On behalf of the Korean Society of Steel Construction (KSSC), it is our great pleasure to have this opportunity to welcome you all to Jeju, Korea to participate in the 7th International Symposium on Steel Structures, ISSS-2013. The main objective of this symposium is to provide an international forum for the presentation of recent advances on various aspects of steel construction and its applications to steel structures.

The theme of this symposium “Innovative Technologies & Materials in Steel Structures” has attracted interesting keynote papers from around the world, covering application of shape memory alloys for seismic resistant design and retrofit, field monitoring for long-span bridges, structural-fire engineering, and recent trend of steel-concrete hybrid bridges. The technical program of the symposium consists of presentations of 4 keynote lectures, 81 invited papers by each session organizer, and 72 general technical papers related to mechanical and structural behaviors, analysis and design, fabrication, construction, and maintenance of steel structures such as bridges, buildings, and other industrial facilities.

We would like to take this opportunity to express my deepest gratitude to the members of the International Advisory Committee, Local Advisory Committee, and Local Organizing Committee for their valuable contributions and hard work. We are also grateful to invited keynote speakers and session organizers for their contributions and efforts which make the symposium a very successful one. All the general participants deserve our appreciation for their helpful submissions. Special thanks are offered to sponsors for their generous financial support, without which this symposium would not have been possible.

We would like to thank you for joining ISSS-2013 in Jeju. We hope that you will find the symposium to be both enjoyable and stimulating. Many of you have made long journeys to be here. If you have spare time after the symposium, please take the opportunity to visit some of the beautiful places in Jeju. We hope that you will have a very pleasant and wonderful time during your stay in Jeju, Korea.

Jeju, Korea
November 7, 2013

Young-Suk Park, Ph.D.  
Symposium Chairman of ISSS-2013  
President of KSSC

Dong-Ho Choi, Ph.D.  
Chairman of Local Organizing Committee of ISSS-2013
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome Message</td>
<td>3</td>
</tr>
<tr>
<td>Symposium Financial Sponsors</td>
<td>5</td>
</tr>
<tr>
<td>Symposium Organization</td>
<td>7</td>
</tr>
<tr>
<td>Symposium Information</td>
<td>9</td>
</tr>
<tr>
<td>Symposium Overview</td>
<td>10</td>
</tr>
<tr>
<td>Technical Program</td>
<td>11</td>
</tr>
<tr>
<td>Social Program</td>
<td>18</td>
</tr>
<tr>
<td>Transportation</td>
<td>20</td>
</tr>
<tr>
<td>Venue Map</td>
<td>21</td>
</tr>
</tbody>
</table>
SYMPOSIUM CHAIR
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Lee, Sung-Chul (Dongguk Univ.)
Mha, Ho-Seong (Hoseo Univ.)
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Yoon, Sung-Kee (Pusan Natl. Univ.)
Yoon, Sung-Won (Seoul Natl. Univ. of Sci. and Tech.)
Yoon, Tae-Yang (RIST)
Youn, Seok-Goo (Seoul Natl. Univ. of Sci. and Tech.)
VENUE

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Website: http://www.grand.co.kr

SECRETARIAT OFFICE

• BEFORE AND AFTER SYMPOSIUM
  Secretariat, ISSS-2013
  The Korean Society of Steel Construction (KSSC)
  106-18, Munjung-dong, Songpa-gu, Seoul, 138-200, Korea
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  E-mail: ISSS-2013@mail.kssc.or.kr
  Website: http://www.kssc.or.kr/ISSS-2013

• DURING SYMPOSIUM (NOVEMBER 7-9, 2013)
  Secretariat, Preparation Room, ISSS-2013
  Sapphire Ballroom, 2nd Fl., Jeju Grand Hotel
  Mobile: 011-9183-9743, 010-4106-1987

REGISTRATION

Registration Desk will be open in front of Crystal Ballroom 2nd Fl. It is recommended that all participants stop by the registration desk upon their arrival at the venue to collect their conference materials. Our staff will be pleased to help with all the participants’ inquiries.

ON-SITE REGISTRATION FEE

<table>
<thead>
<tr>
<th>Categories</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>$500</td>
</tr>
<tr>
<td>Student</td>
<td>$300</td>
</tr>
</tbody>
</table>

The fee covers symposium proceedings, coffee break, lunches, banquet, and admission to technical sessions.

COFFEE BREAKS

Coffee breaks will be held in the Crystal Ballroom at the times noted in the Program Overview.

OPENING CEREMONY

The Opening Ceremony will be held between 08:30-09:00 in Crystal Ballroom on November 7, 2013.

