

TERRE
Training Engineers and Researchers to Rethink geotechnical Engineering for a low carbon future

*European Commission – Horizon 2020
 Marie Skłodowska-Curie European Training Networks (ETN)*

1st TERRE School
‘Fundamentals for an interdisciplinary approach to design and climate-adaptation of geo-infrastructure’

26-27 September 2016
Largo S. Marcellino 10 - Naples, Italy

Aim of the School is to address interdisciplinary aspects in the design and climate-adaptation of geo-infrastructure in the low-carbon agenda. Special attention is paid to a nature-centric approach as opposed to the traditional mechanistic view of geotechnical design.

MONDAY, September 26th

Introduction to the School	
09.00 – 09:30 (9.10 – 9.30)	A nature-centric approach to design of geo-structures in the low-carbon agenda <i>Prof Alessandro Tarantino – University of Strathclyde, UK</i>
Hydro-mechanical behaviour of soils interacting with the climate	
09:30 – 10.10	Fundamentals of hydraulic behaviour of unsaturated soils <i>Prof David Toll– University of Durham, UK</i>
10:10 – 11:50	Basic aspects of mechanical behaviour of unsaturated soils <i>Prof Simon Wheeler – University of Glasgow, UK</i>
11:20 – 11.50	Coffee break
11:50 – 12.30	Monitoring systems and experimental techniques for unsaturated soils <i>Prof Enrique Romero – UPC Barcelona, Spain</i>
12.30 – 13.10	Fundamentals of soil water / atmosphere interaction <i>Prof Alessandro Tarantino – University of Strathclyde, UK</i>

LUNCH TIME

Chemical, thermal, and biological interactions in soil-climate interaction	
14:30 – 15.10	Thermo-mechanical behaviour of soils <i>Prof Alessio Ferrari - École polytechnique fédérale de Lausanne, Switzerland</i>
15:10 – 15.40	<i>Geo-chemistry of clays</i> <i>Prof Giacomo Russo – Università di Cassino e del Lazio Meridionale, Italy</i> <i>Dr Dimitri Deneele, IFSTTAR, France</i>
15.40 – 16.20	Sticky MESS: what to expect from soil-microbe interactions <i>Dr Charles Knapp, – University of Strathclyde, UK</i>
16.20 – 16.50	Coffee break
16:50 – 17.30	Plant-soil mechanical interactions <i>Thierry Fourcaud/Alexia Stokes CIRAD, France</i>
17.30 – 18:10	Timber-soil hydro-mechanical interactions <i>Technological University of Delft, Netherlands</i>

TUESDAY, September 27th

Environmentally Sustainable Geo-infrastructure Design

09.00 – 09:40	Introduction to Life Cycle Assessment <i>Maxime Pousse – Nobatek, France</i>
09:40 – 10.20	Life Cycle Assessment applied to geo-structures <i>Maxime Pousse – Nobatek, France</i>
10:20 – 11:00	Decision Support Systems to assist engineering design <i>Dr Angel Priegue– CIMNE, Spain</i>
11:20 – 11.50	Coffee break

Lectio magistralis

11:50 – 12.50

This summer school is limited to 35 participants. Please send back your reservation using the attached reservation form. If we can assist for Hotel reservation please feel free to ask. The official workshop language is English.