guan, Yew-Chaye Loo, and Rudi Van Staden* EASEC11-619 (114)
- Structural topology optimization with multiple materials**
C.-W. Huang and H.-C. Shih EASEC11-112 (116)
- A genetic algorithm for solving layout design problems of rectilinear floor plans**
Anan Nimitawat and Pruettha Nanakorn EASEC11-190 (118)



How nature builds sustaining structures: multiscale mechanics of bone

Christian Hellmich, Andreas Fritsch, and Cornelia Kober

EASEC11-436 (120)

New development of XFINAS software for the analysis of human structures

Panot Chobsilprakob, Ki-Du Kim, Tae Young Kim, Songsak Suthasupradit, and Bohez

EASEC11-555 (122)

Optimal design of cross section shape of beams

Yuhei Soeno, Mitsuharu Kurata, Buntara S. Gan, and Eiji Nouchi

EASEC11-591-2 (124)

Concrete Structure I

Room: 201F

Time: 20 Nov., 13:45-15:30

Chair: Koichi Maekawa

Structural response of frame with prestressed concrete mild-press-joint

Takashi Suyama, H. Sakata, Akira Wada, and Y. Matsuzaki

EASEC11-34 (312)

Effect of supports on shear resistant mechanism of reinforced concrete deep beams

Ken Watanabe, Junichiro Niwa, Yukihiro Tanimura, and Toshiya Tadokoro

EASEC11-141 (314)

Effect of longitudinal reinforcement on lateral strength of high strength concrete columns under eccentric compression

M. Jayakumar, Krish. P. Thiagarajan, and B. Vijaya Rangan

EASEC11-178 (316)

Studies on vibrated and self-compacted RC beams

H S Narashimhan and S. V. Barai

EASEC11-218 (318)

Modified plasticity approach to punching shear in reinforced concrete slabs.

L. C. Hoang

EASEC11-338 (320)

Optimized design process of deep RCC beams

Bhargab .M. Das and Suhrid .K. Sharma

EASEC11-349 (322)

Shear design of reinforced concrete elements with circular cross section

U. G. Jensen and L. C. Hoang

EASEC11-405 (324)

Composite Materials/Structures II

Room: 202A

Time: 20 Nov., 13:45-15:30

Chair: Hak-Eun Lee

Observation of cracking development in steel fibre RC beams under bending and shear by optical full-field measurement method

Timothy Nyomboi and Hiroshi Matsuda

EASEC11-334 (242)

Complete history analysis on headed stud performance in simply supported composite beam

Qing-Tian Su, Ming-Gen Zeng, Bing Dong, Chong Wu, and Yong-Lin Pi

EASEC11-340 (244)

Effects of stresses induced into the reinforcing profiled steel sheetings during floor slab construction on the ultimate strength of the floor slabs in the service stage

Ellijah Chaparanganda, Steven Meths, and Gundo Masvime

EASEC11-403 (246)

Ultimate capacity of steel pile anchorage in concrete filled steel box connection

Bashir Muhammad Aun, Kota Nakayama, Hitoshi Furuuchi, and Tamon Ueda

EASEC11-462 (248)

Composite beam-column flush end plate/blind bolted joints subjected to low probability, high consequence loading

Brian Uy and Daniel Maenpaa

EASEC11-514 (250)

Program - 20 Nov.



Research on the stress transfer mechanisms of joint structures in hybrid truss bridges

Yuji Sato, Shinichi Hino, Kohei Yamaguchi, Dae Yon Won, and Cheon Seong Bong

EASEC11-570 (252)

Micro/Nano Mech.

Room: 203

Time: 20 Nov., 13:45-15:30

Chair: Josef Eberhardsteiner

Session Keynote:

COMPARATIVE STUDY OF SPHERICAL INDENTATION TEST RESULTS USING NEURAL NETWORK MODELS

S. Swaddiwudhipong and E. Harsono

EASEC11-540 (544)

Nanofabrication with carbon nano-cones as indenter tips

Yun-Che Wang, Chuan Chen, Chien-I Chen, and Chi-Chuan Hwang

EASEC11-165 (546)

Poromechanical estimates for elastic limit states of wood

Karin Hofstetter, Christian Hellmich, Thomas K. Bader, and Josef Eberhardsteiner

EASEC11-500 (550)

A discussion on the nonlocal elastic stress field theory for nanobeams

C.W. Lim

EASEC11-557 (552)

Comparison of unit cell and windowing methods for obtaining estimates on macroscopic elasticity tensors of inhomogeneous materials

Helmut J. Böhm and Dieter H. Pahr

EASEC11-597 (554)

Finer-scale characterization of mechanical properties by means of nanoindentation

Christian Pichler and Roman Lackner

EASEC11-562 (556)

Earthquake Engineering V

Room: 201A

Time: 20 Nov., 16:00-17:45

Chair: Takeshi Koike

Session Keynote:

A STUDY ON PLASTIC HINGES PROPERTIES OF REINFORCED CONCRETE STRUCTURES

I. C. Tsai and S.C. Lin

EASEC11-120 (426)

Proposed plan of base isolation for low-rise buildings

Lama Bahbouh, Hitoshi Yamada, Hiroshi Katsuchi, and And Eiichi Sasaki

EASEC11-59 (428)

Seismic performance curves of reinforced concrete short columns failed in shear

Yi-An Li, Pu-Wen Weng, and Shyh-Jiann Hwang

EASEC11-63 (430)

Analytical model of ductile reinforced concrete members allowing for elongation of plastic hinges

Brian Hsuan-Hsien Peng, Rajesh Dhakal, Richard Fenwick, Athol Carr, and Des Bull

EASEC11-86 (432)

Relocation of plastic hinge of substandard beam-column joint by joint planar expansion

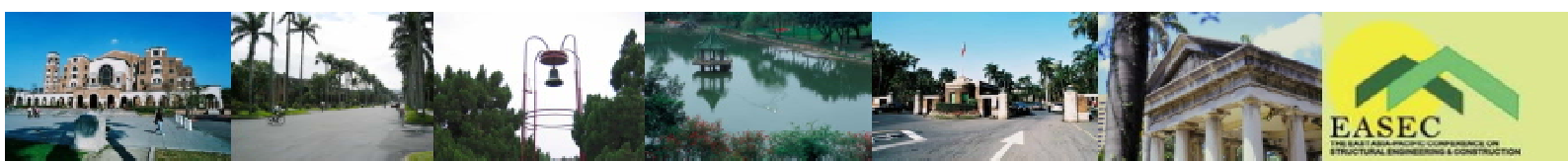
Amorn Pimanmas and Preeda Chaimahawan

EASEC11-149 (434)

Shaking table test research of CFST tall building with vibration energy dissipation dampers

Jie-Min Ding, Jian-Bin Chen, Zhi-Jun He, and Ying Zhou

EASEC11-417 (436)



Bridge Engineering III

Room: 201B

Time: 20 Nov., 16:00-17:45

Chair: Yoshiaki Okui

Load rating assessment of masonry arch bridges.

Marek Posch and Petr Řeřicha

EASEC11-4 (658)

Structural performance of modern glulam timber bridges in Japan

Hideyuki Honda

EASEC11-20 (170)

Time dependent continuity analysis of continuous precast, prestressed concrete girders bridges with cast-in-place decks

Hameed Asif, Min-See Koo, and Do.Dai. Thang

EASEC11-74 (172)

Apply genetic algorithm for single span preflex prestressed concrete girder bridge

Aminullah Akhmad, Min Se Koo, and Jiang Tao Zhang

EASEC11-105 (174)

Structural behavior of reinforced concrete slab rigid frame bridge with h-shaped steels

Saiji Fukada, Yasuo Kajikawa, and Mitsuhiro Tokuno

EASEC11-106 (176)

Quantification of thermal loads in steel box girders

Hans De Backer, Amelie Outtier, and Philippe Van Bogaert

EASEC11-167 (178)

Hybrid prestressed concrete bridges with corrugated steel webs

Jiandong Zhang, Yoshiaki Nishigaki, and Akira Shiji

EASEC11-446 (180)

Condition assessment of a bridge structure under moving vehicle load including uncertainties

S. S. Law and J. Li

EASEC11-603 (182)

Repair and Retrofit I

Room: 201C

Time: 20 Nov., 16:00-17:45

Chair: Ching-Churn Chern

Experimental study on repair effect of carbon fiber sheets for damaged steel members due to corrosion

Hiroshi Sugiura, Kazuo Ohgaki, Naofumi Inaba, Masatsugu Nagai, and Akira Kobayashi

EASEC11-12 (578)

Externally bonded bi-directional CFRP shear reinforcement for RC T-beams with internal shear reinforcement

J. Jayaprakash, Abdul Aziz Abdul Samad, and Ashrabov Anvar Abbasvoch

EASEC11-19 (580)

Bending strength and behavior of damaged-reinforced concrete beams retrofitted by CFRP

Ali Reza Rahai and Mohammad Reza Saberi

EASEC11-108 (582)

Strengthening of masonry structures with carbon fibre-based materials

Jiří Witzany, Tomáš Čejka, and Radek Zigler

EASEC11-419 (584)

Study on strength of connection between pultruded GFRP and steel plates using adhesively bonded and bolted joint

Kenji Kobayashi, Shinichi Hino, Kohei Yamaguchi, and Toru Ohmoto

EASEC11-426 (586)

Debonding strength of CFRP strips glued to steel plate subjected to bending

Toshiyuki Ishikawa, Yu Sasaki, and Kentaro Yamada

EASEC11-460 (588)

Analytical evaluation of FRP-retrofitted concrete structure considering debonding failure under blast loading

Na-Hyun Yi, Ho-Jin Kim, Sung-Bae Kim, Jang-Ho Jay Kim, and Keun-Joo Byun

EASEC11-492 (590)

Repair of earthquake damaged RC interior beam-wide column joints and beam-wall column joints using carbon and glass FRP

B. Li and J. Quek

EASEC11-722 (592)

