

Welcome

The 6th International PhD Student Workshop on Durability of Reinforced Concrete will be held in Delft, The Netherlands, during July 4 and 5, 2013, hosted by TUDelft. After a series of successful workshops, most recently in Espoo (2102), Madrid (2010) and Guimarães (2009), IPSW2013 will be held under the auspices of RILEM EAC (Educational Activities Committee), aiming to bring together young researchers in the field of durability of concrete.

Scope

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 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 in uncracked and cracked concrete.

Modelling of chloride penetration and carbonation has attracted a great deal of attention in recent years; however, essential aspects such as the chloride threshold still remain controversial. Other mechanisms remain important areas of study: ASR, acid, sulphate and frost attack. In addition, the interaction between different degradation mechanisms requires further understanding. New materials are being developed: from high volume or ternary blended cements to alkali-activated binders (geopolymers), for which durability is essential for their acceptance.

Degradation leads to several undesirable effects, for example, cracking and spalling of the concrete cover, loss of steel/concrete bond and reduction of the load-bearing capacity of the structure. So far, most of the structural consequences of reinforcement corrosion or other degradations have been scarcely treated in a rigorous manner. The long term (life cycle) effects of preventive measures and methods for protection and repair need further study.

Topics

The topics should be related to durability performance of reinforced concrete, service life modelling, prevention, protection and repair. Some suggested topics are:

- Causes and mechanisms of deterioration for new binders;
- Durability modelling and prediction and their reliability for new and existing structures;
- The role of cracks for initiation and propagation of corrosion;
- Corrosion assessment techniques;
- Structural behaviour following degradation of concrete structures;
- Prevention, protection and repair of damage in concrete structures.

Objectives

This workshop is intended exclusively for PhD students who are at the frontier of knowledge in the field of durability of reinforced concrete. The main objectives of this conference are:

- to bring together PhD students, just starting or well advanced in their study;
- to put PhD students from the same field of research in contact with each other and promote a scientific dialogue between them;
- to help students to become more familiar with the presentation of their research activities and to generate technical discussions in a more relaxed environment;
- to exchange ideas on methods and scientific goals;
- to contribute to international exchange of knowledge.

www.me.citg.tudelft.nl/events
go to "Durability of Reinforced concrete from Composition to Protection"

Registration, Dates & Fees

Please register through our website: go to www.me.citg.tudelft.nl/events than go to the page: "Durability of Reinforced concrete from Composition to Protection".

An abstract (less than 300 words in MS WORD) should be sent to the contact person of your choice within the contact frame on the backside of this flyer. For more details check our website.

Important dates to keep in mind:

- Deadline for abstract submission – 15 April 2013
- Acceptance of abstracts – 15 May 2013
- Acceptance decision on papers for publication – 31 July 2013
- Deadline for papers – 15 September 2013

The workshop, being intended only for PhD students, is free of charge.

Participants need to support their own travel, accommodation, lunch and dinner expenses.

Proceedings

The Abstracts will be sent in digital format via mail to all participants before the event. In the Fall of 2013, a digital version of the Proceedings with accepted papers will be distributed.

