



INTERPORE NEWS

Issue 6, March 2011

InterPore election results available!

During January and February 2011, all InterPore members were invited to participate in the elections for a new President-Elect and for four of the eight Council Members. The election closed on Feb 17th with a participation of 111 members out of 244 (45.5%), which is an extremely active participation compared to other professional societies. Some more statistics are made available on page 7 of this issue.

InterPore's new President-Elect



Prof. Wolfgang Ehlers

Our new President-Elect is **Prof. Wolfgang Ehlers** from the Institute of Applied Mechanics, University of Stuttgart. He will assume his office on April 1st, 2011.

At the same time, our current President-Elect, **Dr. Oleg Iliev**, will succeed our current President, Prof. Rainer Helmig, as new InterPore President. The new period of office will last until March 31st, 2013.

Our four new Council Members are:

- 🔍 **Prof. Mary F. Wheeler** (University of Texas at Austin),
- 🔍 **Prof. Lynn Bennethum** (University of Colorado Denver),
- 🔍 **Dr. Rudolf Held** (Statoil ASA, Norway) and
- 🔍 **Prof. Sebastian Geiger** (Heriot-Watt University, Scotland).

They will succeed the retiring Council Members Drs. Azita Ahmadi, Helge Dahle, Didier Lasseux and Konrad Steiner on April 1st, 2011, for a period of 4 years until March 31st, 2015. The other four Council Members, Drs. John H. Cushman, Rudolf Hilfer, Massoud Kaviany and Rodrigo Rosati, will continue in office for another two years until March 31st, 2013.



Prof. Mary F. Wheeler



Prof. Lynn Bennethum



Dr. Rudolf Held



Prof. Sebastian Geiger

CONTENTS

🔍 InterPore Election Results	1
🔍 Research Awards	2-4
🔍 Darcy lecture	5
🔍 Community News	6
🔍 InterPore Election Results	7
🔍 Meetings etc.	8-12
🔍 Research positions	13-17
🔍 About InterPore	18
🔍 Imprint	19



RESEARCH AWARDS

Kambiz Vafai is the recipient of InterPore Honorary Membership Award 2011



The InterPore society is proud to announce its InterPore Honorary Member 2011, **Professor Kambiz Vafai**. This award is reserved for individuals who are world renowned within the porous-media community, have provided extraordinary services to porous-media science, and have made significant contributions to the aims and ideals of InterPore.

Professor Vafai is a professor at the University of California, Riverside (UCR). He is the founder and editor-in-chief of two journals: *Journal of Porous Media* and *Special Topics and Reviews in Porous Media*. He also serves on the editorial advisory board of the *International Journal of Heat and Mass Transfer*, *International Communications in Heat and Mass Transfer*, *Numerical Heat Transfer*, *International Journal of Numerical Methods for Heat and Fluid Flow*, *International Journal of Heat and Fluid Flow*, and *Experimental Heat Transfer*. He is the editor of the first and second editions of the Handbook of Porous Media, which became best sellers, and he has been the initiator and Chair of the First, Second, and Third International Conferences on Porous Media, all sponsored by ECI and NSF.

Professor Vafai has supervised fifty graduate students and has directed over twenty post docs and visiting scholars. He has worked on a multitude of fundamental research investigations. He was the recipient of many awards; among them are: Fellow of American Association for Advancement of Science (AAAS), Fellow of American Society of Mechanical Engineers (ASME), Associate Fellow of American Institute of Aeronautics and Astronautics, and Fellow of World Innovation Foundation (WIF). He has also received the ASME Classic Paper Award in 1999 and the 2006 ASME Heat Transfer Memorial Award, which are amongst the most selective awards in the field of heat transfer.

The award ceremony will take place during the upcoming Interpore conference in Bordeaux (France), 29th-31st March 2011 (<http://interpore2011.u-bordeaux.fr/>).