Scheduling and Risk

Room: 201D

Time: 20 Nov., 16:00-17:45

Chair: Rizal Tamin

Catastrophic risk analysis of infrastructure systems

Kong Tiong Lee, and Qi-Yu Qian

EASEC11-653 (994)

Enhancement of scheduling reliability in building project using theory of constraint

Tsung-Chieh Tsai, and Jui-Feng Liu

EASEC11-78 (996)

Modeling predictive construction durations for building project in Taiwan

Ming-Chiao Lin, Hui-Ping Tserng, S-Ping Ho, and D. L. Young

EASEC11-305 (998)

Developing construction multi-project based change management system

Yu-Cheng Lin, C.-S. Chen, and Y. K. Tsui

EASEC11-315 (1000)

Survey on the cumulative impact of change orders in construction

Ciun-han Chen and Ting-ya Hsieh

EASEC11-316 (1002)

New construction applications of bayesian belief networks

Reza Dehghan and Fereshteh Khoramshahi

EASEC11-360 (1004)

Assessment of contractors' risk response in tunneling projects

Veerarak Likhitrungsilp and Purita Harinthajinda

EASEC11-579 (1006)

Analysis and Design methods II

Room: 201E

Time: 20 Nov., 16:00-17:45

Chair: Yu-Chi Sung

Session Keynote:

IMPROVEMENT OF PRE-CAST ELEMENT FOR GRID-TYPE DAM

Deh-Shiu Hsu, Chau-Ching Wu, and Da-Hsiung Pong

EASEC11-54 (126)

Mathematical simulation of historical masonry structures

Jerzy Szolomicki and Piotr Berkowski

EASEC11-125 (130)

Numerical modeling of the stress-strain behaviour of corner materials in cold-formed stainless steel sections

W. M. Quach and P. Qiu

EASEC11-131 (132)

Examples of artificial neural networks application in civil engineering

Miloš Knežević, Biljana Šćepanović, Duško Lučić, and Radomir Zejak

EASEC11-388 (134)

Finite element modeling of horizontally loaded monopile foundation of large scale offshore wind turbine in non-homogeneity clay

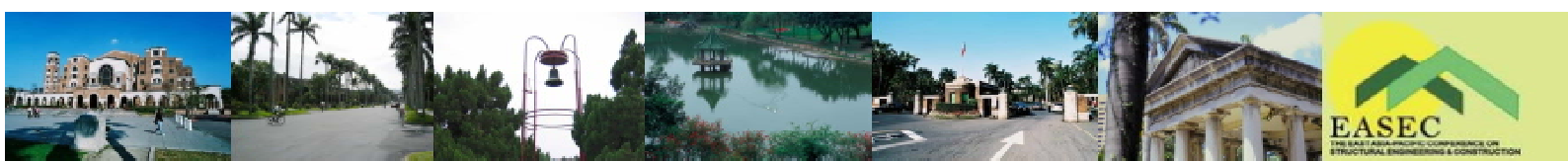
Ke Wu and Shu-Cai Li

EASEC11-389 (136)

Three dimensional finite element analysis of PSC bridge

Songsak Suthasupradit, Sehun Lee, Yun-Joo Byun, Hyun-Gi Kim, Ki-Du Kim, and Chang-Soo Lee

EASEC11-555-2 (138)



Concrete Structure II

Room: 201F

Time: 20 Nov., 16:00-17:45

Chair: Linh Cao Hoang

- Upper bound calculations of shear resistance in arbitrary curved diagonal cracks**
Y. Zhao, L. C. Hoang, and M. P. Nielsen EASEC11-338-2 (326)
- Performance prediction of existing concrete structure by a thermo-dynamic analysis**
Kan Horikiri, Tetsuya Ishida, and Yohei Akioka EASEC11-402 (328)
- A new microplane constitutive model for concrete**
Nguyen Viet Tue, Jia-Bin Li, Ferhun C Caner, and Thomas Püschel EASEC11-407 (548)
- Beam shear design according to Eurocode 2 – a review of the theoretical background**
M. P. Nielsen, L. G. Hagsten, and L. C. Hoang EASEC11-458 (330)
- Back-analysis and experiment research of thermal parameters of concrete**
Jian-zhuang Xiao and Zhi-wen Song EASEC11-518 (332)
- Multi-components load effect analysis on a slender reinforced concrete column using probabilistic SBRA method**
David Pustka, Radim Čajka, Pavel Marek, and Lucie Kaločová EASEC11-587 (334)
- Axially loaded pre-cast foamed concrete sandwich panel**
N. Mohamad, W. Omar, R. Abdullah, Y. L. Lee, and A. A. Abdul Samad EASEC11-614 (336)

Composite Materials/Structures III

Room: 202A

Time: 20 Nov., 16:00-17:45

Chair: Riyad Aboutaha

- Numerical and experimental study on pull-out behaviour of stud shear connector embedded in concrete**
S.W. Liu, Y.Q. Liu, and H. Matsuda EASEC11-5 (256)
- Flexural behaviors of an innovative FRP-concrete composite deck**
Keunhee Cho, Sung Yong Park, Jeong-Rae Cho, Sung Tae Kim, and Byung-Suk Kim EASEC11-163 (262)
- Fatigue strength of angle shape shear connector used in steel-concrete composite slab**
Sung Min Choi, Kazuo Tateishi, Daisuke Uchida, Koichi Asano, and Kiyoshi Kobayashi EASEC11-224 (264)
- A study on the analysis of fiber reinforced plastic composite bridge deck**
Y. F. Li, T. H. Hsu, and S. L. Ting EASEC11-273 (266)

Thermal Behavior of Structures

Room: 203

Time: 20 Nov., 16:00-17:45

Chair: Yeou-Fong Li

- The behaviour under thermal loads of the “ ω -wrap” strategy for the strengthening of the masonry vault structures**
L. Anania, A. Badala, and G. D Agata EASEC11-18 (834)
- Inelastic nonlinear behavior of steel trusses cooled down from a heating stage**
T. J. Lin and Y. B. Yang EASEC11-130 (836)
- Thermal conductivity of ferrocement**
Vatwong Greepala, Pichai Nimityongskul, Tawatchai Tanchaisawat, and Rattapoom Parichartpreecha EASEC11-289 (838)

Program - 20 Nov.



Numerical modeling on fire response of steel semi-rigid beam-column moment connections

Y.J. Chiou, C. J. Mao, P.A. Hsiao, and M. J. Ho

EASEC11-310 (840)

FDS modeling of early fire detection on heritage buildings- the case of Taiwan Shi-Lin presidential residence

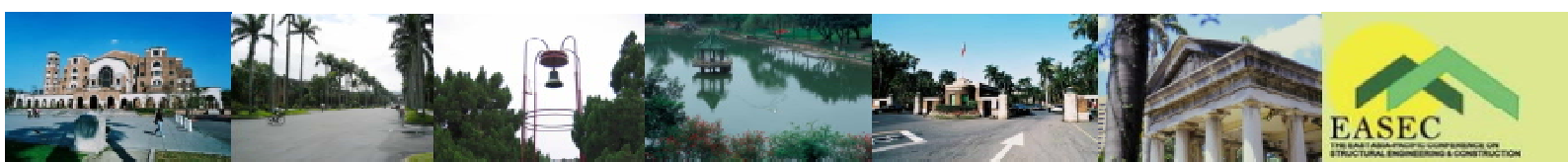
Yin-yung Cho and Ting-ya Hsieh

EASEC11-333 (842)

Investigation of the relationship between the residual compressive strength and UPV of concrete exposed to high temperatures

Chiamen Hsiao, Hsuanchih Yang, and Yiching Lin

EASEC11-421 (844)



Earthquake Engineering VI

Room: 201A

Time: 21 Nov., 09:00-10:30

Chair: Hiroshi Shima

Session Keynote:

RECENT ADVANCES IN PERFORMANCE-BASED BUILDING SEISMIC DESIGN

Christopher Rojahn EASEC11-730 (1024)

Evaluation of steel special moment-resisting frames performance in near fault areas

Mohsen Tehranizadeh and Hamed Movahed EASEC11-137 (438)

Relative performance of steel framed buildings with different bracing systems

Ker-Chun Lin, Chu-Chieh J.Lin, Ker-Chyuan Tsai, Bo-Chen Lin, Chih-Ho Lin, and Heui-Yung Chang EASEC11-257 (440)

Experimental research on hysteretic property of unstiffened tubular x-joints under quasi-static out-of-plane bending

Yiyi Chen, Xiande Meng, Wei Wang, and Bida Zhao EASEC11-264 (442)

Nonprismatic beam element for beams with pre-qualified connections in steel moment frames

D. S. Kim, L. Ridad, K. D. Kim, and M. G. Ko EASEC11-447 (444)

Pendulum tuned mass damper for reducing structural response of MDOF system excited by earthquake

Herlien D. Setio, Erikson Sitanggang, and Saptahari Soegiri EASEC11-469-2 (446)

Bridge Engineering IV

Room: 201B

Time: 21 Nov., 09:00-10:30

Chair: Hong Guan

Extremely low cycle fatigue assessment method for un-stiffened steel pier with box section

Kazuo Tateishi, Tao Chen, and Takeshi Hanji EASEC11-140 (184)

A study on the effect of different causes in geometrical design of bridge piers with emphasis on scouring effect

Farad Fallah and Reza Rahgozar EASEC11-170 (186)

The time and frequency domains analysis of bridges with functional unseating prevention devices

Yeou-Fong Li, Tseng-Hsin Hsu, Kang-Hua Leng, and Jui-Yi Hsu EASEC11-182 (188)

Analysis of stochastic flood flow effects on bridges over water courses

Mihola Marek and Tomica Vladimir EASEC11-230 (190)

Evaluation methods for seismic performance of stiffened steel box members with fiber model

Munemasa Tokunaga, Kiyoshi Ono, Akira Hashimoto, and Nobuo Nishimura EASEC11-234 (192)