TIME AND VENUE FOR EACH PRESENTATION

<table>
<thead>
<tr>
<th>Session</th>
<th>Time</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keynote Lecture</td>
<td>40 min.</td>
<td>Crystal</td>
</tr>
<tr>
<td>Oral Presentation</td>
<td>15 min.(including discussions)</td>
<td>Crystal, Jade, Amethyst</td>
</tr>
<tr>
<td>Poster Presentation</td>
<td>40 min.</td>
<td>Jade Ballroom Corridor</td>
</tr>
</tbody>
</table>

AVAILABLE VISUAL EQUIPMENTS

Beam projector, notebook computer
<table>
<thead>
<tr>
<th>November 6, Wednesday</th>
<th>November 7, Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>18:00 - 19:30</strong></td>
<td><strong>Welcoming Reception</strong></td>
</tr>
<tr>
<td>(16th Fl. Sky Ballroom)</td>
<td></td>
</tr>
<tr>
<td><strong>08:00 -</strong></td>
<td><strong>Registration</strong></td>
</tr>
<tr>
<td>(Crystal Ballroom)</td>
<td></td>
</tr>
<tr>
<td><strong>08:30 - 09:00</strong></td>
<td><strong>Opening Ceremony</strong></td>
</tr>
<tr>
<td>(Crystal Ballroom)</td>
<td></td>
</tr>
<tr>
<td><strong>09:00 - 09:40</strong></td>
<td><strong>Keynote Lecture 1</strong></td>
</tr>
<tr>
<td>(Crystal Ballroom)</td>
<td></td>
</tr>
<tr>
<td><strong>09:40 - 10:20</strong></td>
<td><strong>Keynote Lecture 2</strong></td>
</tr>
<tr>
<td>(Crystal Ballroom)</td>
<td></td>
</tr>
<tr>
<td><strong>10:20 - 10:40</strong></td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td><strong>Session room</strong></td>
<td><strong>Crystal</strong></td>
</tr>
<tr>
<td><strong>Jade</strong></td>
<td><strong>Amethyst</strong></td>
</tr>
<tr>
<td><strong>10:40 - 12:10</strong></td>
<td><strong>Session 1</strong></td>
</tr>
<tr>
<td><strong>Analysis of Bridges</strong></td>
<td><strong>Session 2</strong></td>
</tr>
<tr>
<td><strong>Fire Safety Design</strong></td>
<td><strong>Session 3</strong></td>
</tr>
<tr>
<td><strong>Steel Bridge Rehabilitation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>12:10 - 13:10</strong></td>
<td><strong>Lunch</strong></td>
</tr>
<tr>
<td><strong>13:10 - 15:10</strong></td>
<td><strong>Session 4</strong></td>
</tr>
<tr>
<td><strong>Advanced Design of Steel &amp; Composite Structures</strong></td>
<td><strong>Session 5</strong></td>
</tr>
<tr>
<td><strong>Evaluation of Seismic Performance of Members &amp; Connections</strong></td>
<td><strong>Session 6</strong></td>
</tr>
<tr>
<td><strong>Connections</strong></td>
<td></td>
</tr>
<tr>
<td><strong>15:10 - 15:30</strong></td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td><strong>15:30 - 17:15</strong></td>
<td><strong>Session 7</strong></td>
</tr>
<tr>
<td><strong>Steel &amp; Composite Structures</strong></td>
<td><strong>Session 8</strong></td>
</tr>
<tr>
<td><strong>Super High Strength Steels &amp; POSCO</strong></td>
<td><strong>Session 9</strong></td>
</tr>
<tr>
<td><strong>SMA Applications for Civil Structures</strong></td>
<td></td>
</tr>
<tr>
<td><strong>18:00 - 20:00</strong></td>
<td><strong>Banquet (Crystal Ballroom)</strong></td>
</tr>
<tr>
<td><strong>November 8, Friday</strong></td>
<td><strong>November 9, Saturday</strong></td>
</tr>
<tr>
<td><strong>08:00 -</strong></td>
<td><strong>Registration</strong></td>
</tr>
<tr>
<td>(Crystal Ballroom)</td>
<td></td>
</tr>
<tr>
<td><strong>08:30 - 09:10</strong></td>
<td><strong>Keynote Lecture 3</strong></td>
</tr>
<tr>
<td>(Crystal Ballroom)</td>
<td></td>
</tr>
<tr>
<td><strong>09:00 - 09:40</strong></td>
<td><strong>Keynote Lecture 4</strong></td>
</tr>
<tr>
<td>(Crystal Ballroom)</td>
<td></td>
</tr>
<tr>
<td><strong>09:40 - 10:10</strong></td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td><strong>Session room</strong></td>
<td><strong>Crystal</strong></td>
</tr>
<tr>
<td><strong>Jade</strong></td>
<td><strong>Amethyst</strong></td>
</tr>
<tr>
<td><strong>10:10 - 12:10</strong></td>
<td><strong>Session 10</strong></td>
</tr>
<tr>
<td><strong>Reliability, Monitoring &amp; Management of Infrastructures</strong></td>
<td><strong>Session 11</strong></td>
</tr>
<tr>
<td><strong>Large Span Structures</strong></td>
<td><strong>Session 12</strong></td>
</tr>
<tr>
<td><strong>Seismic Analysis &amp; Design</strong></td>
<td></td>
</tr>
<tr>
<td><strong>12:10 - 13:10</strong></td>
<td><strong>Lunch</strong></td>
</tr>
<tr>
<td><strong>13:10 - 15:10</strong></td>
<td><strong>Session 13</strong></td>
</tr>
<tr>
<td><strong>Performance of Steel Bridge &amp; Influential Factors</strong></td>
<td><strong>Session 14</strong></td>
</tr>
<tr>
<td><strong>Seismic Steel Design</strong></td>
<td><strong>Session 15</strong></td>
</tr>
<tr>
<td><strong>Innovative Steel Structure Design for Fire Conditions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>14:40 - 15:20</strong></td>
<td><strong>Poster Session</strong></td>
</tr>
<tr>
<td><strong>15:20 - 15:40</strong></td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td><strong>15:40 - 17:10</strong></td>
<td><strong>Session 16</strong></td>
</tr>
<tr>
<td><strong>Fatigue and Dynamic Behaviors</strong></td>
<td><strong>Session 17</strong></td>
</tr>
<tr>
<td><strong>Innovation in Fire Design of Steels Structures</strong></td>
<td><strong>Session 18</strong></td>
</tr>
<tr>
<td><strong>Long Span Bridges</strong></td>
<td></td>
</tr>
<tr>
<td><strong>08:30 - 18:00</strong></td>
<td><strong>Cultural and Technical Tours</strong></td>
</tr>
</tbody>
</table>
KEYNOTE LECTURES

