S-1 News Vol.11, No.4
December 16, 2005

PREFACE

This is the fourth S-1 Newsletter for the year 2005. The newsletter contains three sections: S-1 Member News and Announcements, Upcoming Meetings of Interest, and New Job Announcements. To have news and announcements included in future S-1 Newsletters, please send the text (either embedded in an e-mail message or as an attachment) to s-1@uidaho.edu. Newsletters (current and past) and other S-1 information are posted on the S-1 Web Page: http://soils.ag.uidaho.edu/tuller/s-1/

1) S-1 MEMBER NEWS AND ANNOUNCEMENTS

A) Awards

S-1 Early Career Award

David Robinson is the recipient of the 2005 S-1 Early Career Award. He is the fourth recipient of this annual award, which recognizes scientists who have made an outstanding contribution in Soil Physics within six years of completing their Ph.D. degree. Dr. Robinson received his B.S. degree in Soils and the Environment at Reading University, UK, in 1994 and his Ph.D. in Soil Hydrology from the University of Ulster, UK, in 1999. His dissertation research focused on comparing time domain reflectometry, capacitance and impedance sensors for soil water content determination, and the application of automated soil water sensing equipment to field studies under irrigated potato crops. After his Ph.D. study, Robinson worked two years as a postdoctoral researcher at the Volcani Center in Israel investigating theoretical and experimental aspects of dielectric and electrical conductivity measurements for the simultaneous determination of soil water content and salinity. He then spent two years as a research associate at the USDA Salinity Laboratory in Riverside, CA, developing mobile soil mapping techniques for precision agriculture. During the last two years, Robinson has conducted groundbreaking research on electromagnetic sensors for application in and characterization of porous media at Utah State University. In October, Robinson took a staff scientist position in the Department of Geophysics at Stanford University to help develop the concept for integrating geophysical sensing and hydrology under the NSF Consortium of Universities for the Advancement of Hydrological Sciences, Inc. (CUASHI).

Don and Betty Kirkham Soil Physics Award

The recipient of the 2005 Don and Betty Kirkham Soil Physics Award is Jirka Simunek. Dr. Simunek is a Professor and Hydrologist in the Department of Environmental Sciences at the University of California, Riverside. Dr. Simunek earned his M.S. degree from the Czech Technical University in Prague, Czech Republic, and his Ph.D. degree from the Academy of Sciences of the Czech Republic in Prague. His program focuses mainly on mathematical/numerical modeling of various vadose zone processes and development of HYDRUS models. Dr. Simunek served as an associate editor for *Vadose Zone Journal* and is serving as an associate editor for *Water Resources Research* and *Hydrological Sciences Journal*. He is a member of the American Geophysical Union, International Association of Hydrological Sciences, and SSSA.

Congratulations to David and Jirka!!

B) Call for Nominations – 2006 S-1 Early Career Award

The S-1 Soil Physics Division invites nominations for the 2006 S-1 Early Career Award. The award recognizes scientists who have made an outstanding contribution in Soil Physics within six years after completing the Ph.D. degree. Principal criteria for the S-1 Early Career Award are:

1. Completion of Ph.D. degree in Soil Physics or closely related field within six years of the award.
2. Active member of the Soil Science Society of America.
3. Evidence of quality teaching at the undergraduate and/or graduate levels if in a teaching position.
4. Evidence of effectiveness in extension and/or outreach activities.
5. Evidence of significant contribution of original basic and/or applied research in soil physics.
6. Contributions to the public, professional organizations and institutions.

Detailed instructions for nominating candidates may be found at: http://soils.ag.uidaho.edu/tuller/s-1/.

To apply, submit four copies of the complete nomination containing (i) nomination letter not to exceed two pages in length, (ii) supporting materials (see instructions for format) that document the nominee's qualifications, and (iii) three supporting letters not to exceed one page each. The deadline for receiving nominations is June 1, 2006.

Mail nominations to Dr. Glendon Gee, Chair S-1 Early Career Award, Pacific Northwest National Laboratory, Environmental Technology Directorate, P.O. Box 999, Richland, WA 99352.

Questions regarding the award may be directed to Glendon Gee by e-mail glendon.gee@pnl.gov.

The 2006 S-1 Early Career Award Committee consists of Glendon Gee (Chair), Ty Ferre, Shmulik Friedman, and Gerard Kluitenberg.

C) Minutes, 2005 Division S-1 Business Meeting (November 8, 2005, Salt Lake City, UT)

Gerard Kluitenberg, Chair, called the meeting to order and introduced David Radcliff (Past Chair; not present), Jon Wraith (Chair-Elect), Jirka Simunek (Incoming Chair-Elect), and Glenn Wilson (SSSA-ASA Board Representative).

