### May 16th 2016 10:00 - 10:20

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### May 16th 2016 10:20 - 12:20

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<td>MOTTAINAI-WASTEFUL-IN THE FIELD OF CONCRETE</td>
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<td><em>by Nobuaki Otsuki</em></td>
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<td>CHALLENGES AND DEVELOPMENT IN TROPICAL CONCRETING PRACTICE</td>
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<td><em>by Chat Tim Tam</em></td>
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<td>MICROWAVE-ASSISTED CONCRETE TECHNOLOGY – PRODUCTION, DEMOLITION AND RECYCLING</td>
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<td><em>by Khim Chye Gary Ong</em></td>
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<td>PRESTRESSED CONCRETE SEA WALLS AND SHELTERS AGAINST MEGA-TSUNAMIS BASED ON PERFORMANCE CREATIVE DESIGN CONCEPT</td>
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<td><em>by Shoji Ikeda</em></td>
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30 mins per keynote presentation with discussions

### May 16th 2016 12:20 - 13:30

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### Technical Session 1: Mineral Admixtures

**Chairman:** Khamhou Saphouvong

1. **THE EFFECT OF SINGLE AND COMPOUND ELECTROLYZED CATHODE WATERS ON PROPERTIES OF CONCRETE**
   - *by* Liang Wang, Kimitaka Uji, Hisashi Morozumi and Minoru Uemura

2. **DURABILITY AND APPLICATIONS OF ENVIRONMENTAL-FRIENDLY CONCRETE WITHOUT PORTLAND CEMENT**
   - *by* Masataka Ogino, Shigeyoshi Miyahara, Reiko Okamoto, Eiji Owaki and Eisuke Nakamura

3. **COAL ASH APPLICATION IN CONSTRUCTION INDUSTRY THROUGH AN INTERDISCIPLINARY APPROACH**
   - *by* Ronaldo Gallardo and Bertrand Teodosio

4. **EFFECT OF CURING TEMPERATURE ON COMPRESSIVE STRENGTH OF ALKALI ACTIVATED FLY ASH CEMENT**
   - *by* Sak Sanchindapong, Manow Piyaworapaiiboon, Sakprayut Sinthupinyo and Arnon Chaipanich

5. **INFLUENCES OF ADDING MINERAL ADMIXTURES AND SECONDARY WET CURING ON THE COMPRESSIVE STRENGTH AND DURABILITY OF STEAM CURED MORTARS**
   - *by* Yosuke Azuma, Hiroaki Mori and Katsuhiko Tada

6. **PERVIOUS CONCRETE MEMBRANES CONTAINING SYNTHESIZED ZEOLITE NaA FROM CORNCOB ASH AND ITS APPLICATION FOR SEAWATER DESALINATION**
   - *by* Norway Pangan, Susan Gallardo, Pag-asas Gaspillo, Winarto Kurniawan and Hirofumi Hinode

### Technical Session 2: Structural Design

**Chairman:** Kimio Saito

1. **DESIGN AND CONSTRUCTION OF BUTTERFLY WEB BRIDGE - AKUTAGAWA BRIDGE -**
   - *by* Yuki Kaminaga

2. **DESIGN AND CONSTRUCTION OF LONG-SPAN CONCRETE BRIDGE USING DISPLACEMENT ADJUSTMENT BY HORIZONTAL LOADING.**
   - *by* Masamichi Yoshino and Kenichi Nakatsumi

3. **DESIGN AND CONSTRUCTION OF OKEGAWA VIADUCT WHICH HAS PRECAST SEGMENTAL U-SHAPED BUTTERFLY WEB GIRDERs**
   - *by* Kazuo Fujino, Takuya Kojima and Kenichi Nakatsumi

4. **ANALYTICAL EVALUATION FOR SHEAR FATIGUE LOAD CARRYING BEHAVIOUR OF CRACKED RC BEAMS BASED ON THE LOAD PATH**
   - *by* Yuta Yamada, Nobuhiro Chijiwa and Mitsuyasu Iwanami

5. **COMPOSITE TRUSS BRIDGE USING SUSPENDED CONCRETE SLABS: RESEARCH AND PRACTICAL APPLICATION**
   - *by* Shinichiro Kumagai, Shoji Ikeda and Hiroyuki Uchibori