Lecture 1: Application of Shape Memory Alloys for Seismic Resistant Design and Retrofit—A State-of-the-Art Paper
Reginald DesRoches
(November 7, Crystal Ballroom)

Lecture 2: Field Monitoring and its Application for Long-span Steel Bridges
You-Lin Xu
(November 7, Crystal Ballroom)

Lecture 3: Structural-Fire Engineering: Towards Performance-Based Design
Michael D. Engelhardt
(November 8, Crystal Ballroom)

Lecture 4: Recent Trend on Design, Construction and Maintenance of Steel and Steel-Concrete Hybrid Bridges in Japan
Masatsugu Nagai
(November 8, Crystal Ballroom)

ORGANIZED SESSIONS

Session 3: Steel Bridge Rehabilitation
Organized by Masahiro Sakano
(November 7, Amethyst Ballroom)

Session 5: Evaluation of Seismic Performance of Members & Connections
Organized by Satoshi Yamada
(November 7, Jade Ballroom)

Session 7: Steel & Composite Structures
Organized by Lanhui Guo
(November 7, Crystal Ballroom)

Session 8: Super High Strength Steel & POSCO
Organized by Kangmin Lee & POSCO
(November 7, Jade Ballroom)

Session 9: SMA applications for Civil Structures
Organized by Reginald DesRoches
(November 7, Amethyst Ballroom)

Session 10: Reliability, Monitoring & Management of Infrastructures
Organized by Hitoshi Furuta
(November 8, Crystal Ballroom)

Session 11: Large Span Structures
Organized by Feng Fan
(November 8, Jade Ballroom)

Session 13: Performance of Steel Bridge and Influential Factors
Organized by Eiki Yamaguchi
(November 8, Crystal Ballroom)

Session 14: Seismic Steel Design: From Dampers and Connections to System Collapse
Organized by Taichiro Okazaki
(November 8, Jade Ballroom)

Session 15: Innovative Steel Structural Design for Fire Conditions
Organized by Anthony Abu
(November 8, Amethyst Ballroom)

Session 17: Innovations in Fire Design of Steel Structures
Organized by Venkatesh Kodur
(November 8, Jade Ballroom)

Session 18: Long Span Bridges
Organized by Ho-Kyung Kim
(November 8, Amethyst Ballroom)

GENERAL SESSIONS

Session 1: Analysis of Bridges
(November 7, Crystal Ballroom)

Session 2: Fire Safety Design
(November 7, Jade Ballroom)

Session 4: Advanced Design of Steel & Composite Structures
(November 7, Crystal Ballroom)

Session 6: Connections
(November 7, Amethyst Ballroom)

Session 12: Seismic Analysis & Design
(November 8, Amethyst Ballroom)

Session 16: Fatigue and Dynamic Behaviors
(November 8, Crystal Ballroom)