The meetings of the 2004 business meeting were adopted without modification.

Bob Horton relayed some observations about the professional and personal contributions of Rienk van der Ploeg, who passed away this year. A moment of silence was observed in Rienk's honor.

Recognitions

Gerard recognized the following S-1 members who received awards at the 2005 meeting: Jirka Simunek (Don and Betty Kirkham Soil Physics Award), John Letey (Soil Science Distinguished Service Award), Raymond Allmaras (Soil Science Professional Service Award), Rattan Lal (Carl

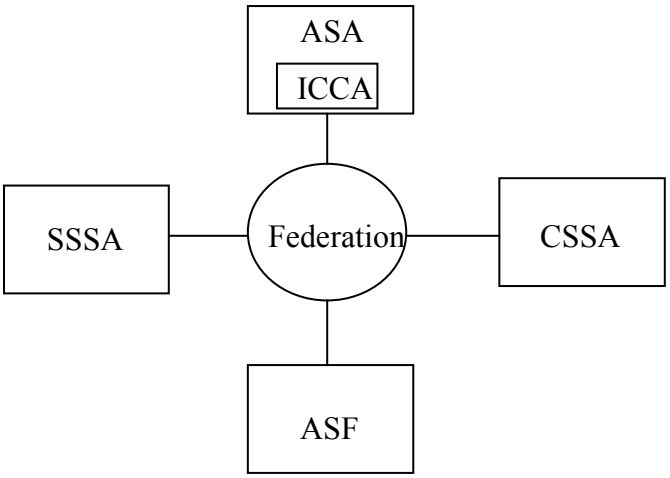
Sprengel Agronomic Research Award and SSSA President-Elect), Stephen Anderson (SSSA and ASA Fellow), Satish Gupta (SSSA and ASA Fellow), Rainer Horn (SSSA Fellow), Liwang Ma (ASA Fellow), Per Moldrup (SSSA Fellow), and Jon Wraith (SSSA Fellow).

Gerard thanked Markus Tuller for his continuing efforts to host the S-1 Website, which Markus noted receives about 3,000 hits per month.

S-1 Early Career Award
Per Moldrup, chair of the Award Committee, presented the 2005 S-1 Early Career Award to David Robinson. Members of the 2005 S-1 Early Career Award Committee were Per Moldrup (Chair), David Radcliffe, Glendon Gee, and Ty Ferre. Per will rotate off the committee for 2006, Glendon will serve as chair, Gerard Kluitenberg will replace David Radcliffe (as Past Chair for S-1) for a one-year term, Ty Ferre continues, and Shmulik Friedman will join the committee for a three-year term.

Report from the SSSA and ASA Board of Directors: Glenn Wilson
Glenn Wilson reported on the activities of the SSSA and ASA Boards, and provided a two-page written report.

I. SSSA Strategic Plan
The tri-societies is restructuring and creating a new 501c3 management entity. The three names proposed for the management entity are: Federation of Plant, Land, and Environmental Societies; Federation of Plant, Soil, and Environmental Societies; Land Resource Societies Federation.



Characteristics: Title transferred from ASA to a federation entity with each society as part owner.

1. Continue under current structure until 12/31/07 or until the new Federation management entity is created and approved by members, whichever comes first.
2. If not created/passed by 12/31/07, revert to former structure with CSSA and SSSA representation on ASA Board of Directors.

Glenn sought approval of a motion to support development of the federation management entity, to support a name, and to pursue inclusion of additional professional societies in the federation. In the discussion of potential names, the number one choice was the "*Land Resources Societies Federation*"; neither of the other two suggestions had support, as they were considered as too specific and left out critical disciplines. S-1 members considered that the name should be broad and simple. Bob Luxmore suggested some wording changes to the amendment proposed by Glenn, which were discussed, modified, and unanimously approved.

II. Membership and Member Services

SSSA has developed a strategy for attracting new members and retaining active members. They have contracted to a telemarketing firm for $41K to contact members about renewing membership. They also instituted a new member breakfast, and created a World Bank International membership rate which attracted 150 new members. Membership has increased steadily for the last 5 years, and increased by 5% from 2004, to 5,946 in 2005.

III. Publications and Professional Meetings

SSSA Editor-in-Chief : Warren Dick's tenure as Editor in Chief has expired and S-1 Technical Editor Sally Logsdon was approved by the BoD as the Editor in Chief for 2006-2008.

VZJ: Rien van Genuchten has stepped down as Editor of VZJ. He has proposed Jan Hopmans to replace him as Editor and that 3 Co-Editors (rather than Technical Editors) be appointed. The BoD will approve an Editor after the President solicits nominations. So far only Jan has been nominated. The Editor will then select Co-Editors.