Identification of cable-tensions for long span cable-stayed bridges

Qiao Li and Deshan Shan EASEC11-301 (194)

Seismic performance of skew bridge with friction type rubber bearings

Kuo-Chun Chang, Chi-Hung Lu, Wei-Chin Zhang, and Kuang-Yen Liu EASEC11-373 (196)



Repair and Retrofit II

Room: 201C

Time: 21 Nov., 09:00-10:30

Chair: Chuin-Shan Chen

Session Keynote:

DYNAMIC STRUCTURAL INTEGRITY ASSESSMENT OF FULL-SCALE STRUCTURES

Gregory L. F. Chiu, Alan P. Jeary, and Charles H. Thornton

EASEC11-493 (594)

Evaluation of strength recovery of repaired steel pipe piles

Yasuo Kitane, Naohiko Watanabe, and Yoshito Itoh

EASEC11-48 (596)

Strengthening of an excessively deflected ten years old long-span prestressed concrete bridge

Xuefei Shi, Yanwei Niu, and Xin Ruan

EASEC11-91 (598)

Seismic retrofit of full-scale RC columns using external jacketing methods

Min-Lang Lin, Pei-Ching Chen, and Keh-Chyuan Tsai

EASEC11-213 (600)

Numerical simulation of model tests of pre-damaged bridge decks strengthened by concrete overlays

Yvonne Theiner and Günter Hofstetter

EASEC11-422 (604)

An advanced seismic retrofitting work for RC-storied building using ACM bracing method

Tomiya Takatani and Koichi Ono

EASEC11-527 (606)

Functional bearing system for bridge seismic retrofit application

Chi-Heng Chiang, Dyi-Wei Chang, Ping-Hsun Huang, and Kuo-Chen Chang

EASEC11-654 (608)

BOT and Financing

Room: 201D

Time: 21 Nov., 09:00-10:30

Chair: S. Ping Ho

Session Keynote:

FINANCING DECISIONS OF CONSTRUCTION SMES

Chotchai Chareonngam and Vivi Megawati

EASEC11-497 (864)

A novel financial analysis model with dynamic discount rate for BOT projects

Borliang Chen, Chih-Tsang Lin, Chen-Hung Tang, and King-Long Wang

EASEC11-312 (866)

Current practices in design and construction of tall buildings

Abbas Aminmansour

EASEC11-442 (868)

The analysis of bankruptcy cost on optimum capital structure of BOT projects

Borliang Chen, Chih-Tsang Lin, H. C. Shiong, and King-Long Wang

EASEC11-312-2 (870)

A survey study on risks and market entry strategies to PPI road and railway sectors in china and Vietnam

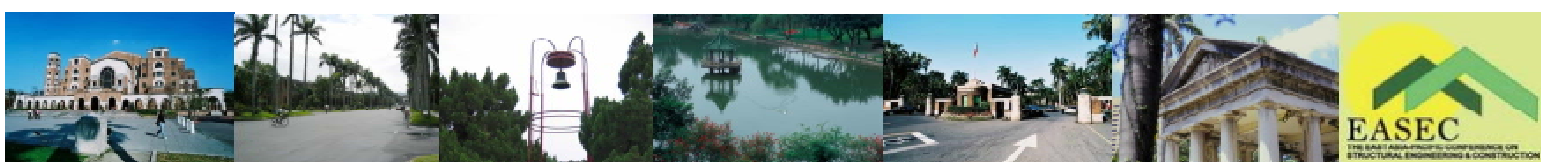
Sha Zheng, Andrew Wang, Jassica Lin, Chi-Yuh Tsai, Andre Permana, and Robert Tiong

EASEC11-641 (872)

The analysis of optimum repayment plan model for BOT projects

Borliang Chen, Chih-Tsang Lin, Chen-Hung Tang, and King-Long Wang

EASEC11-671 (874)



Structural Stability I

Room: 201E

Time: 21 Nov., 09:00-10:30

Chair: Franz G. Rammerstorfer

Minimum stiffness of longitudinal flat-bar stiffeners for compression flange in steel box girder - a parameter study

Do Dai Thang, Min-Se Koo, and Hameed Asif

EASEC11-72 (806)

Influence of residual deformation on stability of temporary support used in bridge construction

Hiroki Takahashi, Katsutoshi Ohdo, and Saiji Takanashi

EASEC11-101 (808)

Structural behavior of pin-supported R/C arch

Takashi Hara and Masashi Kaneda

EASEC11-249 (810)

Effect of connection ductility in the seismic performance of steel moment frames

Chu-Chieh J. Lin, Ker-Chun Lin, Ker-Chyuan Tsai, Sing-You Yeh, and Heui-Yung Chang

EASEC11-255 (812)

The relation between buckling behaviour and residual weld stresses in steel tied arch bridges

Amelie Outtier, Hans De Backer, and Philippe Van Bogaert

EASEC11-322 (814)

Buckling and vibration of rectangular plates with elastic edge supports subjected to linearly varying in-plane loading

S.K. Lai and Y. Xiang

EASEC11-361 (816)

Joint Behavior

Room: 201F

Time: 21 Nov., 09:00-10:30

Chair: Brian Uy

Effect of flange width-thickness ratio parameter on ultimate strength and ductility of steel beam-to-column connections

Victor Maina, Kiyoshi Ono, Yuji Mishima, and Nobuo Nishimura

EASEC11-13 (528)

A study on fatigue crack propagation path in T-shape welded joints

Kazuo Tateishi, Keisuke Tsuchiya, and Takeshi Hanji

EASEC11-221 (530)

Analytical study of the compressive behavior of steel BRBF gusset plate connections

Chung-Che Chou and Pei-Jin Chen

EASEC11-297 (532)

Experimental study on bending behavior of high strength bolted tensile joints with sealant

Yasuo Suzuki, Megumi Nozawa, Akinori Nakajima, and Takashi Yamaguchi

EASEC11-414 (534)

Improvement of extremely low cycle fatigue strength of welded joints

Kazuo Tateishi, Shuji Hanibuchi, and Takeshi Hanji

EASEC11-468 (538)

Fatigue crack propagation behavior of the fillet welded joints under plate bending

Biehn Baik, Kentaro Yamada, and Toshiyuki Ishikawa

EASEC11-484 (540)

Program - 21 Nov.



Concrete Material I

Room: 202

Time: 21 Nov., 09:00-10:30

Chair: Shyh-Jiann Hwang

Mechanical properties of green concrete using Hwangtoh admixture and pet fiber

Geonho Hong, Jangho Jay Kim, and Jinkyu Song

EASEC11-24 (274)

Compressive strength of sandless concrete

Hong-Jian Du and Kiang-Hwee Tan

EASEC11-87 (276)

Wastewater sludge from the semiconductor industry as a construction material

Tzen-Chin Lee, Wei-Jer Wang, Ta-Sen Lin, Po-Hua Lee, and Chung-Ho

Tsai

EASEC11-152 (278)

Experimental study on the use of natural zeolites as partial replacement for cement in concrete

Jonie Tanijaya and Djwantoro Hardjito

EASEC11-153 (280)

Investigation of local behavior of high strength concrete with large quantity of coarse aggregate by using image analysis

Yasutaka Noma, Ken Watanabe, Tomohiro Miki, and Junichiro Niwa

EASEC11-207 (282)

Earthquake Engineering VII

Room: 201A

Time: 21 Nov., 10:50-12:35

Chair: Yi-Yi Chen

Session Keynote:

A SIMPLE APPROACH FOR REALLOCATING VISCOUS DAMPERS

Liang-Jenq Leu, Tzu-Hsin Chang, and Jen-Ter Chang

EASEC11-692 (452)

A simple method of determination of total input energy to a structural system during a seismic activity

Rajeev Dua

EASEC11-62 (454)

Pseudodynamic testing and verification of simplified buckling restrained components

Shih-Yu Chu, S-L Lin., and Shih-Chieh Lo

EASEC11-79 (456)

A shaking-table test for shallow buried urban utility tunnel

Ai-Hua, Wen, Ai-Ping Tang, Rui-Cheng Feng, and Xi-Yuan Zhou

EASEC11-84 (458)

Out-of-plane shaking table tests for URM walls

Yi-Hsuan Tu, Tsung-Hua Chuang, and Pai-Mei Liu

EASEC11-104 (462)

Advanced algorithm for nonlinear dynamic analysis

Mahua Chakrabarti and Sachin Jadhav

EASEC11-532 (794)

Bridge Engineering V

Room: 201B

Time: 21 Nov., 10:50-12:35

Chair: Koji Maegawa

A new design idea for a very long suspension bridge

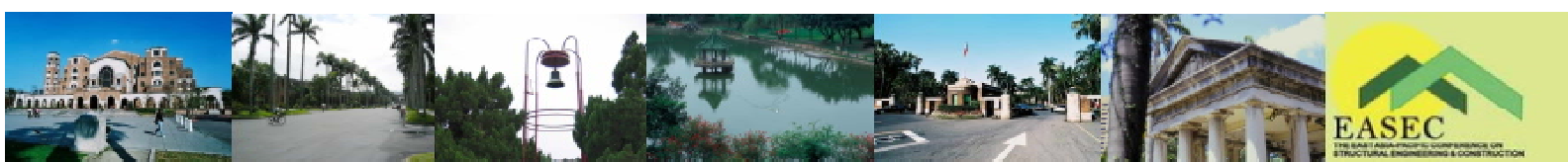
Marco Peroni

EASEC11-39 (198)

Effect of tower height on the internal forces and deformation of the suspension bridge

Phung Manh Tien and Vu Tri Thang

EASEC11-50 (200)



Study on the decrease and eliminate of welding residual stress in cable-stayed bridges

Liu Xiaoyu

EASEC11-58 (202)

Past development and feasibility study of super-long span bridges

Jiunn-Yin Tsay and Y. B. Yang

EASEC11-145 (204)

A design method of continuous composite girders under negative bending moment against restrained distortional buckling

Yshiaki Okui, T. M. Bandula Heva, Masato Komuro, and Masatsugu Nagai

EASEC11-155 (206)