6. **EXPERIMENTAL STUDY ON A NEW TYPE OF SIDE BLOCK FOR BRIDGE BEARING**
   - *by* Guangfeng Zhang, Kentaro Kuraji, Yuji Migitaka and Keita Osumi

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12 mins per presentation with discussions

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May 16th 2016 15:00 - 15:30

**Coffee Break sponsored by CORE Institute of Technology**
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<td><strong>Technical Session 4 / Non-destructive Testing</strong>&lt;br&gt;Chairman: Takahiro Nishida</td>
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<td>HYBRID PRESTRESSED BRIDGES WITH STEEL TRUSS WEBS THE SARUTAGAWA BRIDGE AND THE TOMOEGAWA BRIDGE&lt;br&gt;<em>by Koji Osada, Taketo Kanamoto, Jiro Iwatate and Osamu Usami</em></td>
<td>FREQUENCY SPECTRUM ANALYSIS ON ACOUSTIC DATA OF HAMMERING TEST FOR DETERIORATED RC MEMBER&lt;br&gt;<em>by Katsufumi Hashimoto, Tomoko Fukuyama, Yunmi Kim, Yuuji Ushiwatari and Masakazu Sakou</em></td>
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<td>INTRODUCTION OF STEEL-PRESTRESSED CONCRETE COMPOSITE STRUCTURE BRIDGE (SPC BRIDGE)&lt;br&gt;<em>by Anh Quang Thang, Kei Hirai, Ryohei Kurosawa and Shoji Ikeda</em></td>
<td>NON-DESTRUCTIVE EVALUATION METHODS USING ELASTIC WAVE GENERATED BY ELECTROMAGNETIC PULSE FOR SOUNDNESS OF ADHESIVE PORTION AROUND ANCHOR BOLTS IN CONCRETE MEMBERS&lt;br&gt;<em>by Hirokazu Miyata, Shinya Uchida and Toshiro Kamada</em></td>
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<td>THE INVESTIGATION OF PRE-STRESS AND STRENGTHENING DESIGN REPORT OF THE PRE-TENSION PCT BEAM WHICH WAS DAMAGED BY CHLORIDE ATTACK&lt;br&gt;<em>by Takashi Haga, Hiroyuki Itou, Masaki Yonemoto, Kenichi Hida and Kouta Yamaguchi</em></td>
<td>PROPOSAL OF HIGH-SPEED IMAGE CORRELATION ALGORITHM FOR CEMENTITIOUS COMPOSITE MATERIAL BY USING SHAPE FUNCTION&lt;br&gt;<em>by Yasutaka Noma and Ken Watanabe</em></td>
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<td>A STUDY OF THE INJECTION METHODS OF PC GROUT&lt;br&gt;<em>by Ryota Kudo, Shigeo Tanabe, Yusuke Sakata and Takeju Matsuka</em></td>
<td>EVALUATION OF COVERCRETE QUALITY OF CONCRETE STRUCTURES BY SURFACE WATER ABSORPTION TEST&lt;br&gt;<em>by Akira Hosoda and Kazuhiko Hayashi</em></td>
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<td>EFFECTS OF LOCAL CORROSION ON FLEXURAL BEHAVIOR OF POST-TENSIONED PRESTRESSED CONCRETE BEAMS&lt;br&gt;<em>by Kazuhiro Kozu, Shigehiko Saito and Yasuhiro Kinugasa</em></td>
<td>ACCURACY CONFIRMATION OF PREDICTED VALUES OF CATHODIC PROTECTION CURRENT DISTRIBUTION BY 3D-FEM&lt;br&gt;<em>by Hiroshi Minagawa, Makoto Hisada, Atsushi Kashima, Makoto Yamamoto and Mikio Wakasugi</em></td>
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<td>INTRINSIC RESTORATION CAPABILITY OF PRESTRESSED CONCRETE STRUCTURES&lt;br&gt;<em>by Ryuhei Kurosawa, Shoji Ikeda and Kei Hirai</em></td>
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12 mins per presentation with discussions