Action was taken at the August 2005 Executive Committee meeting to do a fiscal evaluation of *Vadose Zone Journal* from inception through budget year 2006, and further that the evaluation be completed by the 2006 annual meeting. VZJ lost $63K in 2004, $52K in 2005, and is projected by the Editor to be +$11K in 2006; however, the Director of Publications, Frances Katz, projects a loss of $15K. It is critical that VZJ continue to progress towards breaking even or making a profit.

A SSSA newsletter is proposed for quarterly or bi-monthly distribution at a cost of $73k to $107k, respectively. It would cost members an additional $12 to $18 in dues. There is a possibility of combining with Soil Survey Horizons. The Executive Committee cautioned to not start a new costly publication at this time. A motion was passed to form a committee of 5, including the SSSA Editor in chief, to look into options.

Members are encouraged to attend the World Congress of Soil Science. SSSA invested substantial funds in support of these meetings. If there are 2,000 attendees SSSA will lose ~$42k but if we get the typical 3,000 attendees we will have a return on investment of around $322k. SSSA is anticipating a 20% decrease in attendance at SSSA meetings in Indianapolis. A show of hands requested by Glenn as to who anticipated attending WCSS rather than the SSSA meetings in Indianapolis indicated less than about 10% of those present (estimated to be greater than 100 members).

IV. Professional Development

Certification and Licensing: Many states have a soils certification program. SSSA is assisting states in developing this certification.

SSSA initiated the North American Proficiency Testing Program (NAPT) as an activity of SSSA in 1997. The NAPT Coordinator oversees daily operation of the program and is to be under contract with SSSA, however, there is no signed contract on file. A contract has been drafted but to date has not been signed by the Coordinator.

V. Public Policy and Outreach

Smithsonian Institution Soils Exhibit: Plans are for a full wing (6,000 ft^2) exhibit in the Smithsonian. Paul Kamps was hired in a full time position to attract funding; about $900k has been attracted to date. The exhibit is scheduled to open in 2008 at a total cost of $4 million; we need $2.5 million attracted by Dec 2006. A design firm has been selected.

The science policy action alert (www.sciencepolicyaction.org) was developed as an online service that allows members to track bills, email representatives and senators, track their voting record, and follow issues.

The society and its lobbyists were successful in getting a 3% increase in NSF funding despite cutbacks to cover cost of Katrina and other disasters.

VI. Fiscal Strength and Development

The SSSA budget was projected to be $10k in the black but ended $93k in the red. The big cause was that the Services component was over-spent by >$200k. Member services overspent by $130k and Development overspent by $75k.

Partitioning of revenue from meetings was changed to reflect the number of presentations rather than being split according to membership of the three societies. This is advantageous to SSSA since around 50% of papers are in SSSA.

Roughly 40% of revenue is from journals. Journals = $354k; Membership = $218k; Meetings = $65k (by laws allow a 25% profit); NAPT = $112k (but expenses > revenue). There is concern that our budget is tied too closely to journal revenue since subscriptions are decreasing. Member subscriptions are stable but non-member (libraries) is decreasing. Glenn urged members to contact their libraries to request our journals, that members use libraries for literature searches, etc.

Currently the Budget and Finance Committee is composed of four SSSA members, including the Chair. Each committee member serves a 4-year term and the Chair serves a 1-year term. Action was taken to restructure the B&F Committee to be composed of members of the Board of Directors: Mark Alley (06), Doug Beetle (07), Richard Dick (08), Gary Peterson will stay on 1 yr.

The society has not had a dues increase in 10 years. They are considering instituting an automatic cost-of-living adjustment (COLA) or around 4% to dues annually. A discussion on this resulted in a suggestion to use the Higher Education COLA as an index.

Report from VZJ Editorial Board: Rien van Genuchten (Editor)

The VZJ financial situation is improving, and may see a slight profit except for overhead expenses. Subscriptions are up, with about 350 library subscriptions, ~60% of these as part of the societies bundled journals option. Approval has been secured for ISI Abstracting, so VZJ will

soon have an associated impact factor. Current rates are $300 for institutional subscribers, with a 2% increase for 2006.

The journal has about 180 papers per year. Rien suggested the format of an Editor plus 3 co-editors, and that the latter might be selected to represent affiliated societies, which could lead to increased submissions and subscriptions. He encouraged members to submit papers, and encourage libraries to subscribe to VZJ.

Gerard thanked Rien for his dedicated service in launching VZJ and getting it to its current state, and the members present gave Rien a round of applause for his outstanding efforts on our behalf.

