

# REGISTRATION FORM

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## INVOICING DATA (Invoice will VAT exempted)

Company name:.....  
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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.

Amount € \_\_\_\_\_

### 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

### 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 2019 + YOUR NAME AND SURNAME**

Signature: \_\_\_\_\_

## Summer School Director

**Prof. Marco di Prisco**

marco.diprisco@polimi.it

## Ph.D. Programme Coordinator

**Prof. Roberto Paolucci**

[roberto.paolucci@polimi.it](mailto:roberto.paolucci@polimi.it)

## Secretary for post-graduated engineers

Eng. 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](mailto:info@cte-it.org)

## Secretary for Ph.D. students

Department of Civil and Environmental Engineering

Phone: +39 02 23994322

Mobile: +39 331 6000165

Email: [phdissg-dica@polimi.it](mailto: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, FIB – International  
Federation for Structural Concrete



## SUMMER SCHOOL 2019

*Textile reinforced concrete: material  
design and structural behavior*

Lecco Campus, 5th - 10<sup>th</sup> July, 2019



## SUMMER SCHOOL PROGRAMME

### FRIDAY, 5th JULY 2019

09:00 -10:30 Cement based materials properties

(Prof. M.A. Aiello)

10:30 -11:00 *Coffee break*

11:00 -12:30 FRCM critical issues (Prof. M.A. Aiello)

*Lunch*

14:30 -16:00 Textile composites: mechanical parameter identification (Prof. V. Mechtcherine)

16:00 -16:30 *Coffee break*

16:30 -18:00 Durability of the material (Prof. V. Mechtcherine)

### SATURDAY, 6th JULY 2019

09:00 -10:30 Textile material: mortar/fabric interaction (Prof. V. Mechtcherine)

10:30 -11:00 *Coffee break*

11:00 -12:30 Textile material: impact behavior (Prof. V. Mechtcherine)

### SOCIAL PROGRAMME

SATURDAY, 6<sup>th</sup> JULY 2019 – 14:00-23:00

Visit to Villa del Balbianello

SUNDAY, 7<sup>th</sup> JULY 2019 – 9:00-19:00

Trip to Grigna Mountain

### MONDAY, 8<sup>th</sup> JULY 2019

09:00 -10:30 FRCM: tests for Italian certification (Prof. M.A. Aiello)

10:30 -11:00 *Coffee break*

11:00 -12:30 FRCM Italian Design Guidelines (Prof. M.A. Aiello)

*Lunch*

14:30 -16:00 Main design parameters for the material selection (Prof. M. di Prisco)

16:00 -16:30 *Coffee break*

16:30 -18:00 High temperature behaviour of TRC (Prof. M. di Prisco)

## SUMMER SCHOOL PROGRAMME

### TUESDAY, 9th JULY 2019

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

10:30 -11:00 *Coffee break*

11:00 -12:30 Example of light TRC structures for energy retrofitting (Prof. M. di Prisco)

*Lunch*

14:30 -16:00 TRM vs. FRP (Prof. T. Triantafillou) (Prof. T. Triantafillou)

16:00 -16:30 *Coffee break*

16:30 -18:00 Strengthening and seismic retrofitting of RC structures with textile composites: behavior and design

### WEDNESDAY, 10<sup>th</sup> JULY 2019

09:00 -10:30 Strengthening and seismic retrofitting of masonry structures with textile composites: behavior and design (Prof. T. Triantafillou)

10:30 -11:00 *Coffee break*

11:00 -12:30 Strengthening and seismic retrofitting with textile composites: Examples and case studies (Prof. T. Triantafillou)

## REGISTRATION

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.

Only for post graduated engineering the membership fee to CTE is included in the registration fee. It is also possible, to register only for some modulus (1 modulus=half day). The registration fee is (specify the choice)

- |                          |                 |                         |
|--------------------------|-----------------|-------------------------|
| <input type="checkbox"/> | <b>€ 175,00</b> | for 2 modules           |
| <input type="checkbox"/> | <b>€ 250,00</b> | for 4 modules           |
| <input type="checkbox"/> | <b>€ 325,00</b> | for 6 modules           |
| <input type="checkbox"/> | <b>€ 400,00</b> | full course (8 modules) |

Only for Politecnico di Milano PhD students the registration fee will be free.

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
- copy of bank transfer

## SUMMER SCHOOL LECTURERS



### Maria Antonietta Aiello

Full Professor of Structural Design at the Department of Engineering for Innovation, University of Salento and Associate member of the ITC-CNR (Institute of Technologies for Construction- National Research Council). Director of the Laboratory of Structural Mechanics and Structural Engineering of the University of Salento. Main research interests: retrofitting of existing RC and masonry structures with innovative materials and systems, seismic vulnerability of existing structures, seismic vulnerability of non-structural elements, short and long term behavior of structures made by FRC and CSA cement, use of recycled materials in concrete elements. Member of fib, RILEM and ACI committees. Chair of the RILEM TC IMC -Durability of Inorganic Matrix Composites used for Strengthening of Masonry Constructions.



### 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, expert member in DAC of RILEM, and in fib presidium, coauthor of the MC2010 chapters on FRC and convener of the Commission TC250/SC2/Wg1/Tg2 to introduce FRC in EC2.



### Viktor Mechtcherine

Full Professor of Construction Materials and Director of the Institute of Construction Materials at the Technical University Dresden. His research interests include: fibre-reinforced cement-based materials, rheology, concrete technology, fracture mechanics, durability and new additives. Chairman of the RILEM Technical Committee "Application of Super Absorbent Polymers in Concrete Construction", member of the Steering Committee of the fib Commission 8 "Concrete", the Advisory Board of IAFramCos, the Presidium of the Collaborative Research Centre "Textile Reinforcement for Structural Strengthening and Retrofitting" of DFG, the Expert Board "Construction products made of fibre-reinforced cementitious materials" of DIBt.



### Thanasis Triantafillou

Professor of Civil Engineering and Director of the Structural Materials Laboratory at the University of Patras. His main research interests are focused in the application of advanced structural materials (e.g. textile-based composites, FRP, high-performance concrete) in structures, with emphasis in the field of strengthening/retrofitting of concrete, masonry and timber. He has limited research activity in steel-concrete composite construction, advanced prefabrication systems, and damage detection of materials and structures using smart monitoring. Recipient of three best paper awards from ASCE journals and of two medals (IIFC, EMPA). Member of several fib, RILEM and ACI committees; member of the editorial board of 8 International Journals