JPCI NEWSLETTER

No.8, September 2015

Japan Prestressed Concrete Institute

JPCI AWARD

Award for Outstanding Structures

● Otagawa-Ohashi Bridge

Location : Hiroshima Prefecture
Structural Type : 6-span continuous steel-concrete composite arch bridge
Bridge Length : 412m
Span : 40.0+46.5+47.0+2@116+46.5m
Width : 17.04～26.36m (effective width)
Design : Eight-Japan Engineering Consultants Inc.
Construction : SHIMIZU Corporation, Kyokuto Kowa Corporation

● Bizen♡Hinase Bridge

Location : Okayama Prefecture
Structural Type : 6-span PC extradosed continuous box girder bridge
Bridge Length : 765.0m
Span : 86.8+170.0+155.0+2@135.0+80.8m
Width : 6.5m (Effective width)
Design : Yachiyo Engineering Co., Ltd.
Construction : Sumitomo Mitsui Construction Co., Ltd. Shimizu Corporation. Sasayama Kogyo Co., Ltd. JV

● Okegawa Viaduct 2nd

Location : Saitama Prefecture
Structural Type : PC multi span continuous butterfly web bridge
Bridge Length : In-track 1,530m, Out-track 1,559m, Ramp 139m
Span : 45m (maximum span length : 53m)
Width : 10.510m～20.351m (effective wide)
Design : Sumitomo Mitsui Construction, P.S.Mitsubishi JV
Construction : Sumitomo Mitsui Construction, P.S.Mitsubishi JV

● Tanabe sports park gymnasium

Location	: Wakayama Prefecture
Structural Type	: RC+PCaRC+PCaPC+S
Number of Stories	: 2stories+1basement
Building use	: gymnasium
Floor Space	: 5,619.13㎡
Total floor space	: 7,964.24㎡
Design	: Chuoh Consultants Co., Ltd. , Ishimoto Architectural&Engineering Firm,Inc.
Surveillance	: Okamoto Architectural Design Firm
Construction	: Tanaka , Toho , Uraji JV

● Inamori-Kinenkaikan

Location	: Kyoto
Structural Type	: PCaPC+RC
Number of Stories	: 1 story below and 3 stories above the ground
Building use	: University
Floor Space	: 3,811.044㎡
Total floor space	: 9,088.736㎡
Design	: KUME SEKKEI Co.Ltd. Osaka Branch Office
Construction	: Matsumura Nakagawa Heiwa Corporation JV

● Takimi Footbridge

Location	: Shizuoka Prefecture
Structural Type	: Balanced Flat Arch
Bridge Length	: 39.000m
Span	: 28.000m（Arch Span）
Width	: 2.960m
Design	: Pacific Consultants Co.,Ltd.
Construction	: DPS Bridge Works Co.,Ltd.

● Chao Phraya River Crossing Bridge at Nonthaburi 1 Road Construction Project

Location	: Nonthaburi、Thai
Structural Type	: 3-span continuous extradosed bridge
Bridge Length	: 460m
Span	: 129.25+200.0+129.25m
Width	: 32.8m（total）
Design	: Epsilon, Wishakorn, Panya, Wiecon JV
Construction	: Sumitomo Mitsui Construction Co.,Ltd., Italian Thai Development JV

Genta Bridge

Location : Tottori Prefecture
Structural Type : 16 span continuous steel and concrete mixing Gelber Bridge
Bridge Length : 357.9m
Span : 17.86 + 14@23.02 + 17.77m
Width : 6.5m (effective width)
Summary
Design : Pasco Corporation
Construction : Fuji P.S Corporation・UBE Machinary Corporation・KounogumiCorporation JV
(Reconstruction・Repair)

Gunkai-gawa Bridge

Location : Aichi Prefecture
Structural Type : 7-span continuous rigid frame box girder bridge
Bridge Length : 740.0m
Span : 92.8m + 124.0m + 104.0+2@100.0m + 124.0m + 92.8m
Width : 14.75m (effective width)
Design : Sumitomo Mitsui Construction Co., Ltd.
Construction : Sumitomo Mitsui Construction Co., Ltd.

