

PREFACE

This is the third S-1 Newsletter for the year 2007. 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 mtuller@cals.arizona.edu. Newsletters (current and past) and other S-1 information are posted on the S-1 Web Page: <http://ag.arizona.edu/sss-a-s1/>.

1) S-1 MEMBER NEWS AND ANNOUNCEMENTS

A) S-1 Schedule - SSSA Annual Meeting, New Orleans, Louisiana, Nov 4-8, 2007

The S-1 Division has 2 Symposia and 4 Sessions scheduled in New Orleans.

S-1 Symposia

1.) “Advancing Measurement Techniques and Modeling Synergy for Environmental Soils Research in Space and Time: I. Advances in Soil Sensing and Measurement Technologies and their Applications”

Part I: Monday, Nov 5, 9:25 am, Convention Center, Room R03-R05, Second Floor
Part II: Monday, Nov 5, 12:55 pm, Convention Center, Room 220, Second Floor
Part III (Posters): Monday, Nov 5, 4:00 pm, Convention Center, Exhibit Hall A, First Floor
Part IV: Tuesday, Nov 6, 9:25 am, Convention Center, Room 220, Second Floor

2.) “The Art Warrick Symposium on Evaluating Water Flux in the Vadose Zone: Computational Methods and Geostatistical Approaches”

Part I: Tuesday, Nov 6, 12:55 pm, Convention Center, Room 221, Second Floor
Part II (Posters): Tuesday, Nov 6, 4:00 pm, Convention Center, Exhibit Hall A, First Floor
Part III: Wednesday, Nov 7, 9:25 am, Convention Center, Room 221, Second Floor
Part IV: Wednesday, Nov 7, 12:55 pm, Convention Center, Room 221, Second Floor

S-1 Sessions

1.) “Soil Structure and Hydraulic Properties”

Part I: Tuesday, Nov 6, 9:25 am, Convention Center, Room 221, Second Floor

2.) “Soil Physical Properties”

Part I (Posters): Tuesday, Nov 6, 4:00 pm, Convention Center, Exhibit Hall A, First Floor

3.) “Measuring and Modeling Water and Solute Fluxes in Soils”

Part I: Wednesday, Nov 7, 9:25 am, Convention Center, Room 222, Second Floor
Part II (Posters): Wednesday, Nov 7, 4:00 pm, Convention Center, Exhibit Hall A, First Floor

4.) “Surface, Subsurface Hydrological Processes and the Impact of Land Use Changes”

Part I: Thursday, Nov 8, 8:25 am, Convention Center, Room 221, Second Floor

Cosponsored Symposia and Sessions

1.) “Katrina Disaster and Sustainable Coastal Development: An Integrated Perspective and the Role of Land and Water Sciences”

Part I: Wednesday, Nov 7, 1:45 pm, Convention Center, Room R02, Second Floor

Part II: Thursday, Nov 8, 8:00 am, Convention Center, Room 207, Second Floor

1.) “Models and Modeling of Crop and Soil Systems”

Part I: Thursday, Nov 8, 8:25 am, Convention Center, Room 203, Second Floor

S-1 Business Meeting

The S-1 Business Meeting is scheduled for Wednesday, Nov 7, 3:20 – 4:20 pm, Convention Center, Room 221, Second Floor.

Vadose Zone Journal Editorial Board

Tuesday, Nov 6, 4:00 pm, Hilton Riverside, Fountain, Third Floor

Social Gatherings in Honor of Art Warrick

A cash-bar social gathering will be held between 6:00 and 7:30 p.m. at the Convention Center immediately after the poster session on Tuesday, Nov 6. In addition to the social event, there is a dinner party for Art and his family. This dinner party will be held starting at 8:00 p.m. on Tuesday, Nov 6, in a restaurant or hotel near the Convention Center. For further information please contact Aziz Amoozegar (aziz_amoozegar@ncsu.edu, phone: (919) 515-3967)

B) New SSSA Journal Editor

The Board ratified the appointment of David Myrold to a 3-year term (2008-2010) as Editor of SSSA Journal.