RESEARCH AWARDS

Professor John H. Cushman awarded the InterPore Proctor & Gamble Award 2011



Professor John H. Cushman has been awarded the InterPore Proctor and Gamble Award for Porous Media Research in recognition of outstanding contributions to topics related to swelling porous media, very thin porous media, and behavior at interfaces. Over the last 30 years, he has made seminal contributions to a number of aspects of porous media. Professor Cushman has been a prolific scientist with over 190 publications and a long list of invited presentations at many national and international conferences and universities. He has also contributed to porous media research through appointments to editorial boards and memberships on national and international boards. In the spirit of InterPore, Prof. Cushman has cross-fertilized novel ideas between mathematics, geosciences, biology and pharmacology. His contributions to porous media have included increasing our understanding of microporous systems and nanofilm behavior in single and multiphase media; statistical mechanics for scaling transport behavior; multiphase transport in swelling media such as clays, polymers and gels; and dispersion of mobile microbial populations in porous media via Lévy flight random walks. The applications of his work range from groundwater pollution to microfluidics in mica slit-pores to fluid interactions with swelling porous media to drug-delivery polymers. As an indication of the interdisciplinary nature of his research, Prof. Cushman has held visiting appointments in the departments of Applied Mathematics (Pontificia Universidade Católica do Rio de Janeiro, 1995), Environmental Fluid Mechanics (University of Rome, 1998), and Molecular and Cellular Biology (Harvard University, 2001).



Prof. Cushman was among the first to use molecular dynamics for fluid molecules in the liquid-solid interface (Nature, 1990). In swelling porous media, Professor Cushman and his students were among the first to provide a rigorous framework (hybrid mixture theory) that can be used to model multi-phase flow, heat transfer and deformation of swelling porous media. He used this theory to develop a model for swelling drug delivery polymers, swelling clay soils, gels, and fluid transport in drying and sorption of foods. The framework for many of these theories is laid out in his book, *The Physics of Fluids in Hierarchical Porous Media: Angstroms to Miles* (1997). A brief survey of the library statistics are telling. ISI shows an h-index of 32 for Prof. Cushman, with 7 papers receiving over 75 citations. His recent publications have covered diverse subjects such as: blood flow, drug delivery substrates, fluid transport in foods, swelling biopolymers, and transport of motile micro-organics. The journals in which these are published span Chemical Engineering, Geophysics, Physics, Biology, Applied Mathematics, and Fluid Mechanics. He has been awarded the rank of Fellow of the Geological Society of America (in 2010), Fellow of the American Geophysical Union (in 1996), and Fellow of the Soil Science Society of America (in 1990). He is a recipient of Purdue's Herbert Newby McCoy Award (in 1995).



RESEARCH AWARDS

Vahid Joekar-Niasar is the winner of InterPore-Fraunhofer Award for Young Researchers 2011.



The InterPore Honors and Awards Committee has elected Vahid Joekar-Niasar as the winner of the InterPore-Fraunhofer Award for Young Researchers, 2011. Vahid earned his Ph.D. in March, 2010, with distinction Cum Laude. Based on his Ph.D. thesis, Vahid has published nine papers in refereed journals like *Water Resources Research*, *Transport in Porous Media*, *Critical Reviews in Environmental Science and Technology* and *Journal of Fluid Mechanics* as the main author. He has been a member of the Organizing Committee of workshops and conferences. In 2009, he was the organizer of the

summer school "Role of Interfacial Area in Two-Phase Flow and Transport in Porous Media: Theory, Experiment, Modeling", held in Utrecht University. He was a co-convener and chairman of sessions in AGU Fall Meetings. He has been invited to give talks at Shell Global Solutions International BV, University of Bergen, Royal Netherlands Academy of Arts and Sciences (KNAW), Stuttgart University and Purdue University. He has also served as a Technical Reviewer for *Advances in Water Resources*, *AIChE Journal*, *Energy and Fuels*, *Journal of Colloid and Interface Sciences*, *Transport in Porous Media* and *Vadose Zone Journal*. He is currently a post-doctoral researcher with the Department of Earth Sciences, working on the SOWA-COR project "Simulations of electro-osmotic flow considering dynamics of chemical properties" in collaboration with Prof. R. Schotting.

The InterPore-Fraunhofer Award is given in recognition of outstanding contributions to the theory of two-phase flow in porous media and the analysis of capillarity effects in two-phase flow using computational models. The award constitutes a scholarship of 5000 Euro towards covering expenses for staying three months at Fraunhofer ITWM Institute.