POSTER SESSION

November 8, Jade Ballroom Corridor
## TECHNICAL PROGRAM

### November 7, Thursday

#### 08:00 - 08:30
- Registration
- Opening Ceremony (Crystal Ballroom)

#### 08:30 - 09:00
- Welcoming Address
- LOC Address
- Congratulatory Address

**Keynote Lecture 1 (Crystal Ballroom)**

- **Application of Shape Memory Alloys for Seismic Resistant Design and Retrofit**
  - A State-of-the-Art Paper
  - Reginald DesRoches, Georgia Institute of Technology, USA

**Keynote Lecture 2 (Crystal Ballroom)**

- **Field Monitoring and its Application for Long-span Steel Bridges**
  - You-Lin Xu, The Hong Kong Polytechnic University, Hong Kong

#### 09:00 - 09:40
- Registration
- Keynote Lecture 1 (Crystal Ballroom)

#### 09:40 - 10:20
- Keynote Lecture 2 (Crystal Ballroom)

#### 10:20 - 10:40
- Coffee Break

#### 10:40 - 12:10

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 1 (Crystal)</th>
<th>Session 2 (Jade)</th>
<th>Session 3 (Amethyst)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:40 - 10:55</td>
<td>Identification of the Vibration Characteristics of Steel Bridges and Its Uncertainty Using SSVS-VAR Model</td>
<td>Impact of Bending Moment Distribution Mode on Fire Behavior of Restrained REC Columns</td>
<td>Influence of Plate Thickness, Diameter of Hole and Screw on Strength of Lap Joint connected by using Thread Rolling Screws</td>
</tr>
<tr>
<td>10:55 - 11:10</td>
<td>Development of a Structural Dynamic Behavior Model for PC Girders Subject to Variation of Tension Force in Tendons</td>
<td>Assessment of Connection Performance in a Sub-Framed Structure in Fire</td>
<td>Effects of Ultrasonic Peening on Fatigue Strength of Out-of-Plane Gusset Joints</td>
</tr>
<tr>
<td>11:10 - 11:25</td>
<td>Damage Evaluation of a Railway Bridge Based on Vibration Monitoring</td>
<td>Damaging Effects and Investigation of Steel Bridge Fires</td>
<td>Strengthening of Longitudinal and Transverse Beam Connection Joint in Old Steel Railway Bridges</td>
</tr>
<tr>
<td>11:25 - 11:40</td>
<td>Estimation of Structure Deformed Shape Using Measured Displacement Data</td>
<td>Failure Temperatures of Steel H-Section Columns under Elevated Temperatures</td>
<td>Investigation of Thermal Stress in Steel Plate Reinforced by CFRP Composite Material</td>
</tr>
<tr>
<td>11:55 - 12:10</td>
<td>Dynamic Response of Continuous Beam Bridge under Moving Train Load with Track Irregularity</td>
<td>Analysis of Fibre Reinforced Concrete Metal Decking Floor at Elevated Temperature</td>
<td>Dynamic Loading Tests and Stress Measurements to Investigate the Effectiveness of Repair Works in the Yodogawa Bridge</td>
</tr>
</tbody>
</table>