C) New Kirkham Medal

SSSA administers the Don and Betty Kirkham Soil Physics Award which recognizes a mid-career soil scientist who has made outstanding contributions in the area of soil physics. In addition to the award it was proposed that a Don and Betty Kirkham Medal be presented every 8 years at alternate Kirkham Conferences. The Medal will commemorate career achievements of those most extraordinary individuals throughout the world who uniquely contributed to soil physics because of their inspirational teaching, research, and professional activities. The proposal to approve a Don and Betty Kirkham Medal Committee was approved by the Board unanimously. It was clarified that creation of the committee and award does not include a financial commitment from SSSA at this time.

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

A) AGU Fall Meeting, San Francisco, December 10-14, 2007

The 2007 AGU Fall Meeting is expected to draw a crowd of over 15,000 geophysicists from around the world. The Fall Meeting provides an opportunity for researchers, teachers, students, and consultants to present and review the latest issues affecting the Earth, the planets, and their environments in space. This meeting will cover topics in all areas of Earth and space sciences. For further information please visit: <http://www.agu.org/meetings/fm07/>

3) NEW JOB ANNOUNCEMENTS

To review all announcements from the last six months please visit:

<http://ag.arizona.edu/sssa-s1/jobs.htm>

A) Assistant Professor - Soil Physics (UI)

(Posted: 10/31/2007)

The University of Idaho invites applications for a faculty position in soil physics located on the main campus in Moscow, ID. This is a 12-month, tenure-track position with responsibilities allocated as 75% research, 15% teaching, 5% advising, and 5% university/extramural service.

The successful applicant will have an appointment in the Department of Plant, Soil and Entomological Sciences, which is comprised of a large, multidisciplinary faculty and staff. Excellent opportunities exist for collaboration with faculty in soil science, agronomy, horticulture, engineering, environmental science, and a new interdisciplinary graduate program in water resources. Salary will be commensurate with qualifications and experience.

Responsibilities:

Research – The successful candidate will develop an externally funded, internationally recognized research program in soil physics as it relates to environmental and agricultural problems, including but not limited to solute transport, water management, and waste disposal. The individual is expected to address significant regional and national issues related to soil and water quality. The research program will include both basic and applied components. Graduate student education is required and external funding will be obtained. The successful candidate will collaborate with other faculty members in the University, present research seminars, participate in professional meetings, and publish in peer-refereed journals. Information will be conveyed in written and oral formats.

Teaching – The successful candidate will teach one course per year, including an undergraduate course in Soil and Environmental Physics and a graduate course deemed appropriate and necessary by the Soil & Land Resources Division.

Qualifications:

Required – Ph.D. in soil physics, environmental engineering, or a closely related discipline required at time of appointment. Demonstrated ability to effectively communicate in oral and written formats. Demonstrated experience and training in soil physics. Demonstrated ability to conduct, analyze, and interpret research results.

Desired – Demonstrated professional experience or training in academic instruction and educational programming; publication record in refereed journals; experience in obtaining extramural funding; experience mentoring graduate students.

Application Procedures:

To be considered, interested persons MUST complete the online application (which can be accessed at www.hr.uidaho.edu) including a letter of application addressing each required and desired qualification, curriculum vitae, academic transcripts, and contact information for three references. Any required documentation that cannot be submitted online, i.e., academic transcripts, should be sent to:

Dr. Paul McDaniel, Soil Physics Position, University of Idaho, Department of Plant, Soil and Entomological Sciences, University of Idaho, Moscow, ID 83844-2339. Phone: 208-885-7012. Fax: 208-885-7760. Email: paulm@uidaho.edu

Closing date for applications is February 15, 2008 or until a suitable candidate is identified. Anticipated date of appointment is August 2008.

To enrich education through diversity, the University of Idaho is an equal opportunity/affirmative action employer and educational institution.