The Environmental Hydrogeology Group is proud of Vahid's achievements. We congratulate him warmly and wish him much more success.

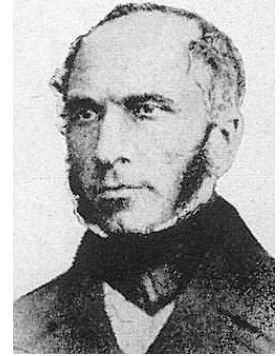
The award ceremony will take place during the upcoming InterPore conference in Bordeaux (France), 29th-31st March 2011 (<http://interpore2011.u-bordeaux.fr/>).



DARCY LECTURE

2011 Henry Darcy Distinguished Lecture Series at InterPore Member Universities

The Henry Darcy Distinguished Lecture Series in Ground Water Science was established in 1986 with the objective of fostering interest and excellence in groundwater science and technology. Among many other Darcy Lecture sessions in 2011, there will be a lecture at the University of Utrecht, the Netherlands, on the 16th of September, and a special session at the University of Stuttgart, Germany on the 21st of September.



This year, the Henry Darcy Distinguished Lecture Series is held by **Prof. Stephen E. Silliman**. Dr. Stephen E. Silliman is currently a professor of civil engineering and geological sciences, with an emphasis in groundwater hydrology. He is specialized in experimental studies (field scale and laboratory scale) and on the application of numerical models for the study of flow and transport in porous media. His numerical studies, aligned with Monte Carlo simulations and probabilistic risk assessment, aim at estimating uncertainties related to groundwater protection and management.

Dr. Silliman's research has been applied to water resource development and management in developing countries. He is involved with collaborations with colleagues from Benin, West Africa, to focus on water quality of rural groundwater wells and the development of new rural water supplies. These efforts have involved integration of numerical, geochemical, hydraulic, and geophysical approaches to understanding complex subsurface systems. He is a member of the *National Groundwater Association* (NGWA) and has served as an associate editor of NGWA's *Ground Water*, as well as several other journals. He is also an active member in the *American Geophysical Union*.

The Darcy Lecture Series host institutions have a choice of one of two lecture topics:

1. Development of Reliable Hydrologic Data Sets in Difficult Environments: Case Studies from Benin, West Africa.
2. Characterization of a Complex, Sole-Source Aquifer System in Benin, West Africa.

For more details and general information on the Darcy Lecture Series in Ground Water Science, please visit

<http://www.ngwa.org/ngwref/darcy/>



COMMUNITY NEWS

Call for Candidates: organizing InterPore 2013

InterPore is seeking candidates for organizing the 5th International Conference on Porous Media and the Annual Meeting of InterPore in 2013 in Europe. This will be done on behalf of and in close collaboration with the Society. It is expected that the meeting will attract hundreds of participants. So, facilities should include one large conference room for plenary meetings, five to six rooms for parallel sessions and suitable area for poster sessions and exhibitors. For more information and expressing interest please contact Majid Hassanizadeh at hassanizadeh@geo.uu.nl.

Utrecht Summer Schools available as online lectures

InterPore members can access all lectures given during two recent summer schools on "Upscaling and Modeling of Reactive Transport in Partially-Saturated Porous Media" and "Role of Interfacial Area in Two-

*summer*school
UTRECHT

Phase Flow and Transport in Porous Media: Theory, Experiment, Modeling". These were international summer schools held during the past two years in Utrecht. The lectures can be accessed as streaming video. Simply click on the Reference Material button on the left hand side of InterPore homepage, log in, go to Utrecht University Summer School, and follow the links.

Online courses by Prof. Jacob Bear



Among many valuable services to the porous media community by Professor Jacob Bear, there are two online courses that he has (co)developed during the last few years. Called "Computer-Mediated Distance Learning" courses, these are on two subjects: "MODELING GROUNDWATER FLOW and CONTAMINANT TRANSPORT" and "ADVANCED GROUND WATER HYDROLOGY." Developing these courses have been an enormous effort. The courses are extremely valuable resources for (self)teaching and as supporting class material. Professor Bear has kindly made the full courses available to InterPore. For a limited period, the courses will be accessible to everybody. But, in the future, they will be made available to InterPore members only. The courses can be accessed through the link under NEWS.



