From: Rufa N Pazyuk

To: <u>coe-cee-grad-students Sympa List</u>

Subject: CEE Newsletter

Date: Tuesday, January 5, 2021 9:22:30 PM

Attachments: ARPA-E T2M Summer Scholar 2021 Overview[2].pdf

CEE Seminar on College Teaching Winter 2021 Flyer[2][2].pdf

Hello Civil and Environmental Engineering Graduate Students,

Happy Week 1 of Winter Quarter 2021! Please see the events and announcements below:

Scholarship and Career Opportunities

- Environmental Engineer / Geologist / Scientist Position at TRC
- Mid-Level Geologist / Engineer Position at EKI
- Assistant Professor Position at The University of Alabama
- Environmental Engineering Position at The University of Houston
- Tenure-Track Faculty Position at Vanderbilt University
- Switzer Fellowship Applications
- Advanced Research Project Agency-Energy (ARPA-E) Summer Scholar Program
- Assistant or Associate Professor Position at the South Dakota School of Mines & Technology

Events and Programs

- Beyond the Barriers Initiative
- Course Offering: Seminar on College Teaching

Scholarship and Career Opportunities

Environmental Engineer / Geologist / Scientist Position at TRC

Job Description

TRC is growing rapidly in the San Francisco Bay Area providing turnkey environmental projects to a variety of clients.

TRC's vision is to solve the challenges of making the Earth a better place to live - community by community and project by project. We value Safety, Quality, Integrity, Creativity, Accountability, Teamwork, and Passion.

<u>Position:</u> The TRC San Francisco, CA office is seeking a talented and motivated mid-level Civil Engineer, Environmental Engineer, Geologist, Hydrogeologist, Environmental Scientist,

or other related Geoscientist for employment in the Bay Area. Broad based duties may include the following:

- Environmental site assessment and remediation, including Phase I Environmental Site
 Assessments (ESAs), and the field assessment of contaminated soil gas, soil, indoor air
 and groundwater Participate in a broad variety of environmental-focused assignments
 including soil, soil gas, and groundwater sampling and remediation; work plan
 development; and related reporting, monitoring and permitting.
- Coordination of investigation field work for a variety of media and pathways, including soil, groundwater, sediment, surface water and vapor intrusion.
- Prepare and implement remedial investigation and response action work plans.
- Scheduling and oversight of utility locating, geophysics, excavation, driller, and construction subcontractors;
- Evaluation of sample results including development of supporting tables and figures.
- Site characterization and technical evaluations regarding sources, transport, and fate of groundwater and soil contamination.
- Preparing summary reports, technical memoranda and email correspondence.
- Developing construction documents (drawings, specifications and cost estimates), and providing bid assistance (preparing bid sheets, and reviewing contractor bids)
- Completing engineering calculations (i.e., remedial, stormwater and earthwork design).
- Grading, drainage and site layout design and analyses.
- Construction CQA and oversight.
- Project and Task management of scope, schedule, and budget.
- Implementing TRC's safety, quality, and project management programs.

Requirements

- Bachelor's degree or higher in civil or environmental engineering, environmental science, or in the Geosciences
- Minimum of four (4) years of related environmental consulting experience or equivalent.
- Energetic, positive can-do attitude.
- Excellent verbal and written communication skills.
- Proficiency with Adobe Acrobat and Microsoft Office tools, including Word and Excel.
- Training in AutoCAD or ArcView GIS desirable.
- Must possess high safety awareness, and be willing to adhere to all aspects of TRC's rigorous behavior-based health and safety programs.
- EIT or GIT required.

- Professional Engineer (PE) Registration (Civil or Geology) in the State of California desirable
- 40-hour HAZWOPER training, including current refresher training is desirable.
- Qualified applicants who are offered a position must pass a pre-employment substance abuse test and a company physical exam (indicating that there will be no restrictions for field activities or use of a half-face respirator).
- This position will require field work and travel, as well as early start times and occasional night or weekend work.
- Ability to work remotely (i.e., work from home) as necessary.

TRC offers advancement potential and a competitive compensation and benefits package including a 401k plan with a company match. For more information please visit their website at www.trccompanies.com

Mid-Level Geologist / Engineer Position at EKI

EKI is looking for a mid-level geologist/engineer. Details of the job description are found on their website (https://www.ekiconsult.com/eki/career-opportunities/mid-level-geologist-engineer/), along with a number of others. Someone graduating with a PhD would qualify for this even with limited experience. An entry level position should be posted in a few weeks. The best place to find out more about opportunities at EKI

is: https://www.ekiconsult.com/eki/career-opportunities/. If any of your students have questions about EKI or environmental consulting, please contact Deepa Ganhi at dgandhi@ekiconsult.com

Assistant Professor Position at The University of Alabama

The Department of Civil, Construction, and Environmental Engineering at The University of Alabama (UA) invites applications for a tenure-track faculty position in the general area of water quantity and quality. Candidates will be considered for appointment at the rank of Assistant Professor. The successful candidate will establish and sustain an externally funded research program and complement the current research and education efforts in the CCEE department through interdisciplinary collaboration. The candidate will teach courses at both the undergraduate and graduate levels, advise both graduate and undergraduate students, generate a scholarly publication record, participate in technical committees and outreach activities, and exhibit a commitment to equity, diversity, and inclusion. Candidates should communicate well, collaborate effectively, and contribute to the mission of the department. Candidates are specifically expected to significantly contribute to and enhance the water research enterprise at UA by supporting the research activities of various centers in the Alabama Water Institute (AWI). For more information about our department's engineering programs, see: http://cce.eng.ua.edu/.