**May 16th 2016 18:30 - 21:30**

Symposium Dinner @ Excel Hotel Tokyu Futakotamagawa
### KURAMAE Hall

**Technical Session 5 / Recycle and Repair**

**Chairman:** Nathaniel Baniel Diola

1. **EFFECTIVENESS OF RECYCLED NYLON FIBERS AS A MORTAR STRENGTHENING MATERIAL**
   - *by* Shanya Orasutthikul, Hiroshi Yokota, Katsufumi Hashimoto and Daiki Unno

2. **TECHNICAL DEVELOPMENT THROUGH RECYCLING OF THE DEBRIS DUE TO THE GREAT EAST JAPAN EARTHQUAKE**
   - *by* Makoto Hisada, Koichi Kobayashi, Kenichi Horiguchi, Nobufumi Takeda and Masao Nishimura

3. **PRACTICAL EXAMPLE OF ELECTROCHEMICAL REPAIR WITH WATER SUPPLY CURING SYSTEM**
   - *by* Atsushi Saito, Akira Shono, Shu Yamamoto and Nobuaki Otsuki

4. **DEVELOPMENT OF JACKETING METHOD FOR PIER PILES USING ULTRA HIGH PERFORMANCE-STRAIN HARDENING CEMENTITIOUS COMPOSITE**
   - *by* Jun Kutsuna, Minoru Kunieda, Mitsuyasu Iwanami, Ema Kato and Ryoichi Tanaka

5. **A STUDY ON THE NEW WATER LEAK REPAIR METHOD FOR SUBWAY TUNNELS USING CRACK SELF-HEALING REPAIR MATERIALS**
   - *by* Tatsuro Hashimoto, Tea-Bo Ahn, Tetsuya Murakami, Norihiko Ogura and Toshiharu Kishi

6. **SOME CASE OF SURVEY AND REPAIR ON DAMAGED RC VOIDED SLAB BRIDGES**
   - *by* Toru Tsuchihashi and Syozo Nishiyama

7. **REHABILITATION OF PC TENDONS IN INCOMPLETE GROUT INGRESSED DE-ICING SALT**
   - *by* Toshiyuki Aoyama, Tomoshige Kamotani, Naotoshi Fukagawa, Kouji Ishii and Hidenori Morikawa

### ROYAL BLUE Hall

**Technical Session 6 / Properties of Concrete**

**Chairman:** Aung Kyaw Min

1. **STUDY ON THE ANCHORAGE MECHANISM OF CFRP GRID IN MORTAR**
   - *by* Bo Wang, Kimitaka Uji, Vu Dung Tran Tran and Ngoc Linh Vu

2. **BASIC EXAMINATION FOR PRACTICAL USE OF GEOPOLYMER BLOCK SLEEPERS REINFORCED BY SHORT FIBER**
   - *by* Minoru Tsukahara, Nobuhiko Oki, Takatsune Sato and Motoki Uehara

3. **STUDY ON A DEBONDING MECHANISM OF SHOTCRETE**
   - *by* Shinya Ikehata, Takatomo Watanabe and Hikaru Nakamura

4. **FUNDAMENTAL PROPERTY OF HARDENED CEMENT Paste AND MORTAR HEATED UP TO 1500 DEGREE CELSIUS**
   - *by* Shintaro Miyamoto, Yuta Seki, Hiroshi Minagawa and Makoto Hisada

5. **INVESTIGATION OF TIME-DEPENDENT DEVELOPMENT OF FLEXURAL CRACKS OF A LONG SPAN RC BOX GIRDER CONSIDERING SHRINKAGE PROPERTY OF CONCRETE**
   - *by* Satoshi Komatsu and Akira Hosoda

6. **EFFECTS OF CFRP SHEETS ON SHEAR STRENGTHENING OF PC BEAMS WITHOUT SHEAR REINFORCEMENT**
   - *by* Thi Thu Dung Nguyen, Koji Matsumoto, Masahiko Yamada and Junichiro Niwa

7. **RESEARCH ON STRENGTH AND INTERNAL FORMATION OF HARDENED CEMENT MIXED WITH SEAWATER**
   - *by* Keisaburo Katano, Nobufumi Takeda, Kumiko Kobayashi and Nobuaki Otsuki