Report from SSSAJ Editorial Board: Sally Logsdon (S-1 Technical Editor)
New features of SSSAJ include book reviews and special topics papers. Review papers are encouraged; these may be invited and/or volunteered, and are to be targeted rather than exhaustive. Technical Editors may invite two reviews per year. SSSAJ will also initiate awards for excellent reviewers.

The journal is in good financial shape. Beginning in 2007 they will experiment with in-house typesetting, which should speed up publication of papers.

Glenn Wilson will be the new Technical Editor for S-1, in response to Sally's moving to the SSSA Editor in Chief slot. Congratulations from all of us to Sally; she has been an outstanding Technical Editor, and we are confident that she will also excel as Editor-in-Chief of SSSA.

Other Business
Division Officers: S-1 will need to elect both a new Chair-Elect and SSSA Board Representative this year. The S-1 Nominating Committee (Dani Or, David Radcliffe, and Gerard Kluitenberg) will develop a slate of two candidates for each position.

Update on the 2008 Kirkham Conference: Gerard relayed from Don Nielsen that the 2008 Kirkham Conference will be held in Ghent, Belgium in February of 2008, preferably including or near the date of February 11 which would celebrate the 100th anniversary of Don Kirkham's birth. Don Gabriels and Don Nielsen will Co-Chair the conference.

Update on the Don and Betty Kirkham Soil Physics Award: Gerard Kluitenberg also noted that Don Nielsen stated that past and future awardees of the Don and Betty Kirkham Soil Physics Award will receive not only a certificate of achievement and a $1,000 honorarium, but also a bronze medallion bearing the portraits of Don and Betty on the obverse of the minted medallion. Also, approximately every eight years at alternate Kirkham Conferences, a Don and Betty Kirkham Soil Physics 24-karat Gold Medal bearing the portraits of Don and Betty on the obverse of the minted medal will be presented to a retired scientist who made unique international leadership and achievement in soil physics. The presentation of these medallions and medals will set a new precedent for the SSSA to enhance the stature and prestige of soil physics throughout the academic world.

Update on the World Congress of Soil Science: Gerard noted that December 1 is the deadline for abstracts to the 2006 World Congress of Soil Science in Philadelphia, and he encouraged members to attend.

2005 SSSA Program Report: Preliminary numbers show that S-1 had 135 volunteered papers (80 posters, 55 oral) at the Salt Lake City meetings, ranking as the fifth highest division behind S-11 (197), S-6 (161), S-2 (145), and S-4 (139). Gerard acknowledged the efforts of Markus Flury and Jan Hopmans who organized the two S-1 Symposia this year. He also thanked the session moderators for their fine work.

Announcements: David Robinson noted that the CUAHSI (Consortium for the Advancement of Hydrologic Sciences, Inc.) organization is conducting a review of hydrologic sciences in the United States. This information will be provided to NSF to inform them with respect to funding hydrologic sciences in the next twenty years. CUAHSI has an online survey that will be open for the next 2 months. David encouraged members to participate in this survey to help direct the future of hydrologic funding.

Gerard Kluitenberg introduced incoming Division Chair Jon Wraith, who thanked Gerard for his outstanding service to the Division, solicited member input for symposia and session topics for the 2006 SSSA meetings, then adjourned the meeting.

Respectfully submitted, Jon Wraith

2) UPCOMING MEETINGS OF INTEREST (arranged by meeting date)

A) 4th International Conference on Unsaturated Soils, Carefree, Arizona, April 2-6, 2006

Join the 4th International Conference on Unsaturated Soils. Unsaturated Soils 2006 will promote the exchange of knowledge in the mechanics of unsaturated soils. For further information please visit: http://www.asce.org/conferences/unsat06/

B) European Geosciences Union General Assembly, Vienna, Austria, 02 – 07 April 2006

The EGU General Assembly 2006 will bring together geoscientists from all over Europe and the rest of the world into one meeting covering all disciplines of the Earth, Planetary and Space Sciences. Especially for young scientists the EGU appeals to provide a forum to present their work and discuss their ideas with experts in all fields of geosciences. The EGU invites all geoscientists to participate in the assembly, submit contributions to the topical sessions and share their research with colleagues and friends. The EGU is looking forward to cordially welcome you in Vienna! For further information please visit: http://meetings.copernicus.org/egu2006/

C) Multi-Scale Modeling of Flow and Transport in Porous Media, Centro Stefano Franscini, Monte Verità, Switzerland, April 7 – 12, 2006

Multi-phase flow phenomena and transport processes in porous media are dominated by the complexity of the geometry and the interconnection of structures of different length scales. Successful predictions of flow and transport depends on reliable modeling of multiple fluids and solute transport in heterogeneous multi-scale structures. This task can only be achieved by a genuinely interdisciplinary approach. The workshop will focus on the state-of-the-art and present problems in the following fields:

- mapping the of three-dimensional structures and processes
- structure quantification
- physics of flow and transport in complex structures
- numerical methods for an efficient solution of the physical-mathematical models
- upscaling approaches

For further information please visit: http://www.porous-media.org/

D) MODFLOW and More: Managing Ground-Water Systems Conference, Golden, Colorado, May 21-24, 2006

The International Ground-Water Modeling Center (IGWMC) is pleased to announce the details of the MODFLOW and More 2006: Managing Ground-Water Systems Conference. The conference will be held from May 21-24, 2006 at the Colorado School of Mines campus in Golden, Colorado. We would like to invite you to submit an abstract for participation in the conference at http://typhoon.mines.edu/events/modflow2006/abstract_form.html. Abstracts will be reviewed by the technical committee and selected authors of both oral and poster presentations will be published in the conference proceedings. Abstracts are due December 5, 2005 and accepted papers are due by March 12, 2006.

Please visit our website for a complete description of the conference dates, activities, and relevant abstract topics: http://www.mines.edu/igwmc/events/modflow2006/modflow2006.shtml.

E) Gordon Research Conference on Flow & Transport in Permeable Media, Proctor Academy, Andover, NH, July 30 - August 4, 2006

The Gordon Conference on Flow and Transport in Permeable media brings together researchers with a common interest in understanding physical, chemical and biological processes in porous media. The conference provides a stimulating and relaxed forum for an interdisciplinary exchange of ideas. A unique feature of this meeting is that participants from a wide variety of backgrounds and with interest in many different applications interact on an equal footing - the conference attracts petroleum engineers from both industry and academia, researchers interested in groundwater hydrology, contaminant transport and carbon storage, soil scientists, geologists, biologists, mathematicians and physicists.

In the spirit of the Gordon Conferences, the format is designed to encourage in-depth discussion with a program of morning and evening invited lectures and open discussions. Free afternoons and evening social gatherings provide ample time for more informal scientific interactions. The afternoon and evening poster sessions are an integral part of the meeting and most attendees prepare one or more posters.

Junior researchers, including graduate students, are particularly encouraged to apply. Funds will be available to meet some or all of the registration costs of junior researchers who do not have other funds.

To apply to attend the conference, please click on: http://www.grc.org/programs/2006/flow.htm

F) International Soil Tillage Research Organisation 17th Triennial Conference ISTRO (August 28 - September 3, 2006, Kiel, Germany)

The Conference will comprise 5 days of sessions, including working groups, symposium on soil structure, tours and displays. A roundtable discussion will be organized during the conference with experts from round the world. In addition we are planning a range of social activities to allow participants to relax, unwind and experience the northern German lifestyle. For further information please visit: http://www.soils.uni-kiel.de/istro.htm

G) GeoX 2006 – 2nd International Workshop on X-Ray CT for Geomaterials, Grenoble and Aussois, France, October 4-7, 2006

Following the first successful workshop held in Kumamoto, Japan, in November 2003 (GeoX 2003), the purpose of the coming workshop GeoX 2006 is again to bring together specialists in the development of X-ray Computed Tomography and their use for studying the mechanics of Geomaterials. Invited international experts in key research areas will review recent developments and challenges in the field. The goal of GeoX 2006 is to bring together scientists from the academic world and industry to address the application of X-ray CT to Geomaterials from both a fundamental and an applied perspective.

For further information please visit: http://geo.hmg.inpg.fr/geox2006/

3) NEW JOB ANNOUNCEMENTS

To review all announcements from the last six months please visit:
http://soils.ag.uidaho.edu/tuller/s-1/jobs.htm

A) Director - National Center for Water Quality Research (Posted: 12/05/2005).

Heidelberg College, Tiffin, Ohio, invites applications for the position of Director of its National Center for Water Quality Research (NCWQR), formerly the Water Quality Laboratory. The NCWQR's research programs emphasize quantifying nutrient, sediment and pesticide export from large agricultural and mixed land-use watersheds into Lake Erie and the Ohio River, aiding in the development of tributary load reduction programs, and assessing the effectiveness of those programs. The NCWQR's tributary loading data bases date from 1974 and are the most detailed and long-term of their type in the United States (http://wql-data.heidelberg.edu/). In 2005, the NCWQR moved into the newly constructed Gillmor Science Hall. We seek a Director who can guide the continued operation and expansion of NCWQR programs. Applicants must possess a doctoral degree with experience in water resources or a related environmental or agricultural discipline. Depending upon qualifications, the position may be tenured upon appointment. The Director reports directly to the Vice-President for Academic Affairs. More information about this position and NCWQR programs and staff can be found at www.heidelberg.edu/wql. To apply, submit by mail (1) a letter of application, (2) a full curriculum vitae, (3) a 1- to 2-page narrative envisioning how you would lead the NCWQR in implementing its mission, and (4) names and contact information for three references. Submit these materials to Dr. David Baker, National Center for Water Quality Research, Heidelberg College, 310 E. Market Street, Tiffin, Ohio 44883. Screening of applications will begin February 10, 2006 and will continue until the position is filled. Heidelberg College is an affirmative action, equal opportunity employer.