B) Assistant Professor - Soil Physics (Auburn)

(Posted: 10/28/2007)

The Agronomy and Soils Department of Auburn University is seeking applicants for an Assistant Professor in the area of soil physics. This is a 9-month, tenure-track position with a 20% instruction and 80% research appointment. The expected position starting date is August 16, 2008.

Responsibilities: The research component of this position emphasizes water and solute transport processes in the unsaturated zones and capillary fringes. Candidates should have an interest in combining experiments with quantitative models to explore the complex physical, chemical, and biological processes associated with unsaturated flow and transport across multiple scales; they should also possess an interest in interdisciplinary research regarding soil water quality and remediation. A successful research program may include, but is not limited to, the fate and transport in the subsurface of inorganic and organic compounds such as pesticides, agricultural waste products, heavy metals, pharmaceutical products, and non-aqueous phase liquids. In addition, the ability to secure extramural funding to help support programs and provide summer salary is highly desirable. The teaching component includes a split lever undergraduate/graduate Soil Physics course and a graduate level course in Transport in Porous Media with emphasis on the behavior of water, chemical, heat, and gas in the subsurface. The successful candidate is also expected to develop an active graduate student program, and establish funded multidisciplinary research programs that build on the expertise in Department of Agronomy and Soils and departments such as Biosystems Engineering, Civil Engineering, Horticulture, Forestry, Geology, and, if beneficial, to interact with scientists at other universities. Services to the department, college and university are expected.

Qualifications include: 1) earned Ph.D. in soils physics, physical geography, geological sciences, vadose zone hydrology, or related discipline by the position start date; 2) effective interpersonal communication skills and computer usage skills; candidate must demonstrate the ability to communicate effectively in English; and 3) meet eligibility requirements for work in the United States at the time the appointment is scheduled to begin and continue working legally for the proposed term of employment. Post doctoral experience is desired.

For detailed application procedures contact Kay Holloway (e-mail: hollokm@auburn.edu; fax: 334-844-3945; phone: 334-844-3899; or mail: Agronomy and Soils Department, 202 Funchess Hall, Auburn University, AL 36849-5412). Only complete application materials will be considered. The search will continue until the position is filled, but to ensure consideration for the position, applicants are encouraged to apply by January 4, 2008.

Minorities and women are encouraged to apply
Auburn University is an Affirmative Action/Equal Opportunity Employer.

C) Postdoctoral Research Associate - Physicochemical Processes in Structured Soils

(Posted: 10/5/2007)

The postdoc position is available for a total of 3 years at the Institute of Plant Nutrition and Soil Science at Christian Albrechts University zu Kiel, Germany in the Soil Science Department (Chair: Prof. Dr. Rainer Horn). We are looking for a scientific coworker for our interdisciplinary research team who is interested in the analysis of physicochemical processes in structured unsaturated soils and will also include the redox reactions and the analysis of the gas compounds in soils and single aggregates. For more detailed information about the running research topics in the institute see: www.soils.uni-kiel.de The applicant with a PhD in soil science or environmental sciences is invited to submit the documents until November 15, 2007 to Prof. Dr. R. Horn Institut for Plant Nutrition and Soil Science, CAU Kiel Hermann-Rodewald-Str. 2, 24118 Kiel Germany.

D) Assistant Professor - Applied Soil Physics

(Posted: 10/3/2007)