#### 12:10 - 13:10
- Lunch
## TECHNICAL PROGRAM

**November 7, Thursday**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 4 (Crystal)</th>
<th>Session 5 (Jade)</th>
<th>Session 6 (Amethyst)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chairs: Huiyong Ban, The University of New South Wales, Australia</td>
<td>Chairs: Satoshi Yamada, Tokyo Institute of Technology, Japan</td>
<td>Chairs: Jingfeng Wang, Hefei University of Technology, China</td>
</tr>
<tr>
<td></td>
<td>Sungwon Kim, Seoul Natl. University of Science and Technology, Korea</td>
<td>Hyung-Joon Kim, University of Seoul, Korea</td>
<td>Jae-Guen Yang, Inha University, Korea</td>
</tr>
<tr>
<td>13:10 - 13:25</td>
<td>Ductility of Composite Beams Constructed with High-Strength Steel</td>
<td>Seismic Performance of Beam-to-Column Connections with Improved</td>
<td>Frictional Contact Behavior of a PFWS Socket</td>
</tr>
<tr>
<td></td>
<td>Sections Huiyong Ban, Mark A. Bradford</td>
<td>Horizontal Stiffeners</td>
<td>Hoon Yoo, Sung-Hyung Lee, Ju-Won Seo</td>
</tr>
<tr>
<td></td>
<td>Elastic Modulus Focusing on Adhesive Length</td>
<td>Seismic Excitation</td>
<td>Jingfeng Wang, Xiaochen Wang</td>
</tr>
<tr>
<td>13:40 - 13:55</td>
<td>Suggestion of Shear Resistance Equation for Y-type Perforobond Rib</td>
<td>Damage Index of Tension Brace Based on Residual Deformation</td>
<td>Seismic Behavior of Shear-critical Steel Coupling Beams in Hybrid Coupled Shear Wall Systems with Shape Steel Boundary Elements</td>
</tr>
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<td></td>
<td>Shear Connector by Empirical Analysis</td>
<td>Hyoung-Joon Kim</td>
<td>Anliang Song, Mingzhou Su</td>
</tr>
<tr>
<td>13:55 - 14:10</td>
<td>Flexural Capacity of Corrugated Steel Beams under Pure Bending</td>
<td>Seismic Retrofit on Beam-to-Column Connections in Existing Steel</td>
<td>Experimental Study on Panel Zone Behavior in Steel Moment Resisting Frames</td>
</tr>
<tr>
<td></td>
<td>Corrugated Steel Plates</td>
<td>Yu Jiao, Shouichi Kishiki, Satoshi Yamada</td>
<td>Kangmin Lee, Keunyeong Oh, Rui Li, Luyi Chen</td>
</tr>
<tr>
<td></td>
<td>China and Its Research Back</td>
<td>Mock-up Using Reuse Structure with New-shaped Hysteresic Damper</td>
<td>Jae-Guang Yang, Min-Chang Baek</td>
</tr>
<tr>
<td>14:40 - 14:55</td>
<td>Flexural Behavior of a Full-Scale 65-kW Wind Turbine Tower</td>
<td>Post Buckling and Deterioration Behavior of RHS Columns under Bi-</td>
<td>Prediction of Fracture in Welded Seismic Steel</td>
</tr>
<tr>
<td></td>
<td>Hyoung-Bo Sm, Ian Prozell, Ahmed Egamal, Cha-Ming Uang</td>
<td>directional Forces</td>
<td>Moment Connections Based on Continuum Damage</td>
</tr>
<tr>
<td>14:55 - 15:10</td>
<td>The Optimization Process for Design of Horizontal Girders of Rising</td>
<td>Random Loading Test on Beam-to-Column Connection</td>
<td>Jae-Hoon Kim, Cheol-Ho Lee</td>
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<tr>
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<td>Sector Gate Using PiAnO</td>
<td>Norihito Miki, Shigeruhto Watanabe, Yu Jiao, Satoshi Yamada</td>
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</tr>
<tr>
<td>15:10 - 15:30</td>
<td>Coffee Break</td>
<td></td>
<td>Numerical Investigation on the Structural Behaviors of Ferritic Stainless Steel (STS430) Two-Bolted Connections</td>
</tr>
</tbody>
</table>

**Time**
- 13:10 - 15:10
- 13:25 - 13:40
- 13:40 - 13:55
- 13:55 - 14:10
- 14:10 - 14:25
- 14:25 - 14:40
- 14:40 - 14:55
- 14:55 - 15:10
- 15:10 - 15:30
<table>
<thead>
<tr>
<th>Time</th>
<th>Session 7 (Crystal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:30 - 15:45</td>
<td>Stability Response of Aluminum Alloy Column with Hruction under Ends of Connections</td>
</tr>
<tr>
<td></td>
<td>Xue Zou, Yixiao Wang, Jie Chen</td>
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<tr>
<td>15:45 - 16:00</td>
<td>Ultimate Shear Strength of High Performance Steel Plate Girders</td>
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<tr>
<td></td>
<td>Do-Hyun Kim, Yong-Chao Tsai, Hsiung Chih-Hung, Sung-Chul Lee</td>
</tr>
<tr>
<td>16:00 - 16:15</td>
<td>Features of the 800MPa High Strength Steel Plates for Building</td>
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<td></td>
<td>Da-Hyun Kim, Sung-Eun Lee, Jin-Ho Yu, Seong-Hyo No</td>
</tr>
<tr>
<td>16:15 - 16:30</td>
<td>Performance Testing and Comparison of Buckling Restrainted Bars with H and CrissCross Cross Section</td>
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<td></td>
<td>Unrestrained Bar Segment</td>
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<td>Ming-Wuu, Lu Xiu, Geng Li, Su, Sun, Zhang Daming Lu</td>
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<td>Stability Response of Aluminum Alloy Column with Hruction under Ends of Connections</td>
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<td>Xue Zou, Yixiao Wang, Jie Chen</td>
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<tr>
<td>16:45 - 17:15</td>
<td>Testing, Modelling, Analysing Various Energy Absorbing SMA Devices</td>
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<td></td>
<td>Emily R. McCarthy, Jamie E. Padgett, Darel Hodges, Reginald DesRoches</td>
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<tr>
<td>18:00 - 20:00</td>
<td>Banquet (Crystal Ballroom)</td>
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</tbody>
</table>