Jissen Joshi Gakuen Junior & Senior High School 120th Memorial Gymnasium

Location : Tokyo
Structural Type : RC+S
Number of Stories : 3 stories
Building use : Gymnasium
Floor Space : 2,578.17㎡
Total floor space : 4,258.52㎡
Design : TAISEI CORPORATION
Construction : TAISEI CORPORATION

DAIKIN Eau Du Ciel Tateshina, Seminar House

Location : Nagano Prefecture
Structural Type : RC+S
Number of Stories : F2/B2, F2/B2, F1
Building use : Guesthouse and Training institution
Floor Space : 1,996.52㎡ +75.25㎡
Total floor space : 4,789.17㎡ +53.41㎡
Proprietor : Daikin Industries, Ltd.
Design : Takenaka Corporation
Construction : Takenaka Corporation

Award for Outstanding Engineering Innovations

● Denka Kotakigawa Bridge

Location	: Niigata Prefecture
Structural Type	: Post-tensioned simple PC T-girder bridge
Bridge Length	: 39.0m
Span	: 38.1m
Width	: 4.0m (effective width)
Design	: Kajima Corporation
Construction	: Kajima Corporation

Award for Outstanding Accomplishments of Constructions

● Modification technology for hinge positions of the Gerber bridge to continuous rigid frame structure with rational placement of external tendons. —Strengthening work of Soutoku Bridge—

Location	: Shizuoka Prefecture
Structural Type	: 5-span continuous box girder bridge
Bridge Length	: 243.0m
Span	: 40.0m + 3@54.0m + 40.0m
Width	: 13.3m
Summary	: removal of central hinge position, rigid connection of the center position and reinforcing with external tendons.
Design	: Chiyoda Engineering Consultants Co., Ltd.
Construction	: Sumitomo Mitsui Construction Co., Ltd.

● Reinforcement Work of Nogawa Viaduct

Location	: Kanagawa Prefecture
Structural Type	: 4-span PC box girder+Simple PCT-beam+4-span PC box girder
Bridge Length	: (Up line) 270m, (Down line) 270m
Span	: 26.4+32.0+2@27.0+37.0 (6.0+25.0+6.0) +3@30.0+29.4m
Width	: 14.05m (effective width)
Design	: ORIENTAL CONSULTANTS Co., Ltd P.S.Mitsubishi Construction Co., Ltd
Construction	: P.S.Mitsubishi Construction Co., Ltd

● Toyotatomoe-gawa Bridge

Location	: Aichi Prefecture
Structural Type	: (Up line) 6-span continuous corrugated steel web bridge, (Down line) 5-span continuous corrugated steel web bridge
Bridge Length	: (Up line) 657m, (Down line) 640m
Span	: (Up line) 38.8+70.0+132.0+2@155.0+103.8m (Down line) 84.9+155.0+164.0+152.0+81.9m
Width	: (Up line) 14.76m～23.901m (effective width) (Down line) 14.76m～25.255m (effective width)
Design	: Sumitomo Mitsui Construction Co., Ltd. Fuji P.S Corporation. Abe Nikko Kogyo Co.,Ltd. JV
Construction	: Sumitomo Mitsui Construction Co., Ltd. Fuji P.S Corporation. Abe Nikko Kogyo Co.,Ltd. JV

EVENTS

Annual Symposium
- Coming symposium -

24th Symposium on Developments in Prestressed Concrete

October 22nd – 23rd, 2015

Toyama, Japan
http://www.jpci.or.jp/eng-index.htm

The topics of the next symposium are special lecture and technical tour. Just after the opening ceremony, Dr. Tor Ole Olsen, Dr. techn. Olav Olsen, Norway and Dr. Yozo Fujino, Distinguished YNU prof., Institute of Advanced Sciences, Yokohama National University will give special lectures. Technical Tour will be held on the 21st October 2015. Tour attendants are going to visit several bridges deteriorated by ASR in Hokuriku region.

- The last symposium -

The last symposium, “23rd Symposium on Developments in Prestressed Concrete”, was held on 23 and 24, October, 2014 at the Aiina Center / MALIOS, Morioka, Iwate. The purpose of the symposium is to attain further development of prestressed concrete technology by sharing valuable information among researchers and practitioners. Reconstructions after the Great East Japan Earthquake had been undergoing.

Previous to the symposium, the Workshop was held. Activities of committees of the JPCI and Tohoku branch of the Japan Prestressed Concrete Contractors Association were reported. Prof. Ichiro Iwaki of the Nihon University presented "For Extending the Service Life of Prestressed Concrete Structures in Tohoku".