The Department of Plant and Soil Sciences, Oklahoma State University is seeking applicants for an 11 month, tenure track, 75% research, 25% teaching position (Applied Soil Physics). The successful candidate is expected to develop internationally recognized research and teaching programs in soil physics with a strong emphasis in soil water storage, flow and utilization, and mathematical modeling of experimental results for technology transfer. The research program will be supported through extramural funding and should focus on, but not be limited to: (1) water use efficiency/conservation, (2) infiltration, runoff and redistribution of water in soil, (3) solute transport, (4) sediment production and transport, (5) relationships between soil physical properties and crop production, and (6) the impact of tillage and cropping systems on soil physical properties and soil organic carbon content. A priority of the research should be to utilize systems science, mathematical modeling, and simulation for guiding, interpreting, and transferring experimental research results needed to improve water use efficiency, enhance soil productivity, and develop the natural resource base of Oklahoma. The successful candidate will teach an undergraduate course in applied soil physics and a graduate-level course in his/her area of expertise, and will advise students. An earned Ph.D. degree in Soil Science with a strong emphasis in soil physics is required. Teaching experience and a sincere desire to teach, advise, and interact with undergraduate, as well as, graduate students and a keen interest in collaborating with other faculty, especially field-oriented researchers, are essential. Excellent written and oral communication skills in English are desirable. Review of applications will begin December 1, 2007 and the position will be filled by February 1, 2008, or as soon as a suitable candidate is identified. Submit a cover letter, statement of research interest, curriculum vita, official transcripts, representative reprints, and arrange for three letters of reference to be sent directly to: Dr. David R. Porter, Department of Plant and Soil Sciences, Oklahoma State University, 368

Agricultural Hall, Stillwater, OK 74078-6028, Phone: 405-744-6425, FAX: 405-744-8687, Email: david.r.porter@okstate.edu. For additional information contact Dr. Shiping Deng (shiping.deng@okstate.edu) at 405-744-9591. OSU is an AA/EOE employer committed to multicultural diversity.

E) USGS Postdoctoral Position - Salt Transport in the Unsaturated Zone

(Posted: 10/1/2007)

Salts (sulfate, nitrate, chloride and carbonate) stored in the unsaturated zone of the western U.S. are the result of natural processes. Changes in land use and climate can modify natural conditions, thus affecting the stability and position of these salt enrichments. This research opportunity will focus on chemical and hydrologic processes affecting salt distribution to develop tools for predicting the rates of salt accumulation and removal. A description of this research opportunity, contact information, and requirements of the USGS Mendenhall Postdoctoral Research Program are at <http://geology.usgs.gov/postdoc> (research opportunity 9).

F) PhD Research Assistantships - Plant Water Interactions in Water Limited Environments

(Posted: 10/1/2007)

We are opening a selection process for a 4 years fully-funded PhD fellowship in the area of “Plant water interactions in water limited environments” at the International Institute for Geo-Information Science and Earth Observation (ITC, The Netherlands) and the Centro Hispano-Luso de Investigaciones Agrarias (CIALE, University of Salamanca, Spain). Given the wide interdisciplinary scope of the project, the student will have the chance to work on various aspects of an interesting field of plant interactions with groundwater, which may involve ecohydrology, plant ecophysiology, unsaturated zone hydrology, remote sensing with near surface geophysics and groundwater assessment with process modeling. The successful candidate will join an exciting group of researchers in an excellent academic and research environment with international connections.

The PhD fellowship includes a training (PhD courses) period at the ITC institute in The Netherlands and a research period in the same institute and at the University of Salamanca. We seek recently graduated candidates with a university degree in Science or Engineering, in a discipline related to the project themes and with very good academic record. The candidates have to be bilingual (English/Spanish). Experience in computer programming and in handling hydrological monitoring sensors will be considered as advantage.

The scholarship covers 4 year of study, 3 years in The Netherlands and 1 year in Spain with flexibility of time allocation depending on the scientific need. Within the first half year of the study at ITC that will start at the beginning of 2008, the candidate will formulate PhD proposal and defend it in order to continue the PhD study.

The selection process will include an interview (in English) at the University of Salamanca in November 2007 by researchers from both institutions.

Application:

Applicants should send electronically in English a CV, statement of purpose and motivation, copies of the official transcripts of the university degree including academic background and records, and a minimum of two letters of recommendation. All these documents should be sent to Dr. José Martínez-Fernández (jmf@usal.es) and to Dr. M. Lubczynski (lubczynski@itc.nl). For further information, you can contact Dr. Martínez-Fernández. Applications are welcome at any time, and the final decision is expected at the end of November 2007.