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12 mins per presentation with discussions

May 17th 2016 10:30 - 11:00

**Break**
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<td>Technical Session 7 / Management of Concrete Structures</td>
<td>Technical Session 8 / Construction</td>
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<td>Chairman: Keiyu Kawaa</td>
<td>Chairman: Katsufumi Hashimoto</td>
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**Technical Session 7 / Management of Concrete Structures**
- **LCM OF OPEN TYPE WHARF RC DECK BASED ON NATION-WIDE SURVEYS OF REAL STRUCTURES CARRIED OUT BY PARI (FORMER PHRI)**
  by Hiroshi Seki, Nobuaki Otsuki, Hidenori Hamada and Toru Yamaji
- **SUSTAINABLE RENEWAL PLAN FOR EXPRESSWAY BRIDGES IN JAPAN**
  by Hideaki Sakai
- **A CASE STUDY ON DURABILITY TESTS FOR CONCRETE IN CONSTRUCTION PROJECTS**
  by Keisuke Matsukawa, Aung Kyaw Min, Chikaharu Kobayashi and Shiro Ishikawa
- **FEM SIMULATION OF CRACKING OF NATM TUNNEL LINING CONCRETE**
  by Keita Iwama and Akira Hosoda
- **DURABILITY DESIGN OF CONCRETE STRUCTURE IN THE ARABIAN GULF OIL AND GAS PROJECTS**
  by Yoshitaka Sato
- **EXPERIMENTAL AND SIMULATION STUDY OF STRENGTHENING FIRE-DAMAGED REINFORCED CONCRETE SLAB BY NEAR-SURFACE MOUNTED (NSM) METHOD**
  by Thi Nguyen Cao, Withit Pansuk and Lluis Torres
- **POTENTIAL ISSUES WITH GENERATION AND STABILITY OF AIR-VOID SYSTEM DUE TO INCOMPATIBILITY OF COMPONENTS IN PLAIN AND FLY ASH CEMENTITIOUS MIXTURES 15PP**
  by Jan Olek and Chaitanya Paleti

**Technical Session 8 / Construction**
- **WATER RETENTION MOISTURE CURING MAT FOR VERTICAL CONCRETE PLANE**
  by Ryoichi Tanaka, Tsutomu Fukute and Takahiko Amino
- **PROPERTIES OF SELF-COMPACTING CONCRETE WITH DIFFERENT SOURCES OF MIXING COARSE AGGREGATE**
  by Khambou Saphouvong, Somnuk Phiathep, Khampaseuth Thepvongsa, Singvixay Simixay and Soukan Khamphachanh
- **INFLUENCE OF CURING WATER CONTAINING VARIOUS IONS ON PERMEABILITY OF CONCRETE AND ITS APPLICATION TO WATER SUPPLY CURING METHOD**
  by Kazuki Ishihara, Atsushi Saito and Nobuaki Otsuki
- **EFFECT OF CURING TEMPERATURE ON COMPRESSIVE STRENGTH AND MICROSTRUCTURE OF ALKALI-ACTIVATED METAKAOLIN CEMENT MORTARS**
  by Kornnika Wianglor, Sakprayut Sinthupinyo, Manow Manow Pyawwarapaihoon and Arnon Chaipanich
- **FLEXURAL CRACK WIDTH REDUCTION EFFECTS OF STAINLESS STEEL BARS IN THE CONCRETE COVER OF AN RC STRUCTURE**
  by Hiroshi Murata and Hitoshi Takeda
- **3D PRINTING USING GEOPOLYMER FOR CONCRETE CONSTRUCTION**
  by Ming Xia and Jay Sanjayan