Pushover analysis of curved steel bridges for evaluating seismic performance and unseating prevention

Dyi-Wei Chang, Cheng-Wei Lin, Yew-Tsang Lin, and Dzung-Chwang Dzung

EASEC11-183 (208)

Analysis of 3 span PSC composite beams by lifting up and laying down the inner supports

Jiangtao Zhang, Minse Koo, Jiangtao Zhang, and A. Aminullah

EASEC11-306 (210)

Sensing & Monitoring TechniquesIV

Room: 201C

Time: 21 Nov., 10:50-12:35

Chair: Bing Li

Session Keynote:

LONG-TERM HEALTH MONITORING OF A BOX-GIRDER BRIDGE

Keigo Suzuki, Chitoshi Miki, Kiyoshi Ono, and Atsushi Tanabe

EASEC11-116 (670)

The development of high efficient structure deformation monitoring system

Shang-Hsien Lai, Yaw-Shen Tu, Yu-Min Chang, Shy-Ming Peng, and Yung-Chuan Chen

EASEC11-278 (672)

Error analysis and measurement uncertainty for a reference dual-wavelength grating sensing system

Jian-Neng Wang, Jaw-Luen Tang, and Der-Cheng Chen

EASEC11-286 (674)

The development of sensor network for structural health monitoring using canopen protocol

Wonsiri Punurai and Komgrit Jaksukam

EASEC11-356 (676)

Crack detection of plate structures by a Bayesian probabilistic methodology

HF Lam, HM Chow, and T Yin

EASEC11-379 (678)

Damage detection of transmission tower based on model reduction utilizing ambient vibration data

T Yin, HF Lam, HM Chow, and HP Zhu

EASEC11-381 (680)

Identification of degrading process of tunnel lining concrete

Osamu Maruyama, A. Sutoh, T.Satoh, and H. Nishi

EASEC11-408 (682)

Infrastructure

Room: 201D

Time: 21 Nov., 10:50-12:35

Chair: C. M. Tam

Rigid bridge substructure construction process analysis using dynamic simulation

Nai-Hsin Pan and Kuei-Yen Chen

EASEC11-197 (946)

Computer-based design and simulation of bridge substructure

Dyi-Wei Chang, Jaw-Lieh Wang, Shu-Jen Wu, and Chuen-Yu Liou

EASEC11-225 (948)



The changes of surface water characteristic as raw water source for water supply treatment plant in Jakarta

Djoko M. Hartono

EASEC11-522 (950)

Study analysis of index accuration in construction estimation cost between bow, SNI 2003 and project real cost

Hermawan Tan

EASEC11-542 (952)

Evaluation of ISO-based quality implementation practice among construction contractors

Vachara Peansupap, Tanit Tongthong, and Cheryl Lyne Capiz

EASEC11-560 (954)

Optimal bridge management system by using the Markovian transition probability model and optimization technique

Kazuhiro Taniwaki, Yuuichi Ankyu, and Mitao Ohga

EASEC11-580 (956)

Constructability practices of low cost apartment developers in Jakarta, Indonesia

Kartika Dewi Gondoboentoro and Ajibade Ayodeji Aibinu

EASEC11-622 (958)

Structural Stability II

Room: 201E

Time: 21 Nov., 10:50-12:35

Chair: Takashi Hara

Development of an out-of-plane buckling curve for curved elements

Amelie Outtier, Hans De Backer, and Philippe Van Bogaert

EASEC11-322-2 (818)

In-plane buckling and design of arches

Jiho Moon, Ki-Yong Yoon, Tae-Hyung Lee, and Hak-Eun Lee

EASEC11-323 (820)

Buckling and post-buckling phenomena of cylindrical shell under axial compression and torsion loading

Cheng Zhao, Hiroshi Matsuda, Chihiro Morita, and Mei Huang

EASEC11-337 (822)

Effects of rotational end restraints on nonlinear in-plane buckling of shallow arches

Yong-Lin Pi, Mark Andrew Beadford, and Francis Tin-Loi

EASEC11-374 (824)

Dynamic stability analysis of thick plates with varying thickness and concentrated mass on inhomogeneous pasternak foundation

Yong-Soo Lee and Il-Jung Kim

EASEC11-481 (826)

Stability analysis of a cylindrical arc shell

Y. C. Tzeng and C. C. Chern

EASEC11-519 (828)

Durability I

Room: 201F

Time: 21 Nov., 10:50-12:35

Chair: Yin-Wen Chan

Session Keynote:

REPAIR OF CORROSION DAMAGED STRUCTURE USING VAPOR PHASE CORROSION INHIBITOR

P.B.Ullagaddi, Ajay Sudhiir Radke, and Dhananjay V.Tayde

EASEC11-1 (340)

Durability of steel bridge coating systems on plate edges with different corner geometries

Yoshito Itoh, Yoshiyuki Shimizu, Naohiko Watanabe, and Yasuo Kitane

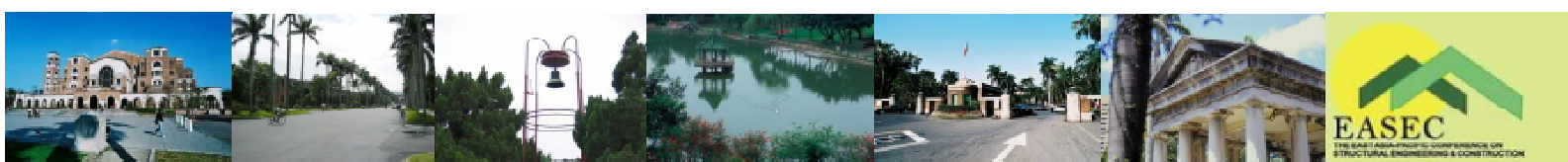
EASEC11-113 (342)

Remaining fatigue life estimation of a riveted bridge connection using the new damage indicator-based sequential law

Mitao Ohga, Sudath Chaminda Siriwardane, Ranjith Dissanayake, and

Tatsumasa Kaita

EASEC11-281 (344)



Safety assessment of reinforced concrete deck bridges under corrosion attack

Kamal Karunananda, Mitao Ohga, Ranjith Dissanayake, and Tatsumasa

Kaita

EASEC11-292 (346)

Chloride penetration in marine concrete structures after 40 years in service

Hiroshi Yokota, Ema Kato, Yoshikazu Akira, and Hiroshi Hamada

EASEC11-508 (348)

Earthquake Engineering VIII

Room: 201A

Time: 21 Nov., 13:45-15:30

Chair: Qiang Xue

Session Keynote:

APPLICATION OF SEISMIC DAMPERS FOR BUILDING STRUCTURES

Eric Chyng-Maw Su

EASEC11-705 (464)

Construction of the fragility curves of expressway embankment based on actual earthquake data

Kiku Mizuno, Yoshihisa Maruyama, Fumio Yamazaki, Yoshiyuki Tsuchiya, and Hiroyuki Yogai

EASEC11-121 (466)

Development of shaking table test techniques for simulation of very large floor responses

Xiaodong Ji, Kouichi Kajiwara, Takuya Nagae, Ryuta Enokida, and Masayoshi Nakashima

EASEC11-196 (468)

Seismic damage analysis of FEI-TSUI arch dam using finite element program

ABAQUS

Yean-Seng Wu, Shin-Yuan Yu, and Chen-Shan Kung

EASEC11-199 (470)

Study on the concrete column deformation pattern with its lateral displacement

Shang-Hsien Lai, Yaw-Shen Tu, Yu-Min Chang, Shy-Ming Peng, and Yung-Chuan Chen

EASEC11-278-2 (472)

Dynamic analysis of plates resting on elastic foundations

Suchibrata Dalal and Mahua A. Chakrabarti

EASEC11-444 (570)

Bridge Engineering VI

Room: 201B

Time: 21 Nov., 13:45-15:30

Chair: Chih-Peng Yu

A study on cable-stayed CFT arch bridge

Shun-Ichi Nakamura, Kazutoshi Kato, and Hiroyasu Tanaka

EASEC11-179 (212)

Wind buffeting analysis of long span bridges

Dorian Janjic, Heinz Bokan, and Andreas Domaingo

EASEC11-240 (214)

Investigation of stay cable vibration of the Kao Ping His bridge under seismic loading

M. Y. Liu, L.C. Lin, and P. H. Wang

EASEC11-352 (216)

Seismic response control of cable-stayed bridge tower with low yield steel hysteretic damper

Shehata E. Abdel Raheem and Toshiro Hayashikawa

EASEC11-413 (220)

Sensitivity analysis of structural parameters for super-span cable-stayed bridge and its application

Qiao Li, Xuewu Dong, Can Huang, Yizhi Bu, and Qinghua Zhang

EASEC11-440 (222)

Parametric study of a harp-shaped cable stayed bridge

M. Talha Junaid

EASEC11-537 (224)



Sensing & Monitoring Techniques V

Room: 201C

Time: 21 Nov., 13:45-15:30

Chair: Chitoshi Miki

Feasibility study of evaluating the length of capped piles with impact response method incorporated with array receivers

Shu-Tao Liao, Jian-Hua Tong, and Chin-Tein Chang

EASEC11-311 (684)

Statistical optimal sensor placement technique for structural model updating

HM Chow, HF Lam, and T Yin

EASEC11-380 (686)

Crack identification in structures using dynamic response data

Alan P. Jeary, Gregory L. F. Chiu, and Charles H. Thornton

EASEC11-392 (688)

Detection of pavement cracks with image processing techniques using parallel image-filters

Takafumi Nishikawa, Junji Yoshida, and Yozo Fujino

EASEC11-491 (690)

An experimental study on precipitation measurement using leaky coaxial cables

Tsukasa Mizutani, Yu Fuke, Yozo Fujino, Tomonori Nagayama, and Yusuke Mizuno

EASEC11-553 (692)

Structural parameter identification by use of additional known masses and its application to damage detection