G) Postdoctoral Research Associate/Scientific Collaborator - Soil and Environmental Physics (Posted: 9/29/2007)

The Soil and Environmental Physics Laboratory (LASEP), School of Architecture, Civil and Environmental Engineering (ENAC), Ecole Polytechnique Federale de Lausanne (EPFL) is seeking a full time postdoctoral fellow with a strong quantitative background (theoretical and experimental) in environmental and porous media physics or related fields (hydrology, physics, environmental and chemical engineering).

We seek a motivated and independent individual to conduct research on one or several topics related to: multiphase flows in porous media; pore space characterization, mechanics of fluid interfaces, acoustic emissions, heat and mass transport, fragmentation of liquid and solids, biological-soil interactions, atmospheric mass and energy exchanges and other topics.

The candidate is expected to:

Have good communication and organizational skills, strong ethical basis, ability to work with others, and independently set priorities. Communicate effectively in English and be willing to learn French Have strong technical and computational skills, and able to conceive and carry out research activities.

The primary duties include:

- Developing and coordinating individual and collaborative research projects
- Assuming an active role in student training and mentoring
- Assisting with LASEP teaching assignment
- Presenting research results in conferences and publishing in scientific journals

LASEP-ENAC-EPFL is a new laboratory with research interest in environmental physics focusing on processes at interfaces between soils and other compartments of the biosphere. LASEP maintains national and international collaboration with other laboratories and centers to advance knowledge and propose innovative engineering solutions to contemporary soil, water, and energy-related problems in natural environments.

We offer excellent working conditions, highly competitive salaries, state-of-the-art facilities, and a multi-cultural and stimulating scientific environment.

For more information visit: <http://lasep.epfl.ch/> or contact: secretariat.lasep@epfl.ch

Applicants should submit: A letter of motivation A detailed CV with work certificates and copies of diplomas Contact information for references or 3 letters of reference Applications will be considered for target starting date of: November-December 2007

H) PhD Research Assistantships - Soil Physics

(Posted: 9/24/2007)

The scholarships will have their base at Aarhus and Aalborg Universities, within the frame of a major new research project funded by the Danish Research Council for Technology and Production Sciences: “Soil Infrastructure, Interfaces & Translocation Processes in Inner Space” (“Soil-it-is”): The upper few meters of the soil (the vadose zone) sustain our life and society, but we only have an empirical knowledge of how soil behaves. In the “Soil-it-is” project, a group of internationally recognized soil scientists at University of Aarhus (AU) and Aalborg University

(AAU), Denmark, join forces with partner universities in the USA, UK and Japan to explore how soil architecture and infrastructure (pore and particle networks) control and are controlled by newly recognized soil-physical phenomena. Our project vision is a holistic understanding of architecture and processes in soil inner space that will provide the basis for solutions to protect groundwater resources, improve clean-up technologies at polluted sites, enhance the health and productivity of cultivated soil, and improve the understanding of the soil vadose zone and its role in climate change. For more information on the project please visit our web-site:

<http://www.agrsci.dk/soil-it-is/>

The project currently has two openings for Ph.D. scholarships with start by February 1, 2008. The scholarships are open to both Danish and international applicants. The subject areas of the two studies are briefly described:

Ph.D. 1: Soil Architecture: “Degraded soil architecture reduces soil functionality” Inadequate management of urban and cultivated land violently challenges the self-organized system of biotic and abiotic soil constituents. This creates poor soil quality in terms of reduced productivity and buffering of environmental impact Understanding the controlling mechanisms for soil self-organization at the cluster-, aggregate-, and bulk soil scale will allow us to influence soil architecture in a positive way with respect to soil functionality and health. As an integral part of this, the interactive links between soil architecture and mobility and transport of colloidal particles, water, and gases need to be revealed. The Ph.D. work will be in close cooperation with the SIMBIOS center at University of Abertay Dundee, Scotland. The successful candidate will be employed and enrolled as a Ph.D. student at University of Aarhus, Department of Agroecology and Environment, with work place at Research Centre Foulum.

