

# REGISTRATION FORM

## PERSONAL DATA

Full surname: \_\_\_\_\_

Full name: \_\_\_\_\_

Birthdate: \_\_\_\_\_

Birthplace: \_\_\_\_\_

Study title: \_\_\_\_\_

Company: \_\_\_\_\_

Company address (street, number, ZIP code, town, province): \_\_\_\_\_

E-mail: \_\_\_\_\_

Phone: \_\_\_\_\_

Mobile phone: \_\_\_\_\_

Skype: \_\_\_\_\_

## INVOICING DATA (invoices will be VAT exempted)

Company name: \_\_\_\_\_

or

Name and surname: \_\_\_\_\_

Address: \_\_\_\_\_

VAT: \_\_\_\_\_

Fiscal Code: \_\_\_\_\_

I authorize my personal data to be processed according to D.Lgs. 196/03.

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 \_\_\_\_\_

## Summer School Director

**Prof. Marco di Prisco**

marco.diprisco@polimi.it

## Ph.D. Programme Coordinator

**Prof. Roberto Paolucci**

roberto.paolucci@polimi.it

## Secretary for post-graduated engineers

Ms. Anna Magri

CTE – Collegio dei Tecnici della Industrializzazione Edilizia

Via G. Zanella, 36 – 20133 Milano

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## Secretary for Ph.D. students

Ms. Federica Aggio - Politecnico di Milano

Department of Civil and Environmental Engineering

Phone: +39 02 23996219

E-mail: [phdissg-dica@polimi.it](mailto:phdissg-dica@polimi.it)

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.

32 CFP will be recognized to post-graduate engineers after passing a multiple-choice test.

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

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



**POLITECNICO  
MILANO 1863**

DIPARTIMENTO DI  
INGEGNERIA CIVILE E AMBIENTALE

In collaboration with



## SUMMER SCHOOL 2017

***Fibre reinforced concrete (FRC)  
Material Characterization and  
Structure Design***

**Lecco Campus, 7<sup>th</sup> – 12<sup>th</sup> July 2017  
room B 0.2**



## SUMMER SCHOOL PROGRAMME

### FRIDAY, 7<sup>TH</sup> JULY 2017

- 9:00-10:30 Fibre reinforced concrete materials: introduction (**Prof. di Prisco**)
- 10:30-11:00 *Coffee break*
- 11:00-12:30 Fibre reinforced concrete properties at fresh and hardened states (**Prof. Sernà**)
- Lunch*
- 14:30-16:00 Mechanical characterization and classification of fibre reinforced materials (**Prof. Sernà**)
- 16:00-16:30 *Coffee break*
- 16:30-18:00 Constitutive models for design (**Prof. di Prisco**)

### SATURDAY, 8<sup>TH</sup> JULY 2017

- 9:00-10:30 Creep of FRC (**Prof. Sernà**)
- 10:30-11:00 *Coffee break*
- 11:00-12:30 Fibre reinforced shotcrete and UHPFRC for architectural design (**Prof. Sernà**)

**SOCIAL PROGRAMME TO BE DEFINED**  
**SATURDAY 8<sup>TH</sup> JULY 2017 – 14:00-23:00**

**SUNDAY, 9<sup>TH</sup> JULY 2017 – 9:00-19:00**

### MONDAY, 10<sup>TH</sup> JULY 2017

- 9:00-10:30 Structure design approach according to Model Code 2010 (**Prof. di Prisco**)
- 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 made with natural fibres (**Prof. Toledo Filho**)
- 16:00-16:30 *Coffee break*
- 16:30-18:00 Structural applications and sustainability of FRC with natural fibres (**Prof. Toledo Filho**)

## SUMMER SCHOOL PROGRAMME

### TUESDAY, 11<sup>TH</sup> JULY 2017

- 9:00-10:30 Properties of Ultra High Performance concrete and their characterization (**Prof. Toutlemonde**)
- 10:30-11:00 *Coffee break*
- 11:00-12:30 Modeling and reliability (**Prof. Toutlemonde**)
- Lunch*
- 14:30-16:00 SFRC advantages in design of structural elements with SFRC for dam construction (**Prof. Toledo Filho**)
- 16:00-16:30 *Coffee break*
- 16:30-18:00 Use of fibre reinforced concrete in well cementing and high temperature refractory applications (**Prof. Toledo Filho**)

### WEDNESDAY, 12<sup>TH</sup> JULY 2017

- 9:00-10:30 Design of advanced architecture (**Prof. Toutlemonde**)
- 10:30-11:00 *Coffee break*
- 11:00-12:30 Examples of applications (**Prof. Toutlemonde**)

## 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.

To register, please send to [phdisssg-dica@polimi.it](mailto:phdisssg-dica@polimi.it) (if you are a Ph.D. student) and to [info@cte-it.org](mailto: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

Collegio dei Tecnici della Industrializzazione Edilizia  
IBAN IT06G0335901600100000113883 – SWIFT code BCITITMX  
Banca Prossima (Intesa San Paolo), Piazza Paolo Ferrari, Milano

**Please always write: FRC DICA SUMMER SCHOOL 2017+YOUR NAME AND SURNAME**

## SUMMER SCHOOL LECTURERS



**François Toutlemonde** is Research Director, Chief Scientist at the Materials and Structures Department of IFSTTAR, the French Public Works Research Institute, where he has been working since 1990. His research interests include shock resistance of concrete structures, durability issues of concrete structures, including Alkali-silica reaction and structural applications of high performance concrete, fiber-reinforced concrete and ultra-high performance fiber-reinforced concrete. Expert in the "Standing group of experts" for the French Nuclear Safety Authority since 2001 and French delegate in European Standardization committees related to concrete and concrete structures. Administrator of the French Association of Civil Engineering (AFGC); president of the Paris Chapter of the American Concrete Institute (ACI) since 2006.



**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/WG1/Tg2 to introduce FRC in EC2.



**Pedro Sernà** (University of Valencia - Spain) Civil engineer. Dr. at the École des ponts ParisTech Paris 1984. Full professor at the Universitat Politècnica de Valencia 1978. Director of 19 doctoral thesis. Participation in 20 competitive projects. Author of more than 60 articles in scientific journals and 70 for congresses. Research areas: special concretes technology: fiber, high and very high strength, self-compacting, recycled, self haling. mix design criteria, and structural analysis (shear, ductility, bond).

Pioneer in structural applications FRC in Spain - Oceanographic park Shells with Sprayed FRC and foodbridges in UHPFRC. Member of WG 4.1. FIB, President of the Spanish committee for FRC standards. Chairman of the Technical Committee of RILEM - CCF on Creep of FRC.



**Romildo Dias Toledo Filho** (COPPE /UFRJ, Rio – Brasil). D.Sc., Full Professor of the Civil Engineering Department. Researcher 1A agreed to CNPq. Ph.D. in Civil Engineering, Concrete Structures, Pontifical Catholic University of Rio de Janeiro and Imperial College of Science Technology and Medicine, London (split program), Member of the International Union of Laboratories and Experts in Construction Materials Systems and Structures (RILEM), Member of ASCE, ACI, Brazilian Concrete Institute, Brazilian Committee for Big Dams, Brazilian Society for Non Conventional Materials and Technologies, Brazilian Society of Agricultural Engineering. Participant of RILEM TC 208-HFC, RILEM TC 240-FDS, RILEM TC 225-SAP, RILEM TC 260-RSC, RILEM TC 254-CMS, RILEM TC 261-CCF. Vice-Director of COPPE1/UFRJ 2013-2015 and supervisor of 29 PhD students.