Minh-Hung Dinh, Tomonori Nagayama, and Yozo Fujino

EASEC11-556 (694)

Applying smart sensing network technology to develop bridge structural monitoring system

Yun-Bin Lin, Chun-Chung Chen, Kuo-Chun Chang, Lu-Sheng Lee, Li-Ting Lin, and Shi-Cheng Weng

EASEC11-590 (696)

Knowledge Management

Room: 201D

Time: 21 Nov., 13:45-15:30

Chair: Wannawit Taemthong

Simplifying on-site report completion for material management

Ming-Kuan Tsai, Chung-Yu Lin, and Jyh-Bin Yang

EASEC11-35 (962)

Identification of construction waste in road & highway construction projects

Bambang Trigunarsyah, Elkhobar M. Nazech, and Denanda Zaldi

EASEC11-95-2 (964)

A study of measurement and deducing an opportunity of improvement for the knowledge management in a construction company

Kim Tae Han, Hwang Doo Won, and Choi Yoon Ki

EASEC11-189 (966)

Knowledge management practices in Thai construction projects

W. Teerajetgul, C. Charoenngam, and P. Vorasubin

EASEC11-437 (968)

Web collaborative system for experience exchange and management in construction

Fu-Cih Siao, Yu-Jyh Su, and Yu-Cheng Lin

EASEC11-552 (970)

Effects of experience & interruption in a construction inspection task

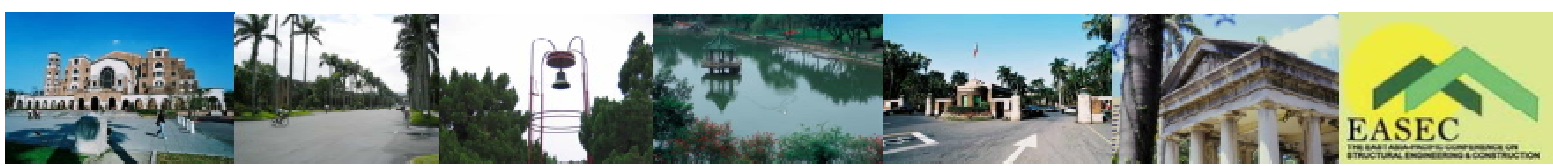
Swapan Saha

EASEC11-604 (972)

How knowledge is shared in organizations: model and empirical evidence

S. Ping Ho, Yaowen Hsu, and C. Wang

EASEC11-657 (974)



Sustainability

Room: 201E

Time: 21 Nov., 13:45-15:30

Chair: Kazuhiro Taniwaki

Recycled aggregate production in hong kong: From centralized plant to mobile setting

C. M. Tam and Vivian W. Y. Tam

EASEC11-33 (1010)

Sustainable Indonesian construction industry- serious challenges and development strategy

Rizal Zainuddin Tamin and Puti Farida Marzuki

EASEC11-171 (1012)

Developing appraisal indicators for sustainable construction in Taiwan

Rong-yau Huang and Wei-ting Hsu

EASEC11-348 (1014)

Research of sustainable building location based on field theory

Yue LI, Xiaoming Wang, and Yukai Wang

EASEC11-367 (1016)

Process design for programming of conservation and utilization project in historic area

Xiao-Ming Wang, Lu Cheng, Hong Hua, and Jun Yang

EASEC11-427 (1018)

Housing construction for sustainability

I. Patnaikuni, T. Molyneaux, and J. Novotny

EASEC11-515 (1020)

Critical success factors framework of construction organization for green building project

Po-Han Chen and Yuan-Yuan Li

EASEC11-639 (1022)

Durability II

Room: 201F

Time: 21 Nov., 13:45-15:30

Chair: Ajay Radke

Strength and ductility enhancement of reinforced HSC columns confined with high-strength transverse steel

Tavio, P. Suprobo and B. Kusuma

EASEC11-14 (350)

Experimental determination of cathodic current and oxygen consumption rate of corroding steel in concrete under varying ambient relative humidity

Raja Rizwan Hussain and Tetsuya Ishida

EASEC11-390 (354)

Analytical investigations of an influence of corrosion on the stress at vicinity of weld toe between lower flange and sole plate

Isao Ito and Koji Kinoshita

EASEC11-473 (356)

Fatigue durability evaluation of fillet welded joint of trough rib to deck plate of orthotropic steel deck

K. Murai, S. Ya, K. Yamada, and T. Ishikawa

EASEC11-490 (358)

The analytical study on remaining compressive strength and ultimate behaviors for locally-corroded flanges

Tatsumasa Kaita, Yuta Kawasaki, Hidenori Isami, Mitao Ohga, and Katashi Fujii

EASEC11-572 (360)

**Concrete Material II****Room: 202**

Time: 21 Nov., 13:45-15:30

Chair: Christopher Rojahn

Experimental study on the mixed proportion design of lightweight concrete using the sludge kilned coarse aggregate from Shihmen reservoir*Hsi-Chi Yang, Kuo-Yu Liao, Jiun-Wei Wu, and Lung-Sheng Chen*

EASEC11-164 (284)

Utilization of incinerator bottom ash as a partial replacement for cement raw material*N. Mohd Kamari and H. Abdul Razak*

EASEC11-208 (286)

Sulfate and sulfuric resistance of fly ash geopolymer*Thanudkij Chareerat and Supakij Nontananandh*

EASEC11-239 (288)

Effect of binder content and composition on strength of fly ash-concrete*Muhammad-Akram Tahir, Miss-Ammara Nusrat, and Essa-Bin Moeen*

EASEC11-288 (290)

Change in self-compactability of fresh concrete due to pumping*Tomohiro Nakayama and Masahiro Ouchi*

EASEC11-291 (292)

Tensile bond strength of self compacting mortar with high dosage of superplasticizer*Kazutaka Yasui and Masahiro Ouchi*

EASEC11-293 (294)

Mechanical characteristics of steel rebars available in Indonesia and its effects on structural responses of ductile R/C structural elements*Iswandi Imran, A.C. Retika, and R. Simatupang*

EASEC11-586-2 (296)

Earthquake Engineering IX**Room: 201A**

Time: 21 Nov., 16:00-17:45

Chair: I-Chau Tsai

Full-scale test of composite frame subjected to long-period ground motions–E-defense shaking table test*Yulin Chung, Takuya Nagae, Kunio Fukuyama, Kouich Kajiwara, Takahito Inoue, Toko Hitaka, and Masayoshi Nakashima*

EASEC11-268 (476)

Light weight steel structure connections behavior in cyclic loading*Ren-Jwo Tsay and Yu-Ren Hwang*

EASEC11-359 (478)

Seismic behavior of a 3d self-centering design reinforced concrete sub-structure under bi-axial loads*Chin-Tung Cheng, Hsing-Hong Chen, Ker-Chun Lin, Pei-Ching Chen, and Sheng-Jhih Jhuang*

EASEC11-369 (480)

Seismic analysis of cantilever retaining wall*Mahua Chakrabarti and Paresh Mestri*

EASEC11-441 (482)

Develop biaxial hysteretic model for reinforced concrete structures*Shu-Hsien Chao and Chin-Hsiung Loh*

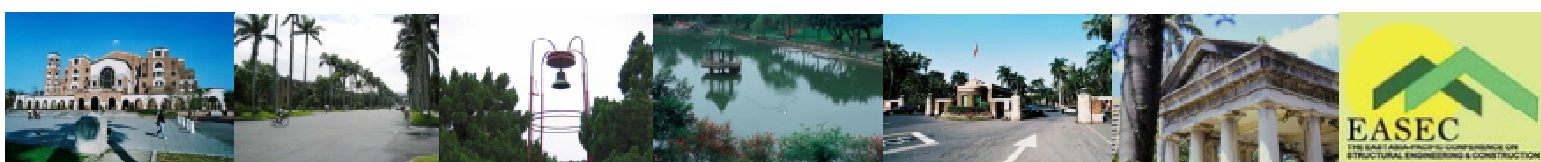
EASEC11-631 (486)

Analytical and experimental studies on seismic behavior of buildings with mid-story isolation*Kuo-Chun Chang, Jenn-Shin Hwang, Shiang-Jung Wang, Bo-Han Lee, Meng-Hui Lin, and Chun-Chin Chiang*

EASEC11-667 (488)

Experimental investigation of a precast wall with end columns (prewec) system*S Aaleti, R S Henry, K Y Liu, S Sritharan, and KC Tsai*

EASEC11-375



Geotechnical Engineering

Room: 201B

Time: 21 Nov., 16:00-17:45

Chair: Lai-Yun Wu

- Detection of liquefied sites using seismic ground motion records**
Osamu Kawai, Fumio Yamazaki, and Yoshihisa Maruyama EASEC11-151 (510)
- Analysis of elastic consolidation due to fluid extraction from a cross-anisotropic poroelastic half space**
John C.-C. Lu and Feng-Tsai Lin EASEC11-250 (512)
- Modelling and monitoring of a urban underground excavation**
R. Fico, A. Cantone, F. Cavuoto, M. Covotta, and A. Mandolini EASEC11-412 (516)
- A prediction formula for axial bearing capacity of a single driven pile based on SPT “n” values and static load test**
Kuang-Hsiang Chen and Barry Kok Wai Choo EASEC11-430 (518)
- Reliability of deep foundations**
Mahua Chakrabarti, Vijay Nalawade, and Amol Kshirsagar EASEC11-475 (520)
- An identification of correlation between demand performances to damage of tunnel lining using AHP**
Atsushi Sutoh, Takashi Sato and Hiroaki Nishi EASEC11-483 (522)
- Determination of unbonded length for strands of ground anchors using impact responses of 1-D member theories**
Chih-Peng Yu, Chia-Chi Cheng, Shih-Tsung Hsu, and Jiunnren Lai EASEC11-655 (524)

