## **REGISTRATION FORM**

## PERSONAL DATA Fullsurname: Birthdate: \_\_\_\_\_ Birthplace:\_\_\_\_ Study title: Company: Company address (street, number, ZIP code, town, province): E-mail: Phone: Mobilephone:\_\_\_\_\_ Skype: **INVOICING DATA (invoices will be VAT exempted)** Company name: Name and surname: Fiscal Code: I authorize my personal data to be processed according to D.Lgs. I agree my personal data being processed to receive information about upcoming courses and for statistical purposes. Pursuant to D. Lgs. 196/03 I will be able to access my data, request their modification or cancellation at any time. Signature \_\_\_\_\_

# Ph.D. Programme in Structural, Seismic and Geotechnical Engineering

#### **Summer School Director**

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## Secretary for post-graduated engineers

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5 CFU will be recognized to students of the Ph.D. programme in Structural, Seismic and Geotechnical Engineering (Politecnico di Milano).

CFU recognition for other Ph.D. students is committed to the Academic Board of the Ph.D. course they belong to.

For additional information, please visit: http://www.cte-it.org/



#### In collaboration with





International Federation National for Structural Concrete

## **SUMMER SCHOOL 2021**

Fibre reinforced concrete.

Material characterization and structure design.

Lecco Campus, July 2<sup>nd</sup> – 7<sup>th</sup> 2021 room B<sub>0.2</sub>



#### **SUMMER SCHOOL PROGRAMME**

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#### SUMMER SCHOOL LECTURERS

### FRIDAY, 2<sup>nd</sup> JULY 2020

9:00-10:30 Fibre reinforced concrete materials: introduction

(Prof. Walraven)

10:30-11:00 Coffee break

11:00-12:30 Fibre reinforced concrete properties at fresh and hardened states

(Prof. Mobasher)

Lunch

14:30-16:00 Mechanical characterization and classification of fibre reinforced materials (**Prof. Kanstad**)

16:00-16:30 Coffee break

16:30-18:00 Constitutive models for design

(Prof. di Prisco)

### SATURDAY, 3rd JULY 2020

9:00-10:30 Creep and shrinkage

(Prof. Mobasher)

10:30-11:00 Coffee break

11:00-12:30 UHPFRC for architectural design (**Prof. Walraven**)

## SOCIAL PROGRAMME TO BE DEFINED SATURDAY 3<sup>Trd</sup>

JULY 2020 - 14:00-23:00

## MONDAY, 5th JULY 2020

9:00-10:30 Structure design approach according to Eurocode 2010 (**Prof. Kanstad**)

10:30-11:00 Coffee break

11:00-12:30 Case studies: reliability of predictive models (**Prof. di Prisco**)

Lunch

14:30-16:00 FRC as a sustainable material

(Prof. Mobasher)

16:00-16:30 Coffee break

16:30-18:00 Structural applications in Civil Engineering (**Prof. Walraven**)

#### TUESDAY, 6th JULY 2020

9:00-10:30 Properties of Ultra High
Performance concrete and their
characterization (**Prof. Kanstad**)

10:30-11:00 Coffee break

11:00-12:30 Modeling and reliability (**Prof. di Prisco**)

Lunch

14:30-16:00 SFRC models for design of structural elements (**Prof. Mobasher**)

16:00-16:30 Coffee break

16:30-18:00 Use of fibre reinforced concrete in soil structure interactions (**Prof. Walraven**)

## WEDNESDAY, 7th JULY 2020

9:00-10:30 Design of advanced applications (**Prof. Kanstad**)

10:30-11:00 Coffee break

11:00-12:30 Design of FRC in Italy

(Prof. di Prisco)

#### REGISTRATION

Only the first 30 Ph.D. students and the first 30 post graduated engineers will be accepted.

The registration fee is 400,00 Euros per person (VAT exempted, following the Italian Law DPR 633/1972, art. 10 and subsequent amendments), covering course attendance and social events. For PhD students of Politecnico di Milano no registration fee will be required.

To register, please send to <a href="mailto:phdissg-dica@polimi.it">phdissg-dica@polimi.it</a> (if you are a Ph.D. student) and to info@cte-it.org (for post- graduate engineer)

- registration form
- copy of bank transfer

#### PH.D. STUDENTS - BANK TRANSFER TO

Politecnico di Milano – Dipartimento di Ingegneria Civile e Ambientale IBAN: IT29G0569601620000001740X15 - SWIFT code: POSOIT22

Banca Popolare di Sondrio, Agenzia 21, Via Bonardi, Milano

#### POST-GRADUATED ENGINEERS - BANK TRANSFER TO

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Please always write: FRC DICA SUMMER SCHOOL 2020+YOUR NAME AND SURNAME



Marco di Prisco (Politecnico di Milano). Professor of Structural Design and Precast Structures, Department of Civil and Environmental Engineering at Politecnico di Milano. Main research interests: constitutive modeling of plain and fibre reinforced concrete, fracture mechanics, composite materials, theoretical and experimental analysis on reinforcement-concrete interaction basic mechanisms

and r/c and p/c structural elements, prefabricated structures, structural response at exceptional loads. Editor in Chief of the European Journal of Environmental and Civil Engineering, Associate editor of the J. of Cement and Concrete Composites, member of ACI, RILEM and fib, Co- author of the MC2010 chapters on FRC, he is currently convener of the Commission TC250/SC2/Wd1/Tq2 to introduce FRC in EC2.



Terje Kanstad is professor at the Department of Structural Engineering at NTNU, Trondheim University. His research and teaching -concerns structural design of buildings and bridges (incl post graduate lecturing and standardization work), Fibre reinforced concrete, Early age concrete crack assessment, Finite element analysis with focus on time-dependent structural systems and material behavior. Deteriorated structures and related design

methods. He is member of Fib TG 8.3 Fibre reinforced concrete, Fib TG 8.8: Structural properties of flowable concrete, CEN/TC 250/SC 2/WG 1/ (Revision of Eurocode 2), TG 7 Timedependent effects, CEN/TC 250/SC 2/WG 1/ (Revision of Eurocode 2), TG 2 Fibre reinforced concrete, Norwegian Concrete Association committee for fibre concrete (chairman).



#### Barzin Mobasher

Professor of Civil and Environmental Engineering,, Ira A. Fulton School of Engineering, Arizona State University.

Main research interests: Constitutive modeling of materials, fracture mechanics, non-destructive testing techniques, experimental stress analysis, biomechanics, composite materials, chemical and mechanical properties of concrete. His research deals with new and improved systems which are

environmentally, and economically superior, passing through processing, characterization, modeling, and performance of structural materials. He is member of American Concrete Institute, and in particular of Committees 446 - Fracture Mechanics, Secretary, 544 - Fiber reinforced Concrete, 549 - Thin section products, 440 - Fiber reinforced plastic Reinforcement.



#### Joost Walraven

Prof. Em. of Concrete and Concrete Structures, Department of Structural Engineering, Delft University of Technology,The Netherlands

Main research interests: high performance concrete types and their applications, like self-compacting concrete, ultra high performance fibre concrete and ecoconcrete, design of precast concrete structures, shear and punching resistance of concrete

structures, residual bearing capacity of existing concrete structures. Convenor of Project Team for Eurocode 2 "Concrete Structures" 2000-2004, Convenor of fib Special Activity Group 5 "New Model Code for Concrete Structures 2010", Convenor of fib Task Group TG 8.6 "Ultra High Performance Fibre Concrete", Convenor of Working Group SAG7-B "Assessment of existing structures". President of fib 2000-2002.