Venue, Aiina Center / MALIOS, Morioka

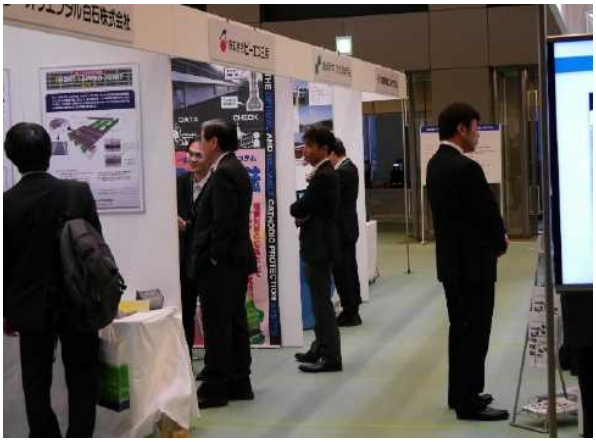
Opening ceremony

Dr. Aurelio Muttoni

Mr. Yasuyuki Kajiwara

In the Opening Ceremony Dr. Hiroshi Mutsuyoshi, professor of the Saitam University, the chairman of the Executive Committee of the symposium, gave opening address. History and outline of the symposium were introduced, and Dr. Jyunichiro Niwa, professor of the Tokyo Institute of Technology, the president of the JPCI gave an opening speech. Then, Mr. Shigenobu Kawasaki, Director of Department of Road of the Tohoku Regional Bureau, Ministry of Land, Infrastructure, Transport and Tourism gave a speech of greeting.

Dr. Aurelio Muttoni, professor of the École Polytechnique Fédérale de Lausanne, and Mr. Yasuyuki Kajiwara, Director of Miyagi Regional Bureau, Reconstruction Agency were invited and gave special lectures. Dr. Aurelio Muttoni presented “Some Innovative Prestressed Concrete Structures in Switzerland”. He mentioned that prestressed concrete technologies play important roles on decision of structural type and establishment of structural characteristics. He showed several examples of prestressed concrete structures which show possibilities of further progress in prestressed concrete structures such as prestressed concrete bridges with unique cross sections and prestressed concrete shell structures. Mr. Yasuyuki Kajiwara presented “Recovery and Reconstruction from the Great East Japan Earthquake - Looking Back on the Efforts over the Past Three and Half Years”. Reconstructions are steadily developing in Tohoku region. On the other hand, several issues should be solved have been



Technical exhibition

Parallel session

newly arisen. He reported situations and countermeasures just after the Great East Japan Earthquake, reconstructions of ports, rebuilding of houses, town planning and also establishment of the "new Tohoku Region".

In order to exchange information concerning activities, researches and original technologies of organizations, companies and universities in the Tohoku region were displayed at the Technical Exhibition. 34 groups participated in the exhibition. Booths were arranged for the exhibition, and presentations and discussions for each exhibition were made in the presentation space provided in the exhibition hall.

In the last symposium, 155 contributed papers were presented in 16 sessions, and the participants were 615. From each session, the most excellent presenters were chosen and were given "Award of Excellent Presentation". Prize winners are as follows.

Session 1: *NobuoTakasuga*, Tekken Corp.
Session 2: *Toshiyuki Nakamura*, Oriental Shiraishi Corp.
Session 3: *Shu Kobayashi*, Japan Prestressed Concrete Contractors Association
Session 4: *Tsuyoshi Fukui*, P.S. Mitsubishi Construction Co., Ltd.
Session 5: *Hidekkatsu Itaya*, Kyokuto Kogen Concrete Shinko Co., Ltd.
Session 6: *Wataru Sasaki*, Sumitomo Mitsui Construction Co., Ltd.
Session 7: *MasahiroOhbuchi*, Chiyoda Engineering Consultants Co., Ltd.
Session 8: *Hiroaki Iwagaki*, Nippon PS Co., Ltd.
Session 9: *TatsuoTsubokura*, Obayashi Corp.
Session 10: *TakashiYokoyama*, Nippon Expressway Research Institute Co., Ltd.
Session 11: *Syohei Momoki*, Tobishima Corp.
Session 12: *Hideki Koshino*, Showa Concrete Industry Co., Ltd.
Session 13: *Hiroyasu Murai*, DPS Bridge Works Co., Ltd.
Session 14: *Kentaro Iwashita*, Meijo University
Session 15: *Tomotaka Fujita*, P.S. Mitsubishi Construction Co., Ltd.
Session 16: *Hiroyuki Uchibori*, Sumitomo Mitsui Construction Co., Ltd.

Workshop

Award of excellent presentation

■ This newsletter contents current information on the activities and topics of JPCI.

■ If you have any comments and suggestions, please contact us by sending e-mail to: *kaiinka24@jpci.or.jp*

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