Sensing & Monitoring Techniques VI

Room: 201C

Time: 21 Nov., 16:00-17:45

Chair: Shu-Tao Liao

- Image-based surface strain field measurement of a pre-stressed RC-wall cyclic test**
Yuan-Sen Yang, Chang-Wei Huang, and Bei-Ting Chen EASEC11-254 (698)
- Measurement of non-linear damping in high-rise buildings**
Chung-Kai Wong and Alan Jeary EASEC11-512 (700)
- System identification and seismic performance evaluation of instrumented cable-stayed bridges**
Dionysius M. Siringoringo and Yozo Fujino EASEC11-516 (702)
- A distributed autonomous active-sensing approach for structural health monitoring using smart sensors**
Mitsushi Ushita, Tomonori Nagayama, and Yozo Fujino EASEC11-551 (704)
- Computerized visual inspection system in Taiwan**
Gilles Hovhanessian, Wei Lee, Jack Lai, and Alexandre Chaperon EASEC11-601 (706)
- Automated bridge coating defect recognition using adaptive ellipse approach**
Po-Han Chen, Ya-Ching Yang, and Luh-Maan Chang EASEC11-647 (708)
- Parametric study for key parameters involved in the extraction of fundamental bridge frequency by an indirect method**
Yeong-Bin Yang and Kai-Chuen Chang EASEC11-672 (710)

**Maintenance****Room: 201D***Time: 21 Nov., 16:00-17:45*

Chair: Hermawan Tan

A study of standardization of facility pipeline layout in large scale hospital buildings*Ning-Chau Chiu and Sy-Jye Guo*

EASEC11-203 (978)

The prefabrication of electronic and mechanical system of a construction project*H. Ping Tserng, Samuel Y.L. Yin, and Wu- Jue Hong*

EASEC11-217 (980)

Maintenance cost and budget for university buildings*Sy-Jye Guo, Chang-Hsien Li, and Pei-Jia Chen*

EASEC11-247 (982)

Process design for programming of conservation and utilization project in historic area*Xiao-Ming Wang, Lu Cheng, Hong Hua, and Jun Yang*

EASEC11-398 (984)

Design and construction of energy awareness townhouses in hot and humid climate*W. Taemthong*

EASEC11-526 (986)

Enhancing facility inspection and maintenance management using RFID and web technology*Fei-Fa Huang, Fu-Cih Siao, Hsiao-Hsiao Lee, and Yu-Cheng Lin*

EASEC11-541 (988)

Study on maintenance decision-making of exiting buildings based on system optimization*Xiao-Ming Wang, Ge Ruan, and Ming Li*

EASEC11-398-2 (990)

Soil Structure Interaction**Room: 201E***Time: 21 Nov., 16:00-17:45*

Chair: Shen-Haw Ju

Seismic history analysis of two-way asymmetric-plan buildings with soil-structure interaction*Jui-Liang Lin and Keh-Chyuan Tsai*

EASEC11-46 (714)

Numerical analysis of the foundation structures with sliding joint*Radim Čajka and Petr Maňásek*

EASEC11-89 (716)

Interaction between prestressed foundations and subsoil – influence of shear stress in contact area to state of stress in foundation*Radim Čajka and David Sekanina*

EASEC11-90 (718)

Analytical solution for soil-structure interaction in EPB shield tunneling*Shouju Li, Yingxi Liu, Longtan Shao, and Wei Sun*

EASEC11-410 (722)

Performance based seismic evaluation of buildings considering soil-structure interaction*S.S.Dyavanal and S. A. Annigeri*

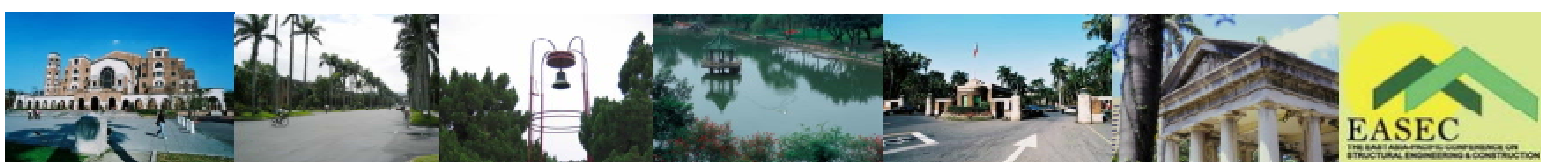
EASEC11-509 (724)

Bearing capacity of embedded cylindrical object*Yat-Sun Lee, Man-Chung Ng, Chi-Yin Cheuk, Kam-Tam Tse, and Llewellyn Chun-Ming Tang*

EASEC11-566 (726)

Finite element modelling for piled raft foundation in sand*E.Y. N Oh, M. Huang, C. Surarak, R. Adamec, and A. S. Balasurbamianam*

EASEC11-577 (728)



Durability III

Room: 201F

Time: 21 Nov., 16:00-17:45

Chair: Yoshito Itoh

Durability related design of GFRP bar reinforced concrete structures

Jianwei Huang and Riyad S. Aboutaha

EASEC11-136 (362)

Probabilistic approach for anticorrosion design of reinforced concretes under air-borne salt attack

Kai-Lin Hsu and Yi-Ze Lin

EASEC11-168 (364)

Durability of polystyrene concrete bricks under Malaysian atmosphere exposure

I. Ismail and M.O. Mostafa

EASEC11-467 (366)

Numerical simulation of chloride-induced steel corrosion in underground RC structures under various water leakage history

Yuya Takahashi, Sae Kagawa and Tetsuya Ishida

EASEC11-506 (368)

An experimental study on the effectiveness of surface improvement material for concrete structures

Hirotaaka Hazehara, Koji Takewaka, Toshinobu Yamaguchi, and Nao Shirasawa

EASEC11-546 (370)

An experimental study on cathodic protection using galvanic anode system under severe corrosion environment

Koji Takewaka, Toshinobu Yamaguchi, Koji Kawamata, and Masao Nagura

EASEC11-548 (372)

Concrete Material III

Room: 202

Time: 21 Nov., 16:00-17:45

Chair: Chung-Wei Huang

Session Keynote:

EFFECT OF DETERIORATION PROCESSES ON EFFECTIVE STRENGTH OF CONCRETE HIGHLIGHTED BY MEANS OF NUMERICAL LIMIT ANALYSIS

Josef Füssl, Roman Lackner, and Josef Eberhardsteiner

EASEC11-434 (272)

Tensile bond strength of self-compacting mortar using artificial lightweight fine aggregate

Takahiko Muto and Masahiro Ouchi

EASEC11-295 (298)

Controlled low-strength material using industrial hazardous waste incinerator bottom slag and refined kaolin

Hashim Abdul Razak, Sivakumar Naganathan, and Siti Nadzriah Abd Hamid

EASEC11-365 (300)

Spatially averaged constitutive model of HPFRCC with multi-directional cracking

Kohei Nagai, Benny Suryanto, and Koichi Maekawa

EASEC11-391 (302)

The effect of zeolite on microstructure of blended cement paste

Chuwit Napia, Theerawat Sinsiri, and Prinya Chindaprasirt

EASEC11-543 (304)

New jacketing methods to enhance the performance of concrete cylinders

M. C. Baek, E. S. Choi, S. C. Cho, Y. S. Chung, and D. W. Yang

EASEC11-658 (308)

Nishino Medal and Prize 2008



During the period 1984 – 1985, Professor Fumio Nishino (1936-2007) and his colleagues at the Asian Institute of Technology set up the organizational structure for the East Asia-Pacific Conference series on Structural Engineering and Construction (EASEC) - an initiative that led to the first EASEC conference in Bangkok in January 1986. In the subsequent two decades EASEC has become a premier conference series, having to date 10 conferences held in different cities in Asia. Professor Nishino's contributions in founding and supporting EASEC were enormous and the success of EASEC was largely due to his enthusiastic and ceaseless efforts. In addition, he worked actively and successfully in promoting the discipline of structural engineering and construction in the Asia region and beyond.

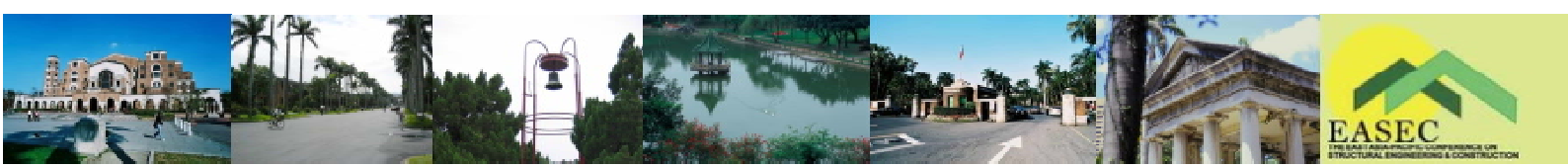
In recognition of his efforts, initiatives and achievements, the EASEC International Steering Committee has established two awards in the honor of Professor Nishino, so that henceforth he will be remembered formally by the EASEC community every time the Conference is held. The awards and commendations will be made in two categories as follows:

1. The Nishino Medal

To be awarded at each future EASEC conference to a distinguished senior engineer who has been judged to have made internationally recognized contributions in the area of structural engineering and construction through research, development and/or professional practice in the Asia-Pacific region.

2. The Nishino Prize

To be awarded concurrently at each future EASEC conference to one or two young engineers (age below 45 years) from the Asia-Pacific region who have made significant contributions and shown potential for considerable future achievements in the area of structural engineering and construction through research, development and/or practice.



Professor Arthur N. L. Chiu, Ph.D., P.E. (1929 - 2006)



Arthur N. L. Chiu was a strong advocate and supporter of EASEC's ideals of promoting the exchange of information and knowledge among structural and construction engineering professionals in East Asia. Dr. Chiu served on EASEC's International Steering Committee from its inception in 1984 until his untimely passing in 2006, and continually contributed to EASEC with his counsel, vision and friendship. He fostered initial ties with many of EASEC's original organizers and participants when he was a professor at the Asian Institute of Technology from 1966-68.

