



SHORT COURSE

APPLIED REACTIVE TRANSPORT MODELLING

BORDEAUX, FRANCE, 10TH – 14TH JUNE 2019

COURSE TOPIC

Coupled numerical models that simultaneously account for the quantification of both subsurface fluid flow and biogeochemical processes have become increasingly important tools for interpreting groundwater quality data and processes relevant to natural and contaminated aquifer systems. Solute and reactive transport models help to provide insights into the past and present behaviour of a wide range of groundwater constituents and allow to predict future groundwater quality evolution under multiple water quality management scenarios.

WHO SHOULD ATTEND?

The course is designed for environmental consultants, government scientists, researchers and postgraduate students who want to undertake or assess numerical modelling studies of coupled groundwater flow, transport and geochemical reactions as part of their work or research. Participants will benefit the most from this course if they have a working knowledge of groundwater (flow/transport) processes and at least a basic understanding of geochemical processes. Prior modelling experience is not an absolute requirement but it will increase the benefits from the course significantly.

WHO IS PRESENTING?

- Olivier Atteia, Gregory Cohen and Michel Franceschi (ENSEGD France)
- Doug Kent (US Geological Survey, Menlo Park)
- Henning Prommer (University of Western Australia / CSIRO)
- Elicia Verardo (Numineo / Bordeaux)

WHAT WILL THE COURSE COVER ?

- Basic theory/concepts of solute/reactive transport and geochemical modelling
- Introduction to the key reactive transport processes affecting groundwater quality evolution such as redox reactions, mineral reactions, ion exchange and surface complexation reactions
- Modelling concepts to quantify reactive transport problems such as metal(loid) migration and nitrate pollution
- Modelling of environmental (groundwater age) tracer transport and isotope fractionation processes
- Illustrative case studies of reactive transport model applications to a wide range of real-world groundwater quality problems.
- Ample hands-on experience with the modelling tools MODFLOW, MT3DMS, PHREEQC and PHT3D



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COURSE DETAILS

The course will be held at the University of Bordeaux, France, from 10th to 14th of June

The course fee includes course notes (pdf), classroom teaching, tutorials, morning and afternoon teas and lunches.

Attendees are to arrange their own travel

COURSE FEES

1500 € for company delegates
(1750 € after 20th May)

550 € for MSc and PhD students
(750 € after 20th May)

1000 € for researchers and government employees
(1150 € after 20th May)

GROUP DISCOUNTS

If you are a part of an organization and wish to enroll a group (2 or more) for the course please contact us at for discount.

CONTACT

Administration : Alicia.corbaux@ensegid.fr

Program : Olivier.atteia@ensegid.fr



REGISTRATION FORM

Name : _____

First name : _____

VAT code : _____

Institution / Company : _____

Address : _____

City : _____

ZIP code : _____

Phone : _____

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e-mail: _____

ADMINISTRATIVE OFFICE FOR REGISTRATION

ENSEGID

Short Course Reactive Transport Modelling

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