B) Assistant Professor of Watershed Hydrology (Posted: 11/29/2005).

The Environmental Sciences Department at the University of California, Riverside, is searching for outstanding applicants for the Assistant Professor of Watershed Hydrology position currently open in our department. The appointee will be expected to develop an independent research program in surface hydrology which integrates hydrologic processes with pedological, ecological, and biogeochemical processes. S/he will have the opportunity to work with other water/soil/environmental scientists in developing interdisciplinary approaches for the environmentally sound management of water and soil resources in natural, agricultural, and urban systems. The appointee will be expected to teach undergraduate and graduate courses related to hydrology and watershed biogeochemistry and to direct graduate students. This 9-month, tenure track position is 50% teaching and 50% research.

Candidates must have a Ph.D. with strong training and demonstrated interest in conducting research in surface hydrology, transport processes in soils and watersheds, and modeling. Experience in field experimentation and GIS applications in hydrology are highly desired. Candidates must possess a strong commitment to teaching excellence at both the undergraduate and graduate levels. Prior teaching experience is highly desirable.

Candidates for this position are requested to submit a curriculum vitae, a statement of teaching/research interests, transcripts, the names and addresses of at least three references, and any other supporting documentation to Dr. Robert C. Graham, Department of Environmental Sciences, University of California, Riverside, CA 92521-0424. Review of applications will begin January 28, 2006, but applications will be accepted until the position is filled. Salary is commensurate with education and experience. The University of California is an equal opportunity-affirmative action employer.

C) Postdoctoral Research Associate - Reactive Transport (Posted: 11/29/2005).

The Earth Sciences Division of Lawrence Berkeley National Laboratory invites applications for a postdoctoral research position to focus on reactive transport analyses of the behavior of radionuclides under partially saturated flow conditions. The position involves the development of conceptual and numerical models to describe the thermodynamic and kinetic behavior of radionuclides under partially saturated conditions similar to those expected in the proposed high level nuclear waste repository at Yucca Mountain. A particular focus will be on the dissolution of spent fuel and the subsequent precipitation of various radionuclide-bearing secondary phases.

The successful candidate should have a Ph.D. in geochemistry, environmental chemistry, chemical engineering, hydrology, or related field, and good familiarity with both chemical thermodynamics and kinetics. Some experience with geochemical and/or transport modeling is essential. The candidate will work as part of a team of model developers with a range of geochemical and hydrological expertise.

The Earth Sciences Division of the Lawrence Berkeley National Laboratory is one of the leading institutions for multiphase-multicomponent reactive transport modeling in the world. Opportunities exist to interact with other researchers in the Earth Sciences Division who are engaged in fundamental and applied studies of reactive transport for a wide range of geological and engineered systems investigating problems in nuclear waste isolation, environmental

remediation, chemical weathering, biogeochemical cycling, geothermal resources, and carbon sequestration.

How to Apply: For fastest consideration, apply online at: http://jobs.lbl.gov, select "Search Jobs", and enter 018061 in the keyword search field. Select the "Upload Your Resume" option, and follow the on-line instructions to complete the application process. Berkeley Lab is an Affirmative Action/Equal Opportunity Employer committed to the development of a diverse workforce. For more information about Berkeley Lab and its programs, visit http:www.lbl.gov.

D) Assistant/Associate Professor, Engineering - Multidisciplinary (Posted: 11/21/2005).

Washington State University has four openings for tenure-track faculty positions as part of a multidisciplinary team conducting innovative research and teaching that addresses the interplay of physical, chemical, and biological factors determining environmental sustainability. The positions, with an effective start date of August 16, 2006, will be filled in three departments: Biological Systems Engineering (associated with the Agricultural Research Center), Chemical Engineering and Bio Engineering, and Civil and Environmental Engineering. These departments, in addition to three others, work closely through the Center for Multiphase Environmental Research and this clustered hire will further promote interdisciplinary collaborations across the WSU campus.

Position Description: Candidates are sought at all professorial ranks with expertise in the areas of groundwater hydrology, surface water quality, environmental microbiology, and water chemistry. Examples of areas of interest are provided below, although excellent candidates from any area of Environmental Science and Engineering and Water Resources will be considered: 1. study of extremophiles for solving environmental problems, 2. microbial transformation as related to biodegradation, 3. pathogen fate and transport, 4. surface water quality, 5. ecosystem health, 6. water and wastewater disinfection, 7. water reclamation, 8. contaminant fate and transport in the vadose zone, and 9. watershed scale studies of contaminant transport.