Professor Chiu was a world recognized expert in wind-engineering and structural dynamics having spent his entire career studying wind effects on full-scale structures and mitigating the effects of wind events. His interest in full-scale wind engineering began during his PhD work in which he studied wind hazard (characterizing the wind environment on structures), the response of a latticed steel tower to wind hazard and compared the results with design codes, creating a framework that continues to be used today. Dr. Chiu had the opportunity to perform full-scale investigations on such noted structures as U.S. Navy antenna (800 to 1,000 feet) in Cutler, Maine (USA), the old Shanghai Television Tower and Taipower towers on Taiwan. In addition to his full-scale investigations, Dr. Chiu worked on unique wind projects such as wind analyses on the original concept design of the U.S. Space Shuttle. In his later years, he devoted his efforts to advocating the reduction of wind-induced damage through better engineering and construction practices, and served as a member and president of the Applied Technology Council as a means to promote mitigation efforts across all hazards.

Dr. Chiu was a supporter of sharing knowledge and information across national boundaries. To promote such communication, he organized conferences and workshops in India, Thailand, Indonesia, Japan and Hawaii for the purpose of bring persons with different experiences and cultures together to collaborate on studying natural hazards and their effects on the built environment.

Dr. Chiu was born in Singapore and moved to the US to attend university. He received B.S and B.A. degrees from Oregon State University, his M.S. from the Massachusetts Institute of Technology and his Ph.D. from the University of Florida. He was licensed as both Professional Civil Engineer and Structural Engineer in the State of Hawaii. He began his teaching career in 1954 as an Instructor at the University of Hawaii, retiring as a Professor in 1995. During the intervening years, he also spent time at the Asian Institute of Technology as Professor and Chairman of the Structures Division.



Travel Information

■ Danshui Attraction 淡水風景區



- 👉 It is the tourist attraction flooded in with more crowds of people at weekends. Popular sights including Fisherman's Wharf, Hongmao Castle, Bali Leftbank Park, Shihsanhang and Museum of Archeology.

🌐 At the **Danshui station** on the **Danshui Line**.

■ Beitou Hot Spring 北投溫泉



- 👉 Beitou is the well-known Hot Spring Resort in the northern Taiwan rising from volcanoes' geothermal energy. Beitou Hot Spring Museum and Taiwan Folk Arts Museum are the most popular sights in this area.

🌐 At the **Xinbeitou station** on the **Danshui Line**.

■ Yangming Park 陽明山國家公園



- 👉 The park contains all kinds of flowers, and attracts large crowds of visitors during the Taipei Flower Season.

🌐 From **Jiantan station** on the **Danshui Line**, take Bus 260 or the **Red 5** bus to the Yanmingshan bus stop.

■ National Palace Museum 國立故宮博物院



- 👉 One of the five best museums in the world, with collection of bronzes, jades, shell-and-bone writings, paintings, and calligraphy works ranging from the Neolithic Age through the end of the Qing Dynasty.

🌐 From **Shilin station** on the **Danshui Line**, take the bus **Red 30**, 304, 255, little 18, or little 19 bus to the National Palace Museum stop.

🕒 9:00 AM – 5:00 PM (365 days)

■ Taipei Astronomical Museum 台北市立天文科學教育館

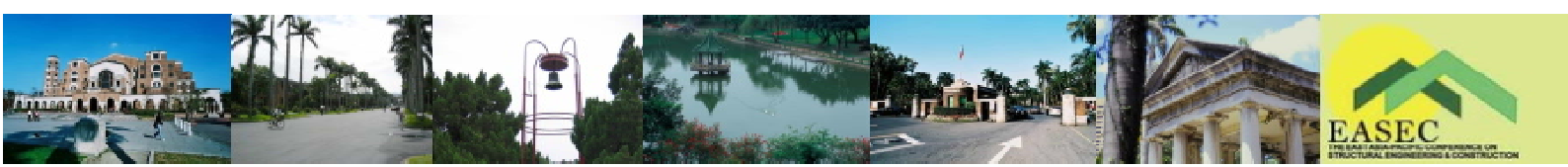


- 👉 Displays of all kinds of instruments related to astronomical science. Exhibits and observation are used to give visitors information and experiences as though they had traveled to space themselves.

🌐 From **Shilin station** on the **Danshui Line**, walk about 10 minutes in the direction of the Jihe Road.

🕒 Sunday and Tuesday – Friday : 9:00 AM – 5:00 PM

🕒 Saturday : 9:00 AM – 8:00 PM



■ National Taiwan Science Education Center 國立台灣科學教育館



- 👉 A place for learning that combines science with daily life and allows visitors to participate in and gain the latest knowledge about science. Offers education, exhibition, research, and experimentation function.
- 📍 At the **Shilin station** on the **Danshui Line**, depart via Exit 1 and walk in the direction of the Jihe Road for about 15 minutes.
- 🕒 Tuesday - Friday : 9:00 AM – 5:00 PM (no entry after 4:00 PM)
- 🕒 Saturday and Sunday : 9:00 AM – 7:00 PM (no entry after 6:00 PM)

■ Shilin Official Residence 士林官邸



- 👉 This is where the late President Chiang Kai-shek lived with Madame Chiang. Encompasses the Shilin Horticulture Garden, Horticulture Gallery, European Garden, Chinese Garden, Xinlan Pavilion and fountain.
- 📍 From the **Shilin station** on the **Danshui Line**, walk about 5 minutes in the direction of Fulin Road.
- 🕒 Monday - Friday : 8:30 AM – 5:00 PM
- 🕒 Saturday and Sunday : 8:00 AM – 7:00 PM

■ Miramar Entertainment Park 美麗華百樂園



- 👉 A shopping and entertainment complex with Taiwan's first 100-meter Ferris wheel.
- 📍 From the **Jiantan station** on the **Danshui Line**, take the free shuttle bus to the Miramar Entertainment Park; alternatively, take public bus 267 or 902 to the Miramar stop.
- 🕒 Ferris wheel : 11:00 AM - 12:00 Midnight
- 🕒 Cinemas : 11:00 AM – 12:00 Midnight Sunday –Thursday, 9:00 AM – 1:00 AM Friday and Saturday.

■ Martyrs Shrine 忠烈祠






- 👉 This structure in the style of the National Palace's Taihe Hall is a landmark of the Yuanshan area. Colorful changing of the guard ceremony every hour on the hour from 9:00 AM to 4:40 PM.
- 📍 From the **Jiantan station** on the **Danshui Line**, take the public bus 267 to the Martyrs Shrine stop.
- 🕒 9:00 AM – 5:00 PM
- 🕒 Half-day on Mar. 29 and Sept. 3; closed Mar. 28 and Sept. 2



■ Taipei Municipal Children's Recreation Center





台北市立兒童育樂中心



-  This complex contains three theme areas: World of Yesterday, World of Today, and World of Tomorrow. Each area has its own characteristic amusement and exhibition facilities; perfect for family visits.
-  From the **Yuanshan station** on the **Danshui Line**, walk north on Yumen Street for about 5 minutes.
-  9:00 AM – 5:00 PM (closed on Monday and Lunar New Year's Eve)




■ Taipei Fine Arts Museum 台北市立美術館



-  The Largest modern art museum in Asia, with 26 indoor exhibition galleries as well as space for large displays outdoors and in the lobby area.
-  From the **Yuanshan station** on the **Danshui Line**, walk about 10 minutes in the direction of Jiuquan Street.
-  Tuesday – Sunday : 9:30 AM – 5:30 PM (closed on Monday)
-  Saturday : 9:30 AM – 8:30 PM (free entry after 5:30)




■ Longshan Temple 龍山寺



-  First built in 1738, this second-grade historic site is the center of worship in the Wanhua District.
-  At the **Longshan Temple Station** on the **Banqiao Line**, depart from Exit 1 and walk north on Xiyuan Road for about 5 minutes.
-  7:00 AM – 10:00 PM (365 days)




■ National Dr. Sun Yat-sen Memorial Hall 國父紀念館

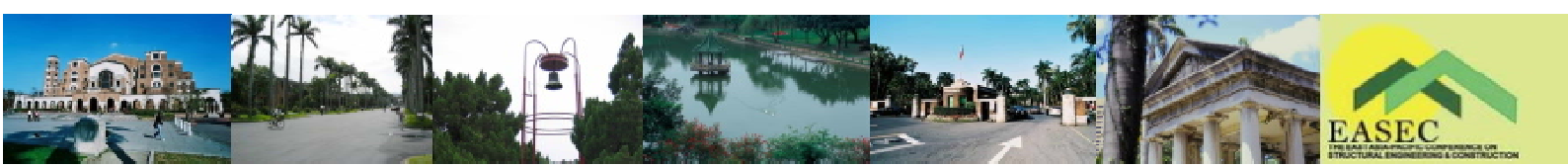


-  Built in ancient Chinese palace style. It is a multipurpose facility for outdoor recreation and leisure activities as well as indoor cultural and educational activities.
-  From the **Sun Yat-sen Memorial Hall Station** on the **Nangang Line**.
-  9:00 AM – 5:00 PM (closed on Chinese New Year's Eve and Day)

■ Taipei 101 台北 101



-  Take the world's fastest elevator to the observation deck of the world's tallest panoramic view of Taipei.
-  From the **Taipei City Hall Station** on the **Nangang Line**, take public bus **blue 5**, 266, 537, or 699 to Taipei 101.
-  10:00 AM – 10:00 PM (last entry 9:15 PM)



■ Chiang Kai-shek Memorial Hall 中正紀念堂/台灣民主紀念館



- 👉 This impressive structure, built to commemorate the late President Chiang Kai-shek, contains an art gallery and lecture hall, and is surrounded by Chinese-style gardens. It is a favorite leisure spot for Taipei residents.
- 🌐 From the **Chiang Kai-shek Memorial Hall Station** on the **Danshui Line**, depart via Exit 5.
- 🕒 9:00 AM – 6:30 PM (365 days)

