

V INTERNATIONAL SEMINAR ON PERFORMANCE AND DURABILITY OF CONCRETE STRUCTURES

RILEM Meeting – Durability Indicators and Service Life Predictive Models

Goiânia, Brazil - April 29-30/2020

The seminar will address general issues related to the durability and to the mechanisms of deterioration and aging of concrete structures, focusing on the performance of concrete structural systems. Particular attention will be given to the indicators and criteria of durability, as well as to the service life predictive models, as a way of contributing to concrete formulation and structural design within a performance-based approach.

PRELIMINARY PROGRAMMING



29/04/2020

Inscription and reception of participants: 08:00 h to 09:00 h

Opening ceremony of the event: 09:00 h to 09:30 h

Section 1: Indicators and Durability Criteria – International Overview

- 09:30 h to 10:25 h – Indicators and criteria of durability in media subject to carbonation and chlorides: a contribution to the specification of durable concretes – Prof. Dr. Mark Alexander (U Cape Town);
- 10:25 h to 10:45 h – Discussion: Critical Analysis and Perspectives
- Coffee-break – 30 min

Section 2: Recent Research Results of the PPG-GECON/UFG – Part 1

- 11:15 h to 12:15 h – 3 presentations on the following topics: a) Porosity of cementitious systems, b) Pre conditioning for concrete carbonation tests and c) Gas permeability in concrete with mineral additions;
- 12:15 h to 12:30 h – Discussion and Section Closing

Section 3: International Standardization on Durability of Concrete Structures

- 14:30 h to 15:30 h – Vision of Eurocode and international standardization for the durability of concrete structures: an international overview – Profs. Drs. Gilles Escadeillas and Alexandra Bertron (UPS/INSA – Toulouse);
- 15:30 h to 16:00 h – Discussion: Critical Analysis and Perspectives
- Coffee-break – 30 min

Section 4: Recent Research Results of the PPG-GECON/UFG – Part 2

- 16:30 h to 17:45 h – Presentations on performance and durability of concrete modified by pozzolanic mineral additions of high reactivity;
- 17:45 h to 18:00 h – Discussion and Section Closing



30/04/2020

Section 5: Service Life Predictive Models – Performance Approach

- 08:15 h – Section opening;
- 08:30 h to 09:30 h – Multi-scale modeling of cementitious materials for service life prediction and conception for durability – Prof. Dr. Túlio Honório de Faria (LMT/ENS Paris Saclay);
- 09:30 h to 10:15 h – Carbonation models after 15 years of natural exposure of concretes with mineral additions – Profs. Drs. Oswaldo Cascudo and Helena Carasek (Universidade Federal de Goiás – UFG/EECA), and Eng. Alexandre de Castro (Eletrobras Furnas);
- 10:15 h to 10:30 h – Discussion: Critical Analysis and Perspectives
- Coffee-break – 30 min

- 11:00 h to 12:00 h – Presentation of the National Project PERFDUB – Bases for the durability of concrete and concrete structures with a performance-based approach – Prof. Dr. Gilles Escadeillas (UPS/INSA – Toulouse);
- 12:00 h to 12:30 h – Discussion: State of the Art and Applicability
- 12:30 h to 12:45 h – Seminar Closing

Obs.: from 14:30 h to 17:00 h, technical visits to research laboratories.

International Scientific Committee:

Alexandra Bertron* – Institut National des Sciences Appliquées – INSA/Toulouse, France

Alexandre de Castro – Eletrobras Furnas, Brazil

Ana Velosa* – Universidade de Aveiro – UA, Portugal

Andrielli Moraes de Oliveira* – Universidade Federal de Goiás – UFG, Brazil

Gilles Escadeillas* – Université Paul Sabatier – UPS/INSA/Toulouse, France

Helena Carasek* – Universidade Federal de Goiás – UFG, Brazil

Marina Augusta Malagoni – Instit. Federal de Educação, Brazil; INSA/Toulouse, France

Mark Alexander* – U Cape Town, South Africa

Oswaldo Cascudo** – Universidade Federal de Goiás – UFG, Brazil

Pedro Castro* – Centro de Investigación y de Estudios Avanzados, IPN/Mérida, Mexico

Paulo Helene* – Instituto Brasileiro do Concreto – IBRACON, Brazil

Túlio Honório de Faria* – LMT/ENS Paris Saclay/Université Paris Saclay, France

Vanderley M. John* – Escola Politécnica da Universidade de São Paulo – EP.USP, Brazil

* RILEM members (*in bold*).