Successful candidates are expected to direct graduate research, develop research programs through external funding and teach undergraduate and graduate courses in their home department.

Minimum Qualifications: Candidates must have completed a PhD degree in the appropriate field by August 16, 2006.

Application Process: Screening of applications will begin January 20, 2006. Applicants are requested to send a cover letter indicating level of application (Assistant, Associate, or Full), a statement of research and teaching interests, a detailed resume, and a list of five (5) potential references to:

Dr. David Yonge, Director
Attn: Water/Environmental Engineering Search
Center for Multiphase Environmental Research
P.O. Box 642910
Washington State University
Pullman, WA 99164-2910

WSU employs only U.S. citizens and lawfully authorized non-U.S. citizens. All new employees must show employment eligibility verification as required by the U.S. Immigration and Citizenship Services. Washington State University is an equal opportunity/affirmative action educator and employer. Members of ethnic minorities, women, Vietnam era or disabled veterans, persons of disability and/or persons age 40 and over are encouraged to apply. For further details contact the Center for Human Rights web site at http://chr.wsu.edu.

E) Research Associate/ Soil & Environmental Physics Technician (Posted: 11/21/2005).

The Soil and Environmental Physics Laboratory (LASEP), School of Architecture, Civil and Environmental Engineering (ENAC), EPFL, is seeking a full time Research Associate/ Soil & Environmental Physics Technician

Requirements:
- MS degree with extensive experience preferably in a related engineering field
- Experience in field & lab research practices related to hydrology, geo-chemistry, soils including relevant techniques, instruments and analyses
- Skills and experience in data analysis and technical writing, an asset
- Knowledge and experiences concerning characterization of soil physical properties and processes, instrumentation and hydrologic monitoring network design and deployment
- Computer skills: adept with personal computers and a variety of Windows software applications as well as familiarity with electronic data logging equipment
- Languages: fluent English and French, any additional language an asset
- Good communication skills and ability to work with others
- Flexibility, enthusiasm, willingness to learn, creativity, good organizational skills and an ability of working independently and with others, conscientious…

Work description (primary duties):
- Design, coordination and construction of state-of-the-art Soil & Environmental Monitoring laboratory
- Planning, conducting and analyzing research in environmental engineering
- Operating and maintaining field and laboratory facilities, instruments, and equipment
- Providing research assistance and oversight for several research projects and principal investigators
- Assisting graduate student research projects
- Supervising undergraduate student workers
- Conducting other related functions and responsibilities

We are offering:
- Excellent work conditions and competitive remuneration
- An opportunity to learn new techniques
- A multi-cultural and stimulating scientific environment

Starting date: 1st January 2006 or sooner.

For further information, please contact Professor Dani OR by e-mail: dani.or@epfl.ch
Applicants should submit a letter of interest and motivation for this particular position, curriculum vitae, working certificates and letters of reference to Ressources Humaines de l'EPFL, Pavillon C, Station 7, CH-1015 Lausanne

F) Assistant Research Professor - Environmental Hydrogeophysics (Posted: 10/27/2005)

The Desert Research Institute's (DRI's) Division of Hydrologic Sciences seeks an Assistant Research Professor of Environmental Hydrogeophysics. This position is designed to complement DRI's Divisions of Hydrologic Sciences, Earth and Ecosystem Sciences and our multi-disciplinary Centers as an integral part of an ongoing effort to build strong cross-disciplinary programs linking hydrological, geophysical, and near-surface environmental processes. The successful candidate will be responsible for writing multidisciplinary, collaborative grant proposals for laboratory, field and/or numerical research on the use of geophysical techniques for understanding processes at different spatial scales, potentially up to and beyond the ecosystem level, or down to the micron level. Emphasis for this position is on near-surface interrogation, rather than deep-hole geophysics. The successful candidate will be expected to establish a strong extramurally funded research program that complements DRI's existing research foci. This position will be filled at DRI's Las Vegas Campus. Las Vegas is a rapidly growing metropolitan area with over 300 sunny days a year, favorable cost of living, and world class entertainment and dining. The Las Vegas climate (year round average temperature of 80 degrees) allows year round access to diverse outdoor activities including the most national parks within a day's drive of any major city. For more information see: http://www.lvchamber.com/visit/.

