



Euromech Colloquium 539

Effective stress principle;

from micromechanics to thermodynamics

27-30 August 2012

Utrecht, The Netherlands

This colloquium will be devoted to presenting advances in the mechanics of unsaturated porous media, in general, and soils, in particular. The concept of effective stress and its extension from saturated to unsaturated porous media has been the subject of much research, but there is no consensus yet in this regard. Various approaches have been used to get insights into this concept. They span from micromechanical approaches to thermodynamic investigations.

Colloquium Co-chairs:

Jacques Huyghe, Eindhoven University of Technology
S. Majid Hassanizadeh, Utrecht University
Ehsan Nikooee, Shiraz University

Organizing committee

Margreet Evertman, Utrecht University
S. Majid Hassanizadeh, Utrecht University
Jacques Huyghe, Eindhoven University of Technology
Mohammad Imran, Utrecht University,
Ehsan Nikooee, Shiraz University

Who should attend?

The mechanical behavior of unsaturated porous media is the subject of interest for many disciplines. It spans from geotechnical engineering to food sciences. Therefore, we encourage researchers from such diverse disciplines as geotechnical engineering, petroleum engineering, food science, building materials, unsaturated soil science, and agricultural engineering to participate and contribute to the colloquium.

Why should you attend?

The effective stress principle and its formulation in unsaturated porous media is a key to understand the behavior of unsaturated porous material, in general and unsaturated soils in particular. Keynote and invited lecturers of the colloquium will present inspiring lectures and state-of-the-art reviews on this topic. Doctoral students can present their ongoing research and can benefit the most from discussions.

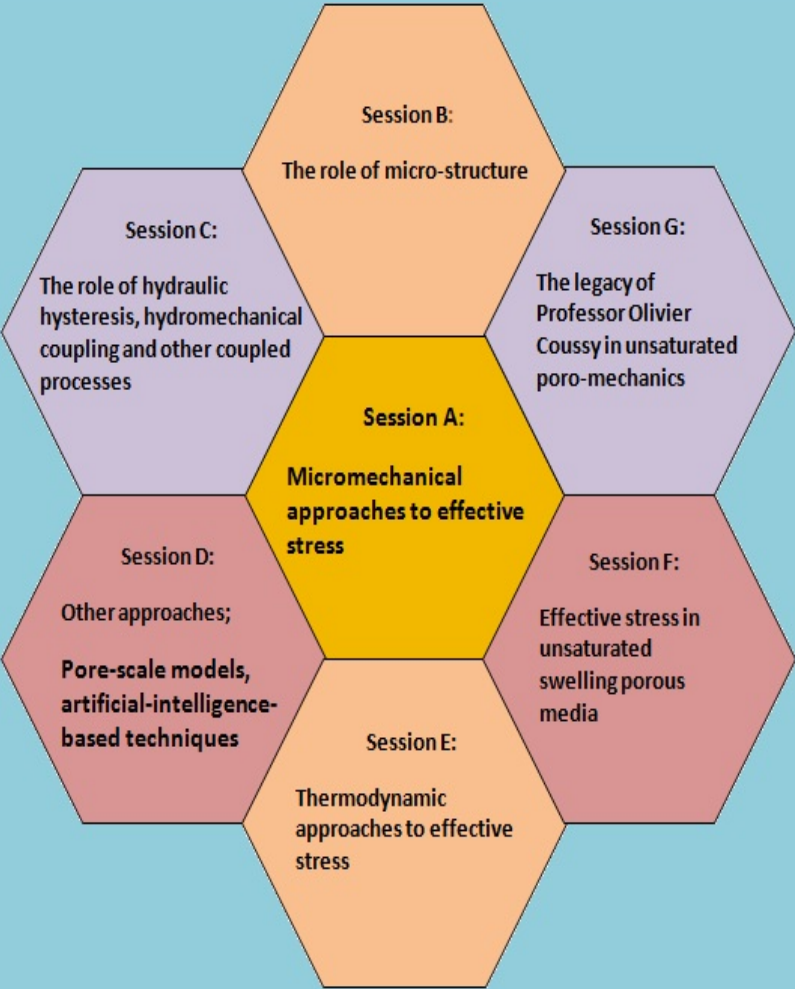
Keynote speakers

Eduardo Alonso, UPC, Spain
Ronaldo Borja, Stanford University, USA
John H. Cushman, Purdue University, USA
Patrick Dangla, ENPC, France
Ghassem Habibagahi, Shiraz University, Iran
Nasser Khalili, UNSW, Australia
Lyesse Laloui, EPFL, Switzerland
Eric Lemarchand, ENPC, France
Ning Lu, Colorado School of mines, USA

