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I want to thank you for all your kindness in Japan before writing and I was very happy to be there seeing you all and your country. I was honored as a recipient of STG (Study Tour Grant) 2010 which is held by JSCE. I came to Japan on 13th of September, 2010. During one week, I was experienced with Japanese latest technologies of Civil Engineering.

We visited to Public Works Research Institute in Tsukuba with our guide Mr. Sato from General Affairs Division of Public Works Research Institute. We saw the one of the largest dynamic centrifuges in the world of which has radius of 6.6 m, maximum acceleration 150G, maximum pay load 400t G. There were shaking tables mounted on swing platforms which can simulate big earthquake motions. In the laboratory, we watched some centrifugal tests about such as embankment failure induced by liquefaction of subsoil, resistance of rigid retaining wall against earthquake, seismic behavior of underground structure during earthquake and resistance of gravity caisson on soft rock bed against earthquake.



Secondly, we were witnessed to pavement testing facilities on which 4 loaded vehicles unmanned and autonomously controlled travel simultaneously along the large and medium loops. Actually, we

learned different kinds of pavements used in Japan.

Permeable, heat shield and water retention pavements. We can apply these in our country too.(especially in Istanbul) We also saw tested tracks for the purpose of implementing tests concerning the driving safety of road traffic. We were so excited passing on steeply slanted track. (Design speed was 120 km/hour and maximum angle of inclination is 27 degrees.) The technologies that provide rain, mist to simulate and create wet and frozen road surfaces, test visibility by automatically changing the traffic lights properties increased my interest in your road studies.



In addition, dam hydraulic laboratory was so large and has models of spillways and flood control facilities. We understood that the development of structural design methods concerning the reservoir sedimentation is one of the main items of laboratory and also your country. In the laboratory, numerical simulation was also developed for sedimentation counter measures, water quality conservation systems and intake facilities. Fatigue of concrete decks was also searched in their structure laboratories since in Japan the general deteriorations of bridges were observed due to fatigue of concrete decks. The students finished their master programs introduced us IFAS and GFAS

(Integrated Flood Analysis System and Global Flood Alert System which is developed by ICHARM (International Center of Excellence for Water Hazard and Risk Management) and its applications. We saw how Japan helps to other countries by using its advance technologies providing early warnings for flood.

We also visited Kajima Technical Research Institute. First, we saw the wind tunnel tests on how wind affects tall buildings and even to surrounding buildings. Then, we saw wave maker facility made to evaluate the effect of waves to underwater structures. Besides this, energy saving technology in which they used for such as air ventilation system in their offices is surprised me since they were using the underground water to warm up and get cool. This made me thoughtful about new energy saving techniques. Also, the structure laboratory in which steel and reinforced concrete structural elements were tested applying earthquake forces by machines and equipments and I realized that tests which Japan did at the beginning of two thousand years are seen nowadays in our countries.



In addition, we saw Tokyo Port Bridge. Tokyo Port Bridge is steel truss bridge which is 2933 meters long and 87.7 meters high above water level. The architecture of this bridge was great. Earthquake resistance of the bridge was also unusual for our country. Arakawa Museum of Aqua one of the biggest rivers in Tokyo and we had chance to get some information about

Arakawa River in this museum, too. Moreover, in your country, using common utility ducts all the utility lines such as telecommunication, electronics, gas, water and wastewater lines together were consolidated in one secure common utility duct and as an example of this Hibiya Common Utility Duct Construction was introduced to us.



I was really surprised by seeing the huge bridge and road constructions and underground constructions in your country.

Thank you to JSCE and separately to Mr. Yanagawa Hiroyuki, Mr. Sato Yoshiaki, Mr. Yukio Miyagawa and Mr. Takayuki Ayabe for their hospitality. It was really great experience for me and for my engineering career.