Seminar Report

“Joint seminar on maintenance of concrete structures in Philippines - Utilization of the knowledge of Standard Specification for Concrete Structures of JSCE (Concrete Codes)” was held at Metro Manila on Aug. 26th, 2015. The joint seminar was co-organized by JSCE Concrete Committee, JSCE Philippine branch and University of the Philippines Diliman and also supported by JSCE International Scientific Exchange Fund.

The venue of the seminar was “Eastwood Richmond hotel” located in Queson City, where is northern part of Metro Manila. The purposes of this seminar was to introduce the effectiveness of “JSCE Concrete Codes” to Philippine engineers and to spread Japanese maintenance ideas and concepts of concrete structures based on “JSCE Concrete Codes - Maintenance Edition -”, especially related to highway and port structures.

There were 50 of participants from the fields of Governmental works, structural designers, constructors and university faculties. They were highly impressed in the presentations of Japanese lecturers. The population density of Metro Manila is now 18,000 person/km², which is 3 times larger than that of Tokyo. Under this highly crowded region, he plenty of concrete structures such as buildings, loads, highway bridges and train bridges. Now Philippine is “Construction Age” enhanced by 5 to 6 % of economic growth, but also they should maintain old concrete structures, which contained concrete structures founded by Japanese ODA Projects. In the seminar the participants exchanged their ideas and opinions under the situations of above.

In the process of maintenance of deteriorated concrete structures, it is difficult to find a correct answer properly, and we should find adaptable systems or methods in each country with considering technical levels, cultures, climate and economy. This joint seminar had successfully ended as a first step of the collaborative discussions between Japan and Philippines accessing to future maintenance of concrete structures.
## Schedule on Aug. 26th 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Content</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>09:00-09:30</td>
<td>Registration</td>
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| 09:30-09:40| Opening Remarks & Ceremony                   | Dr. Nathaniel B. Diola  
Associate Prof. of University of the Philippines Diliman  
Dr Ricardo G. Sigua  
Prof. of University of the Philippines Diliman |
| 09:40-09:55| Coffee Break                                 |                                                                         |
| 09:55-10:55| Outline of JSCE Concrete Codes              | Dr. Kyuichi Maruyama  
Emeritus Prof. of Nagaoka University of Technology                      |
| 10:55-12:10| JSCE Concrete Codes Maintenance and Repair  | Dr. Hiroshi Yokota  
Prof. of Hokkaido University                                            |
| 12:10-13:30| Lunch Break                                  |                                                                         |
| 13:30-14:30| Current Situation of Road Structures and their Maintenance in Japan | Dr. Yoshinobu Ohshima  
Senior Researcher of Public Works Research Institute                    |
| 14:30-15:30| Recent topics on maintenance of Port Facilities in Japan | Dr. Toru Yamaji  
Director of Structural Engineering Field Port and Airport Research Institute |
| 15:30-15:45| Coffee Break                                 |                                                                         |
| 15:45-16:45| Cutting-Edge Technologies for Assessing Infrastructures | Dr. Tomoki Shiotani  
Prof. of Kyoto University                                               |
| 16:45-17:30| Discussion & Ending Remarks                  |                                                                         |

## Schedule on Aug. 27th 2015

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<tr>
<th>Time</th>
<th>Content</th>
<th>Attendances</th>
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<tbody>
<tr>
<td>08:00-12:00</td>
<td>Site visit to Sky Way Construction</td>
<td>Prof. Shiotani, Dr. Yamaji, Dr. Nishida</td>
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<tr>
<td>15:00-17:00</td>
<td>Visit to Manila City</td>
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Participants of seminar

Presentation from Prof. Maruyama related to JSCE Concrete Codes

Presentation from Prof. Yokota related to Maintenance Edition of JSCE Concrete Codes
Presentation from Dr. Ohshima related to maintenance of road structures

Presentation from Dr. Yamaji related to maintenance of port structures

Presentation from Prof. Shiotani related to innovative NDT
Overview of seminar hall

Visit to Skyway Construction site.