Organizers:

Programa de Pós-Graduação em Geotecnia, Estruturas e Construção Civil – PPG-GECON

Escola de Engenharia Civil e Ambiental – EECA

Universidade Federal de Goiás – UFG

Divisão de Tecnologia em Engenharia Civil – DTEC.E

Eletrobras FURNAS

Organizing Committee (Local Committee):

Oswaldo Cascudo – Universidade Federal de Goiás – UFG (Seminar Chair)

Alexandre de Castro – Eletrobras Furnas (Coordinator by Furnas)

Helena Carasek – Universidade Federal de Goiás – UFG (Coordinator at UFG)

Renato Marques Cabral – Eletrobras Furnas

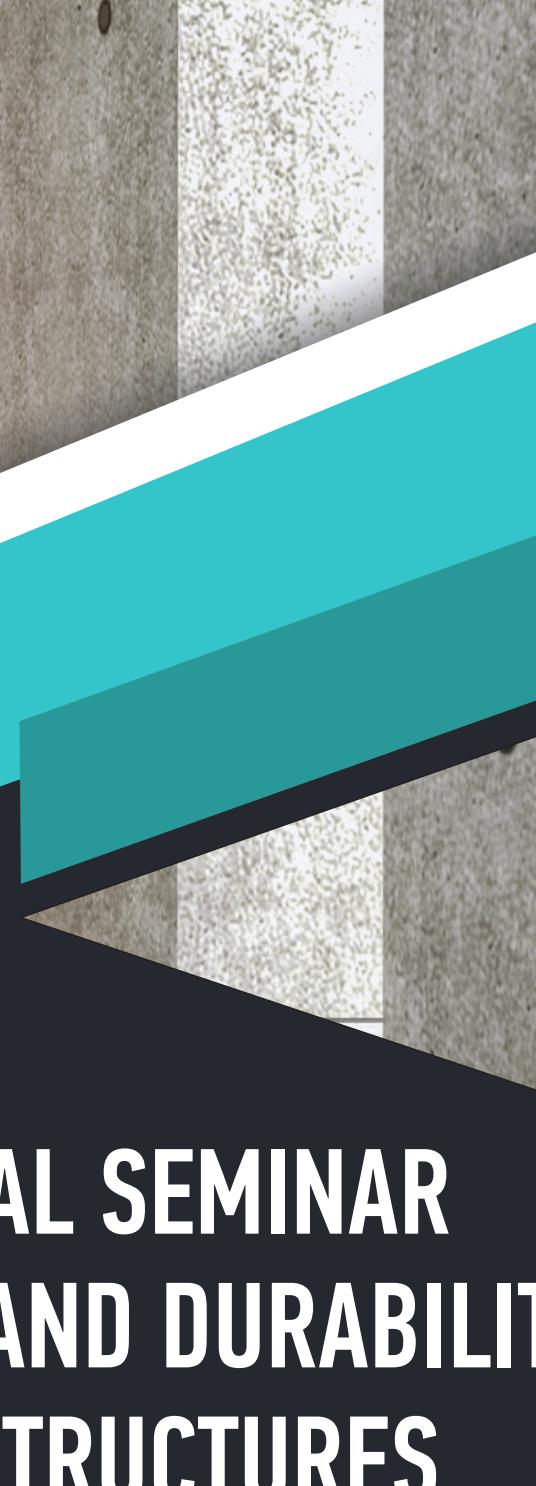
Andrielli Moraes de Oliveira – Universidade Federal de Goiás – UFG

Daniela Castro Silva – Comunidade da Construção/Goiânia and UFG

Co-sponsorship/Promotion:

RILEM – International Union of Laboratories and Experts in Construction Materials, Systems and Structures

REALIZATION



SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT

REALIZATION

SPONSORSHIP

CO-SPONSORSHIP

TECHNICAL AND SCIENTIFIC SUPPORT

GENERAL SUPPORT