ELECTION RESULTS

Election results in detail

- Total number of participants: 111
- Total number eligible to vote: 244
- Total number of votes for President: 111
- Total number of votes for Council: 387

How did you like the election organization?

If you have any comments or experienced problems, please tell the election committee:

- Wolfgang Nowak (wolfgang.nowak@iws.uni-stuttgart.de)
- Rien van Genuchten (rvangenuchten@yahoo.com)
- Massoud Kaviany (kaviany@umich.edu)



MEETINGS ETC



Date:

May 9-11, 2011

Location:

Ocean Edge Resort
Brewster (Cape Cod)
Massachusetts, USA

Abstract deadline:

March 4, 2011

For details visit:

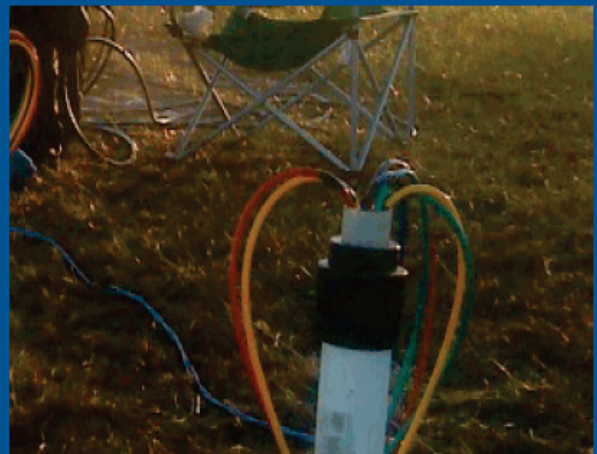
www.novcare.org

NovCare 2011

Novel Methods for Subsurface
Characterization and Monitoring:
From Theory to Practice

International Conference
Cape Cod, Massachusetts, USA

May 9-11, 2011





MEETINGS ETC

CALL FOR PAPERS

33rd International Conference on Boundary
Elements and other Mesh Reduction Methods

BEM/MRRM 2011

28 – 30 June 2011
New Forest, UK

ORGANISED BY:

Wessex Institute of Technology, UK

SPONSORED BY:

International Journal of Engineering Analysis
with Boundary Elements (EABE)



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Advancing International Knowledge Transfer
www.wessex.ac.uk

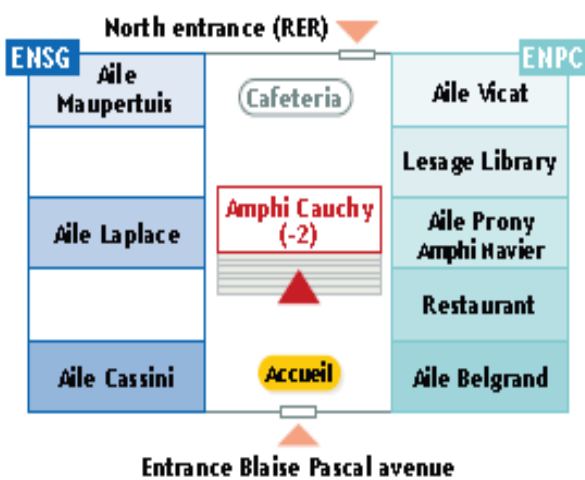




MEETINGS ETC

Venue

École des Ponts ParisTech is located in Champs-sur-Marne, 20 minutes away from downtown Paris by train. Walking directions from RER A train station « Noisy-Champs » are shown below (follow « Cité Descartes » to exit the train station). The symposium will be held in the Cauchy lecture hall.



Contact:

mpps2011@lpcp.fr

Web site: <http://navier.enpc.fr/events/mpps2011>

MPPS 2011

Mechanics and Physics of Porous Solids

A tribute to late
Pr. Olivier Coussy



18-20 April

École des Ponts ParisTech
Champs-sur-Marne, France

Organisation



Sponsors





MEETINGS ETC

SIAM Conference on Mathematical & Computational Issues in the Geosciences



March 21-24, 2011
Hilton Long Beach
& Executive Meeting Center
Long Beach, California USA



MEETINGS ETC

Les Rencontres Scientifiques d'IFP Energies nouvelles

IFP Energies nouvelles, Rueil-Malmaison, France ■ 16-18 November 2011

International Conference on Flows and Mechanics in Natural Porous Media from Pore to Field Scale – Pore2Field

Announcement

Save the date in your diary now!

