

# 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 the processing of my personal information under D.Lgs. 196/03.

I agree with the processing of my data for receiving information about the upcoming courses and for statistical purpose

At any time, pursuant to D. Lgs. 196/03, I will be able to access my data, request their modification or cancellation.

Signature \_\_\_\_\_

## Summer School Director

**Prof. Marco di Prisco**

marco.diprisco@polimi.it

## Ph.D. Programme Coordinator

**Prof. Stefano Mariani**

stefano.mariani@polimi.it

## Secretary for post-graduated engineers

Mrs. Anna Magri

CTE – Collegio dei Tecnici della Industrializzazione Edilizia

Via G. Zanella, 36 – 20133 Milano

Phone: +39 02 36558834 - Mobile: +39 347 2235773

E-mail: info@cte-it.org

## Secretary for Ph.D. students

Department of Civil and Environmental Engineering

Phone: +39 02 23994322

Mobile: +39 331 6000165

E-mail: phdissg-dica@polimi.it

5 CFU will be recognized to students of the Ph.D. Programme in Seismic and Geotechnical Engineering at Politecnico di Milano after the discussion of an assigned homework.

[www.dica.polimi.it/dottorato/dot-stru/](http://www.dica.polimi.it/dottorato/dot-stru/)

Department of Civil and Environmental Engineering Ph.D. programme in Structural, Seismic and Geotechnical Engineering  
in collaboration with CTE – Collegio dei Tecnici della Industrializzazione Edilizia, aicap - Associazione Italiana Cemento Armato Precompresso and fib – International Federation for Structural Concrete

POLITECNICO DI MILANO



## SUMMER SCHOOL 2023

*Textile reinforced concrete: material design and structural behaviour*

Lecco Campus, June 30<sup>th</sup> - July 5<sup>th</sup>,



## SUMMER SCHOOL PROGRAMME

### FRIDAY, 30<sup>th</sup> JUNE 2023

09:00 -10:30 Cement based materials properties (B. Mobasher)

10:30 -11:00 *Coffee break*

11:00 -12:30 Textile material: mortar/fabric interaction (B. Mobasher)

#### Lunch

14:30 -16:00 Textile-Reinforced Inorganic Matrix Composites: critical issues & mechanical parameter identification (C. Papanicolaou)

16:00 -16:30 *Coffee break*

16:30 -18:00 Textile material: impact behavior (B. Mobasher)

### SATURDAY, 1<sup>st</sup> JULY 2023

09:00 -10:30 Durability of the material (B. Mobasher)

10:30 -11:00 *Coffee break*

11:00 -12:30 High temperature behaviour of TRC (M. di Prisco)

#### SOCIAL PROGRAMME

SATURDAY, 1<sup>st</sup> JULY 2023 – 14:00-23:00

Visit to Lake Como Villas

SUNDAY, 2<sup>nd</sup> JULY 2023 – 9:00-15:00

Trip to Grigna Mountains

### MONDAY, 3<sup>rd</sup> JULY 2023

09:00 -10:30 FRCM: tests for certification (G. De Felice)

10:30 -11:00 *Coffee break*

11:00 -12:30 FRCM Design Guidelines (G. De Felice)

#### Lunch

14:30 -16:00 FRCM vs. CRM in design and certification (G. De Felice)

16:00 -16:30 *Coffee break*

16:30 -18:00 Alternative & next-gen FRCM (C. Papanicolaou)

## SUMMER SCHOOL PROGRAMME

### TUESDAY, 4<sup>th</sup> JULY 2023

09:00 -10:30 Multilayer structures for Industrial building retrofitting (M. di Prisco)

10:30 -11:00 *Coffee break*

11:00 -12:30 Strengthening and seismic retrofitting of masonry structures with textile composites: behavior and design (G. De Felice)

#### Lunch

14:30 -16:00 Example of light TRC structures for energy retrofitting (M. di Prisco)

16:00 -16:30 *Coffee break*

16:30 -18:00 TRM vs. FRP (C. Papanicolaou)

### WEDNESDAY, 5<sup>th</sup> JULY 2023

09:00 -10:30 Strengthening and seismic retrofitting with textile composites: Examples and case studies (C. Papanicolaou)

10:30 -11:00 *Coffee break*

11:00 -12:30 Strengthening and seismic retrofitting of RC structures with textile composites: behavior and design (M. di Prisco)

#### REGISTRATION

The on-site 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. The On-line registration fee is 200 €.

To register, please send to [phdissg-dica@polimi.it](mailto:phdissg-dica@polimi.it) (if you are a Ph.D. student) and to [info@cte-it.org](mailto:info@cte-it.org) (if you are a post-graduated engineer) registration form and copy of bank transfer

For Politecnico di Milano PhD students the registration will be free.

#### PH.D. STUDENTS – BANK TRANSFER TO:

Politecnico di Milano – Dipartimento di Ingegneria Civile e Ambientale

IBAN IT29G0569601620000001740X15 - SWIFT code: POSOIT22

Banca Popolare di Sondrio, Ag. 21, Via Bonardi, Milano

Up to 24 CFP will be recognized to post-graduated Engineers by CTE/AICAP, if the multiple-choice test will be passed.

#### 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: DICA SUMMER SCHOOL 2023 + YOUR NAME AND SURNAME

## SUMMER SCHOOL LECTURERS



#### 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.



#### Marco di Prisco

Full Professor of Structural Design at the Department of Civil and Environmental Engineering, 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; r/c, p/c, frc structures, prefabricated structures; structural response at

exceptional loads; tunnel and bridge safety. Honorary Editor of the European Journal of Environmental and Civil Engineering, member of the editorial board of the J. of Cement and Concrete Composites, member of fib, RILEM and ACI, member of fib presidium, coauthor of the MC2010 chapters on FRC and convener of the Commission TC250/SC2/Wg1/Tg2 to introduce FRC in EC2.



#### Catherine (Corina) Papanicolaou

Associate Professor & Head of the Structures Division at the Department of Civil Engineering of University of Patras.

Main research interests: experimental mechanics of structural materials (e.g. innovative or special-performance concrete and lightweight concrete) under normal environmental conditions but also under detrimental ones, such as fire; mechanical

behavior of inorganic matrix composites, with special emphasis on strengthening/rehabilitation applications and prefabrication; optimum design of advanced prefabrication systems. She is a member of International (Rilem, ACI) and Greek Scientific Committees and Associations and the co-Chair of Rilem TC IMC "Durability of Inorganic Matrix Composites used for Strengthening of Masonry Constructions".



#### Gianmarco De Felice

Full Professor of Technical Construction at the Department of Engineering, Università degli Studi Roma Tre. His research interests include: mechanics of masonry, structural analysis of monuments, evaluation of seismic safety of masonry and reinforced concrete, safety assessment of bridges, testing of historical masonry structures and reinforce technologies,

interaction soil-structure, evaluation of the excavation effects on buildings.

Chairman of the Technical Committee TC-Rilem CSM, member of the Management Committee of COST Action "Next Generation Design Guidelines for Composites in Construction", the International Masonry Society and the National Association of Earthquake Engineering.