**Session 9 (Amethyst)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Technical Program</th>
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</thead>
<tbody>
<tr>
<td>15:30 - 15:45</td>
<td>Behaviour of Recentering Buckling-Restrained Braced Frame Structures</td>
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<tr>
<td></td>
<td>Ji-Woong Park, Jongwan Hu</td>
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<tr>
<td>15:45 - 16:00</td>
<td>Analytical Performance Simulation of Built-up H-Section Structural Members Fabricated with HSA800</td>
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<td>Junghan Yoo, Joowoo Kim, Jaeguen Yang, Joowon Kang, Myungjae Lee</td>
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<tr>
<td>16:00 - 16:15</td>
<td>Structural Performance of H-Shaped Beam-Columns Fabricated with High Performance Steel HSA800</td>
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<tr>
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<td>Kangmin Lee, Myung Jae Lee, Young Suk Oh, Tae Soo Kim, Do Hwan Kim</td>
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<tr>
<td>15:30 - 15:45</td>
<td>Bond-slip Characteristics of SMA Concrete Reinforcing Fibers Due to Pull-Out Tests</td>
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<td>Eunsoo Choi, Dongjoo Kim, Young-Soo Chung</td>
</tr>
<tr>
<td>16:15 - 16:30</td>
<td>Ultimate Shear Strength of High Performance Steel Plate Girders</td>
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<tr>
<td></td>
<td>Do-Hyun Kim, Yong-Chao Tsai, Hsiung Chih-Hung, Sung-Chul Lee</td>
</tr>
<tr>
<td>16:30 - 16:45</td>
<td>Structural Behavior of Anchor for High Strength 7 Wire Strand</td>
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<td>Jin-Kook Kim, Tae-Ryong Seong, Myung-Hyun Nub</td>
</tr>
</tbody>
</table>
## November 8, Friday

### 08:00
Registration (Crystal Ballroom)

### 08:30 - 09:10
Keynote Lecture 3 (Crystal Ballroom)
**Structural-Fire Engineering: Towards Performance-Based Design**
Michael D. Engelhardt, University of Texas at Austin, USA

### 09:10 - 09:50
Keynote Lecture 4 (Crystal Ballroom)
**Recent Trend on Design, Construction and Maintenance of Steel and Steel-Concrete Hybrid Bridges in Japan**
Masatsugu Nagai, Nagaoka University of Technology, Japan

### 09:50 - 10:10
Coffee Break

### 10:25 - 10:40
Evaluation of Seismic Performance of Steel Bridge Piers by Revised Design Earthquake Ground Motions
Sayuri Kitaichi, Kiyoshi Ono, Seiji Okada

### 10:40 - 10:55
Study on Inelastic Buckling Behavior and Residual Strength of H-Section Steel Column
Daniel Y. Abebe, Jinwoo Kim, Charles Clifton, Jaeyoung Choi

### 10:55 - 11:10
A Comparison of Design Standards for the Calculation of Wind and Earthquake Loads and the Design of Steel Structural Members in Industrial Plants
Jong-Han Lee, Eunsoo Choi, Baik-Soon Cho

### 11:10 - 11:25
Probabilistic Assessment of Seismic Performance Variations due to Changes of the Characteristics of Hysteretic Energy Dissipating Systems
Hyung-Joon Kim, Dong-Hyoun Shin

### Technical Program

#### Session 10 (Crystal)
**Reliability, Monitoring & Management of Infrastructures**
Chair: Hitoshi Furuta, Kansai University, Japan
Jung-Sik Kim, Kong University, Korea

10:10 - 12:10
- Traffic Control System for Reducing Bridge Live Load
  Moon-Sock Choi, Sang-Hyo Kim, Jung-Yeon Jung
- Considering Change of Environmental and Operational Conditions on Long-term Monitoring of a Steel Bridge by Bayesian Regression
  C.W. Kim, T. Morita, S. Kim, K. Sugura
- Finding Various Failure Modes of Lifeline Network Using Metaheuristics
  Koichiro Nakatani, Hitoshi Furuta, Yasutoshi Nomura, Ken Ishibashi, Masahiro Uchida
- Effectiveness of Optimization for Bridge Maintenance Planning
  Koichiro Nakatani, Hitoshi Furuta, Keisuke Takahashi, Ken Ishibashi, Masahiro Uchida
- Health Monitoring of a Truss Bridge Utilizing Wireless MEMS Sensors and Vehicle-Induced Vibration Data
  Mfauo Kawatsa, Chui Woo Kim, Hoomasa Doa, Ali Yamano
- Seismic Performance of RC Bridge Piers in Consideration of Unthinkableness
  Hiroaki Kinomura, Takeki Toi, Hiroaki Tsuruta, Masahiro Doaka
- Stress Redistribution by Member Fracture in Steel Truss Bridge
  Kunitomo Sugiu, Kunirotaro Hashimoto, En Nakamura
- Seismic Response Characteristics of Curved Girders with Inducted Bridge-Vehicle Interaction
  Mfauo Kawatsa, Chui Woo Kim, Akiyoshi Yamamoto, Shinya Yokoyama