DRI is a not-for-profit environmental research institute within the Nevada System of Higher Education (NSHE) and functions in a combined academic and entrepreneurial setting. Many DRI faculty are involved in teaching and advising of students at the University of Nevada Reno (UNR) and the University of Nevada Las Vegas (UNLV). DRI strongly encourages creativity and individual initiative, actively facilitates professional development, and promotes high standards for all faculty and staff. DRI research efforts emphasize understanding and monitoring of the environment.

REQUIRED EDUCATION / EXPERIENCE
- Ph.D. with a focus on near surface geophysics, hydrology, soil science, high resolution imaging.
- A record of program development or other demonstrated ability to obtain and complete research grants and contracts appropriate for the candidate's professional rank.
- Ability to secure funding from federal, state, and local agencies.
- A record of peer reviewed journal articles as well as presentations at professional meetings appropriate for the candidate's professional rank.
- Excellent oral and written communication skills.

NOTE: The individual who is offered and accepts this position must provide (within 30 calendar days of his/her start date of the position) a copy of the transcript(s) awarded by an accredited institution as recognized by the United States Department of Education and/or the Council on Higher Education Accreditation (CHEA).

PREFERRED EDUCATION / EXPERIENCE
- Ph.D. with an undergraduate or graduate degree in geophysics, soil science, vadose zone hydrology, or a related field.
- Research experience in linking physical processes and numerical models.

SALARY / BENEFITS
Starting salary is commensurate with experience and education. DRI provides an exceptional benefits package (see benefits summary at www.dri.edu/Admin/HR/docs/facultybenef.doc).

APPLICATION / REVIEW PROCESS
To ensure full consideration, applicants must submit:
1) current curriculum vitae,
2) cover letter with description of prior research experience,
3) statement of research interests and goals, and
4) contact information for three professional references.

Review of applications will begin in late Fall 2005, and continue until the position is filled. We anticipate that interviews will begin in January 2006. Send materials to: Human Resources, DRI, 2215 Raggio Parkway, Reno, NV 89512; email MSWord-compatible attachments to recruit@dri.edu; or fax application materials to (775) 673-7339. Refer to position #40-002. To learn more about DRI, visit our Web site at recruit@dri.edu or call (775) 673-7332. Questions regarding this position can be directed to Michael H. Young, Chair, Environmental Hydrogeophysics Search Committee, Desert Research Institute, 755 East Flamingo Road, Las Vegas, NV 89119 (702-862-5489, michael.young@dri.edu).

G) Assistant/Associate Professor, Environmental Physics (Posted: 10/27/2005)

The Department of Soil, Water and Environmental Science at The University of Arizona invites applications for a tenure track faculty position in the area of environmental physics. We seek dynamic, creative applicants with an excellent understanding of fundamental physical properties and processes associated with soils and subsurface terrestrial systems. Examples of desirable research areas include multi-phase fluid flow, irrigation, deep vadose-zone systems, pore-scale processes, and recharge/irrigation fundamentals. Candidates with experience in quantitative characterization of flow and transport processes, including theoretical analysis, mathematical modeling, and innovative imaging methods, are especially encouraged to apply. The candidate is expected to complement existing strengths of the department in one or more of the following overlapping areas: solute and colloid transport, contaminant transport and fate, water quality, soil/groundwater remediation, soil-plant-water relationships, and environmental microbiology. The successful candidate is expected to develop a vigorous externally funded research program, to supervise graduate research, and to teach at the undergraduate and graduate levels. This position will be available August 2006. Applicants are required to have a Ph.D. in hydrology, soil physics, or closely related field at the time of appointment. Initial review of applications will begin January 15, 2006, and will continue until the position is filled. Candidates should submit their curriculum vitae, names and addresses of three references, and a statement of research and teaching interests to Dr. Mark L. Brusseau, Search Committee Chair, 429 Shantz, University of Arizona, Tucson, AZ 85721. Additional information about the department is available at http://ag.arizona.edu/SWES/. The University of Arizona is an EEO/AA Employer - M/W/D/V.

APPENDICES

A) S-1 Contacts

Chair (06): Jon Wraith **jwraith@montana.edu**
Chair-Elect (06): Jirka Simunek **jiri.simunek@ucr.edu**
ASA and SSSA Board Representative (03-06): Glenn Wilson **gvwilson@ars.usda.gov**
SSSA Journal S-1 Technical Editor: Glenn Wilson **gvwilson@ars.usda.gov**
Vadose Zone Journal (VZJ) Editor: Rien van Genuchten **RVANG@ussl.ars.usda.gov**

B) S-1 Working Groups and Committees

S-1 Program 2006 ASA-SSSA Meeting (Indianapolis, IN, Nov. 12 - 16): Jon Wraith
S-1 Early Career Award: Glendon Gee (Chair), Ty Ferre, Shmulik Friedman, and Gerard Kluitenberg