

Study on Maintenance of Concrete Structures



Dr. Motoyuki Suzuki (Tohoku University)

Dr. Suzuki has been working in the field of structural engineering for many years. His interests include the safety and seismic design of concrete structures and the investigation, analysis and evaluation of bridge structural performance in consideration of aging deterioration. With society facing a serious problem of infrastructure aging, Dr. Suzuki has worked diligently on the maintenance and life-extension of existing structures. His latest research entailed carrying out loading tests and variable non-destructive tests on PC road bridges that have suffered significant deterioration due to chloride ion attack and then, after demolishing the bridges and carefully measuring their material properties, summarizing their structural state (stiffness, load capacity and deformability) using FEM analysis. Based on this research, he proposed a comprehensive method of investigating, analyzing and evaluating concrete structures for aging deterioration and safety. This accomplishment is highly recognized for its contribution to improving the safety and durability of concrete structures, as well as for bringing together material behavior and structural behavior, which have heretofore been treated as separate research fields.

Dr. Suzuki's pioneering work and inventive research have contributed to a safer and more secure society both now and in the future. With much appreciation, the JSCE recognizes his achievements as worthy of the Yoshida Award for Research Accomplishment.