Ph.D. 2: Water-Solids Interfaces: “Water transport in soil is often erratic, causing poor water distribution and accelerated chemical transport” A major reason for this problem is the recognition of interface processes that affect water flow throughout the soil profile. Both surface and sub-critical water repellency due to hydrophobic coatings (films) on soil particles and aggregates occur and both phenomena need to be quantified and incorporated in existing models for water and chemical transport. The Ph.D. work will be in close cooperation with Saitama University, Tokyo, Japan. The successful candidate will be employed and enrolled as a Ph.D. student at Aalborg University, Department of Biotechnology, Chemistry, and Environmental Engineering. Should a candidate apply for more than one position, then each application must be submitted separately.

Closing date for applications is November 1, 2007 at 12:00 noon. More detailed information and specifics on the application procedure is given on our homepage <http://www.agrsci.dk/soil-it-is/>, please note that the requirements vary between Ph.D. 1 and Ph.D. 2. For further information please contact: Senior scientist Lis Wollesen de Jonge, University of Aarhus, Department of Agroecology and Environment, Research Centre Foulum, 8830 Tjele, Denmark.

Lis.W.de.Jonge@agrsci.dk Phone: +45 89991752 or Professor Per Moldrup, Aalborg University, Department of Biotechnology, Chemistry, and Environmental Engineering, Sohngaardsholmsvej 57, 9000 Aalborg, Denmark. pm@bio.aau.dk Phone: +45 96358460

D) Postdoctoral Research Associate - Vadose Zone Processes

(Posted: 9/6/2007)

The University of Nevada, Las Vegas (UNLV) invites applications for a Postdoctoral Fellowship in soil science and vadose zone hydrology. The focus of the research will be on the study of unsaturated flow, soil biochemistry, flow and solute transport in arid soils with integrated field,

laboratory, and numerical approaches, as well as scaling issues on various physical processes in arid soils. The Fellowships provide a direct annual salary of \$40,000. A Ph.D. in hydrology, soil physics or related fields is required, as well as a background in numerical modeling. Preference will be given to applicants with quantitative skills and research background in arid soils and vadose zone hydrology. Potential applicants are strongly encouraged to contact Dr. Zhongbo Yu (zhongbo.yu@unlv.edu), Dr. Michael Young (michael.young@dri.edu) or Dr. Dale Devitt (dev50@clark.nscee.edu) for additional information about postdoctoral fellowship and application procedure, the SEPHAS program and related projects (<http://hydro.nevada.edu/sephas/postdoc.pdf>). Review of applications will begin on Nov. 1, 2007. Applications will be accepted until fellowship position is filled.

J) Agricultural Engineer/Civil Engineer/Research Hydrologist

(Posted: 8/21/2007)

ANNOUNCEMENT NO: RA-07-078L

POSITION: Agricultural Engineer/Civil Engineer/Research Hydrologist

LOCATION: Bushland, Texas

DESCRIPTION OF DUTIES: The position is located in the Soil and Water Management Research Unit (SWMRU), Conservation and Production Laboratory, Bushland, Texas. The incumbent will modify and improve physically-based surface hydrologic and groundwater models incorporating agricultural water use data and remote sensing sources to illustrate the effectiveness of improved and advanced technologies on reducing groundwater withdrawals from the Ogallala aquifer. The work will examine the interactions between climate, crop-water relationships, and soil physical components at landscape scales. Research includes the use of data from previous evapotranspiration experiments and the use spatial (GIS, geographic information systems) and remote sensing models applied on the hydrologic and landscape levels to identify cropping patterns, crop water use, and to predict groundwater withdrawals across the Southern High Plains region of the Ogallala aquifer.

