

## **ERICA**

### **Series of Residential Schools**

This course is the third of six intensive Residential Schools organized by the ITN ERICA network.

## **Marie Skłodowska Curie ITN ERICA**

The ERICA Innovative Training Network is a programme funded by the European Community with an emphasis on mobility.

The ERICA MSC-ITN supports 13 Early Stage Researchers (ESR) over a period of four years. The ITN provides a series of six residential schools for the ESRs.

Some of these Schools are also open to other students.



## **ERICA – Engineered Calcium-Silicate-Hydrates for Applications**

### **Residential School 3**

**EPFL, Lausanne, CH  
January 14th-16th, 2019**

#### **Lecturers**

**Jean-François Dufrêche**, Univ. de Montpellier, FR

**Yogarajah Elakneswaran**, Hokkaido Univ.

**David Faux**, Univ. of Surrey, UK

**Fabien Georget**, EPFL, CH

**Bruno Huet**, LafargeHolcim, FR

**Peter McDonald**, Univ. of Surrey, UK

**Steve Parker**, Univ. of Bath, UK

**Richard Sear**, Univ. of Surrey, UK

**Hong Wong**, Imperial College London, UK

#### **Organised by**

**Fabien Georget**, EPFL, CH

## Scope of Course

The present course is the third of six residential schools given as part of the MSC-ITN. The objective of the course is to introduce the students to selected methods of modelling and characterising transport in porous media.

## Course Contents

The following subjects are covered in the course:

- Transport in porous media, Finite element methods of numerically solving the transport equations in simple and complex geometries.
- Lattice Boltzmann methods
- Monte Carlo and Molecular Dynamic / Atomistic methods of modelling dynamics.
- Water Transport in restricted geometries

The course consists of connected lectures and study visits to labs.

Social activities during the course are planned to promote a stimulating study atmosphere.

## Work Load

The estimated work load corresponds to 1 ECTS points, including approximately 14 hours of contact and an individual report after the course.

## Evaluation

In order to get the credit, the participants will have to write a short report in connection with their projects (5 pages, font size 12, double spaced).

## Study Materials

Notes will be provided before the course.

## Participants

The participants are expected to have a basic knowledge of cement production and concrete technology. All lectures will be given in English.

## Accommodation

For those participants who need accommodation in Lausanne, we suggest:

Hotel Lausanne Guesthouse by Fassbind  
Rue Marterrey 15  
1005 Lausanne  
Tel: +41 21 601 80 00  
lg@byf.ch

Prices per night :

Single room : CHF 120.- (including breakfast) + CHF 2.60 city tax  
Twin room : CHF 118.- (including breakfast) + CHF 2.60 city tax

\* Students are encouraged to share a twin room

Participants are requested to make their reservation directly at Hotel Lausanne Guesthouse By Fassbind before December 14, 2018 using code ERICA-EPFL

## Course Fee

The course fee of CHF 280 will apply for students. The participants will be responsible for travel, some meals and accommodation.

## Further Information and Registration

Applicants should register by December 14, 2018.

Further information will be posted at:

<https://www.ERICA-etn.eu/event/school-3/>

or you may contact:

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