

SEACON - Sustainable concrete using seawater, salt-contaminated aggregates, and noncorrosive reinforcement

Mid-term Workshop

13th January 2017, 15:00-17:45 CET (9:00-11:45 EST)

Lecture room MA.1, Politecnico di Milano, Mancinelli campus, via Mancinelli 7,
20131 Milan - Italy

Broadcast on-line via Skype Professional

Advancement of the SEACON project at month 15

Nowadays design standards worldwide aim at limiting the use of chloride-contaminated materials for reinforced concrete (RC) structures. Beside possible effects on the early stages of cement hydration and the long-term development of strength, the primary reason is corrosion of black steel reinforcement. However, the use of chloride-contaminated raw materials for the production of concrete would allow saving natural resources, such as fresh water, leading to enhanced environmental sustainability.

Within the framework of ERA-NET Plus Infravation 2014, an infrastructure innovation program on “Advanced systems, materials and techniques for next generation infrastructure” (<http://www.infravation.net/>), the SEACON project - Sustainable concrete using seawater, salt-contaminated aggregates, and non-corrosive reinforcement (<http://seacon.um-sml.com>) was started on October 2015. This project aims at demonstrating the safe utilization of seawater and salt-contaminated aggregates (natural or recycled) for a sustainable concrete production when combined with non-corrosive reinforcement to construct durable and economical concrete infrastructures. Integral to the study are two experimental tracks.

During this workshop, the mid-term advancement in the research conducted by the various partners will be presented and discussed, in order to better finalize the prosecution of the project. The workshop is open to the project partners, collaborators, program managers, and funding organizations.



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Agenda

- 15:00 - **Opening of the workshop** - Bertolini (Politecnico di Milano)
- 15:05 - **Presentation of the SeaCon Project** - Nanni (University of Miami)
- 15:10 - **Effects of seawater and salt-contaminated aggregates on concrete** - Bertola (Buzzi)
- 15:30 - **Sea-concrete and GFRP rebars** - Nanni, Khatibmasjedi (University of Miami)
- 15:50 - **Use of sea-concrete and stainless steel rebars** - Carsana, Lollini (Politecnico di Milano)
- 16:10 - **LCA-LCC analyses of infrastructures made with SeaCon and GFRP or SSR bars** - Dotelli, Gallo Stampino (Politecnico di Milano)
- 16:30 - **Advancement of Halls River Bridge field demonstration project in Florida** - Nolan (FDOT)
- 16:50 - **Advancement of culvert along A1 motorway field demonstration project in Italy** - Canonico (Buzzi), Pela (Pavimental), Redaelli (Politecnico di Milano)
- 17:10 - **Open discussion** on present results and project prosecution, with possible contributions from program managers and funding organizations (Infravation, ANAS and FHWA)
- 17:45 - **Closure of the workshop**

Registration

Registration to the workshop can be simply made by sending an email message to Dr. Matteo Gastaldi (matteo.gastaldi@polimi.it). The deadline for registration is 20 December 2016. People interested in participating on-line should specify the email address to which they wish to receive the invitation for the remote connection via Skype Professional.