To address the new challenges of the 21st century, such as climate change, environmental impacts, energy diversification and water resource management, research has been stepped up in a variety of fields, including the geological storage of CO₂, the production of shale gas and tight gas reservoirs and EOR processes.

A better understanding of flows and related physical processes (reactive flows, mechanics, etc.) is essential to effectively tackle these topics and come up with appropriate technical solutions.

To achieve this, it is necessary to consider different scales, from the pore scale (micrometers) to the field scale (hundreds of meters). One of the major difficulties involved is effectively grasping the coupling between different scales and related physical phenomena. Processes that occur on a microscopic scale determine mechanical and flow behaviors on a larger scale. In addition, a coarser description is necessary on a large scale due to a lack of detailed knowledge of the field and the need to keep computational costs down. What makes the problem challenging is the need for a unified description linking the different scales and the physics involved. While characterization and modeling on different scales are giving rise to active and promising theoretical, experimental, and numerical

research, there is still a need to improve integration of all the relevant scales and the associated physical phenomena at an early stage.

This international conference will be a scientific and technical event bringing together players from the worlds of academic research, applied research and industry. They will be able to discuss research advances, recent developments, R&D needs, challenges and applications in the field of flow and mechanical modeling of porous and fractured rocks.

The main topics tackled at the conference will be:

- pore-scale 3D imaging and modeling
- coupled phenomena (reactive flow, geomchanics, etc.)
- flow modeling
- upscaling
- data integration and monitoring
- using integrated models to understand and manage fluid flow on a field scale
- innovative case studies

A call for papers will be issued beginning of March



Under the auspices of the French Academy
of Sciences



INSTITUT DE FRANCE
Académie des sciences





RESEARCH POSITIONS

POSTDOCTORAL POSITIONS IN HYDRAULICS AND ENERGY ENGINEERING

The Politecnico di Milano (Department of Environmental, Hydraulic, Infrastructures and Survey Engineering, DIAR, and Department of Energy) is advertising two positions at the post-doctoral level on the following research topic: Modelling multi-scale processes for two- and three-phase flows in the context of Water Alternating Gas (WAG) practices.

Project Description:

Characterize two- and three-phase flow through fundamental theoretical/experimental/numerical research. Activities will include development of (a) theoretical formulations for upscaling of multi-phase flows (from pore- to core- scale) to assess limits of validity of continuum depictions (including the concepts of phase relative permeabilities), (b) numerical simulations of the pore scale processes by means of Computational Fluid Dynamics (CFD) and pore-network concepts and tools, (c) theoretical framework conducive to the design of effective pore- and core-scale experiments. Specifics goals of the project are (a) development of a numerical model (based on CFD concepts) to simulate multiphase processes at the pore scale (in the presence of complex geometries), (b) analysis (e.g., starting from volume averaging techniques) of the range of validity of macroscopic approaches based on the extension of Darcy's Law to model two- and three-phase flow processes in porous and fractures media. The work will be performed in close collaboration with Eni's E&P Division.

Projected Duration of Appointment:

2 years (possible extension of 1 additional year).

Educational Requirements and Experience:

Ph.D. in Physics, Applied Mathematics, Energy Engineering, Geochemistry, Computer Science, Computational Fluid Dynamics, Environmental Sciences, Environmental Engineering, or closely related fields. Experience at University and/or Research Institutions on research topics associated with industrial applications is a preferred requirement.

Work contract conditions:

Each post-doctoral fellow will perceive a net salary of 33000 Euro per year plus benefit to be defined according to achieved results. (S)he will participate in the scientific activities of his/her department, in particular in seminars and working groups. The post-doctoral fellow is expected to work both independently and as a member of the project team. The post-doc is supposed to interact with Eni's E&P Division, have ability to plan and organize the work, and be able to communicate the scientific results, both to public and industry and through scientific publications. The selected post-doc will write a report on his/her scientific accomplishment on a bi-monthly basis, comparing it to his/her initial project, and describing his/her subsequent objectives. At the end of the project (s)he will also write a complete report on the work performed and on the results obtained.