QUALIFICATION REQUIREMENTS: Ph.D. in Agricultural or Civil Engineering, Hydrology or closely related field is required. Knowledge of soil-plant-atmosphere-continuum modeling, computer programming, and remote sensing is required Knowledge of: 1) the principles, theories and methodologies of agricultural or engineering related to irrigation science and groundwater hydrology; 2) GIS and remote sensing technologies; 3) numerical methods used in process-based hydrology, porous-media flow, groundwater flow or crop development modeling is desirable.

INFORMATION ON SALARY AND APPLICATION PROCEDURES FOR POSTDOCTORAL POSITIONS is available at:

<http://www.afm.ars.usda.gov/divisions/hrd/hrdhomepage/vacancy/pd962.html>

INFORMATION ON EMPLOYEE BENEFITS is available at:

<http://www.usajobs.opm.gov/ei61.asp>

FOR SPECIFIC INFORMATION ON THE DUTIES AND RESPONSIBILITIES OF THIS POSITION OR TO SUBMIT AN APPLICATION, CONTACT:

Dr. Prasanna Gowda
Soil and Water Management Research Unit, USDA/ARS
P.O. Drawer 10 (2300 Experiment Station Road)
Bushland , TX 79012
Phone: 806-356-5730
Fax: 806-356-5750
Email: pgowda@cpri.ars.usda.gov

K) Postdoctoral Research Associate - Hydrology/Soil Physics

(Posted: 8/21/2007)

The Desert Research Institute (DRI) seeks a Post-Doctoral Fellow in Las Vegas, Nevada to assist in the ongoing development of research programs that will include the use of large weighing lysimeters recently constructed in Boulder City, NV. The lysimeters are part of a multi-year NSF project that seeks to understand environmental processes in heterogeneous arid soils, including the interrelationships between soil, plants and atmospheric inputs.

The primary responsibilities of this position are to provide input into and help lead upcoming experiments in the lysimeters and at other field sites where larger-scale experiments are being conducted. The work will include a mix of activities between field, laboratory and computational environments. Other responsibilities include assistance in a wide variety of hydrologic and environmental science projects as opportunities and needs arise. These efforts include the field measurement of soil hydraulic properties, surface runoff potential, and other environmental characteristics, primarily in the Mojave Desert and Great Basin, but potentially elsewhere.

S/he will work in an interdisciplinary environment and will collaborate with faculty and graduate students in ongoing research programs, and will have significant opportunities for developing research ideas and for pursuing external funding to investigate these ideas. Two separate laboratories (soil physics and hydrology) are available – in addition to the lysimeters – and equipped with infrastructure and electronic components to run a wide variety of steady-state and transient experiments on laboratory soil columns of variable sizes.

As the environmental research arm of the Nevada System of Higher Education, DRI conducts cutting-edge applied research in land, air, life, and water quality across Nevada, the United States and on every continent. With more than 500 employees and two main campuses in Las Vegas and Reno, DRI generates nearly \$50 million in total annual revenue. DRI's faculty members are untenured, entrepreneurial and responsible for their own salaries from external grants and contracts. This blend of academic rigor and private-sector pragmatism has earned DRI a reputation for delivering rapid, high-quality environmental science in a businesslike fashion.

REQUIRED EDUCATION / EXPERIENCE

- PhD in hydrology, soil physics, soil science, or other related discipline;
- Team player with diverse interests and strong interpersonal skills;
- Background in laboratory and field techniques for monitoring soil water flow;
- Published record of research involving near-surface water movement and/or chemical transport, preferably with numerical analysis and coding experience;
- Excellent English-language communication skills (oral and written) as evidenced by publication in peer-reviewed literature, and conference and symposia presentations;
- Proven organizational skills and attention to detail.

PREFERRED EXPERIENCE

- Demonstrated experience in field and laboratory characterization of soils and sediments.
- Experience with post-processing and quality control of a variety of measurements.
- Ability to solve practical field problems using resourceful and innovative solutions
- An ability to obtain a DOE security clearance is highly desirable.