#### Session 11 (Jade)
**Large Span Structures**
Chair: Feng Fan, Hainan Institute of Technology, China
Dongyu Lee, Sejong University, Korea

10:10 - 12:10
- The Effects of Seismic Motion Spatial Correlation on Earthquake Response of Single-Layer Spherical Lattice Shell
  Feng Fan, Yuchang Li, Xudong Zhi, Lu Li
- Database-assisted Design of Large-span Flat Roofs for Wind
  Ying Sun, Ning Su, Yue Wu
- Assessment and Strengthening of a Space Truss Structure Damaged by Heavy Snow
  Bo Nan, Yue Wu

#### Session 12 (Amethyst)
**Seismic Analysis & Design**
Chair: Tejin Kim, CHANG MINWOO Structural Consultant, Korea
Kiyoshi Ono, Osaka University, Japan

10:10 - 12:10
- Anti-seismic Effect of Lattice Grid with Friction Pendulum Bearings under the Earthquake Impact of Various Dimensions
  Feng Fan, Deven Kong, Menghan Sun, Xudong Zhi
- Study on Inelastic Buckling Behavior and Residual Strength of H-Section Steel Column
  Daniel Y. Abebe, Jinwoo Kim, Charles Clifton, Jaeyoung Choi
- A Comparison of Design Standards for the Calculation of Wind and Earthquake Loads and the Design of Steel Structural Members in Industrial Plants
  Jong-Han Lee, Eunsoo Choi, Baik-Soon Cho
- Numerical Analysis of Single-Layer Reticulated Shells with Socket Joints
  Huihuan Ma, Feng Fan, Gengbo Chen, Shizhao Shen
- Seismic Performance Evaluation of Fixed Steel Jacket Offshore Platforms with Buckling-Restrained Braces
  Mohamed Nou El-Din, Jin-Koo Kim

### 12:10 - 13:10
Lunch
November 8, Friday

Session 13 (Crystal)

13:10 - 13:25
Shozo Nakamura, Toshihiro Okumatsu, Takafumi Nishikawa, Takatoshi Okabayashi

Improving Steel Structure Design for Fire Conditions

13:25 - 13:40
Chang Kook Oh, Doobyong Bae

Influence of Land Use Data on Numerical Simulation of Corrosive Environment Caused by Airborne Seashore Particles

13:40 - 14:10
Makoto Obata, Masato Fukushima, Seiya Suzuki

Influence of Local Corrosion on Load-Carrying Capacity of Steel Beams Subject to Fire

Post Session

Session 14 (Jade)

13:10 - 13:25
Eiki Yamaguchi, Toshiaki Akagi

Performance of Steel Bridge & Influential Factors

13:25 - 13:40
Jeong-Ki Min, Young K. Ju

Residual Stresses Analysis of Welded Joints by Using Coercive Residual Stress and Ultimate Strength of Welded Steel Columns with Rectangular Section

13:40 - 14:05
Jinwoo Lee, Michael D. Engelhardt

The Critical Temperature of Steel Beams with Moment-Resisting Beam-Splice Connections

14:05 - 14:20
Jung Soo Kim, Moon Kyum Kim

Residual Stresses on Welds of Different Opening Shapes for Filling

Session 15 (Amethy)

13:10 - 13:25
Jeong-Ki Min, Young K. Ju

Residual Stresses Analysis of Welded Joints by Using Coercive Residual Stress and Ultimate Strength of Welded Steel Columns with Rectangular Section

13:25 - 13:40
M. Sreenivasan, A. Baskar, R. Arunpitchaimuthu

Inelastic Analysis of a Bridge Considering Influence of Strain Hardening on Bending Moment-Axial Force Interaction

13:40 - 14:05
Jing Wu, Guoqiang Wu, Qinghua Li, Jingbo Yang

Initiation and Analysis of Stitching Strain of Steel Plate

14:05 - 14:20
Jun-ke Han, Chun-lei Zhang

Experimental Study on Fatigue Behavior of Corroded Steel Plate

14:20 - 14:35
Kyung-Ho Chang, Tae-Hwan Um, Jae-yik Lee

Experimental Study on Fatigue Behavior of Corroded Steel Plate

14:35 - 14:50
Jung Soo Kim, Moon Kyum Kim

Residual Stresses on Welds of Different Opening Shapes for Filling

14:50 - 15:05
Jongmin Yang, Wei Bing, Kwang-il Ko, Mija Chung, Euntaek Lee

Inelastic Analysis of Steel Frame Considering Influence of Strain Hardening on Bending Moment-Axial Force Interaction

15:05 - 15:20
Euntaek Lee

The Critical Temperature of Steel Beams with Moment-Resisting Beam-Splice Connections