Invited speakers

Confirmed lecturers so far are:
Bruno Chareyre, INPG, France
Vahid Joeckar-Niasar, Utrecht University, the Netherlands
Cristina Jommi, Politecnico di Milano, Italy
Olaf Kolditz, UFZ, Germany
Azad Koliji, EPFL, Switzerland
David Masin, Charles University in Prague, Czech Republic
Jean-Michel Pereira, ENPC, France
Francesco Pesavento, University of Padua, Italy
Eduardo Rojas, UAQ, Mexico
Paul H. Simms, Carleton University, Canada

Sessions and themes



Please visit colloquium website for more details:
http://www.geo.uu.nl/hydrogeology/Colloquium2012/Euromech_sessions.html

Submission of abstracts

Although the colloquium mainly consists of oral invited and keynote lectures, there is limited room for oral as well as poster presentations.

Thus, interested researchers are encouraged to send a one-page abstract (including their affiliation and email address) as well as their CV by email to M.evertman@uu.nl

English is the official language of the colloquium.
Please indicate your preferred type of presentation (oral or poster). Final decision on the type of presentation will be made by the Organizing Committee.

Deadline for abstract submission: May 10, 2012.

Booklet of abstracts will be available online at colloquium website. It will also be included in the colloquium report to European Mechanics Society.

Important dates

Deadline for abstract submission: **May 10, 2012**
Notification of abstract acceptance: **June 10, 2012**
Deadline of early registration: **June 25, 2012**

Registration fee

The registration fee includes lunches, coffee breaks, gala dinner and ice breaker party. For accompanying persons, the registration fee includes gala dinner, and ice breaker party. Registration fee will be as follows:

Registration time	Registration type	Registration fee
Early registration (till June 25 th)	Participants (non Euromech members)	450 Euro
	Participants (Euromech members)	425 Euro
	Accompanying person	260 Euro
Late registration (After June 25 th)	Participants (non Euromech members)	490 Euro
	Participants (Euromech members)	465 Euro
	Accompanying person	300 Euro

The fee must be transferred to Rabobank Eindhoven **IBAN NR. NLRABO0158249658, BIC/SWIFT code RABONL2U. Account holder is TU Eindhoven.** For payment inside the Netherlands, you can use the account number **158249658 (Rabobank Eindhoven).**

As payment information please indicate: **Activity No. 503590/1001796, your last name and your first name.** Please make sure to mention activity number as otherwise it is impossible to trace back your payment.

Bank address: Rabobank Eindhoven, Postbus 301, 5600AH. Eindhoven. The Netherlands.

Colloquium Venue

The colloquium will be held at **Earth Sciences Department, Utrecht University** located in De Uithof (University Campus). It can be reached from **Utrecht Central Station** by bus **11** and bus **12**. The routes from bus stops to earth sciences department are depicted below. Earth Sciences Department is located behind Minnaert building as shown in the following figures.

For more information please visit:

http://www.geo.uu.nl/hydrogeology/Colloquium2012/Eurochem_venue.html



A: Bus Stop Botanische Tuinen (Bus 11) B: Department of Earth Sciences
C: Minnaert Building



A: Bus Stop Padualaan (Bus 12) B: Department of Earth Sciences
C: Minnaert Building D: Kruytgebouw (cross-shaped Building)



Utrecht: A bit of history

Utrecht is the capital of the Dutch province of Utrecht. It is the fourth largest city of the Netherlands.

Utrecht's ancient city centre has many buildings from the early middle ages.

Soldiers of the Roman Empire founded their camp on the shores of the Rhine and Vecht rivers. They call the place Ultrajectum, which means ford (a shallow place where a river or stream can be crossed by a vehicle), and this way Utrecht was born! In the Middle Ages Utrecht was the most important city in the Northern and Eastern part of the country.

In 1579 seven Northern provinces in The Netherlands signed the "Unie van Utrecht" (Union of Utrecht). This was as an important event in the history of the Netherlands.

Nowadays, Utrecht is bidding to become cultural capital of Europe in 2018.

To know more about city attractions please visit:

<http://www.utrecht.nl/smartsite.dws?id=249427>