■ National Museum of History 國立歷史博物館



- 👉 This large museum, built in 1995 with red walls and green roof tiles, displays Chinese cultural artifacts including bronzes, green-glazed porcelains, and Tang tri-color pottery.
- 🌐 At the **Chiang Kai-shek Memorial Hall Station** on the **Danshui Line**, use Exit 1 and walk along Nanhai Road for about 7 minutes.
- 🕒 10:00 AM – 6:00 PM (closed on Mondays, Chinese New Year's Eve and Chinese New Year's Day)

■ Taipei Zoo 台北市立動物園



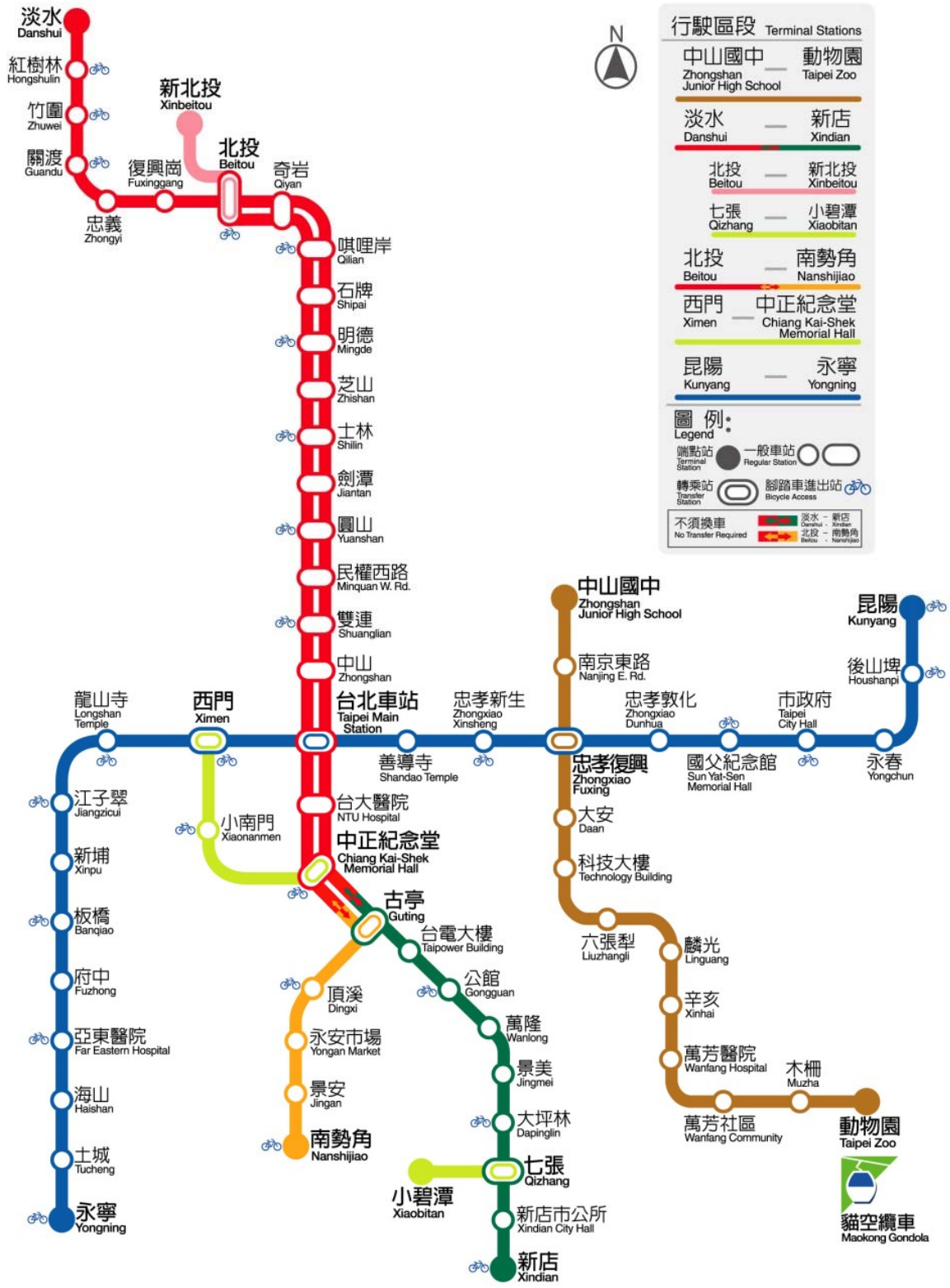
- 👉 The zoo is divided into eight areas, including a petting zoo area and Asian Tropical rain forest area. The addition of koalas and king penguins in recent years has attracted crowds of visitors.
- 🌐 From the **Taipei Zoo Station** on the **Muzha Line**, walk to the zoo.
- 🕒 9:00 AM – 5:00 PM (no entry after 4:00 PM, closed on Chinese New Year's Eve)

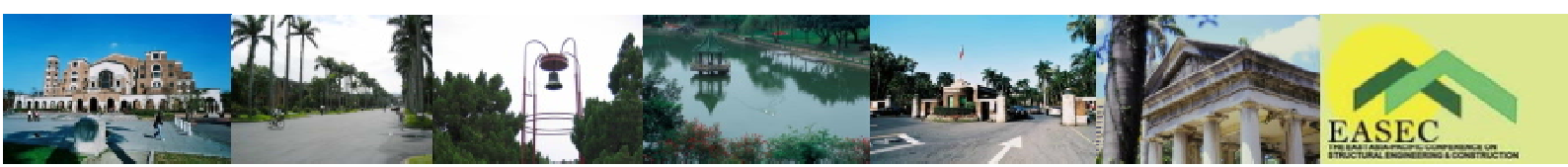
■ Useful Phone Numbers & Links

- ◆ Taiwan Taoyuan (CKS) International Airport
<http://www.taoyuanairport.gov.tw/CKSeng/> Tel: (03)398-2050
- ◆ Tourism Bureau
<http://eng.taiwan.net.tw/lan/Cht/search/index.asp> Tel: (02)2717-3737
- ◆ Taipei Police Headquarters, Foreign Affairs Division Tel: (02)2381-8341



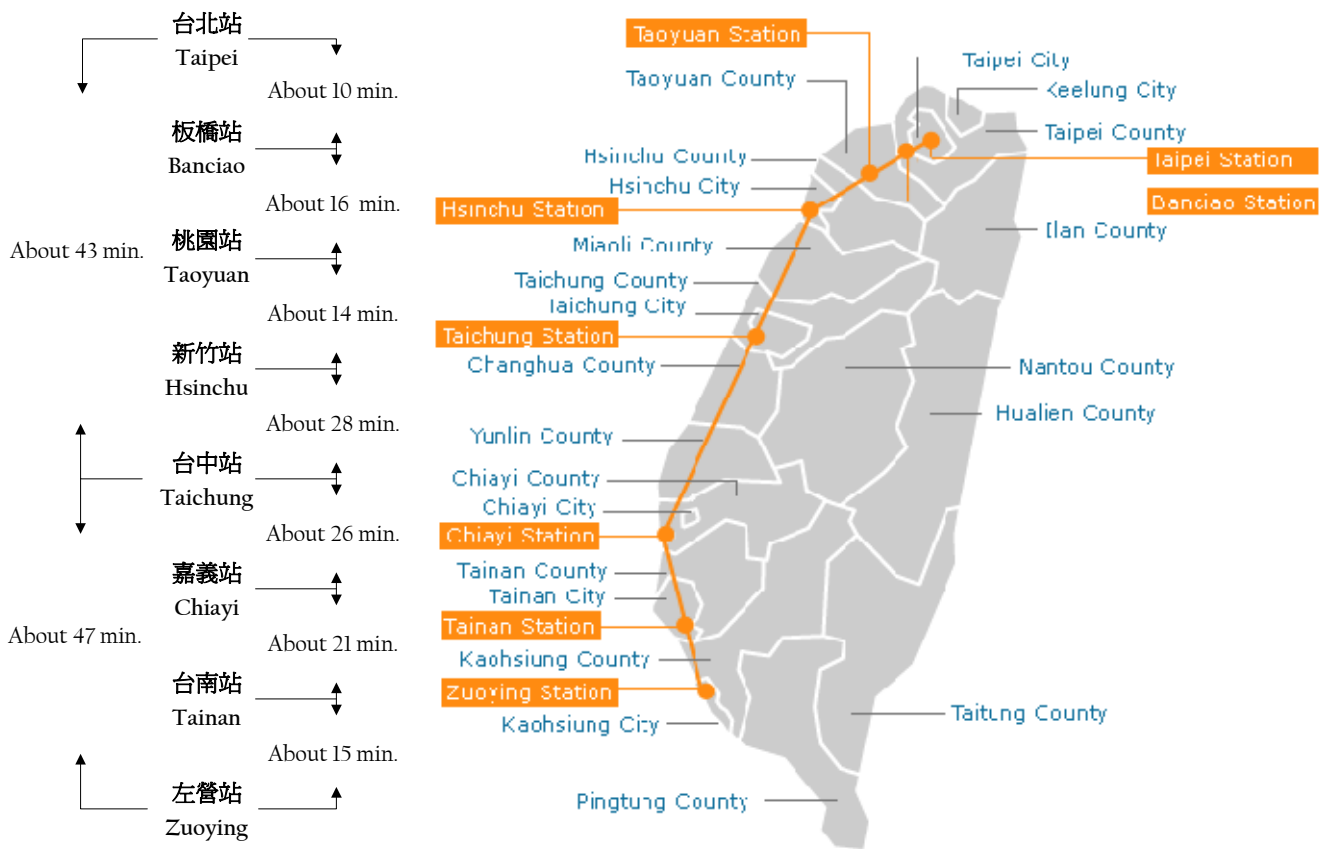
Taipei Metro Route Map





Taiwan High Speed Rail (THSR)

THSR is planning to set up 12 stations along the western corridor in Taiwan. Currently, 8 stations are in service and the rest are estimated to begin service in 2010.



Travel

THSR Official Website: <http://www.thsrc.com.tw/en/index.htm>