Scientific Contact/Principal Investigator (PI):

Alberto Guadagnini, Ph: + 39 02 2399 6263, email: alberto.guadagnini@polimi.it

Application procedure and information:

The official international call will be open at the end of December 2010. Candidates who are interested are encouraged to contact the PI for information.

Politecnico di Milano

Dipartimento di Ingegneria Idraulica,

Ambientale, Infrastrutture Viarie, Rilevamento

Piazza Leonardo da Vinci, 32

20133 Milano

Tel. 02 2399 6220, Fax 02 2399 6298

www.diiar.polimi.it



RESEARCH POSITIONS



Department of
LAND, AIR AND WATER RESOURCES
University of California, Davis

Climate Change • Sustainable Agriculture
Environmental Quality • Landscape Processes

Postgraduate / Postdoctoral Researcher Positions Available

Groundwater-Surface Water Basin Modeling (1 position)
Groundwater & Land Subsidence Modeling and Assessment (1 position)

Research positions are available for postgraduate (M.S. degree or equivalent) or postdoctoral researchers interested in pursuing research in subsurface hydrology as part of a dynamic research team that links field and laboratory research with numerical modeling. Successful candidates will lead numerical modeling efforts for projects evaluating subsurface flow, groundwater-stream interaction, and land subsidence related to agriculture and animal farming in the Central Valley and in a montane Northern California basin. This is a very timely issue in California as public agencies and diverse stakeholder groups are in conflict over how to address declining groundwater resources while managing nonpoint source pollution from animal farming, crop farming, and urban sources. The project work offers the possibility to work on:

1. Basin groundwater-surface water modeling to address groundwater management in conjunction with protecting stream baseflow for ecosystem services, and to develop a field program to assess the groundwater-stream interface.
2. Development of a regional groundwater model to assess water use, groundwater use, and land subsidence

For both projects, we have already collected substantial datasets and candidates will find a relatively data-rich environment. Candidates must have strong skills in computational modeling of environmental systems (preferably groundwater flow and transport systems, heat transport, and –for the second position – in land subsidence). Demonstrated experience in MODFLOW modeling and in programming with Matlab is required. Additional experience in programming with Fortran and experience with COMSOL (formerly “FEMLAB”) is a plus but not necessary. Preferably, candidates are familiar with GIS (ArcGIS) and data management software (e.g., in MS Excel, MS Access). Suitable candidates enjoy the responsibility and collaboration skills needed in working with a research team. The successful candidates will be part of an extended project modeling team developing numerical modeling approaches and model applications. The successful candidates will be responsible for meeting the projects’ reporting requirements, will prepare scientific manuscripts, and will participate in public outreach events. Excellent writing, communication, and organizational skills are required.

The positions are funded for one year. Our research group website is <http://groundwater.ucdavis.edu>. Interested applicants should send a resume and contact information for at least two references to: Dr. Thomas Harter, Department of Land, Air, and Water Resources; Veihmeyer Hall 125, University of California, Davis, CA 95616-8628, cell-phone: (530) 400-1784; e-mail: thharter@ucdavis.edu. Review of applications will begin immediately and will continue until the positions are filled. The University of California is committed to equal opportunity and the diversity of its workforce.



RESEARCH POSITIONS

Senior Lecturer / Lecturer in Petroleum Engineering

Australian School of Petroleum

Job Reference Number: **13639**

The Australian School of Petroleum is Australia's pre-eminent centre for education, training, and research in the upstream petroleum industry. Our structure is unique in the Asia-Pacific area, ensuring a focus on the practical needs for the international petroleum industry through close integration of Petroleum Geoscience, Petroleum Engineering and Business Decision-making in one School.