15:20 - 15:35
Jung Soo Kim, Moon Kyum Kim

Residual Stresses on Welds of Different Opening Shapes for Filling

15:35 - 15:50
Jongmin Yang, Wei Bing, Kwang-il Ko, Mija Chung, Euntaek Lee

Inelastic Analysis of Steel Frame Considering Influence of Strain Hardening on Bending Moment-Axial Force Interaction

15:50 - 16:05
Euntaek Lee

The Critical Temperature of Steel Beams with Moment-Resisting Beam-Splice Connections

16:05 - 16:20
Jung Soo Kim, Moon Kyum Kim

Residual Stresses on Welds of Different Opening Shapes for Filling

16:20 - 16:35
Jongmin Yang, Wei Bing, Kwang-il Ko, Mija Chung, Euntaek Lee

Inelastic Analysis of Steel Frame Considering Influence of Strain Hardening on Bending Moment-Axial Force Interaction

16:35 - 16:50
Euntaek Lee

The Critical Temperature of Steel Beams with Moment-Resisting Beam-Splice Connections
WELCOMING RECEPTION

A Welcoming Reception will be held in the Sky Ballroom (16th Fl.) to provide the opportunity for participants to socialize in a relaxed atmosphere from 18:00-19:30 on Wednesday, November 6, 2013.

BANQUET

The Conference Banquet scheduled for 18:00-20:00 on November 7, 2013 in the Crystal Ballroom (2nd Fl.), will provide the opportunity to enhance your friendship with attendees from throughout the world.

CULTURAL AND TECHNICAL TOURS

Jeju is an oval-shaped island that is 73km from east to west and 31km from north to south, with Mt. Hallasan in the center. The island has a coastal ring road of 181km and 258 km of coastline. It has a temperate climate with temperatures that rarely drop below zero degrees.

The island is home to both polar and tropical animals. It is home to 77 types of mammals, 198 species of birds, 8 kinds each of reptiles and amphibians, 873 types of insects and 74 varieties of spiders. The island, with Mt. Hallasan at its center, has recorded a total of 2,001 types of vertically distributed sub-tropical, temperate, and polar vegetation, in comparison with Mt. Baekdusan, which has about 500 types, and Mt. Jirisan, which has about 1,000.

TOUR PROGRAM

■ Schedule

DATE: November 9, 2013
TIME: Hotel start (08:30) → Udo tour/Lunch (10:00~13:30) → Sungsang Ilchulbong (13:40~14:30) → Aqua Planet Jeju (14:50~17:00) → Hotel stop

■ Information

• Minimum Participation Required: at least 20
• Vehicle: 45 seated bus
• Fare: 85,000KRW per 1 person (VAT included-available only cash)
• Included: Entrance fee, Vehicle, English tour guide, Lunch
Tour Desk

- Title: ISSS-2013 The 7th International Symposium on Steel Structures
- Venue: Jeju Grand Hotel
- Date: 2013.11.07 ~ 2013.11.09
- The Services Provide
  - Airline Reservation Service
  - Car rental Reservation Service
  - Tour Information Service
  - Transportation Information Service
  - Restaurant Information Service
  - Tour Guide Book

■ Udo

The island was named “Udo” or “Cow island” as its contours look like a cow lying down on the ground. There are 8 scenic wonders of Udo, and we’ll visit 3 spots (Udo-bong, Seobin-baeksa, Dongan-gyeonggul).

■ Seongsan Ilchulbong

Sungsan Ilchulbong is recognized and registered as a worldwide cultural Inheritance by UNESCO and is formed due to volcano activity. Watching sun rise at Sungsan Ilchulbong is known to be very beautiful.

■ Aqua planet Jeju

Aqua planet Jeju is the largest aquarium in Asia and an eco-friendly aquarium. There are several programs: Ecology of the Flying Penguin, the Dancing Sea Lion, and learning about the behaviors and characteristics of sea lions, elephant seals, and dolphins with different attractions at a presentation on ecology provided by professional aquarists.
From Jeju International Airport to Jeju Grand Hotel

The distance between the airport and the hotel is app. 2.5 km and takes about 7 minutes by driving. Public Transportation/Shuttle Bus Information are the following. Local people usually use taxi instead of the bus or shuttle bus.

※ In case of using airport bus, app. 2 minutes of walking will be required to Hallasan(Mt.) direction after taking 100, 200 ro 500 for Halla University direction and talking off at the Jaewon Apt. in Shinjeju.

※ Hotel shuttle buses are operated when reserved by customers and may stop at parking lot no. C-10, 11 of airport for boarding.

※ US $1 ≈ KRW 1,100.
Jeju Grand Hotel

First Floor

Second Floor

Poster Session

Jade

Sapphire

Amethyst

Crystal
The 7th International Symposium on STEEL STRUCTURES
November 7-9, 2013
Jeju Grand Hotel, Jeju, Korea