SALARY / BENEFITS

Salaries are competitive and commensurate with qualifications, with continued appointment (for up to a maximum of three years) being dependent upon performance and availability of funding. DRI offers an excellent benefits package. (See summary at <http://www.dri.edu/Admin/HR/docs/postdocbenef.doc>)

APPLICATION / REVIEW PROCESS

Review of applications will begin immediately and continue until semi-finalists have been selected. To ensure consideration, applicant must submit:

- 1) Current curriculum vitae;
- 2) Cover letter describing previous experience, interests, and career goals;
- 3) Contact information for three work-related references.

Applicants not meeting these requirements will not be considered.

Refer to position #40-068. Send application materials to: Human Resources, DRI, 2215 Raggio Parkway, Reno, NV 89512; email MSWord or PDF-compatible attachments to recruit@dri.edu; fax materials to 775-673-7339. To learn more about DRI, visit our Web site at www.dri.edu or call 775-673-7332.

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

L) Postdoctoral Research Associate - Soil Physics/Chemistry

(Posted: 7/26/2007)

The Soils Institute at the Christian Albrecht University in Kiel, Germany is recruiting a soil physical chemist interested in research of physiochemical properties of soil aggregate formation and function. This position is funded for 2-3 years in the Soils Institute.

We are seeking a creative, active, and friendly coworker. For more information contact: Dr. Rainer Horn, Soils Institute, at: rhorn@soils.uni-kiel.de

M) Assistant Professor - Soil Physics & Unsaturated Hydrology

(Posted: 7/26/2007)

The Departments of Crop and Soil Sciences and Geological Sciences and the Environmental Science and Policy Program at Michigan State University invite applications for a new tenure-track assistant professor position in soil physics and hydrology with emphasis on unsaturated

flow and transport. This academic year position will work across disciplines with a potential for joint appointments.

Position Description: This research and teaching position will emphasize water and solute transport processes in the unsaturated and capillary zones. The ideal candidate will combine experiments with quantitative models to explore the complex physical, chemical, and biological processes that govern unsaturated flow and transport across multiple scales. The candidate will be expected to teach an undergraduate and graduate course, train graduate students, and establish an extramurally funded multidisciplinary research program that builds on the expertise across campus in soil science, groundwater hydrology, solution and surface chemistry, environmental engineering, and microbial ecology.

Qualifications: Applicants must have a Ph.D. in soil physics, hydrology, geological sciences, or a related field and demonstrate a potential for developing outstanding research and teaching programs. Postdoctoral experiences in unsaturated transport are desired as are a record of strong peer-reviewed publications and funded grant proposals.

Salary: Salary will be commensurate with experience along with excellent fringe benefits.

Applications: Qualified individuals are encouraged to submit a letter of application that includes their specific research interests, research and teaching philosophies, and long term professional goals. Include a curriculum vitae, complete academic records for college degrees, pdf copies of selected reprints, and complete contact information for four professional references. Applications should be submitted online to Darlene Johnson at johns146@msu.edu. Applications will be accepted until September 28, 2007 or until a suitable candidate is selected. Nominations and inquiries are encouraged and should be forwarded to Alvin Smucker, Search Committee Chair, by email: smucker@msu.edu or telephone: 517.355.0271, ext. 1251.

APPENDICES

A) S-1 Contacts

Chair (07): Jirka Simunek jiri.simunek@ucr.edu

Chair-Elect (08): Per Møldrup pm@bio.aau.dk

ASA and SSSA Board Representative (07-08): David Radcliffe: dradclif@uga.edu

SSSA Journal S-1 Technical Editor: Glenn Wilson: gywilson@ars.usda.gov

Vadose Zone Journal (VZJ) Editor: Jan Hopmans jwhopmans@ucdavis.edu

B) S-1 Working Groups and Committees

S-1 Program 2007 ASA-SSSA Meeting (New Orleans, LA, Nov. 4 - 8): Jirka Simunek

S-1 Early Career Award: Ty Ferré (Chair), Shmulik Friedman, Michael Young, and Jon Wraith
