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Sommario/riassunto

This volume contains the proceedings of the 8th International PhD Student Workshop on Service Life and Durability of Reinforced Concrete Structures that was held in Marne-la-Vallée, France, on September the 26th and 27th 2016. Topics discussed in the book are related to durability performance of reinforced concrete, service life modelling, prevention, protection and repair. Reinforced concrete structures may prove to be very durable, however, their gradual degradation over time impairing both serviceability and structural safety is still a matter of great practical concern in view of the large economic consequences for assessment, maintenance and repair. Corrosion of steel reinforcement is considered to be the most detrimental process responsible for structural deterioration. Many studies are in progress to develop a comprehensive engineering approach for assessment of the initiation and the propagation period of corrosion in both uncracked and cracked concrete. Modelling of chloride penetration and carbonation has attracted a great deal of attention in recent years, however, there is still much debate on several essential aspects such as the chloride threshold level. ASR, and acid, sulphate and frost attack and other mechanisms remain important areas of study. In addition, the interaction between different degradation mechanisms requires further understanding. The worskhop was organised under the auspices of RILEM EAC (Educational Activities Committee), with the aim to bring together young researchers in the field of durability of concrete.