The School's current research interests include reservoir characterisation, modelling and simulation; enhanced hydrocarbon recovery; completion and production techniques formation damage; geomechanics; sedimentology and stratigraph ; carbon dioxide sequestration; economic evaluation and decision-making & risk analysis. The School has well-established links with the petroleum industry and related government organisations including Primary Industries and Resources South Australia (PIRSA), Geoscience Australia, and the CSIRO. It is a node of the Cooperative Research Centre for Greenhouse Gas Technologies (CO2CRC).

We are seeking to appoint to an academic position at the level of Lecturer (Level B) or Senior Lecturer (Level C) in Petroleum Engineering. The School will consider outstanding candidates in any area of Petroleum Engineering.

Position Requirements

You should have as a minimum:

- a higher degree in petroleum engineering (or a in related discipline, complemented by experience in petroleum engineering)
- willingness and ability to teach petroleum engineering topics at undergraduate and post-graduate levels
- demonstrated research ability in petroleum engineering or a related discipline
- high quality interpersonal skills and excellent communication skills, written and verbal
- willingness and ability to participate effectively in administrative duties.

For more information please visit: <http://www.adelaide.edu.au/jobs/current/13639/#furtherinfo>



RESEARCH POSITIONS

Faculty Position in Civil and Environmental Engineering / CO₂ Sequestration

EPFL's School of Architecture, Civil and Environmental Engineering seeks a Tenure-Track Assistant Professor of Geo-Engineering focusing on CO₂ Sequestration. It is our intention to hire at the level of Assistant Professor (Tenure Track) but in suitable cases an appointment at the Associate or Full Professor levels will be considered.

The future success of CO₂ sequestration in deep, geologically secure formations, either on-shore or off-shore, remains uncertain due to numerous technological and scientific challenges. These challenges include an improved understanding of: the physico-mechanical and bio-geochemical processes involved, the roles of geological controls and well technologies on long term storage, methods for locating storage sites and monitoring of their performance, large-scale mathematical modeling combined with field evidence, especially on geochemical interactions. We seek applications from highly qualified scientists and/or engineers committed to a career aiming at excellence in research and teaching. Applications are welcomed from all disciplines pertinent to CO₂ sequestration, including, but not limited to, geology, geochemistry, environmental and civil engineering and applied mathematics. The successful applicant will have potential for developing a research profile characterized by novel accomplishments, competitive grant funding and an interdisciplinary, collaborative vision. A broad vision of geo-engineering is sought, as is the ability to collaborate across disciplines as customary in the ENAC School at EPFL today.

Successful candidates are expected to initiate independent research programs and participate in undergraduate and graduate teaching. Substantial start-up resources will be available. We offer internationally competitive salaries and benefits.

Applications should include a résumé with a list of publications, a concise statement of research and teaching interests, and the names and addresses (including e-mail) of at least four referees. Applications should be submitted electronically to <http://enac.epfl.ch/page-2114.html> by 1st March 2011 when formal screening of applications will begin.

Informal enquiries may be made to:

Professor Andrea Rinaldo: andrea.rinaldo@epfl.ch

Additional information about EPFL is available at: <http://www.epfl.ch>, <http://enac.epfl.ch> .

Ecole polytechnique fédérale de Lausanne is an equal opportunity employer.

Women candidates are particularly encouraged to apply.



RESEARCH POSITIONS



UNIVERSITY OF
SASKATCHEWAN

Department of Civil and Geological Engineering Assistant Professor in Geological Engineering (Hydrogeology)

The Department of Civil and Geological Engineering of the University of Saskatchewan invites applications from outstanding candidates for a tenure-track faculty position at the Assistant Professor level in Geological Engineering in the area of hydrogeology of porous and fractured media. Associate Professor appointment will be considered for an exceptional candidate.

Candidates must have a PhD in Geological Engineering or related field. Applicants should demonstrate the ability or aptitude to develop a strong research program, particularly based on collaboration with industry. Relevant experience with the mining industry is an asset. Applicants should show competence in and a strong commitment to undergraduate and graduate teaching. Registration with the Association of Professional Engineers and Geoscientists of Saskatchewan is required for tenure.

Preference may be given to candidates with the additional ability to teach courses in rock mechanics, reservoir mechanics and a geological mapping field course. Exceptional candidates who specialize in engineering geology and site characterization may also be considered.