12 mins per presentation with discussions
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<td>TEMPERATURE DEPENDENCY OF DETERIORATION PROCESS DUE TO CHLORIDE ATTACK</td>
<td>Takahiro Nishida, Nobuaki Otsuki and Hiroshi Minagawa</td>
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<td>CHLORIDE PENETRATION PROFILES IN EXISTING HARBOR STRUCTURES CONSTRUCTED WITH ORDINARY PORTLAND CEMENT AND BLAST FURNACE SLAG CEMENT</td>
<td>Takahiko Amino and Nobuaki Otsuki</td>
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<td>STUDY OF CORROSION PROPERTY OF STEEL BARS IN CONCRETE UNDER DIFFERENT TIDAL ENVIRONMENTS</td>
<td>Kazuhide Yonamine, Toru Yamaji, Yoshikazu Akira, Hidenori Hamada and Nobuaki Otsuki</td>
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<td>DURABILITY OF SEAWATER MIXED CONCRETE WITH DIFFERENT CEMENT REPLACEMENT RATIO OF BLAST FURNACE SLAG (BFS) AND FLY ASH (FA)</td>
<td>Aung Kyaw Min, Nobuaki Otsuki, Tomohiro Nagata and Cheng Yi</td>
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<td>A NOVEL METHOD IN ENHANCING CORROSION RESISTANCE IN CONCRETE USING AEROBIC BACILLUS SUBTILIS</td>
<td>Keiyu Kawaai, Takahiro Nishida, A. Saito and I. Ujike</td>
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<td>CHLORIDE PENETRATION AND ITS RELATION TO OTHER PROPERTIES OF SELF-COMPACTING CONCRETE CONTAINING HIGH LEVEL FLY ASH AND SILICA FUME</td>
<td>Arnon Chaipanich, Watcharapong Wongkeo, Pailyn Thongsanitgarn and Athipong Ngamjarurojana</td>
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<td>CONSTRUCTION OF KOTAKI-RIVER BRIDGE USING UFC-SUQCEM CAST IN SITE</td>
<td>Shoji Yamaai, Yuji Watanabe, Toshimichi Ichinomiyia, Kentaro SUHARA and Katsuaki Iriuchijima</td>
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<td>SEISMIC BEHAVIOR OF REINFORCED CONCRETE COLUMNS UNDER NEAR FIELD EARTHQUAKE</td>
<td>Takahiro Yamaguchi, Kei Hirai, Ryohei Kurosawa and Shoji Ikeda</td>
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<td>AEM MODELLING AND ANALYSIS FOR SEISMIC EVALUATION OF MASONRY INFILLED REINFORCED CONCRETE BUILDINGS</td>
<td>Arita Iflat Zerin, Akira Hosoda and Hamed Salem</td>
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<td>SEISMIC RETROFITTING USING CERAMIC-CAP-BAR FOR UNDERGROUND STRUCTURES</td>
<td>Keigo Tamano, Naoki Sogabe, Masaaki Ueda and Shinichi Yamanobe</td>
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<td>EXISTING RC FRAMES CONNECTED THROUGH RC SLABS TO EXTERIOR RETROFITTING FRAMES WITH MILD-PRESS-JOINTS</td>
<td>Ryoitaro Kurosawa, Hironyasu Sakata, Yuki Shirai and Yasuhiro Matsuzaki</td>
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<td>LOAD-BEARING CAPACITY OF A HYBRID STRUCTURAL FOOTING EMBEDDED WITH STEEL GRID MEMBERS</td>
<td>Shigeru Ihara, Hisatomo Matsuzaki and Takashi Saito</td>
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<td>COMPARISON OF THE ENVIRONMENTAL IMPACTS OF A COMPOSITE AND A STEEL BUILDING WITH THE APPLICATION OF LOW-CARBON MATERIALS</td>
<td>Han Yu, Julian Chun-Fai Lee, Siu-Lai Chan and Tak-Ming Chan</td>
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<td>HIGH SEISMIC PERFORMANCE BRIDGE PIER COLUMN USING ULTRA HIGH STRENGTH FIBER REINFORCED CONCRETE</td>
<td>Kimio Saito, Shinichi Yamanobe, Tetsuya Kono, Naoki Sogabe</td>
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**KURAMAE Hall**

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<td>Technical Session 9 / Steel Corrosion and Corrosion Control&lt;br&gt;Chairman: Hiroshi Minagawa</td>
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<td>May 17th 2016 16:15 – 17:00</td>
<td>Technical Session 10 / Seismic Behavior and Strengthening&lt;br&gt;Chairman: Nobuhiro Chijiwa</td>
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**Closing Ceremony**