## 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, constructers 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. $26^{th}$ 2015

Time	Content	Speaker
09:00-09:30	Registration	
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	Dr. Hiroshi Yokota
	and Repair	Prof. of Hokkaido University
12:10-13:30	Lunch Break	
13:30-14:30	Current Situation of Road	Dr. Yoshinobu Ohshima
	Structures	Senior Researcher of Public Works
	and their Maintenance in Japan	Research Institute
14:30-15:30	Recent topics on maintenance	Dr. Toru Yamaji
	of Port Facilities in Japan	Director of Structural Engineering
		Field Port and Airport Research
		Institute
15:30-15:45	Coffee Break	
15:45-16:45	Cutting-Edge Technologies for	Dr. Tomoki Shiotani
	Assessing Infrastructures	Prof. of Kyoto University
16:45-17:30	Discussion & Ending Remarks	

## Schedule on Aug. $27^{th}$ 2015

Time	Content	Attendances
08:00-12:00	Site visit to Sky Way Construction	Prof. Shiotani, Dr. Yamaji, Dr.
15:00-17:00	Visit to Manila City	Nishida



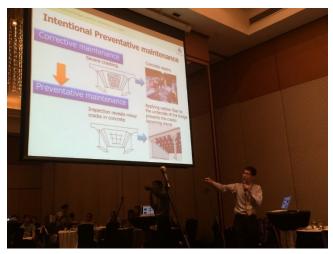
Participants of seminar



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.