The Department of Civil and Geological Engineering offers undergraduate programs in Civil Engineering, Geological Engineering and Environmental Engineering and postgraduate programs at the M.Eng., M.Sc. and Ph.D. levels to over 370 students.

There is considerable involvement with various aspects of the mining industry in the provincial economy with commensurate research opportunities in this area. Additional information about the University can be found at www.usask.ca.

Interested applicants are invited to provide a curriculum vitae, statements of research and teaching interests, and the names of at least three suitable references to:

Professor Jim Kells, Head
Department of Civil and Geological Engineering
University of Saskatchewan
57 Campus Drive
Saskatoon, SK S7N 5A9
Email: geoe.search@usask.ca

Electronic submissions by email are preferred. The appointment will commence July 1, 2011 or as soon as possible thereafter.

Applications will be reviewed until the position is filled. The University of Saskatchewan thanks all applicants for their interest, however, only applicants selected for interviews will be contacted.

This position is within the scope of the University of Saskatchewan Faculty Association.

All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. The University of Saskatchewan is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals, including women, members of visible minorities, Aboriginal persons, and persons with disabilities.



ABOUT INTERPORE

The *International Society for Porous Media (InterPore)*

is a non-profit-making independent scientific organization established in 2008.

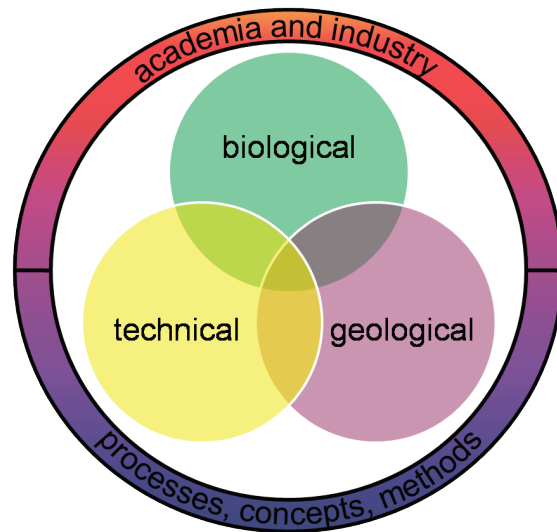
The general aim of the Society is to advance and disseminate knowledge for the understanding, description, and modeling of natural and industrial porous media systems.

Key Aims of the Society

- facilitate connections and collaboration among industrial and academic researchers;
- connect porous media theoreticians, modellers, and experimentalists;
- provide a forum for exchanging ideas and expertise for the improvement of porous media models;
- identify research questions that will lead to major improvements in the theories and models of complex porous media and to define modelling challenges;
- facilitate training and education.

Examples of Industrial & Natural Applications of Porous Media

Fuel cells, paper-pulp drying, food production and safety, filtration, concrete, ceramics, moisture absorbents, textiles, paint drying, polymer composites, and detergent tablets. The most well-known natural porous media involving multiphase flow and transport are soils, aquifers, and reservoirs. But such processes also occur in biological tissues and plants. Recently, there has been growing interest in the biomechanics of porous tissues, engineered tissues, and in-tissue drug delivery.



Why should you join InterPore?

InterPore is uniquely positioned to connect experts and practitioners from a diverse field of both scientific and engineering know how as well as industrial applications. This enables faster and unexpected connections resulting in quicker learning and accelerated innovation.

You can become a member by registering online or contacting InterPore.

Honours and awards committee

Chairperson: Mike Celia (Princeton University). Jacob Bear (Technion, Haifa), Mary Wheeler (U. Texas, Austin), Rodrigo Rosati (Procter & Gamble, Germany), and Jan Nortbotten (Bergen University, Norway).

INTERPORE: "Similar solutions to diverse applications."

Website: www.interpore.org

Contact: info@interpore.org



ABOUT INTERPORE

Imprint

InterPore News, www.interpore.org

Published in printable electronic form by the International Society for Porous Media (InterPore)

Circulated free of charge to members of InterPore.

Articles and news items on the study and characterisation of porous media,
especially when relevant to other types of porous media,
are welcomed for publication in this newsletter, issued three or four times a year.

Copy deadline for next issue: May 30st 2011

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