Desired areas of expertise include, but are not limited to, environmental data analytics and

decision making, environmental fluid dynamics, land-atmosphere interactions, hydrology, hydrometeorology, ecohydrology, and water quality management.

The University of Alabama currently enrolls over 37,000 students and employs over 2,000 full and part-time faculty members in thirteen colleges and schools. The College of Engineering is comprised of seven academic departments with over 6,000 students, and the College will be home to more than 150 tenure/tenure-track faculty following the current search. The College also houses nine research centers and is active in the University's four new research institutes. The College occupies well over a half million square feet of state-of-the-art facilities, including the \$300 million Shelby Engineering and Science Quadrangle, completed in 2014, and the newly reopened \$22 million renovated HM Comer in 2018. The Carnegie Foundation has recognized The University of Alabama with its R1 Very High Research Activity status.

If you have questions about the position, please email the co-chairs of the search committee, Mark Elliott melliott@eng.ua.edu and Prabhakar Clement melliott@eng.ua.edu and melliot

To apply: https://facultyjobs.ua.edu/postings/47808

Environmental Engineering Position at The University of Houston

The Department of Civil and Environmental Engineering (CEE) at the University of Houston invites applications for one full-time tenured or tenure-track faculty position in environmental engineering. The appointment is open at the Assistant, Associate or Professor rank and for all areas of environmental engineering with particular interest in, but not limited to, water or wastewater treatment, environmental chemistry, environmental systems analysis and big data applications in environmental engineering, process engineering, and the water-energy nexus. Candidates applying at the Associate Professor or Professor rank are expected to demonstrate nationally and internationally recognized scholarly activities with a strong record of externally funded research. The candidates must also demonstrate a commitment towards teaching at both undergraduate and graduate levels.

Applicants must have an earned Ph.D. degree in Environmental Engineering, or in a closely related field. Successful candidates are expected to develop and maintain an internationally recognized, cross-disciplinary research program in collaboration with the current faculty in the Department, College, and University. Preference will be given to candidates that can make an impact across disciplinary boundaries particularly those closely related to environmental engineering.

The start date for this appointment is September 1, 2021. Applicants are encouraged to apply before January 4, 2021.

Applications should include a cover letter, curriculum vitae, a one-page statement of research,

a one-page statement of teaching interests, a diversity and inclusion statement, and complete information for four references. The application and associated documentation should be submitted to the following site for consideration:

https://uhs.taleo.net/careersection/ex2_uhf/jobdetail.ftl?job=FAC001613

The University of Houston is an Equal Opportunity/Affirmative Action employer and is strongly and actively committed to diversity within its community. Women, minorities, veterans, and persons with disabilities are encouraged to apply. The University prohibits discrimination on the basis of sexual orientation, gender identity or gender expression and is responsive to the needs of dual career couples.

Tenure-Track Faculty Position at Vanderbilt University

Vanderbilt University has a strong institutional commitment to recruiting and retaining an academically and culturally diverse community of faculty. Our people are committed to and manifest a welcoming, diverse, and inclusive culture that showcases respect, collegiality, and intellectual freedom. We recognize that diversity is a driver for innovative and creative solutions that benefit our society through engineering. Vanderbilt is an Equal Opportunity, Affirmative Action employer dedicated to excellence through diversity.

The Department of Civil and Environmental Engineering (CEE) at Vanderbilt University invites applications for a tenure-track position as Assistant Professor beginning Fall 2021. The area of specialization is in the broad topic of **Intelligent Community Environments and**

Infrastructure, often referred to as Smart & Connected Communities. This area of research spans Intellectual Neighborhoods within the School of Engineering focused on (i) cyberphysical systems, (ii) big data science and engineering, (iii) risk, reliability and resilience, and (iv) energy and natural resources.

Our faculty are revolutionizing the ability to develop innovative solutions to aid societal well-being through the development of novel sensor networks, data analytics algorithms, and artificial intelligence enabled infrastructure management approaches. This includes a unique intelligent community environment and infrastructure capability served by testbeds located on Vanderbilt's campus, as part of the Chattanooga TN city transit system, at the Sterling Ranch community outside Denver, and along the I-24 Smart Corridor between Nashville and Atlanta. Sources of additional information include https://engineering.vanderbilt.edu/cee/, https://www.vanderbilt.edu/datascience/, and https://www.isis.vanderbilt.edu/.

This hire will be able to leverage research momentum the CEE faculty has achieved within the department and also collaborate closely with faculty from Computer Science and the Data Science Institute. The successful candidate is expected to (i) establish a nationally-recognized research program with extramural funds, (ii) teach at the undergraduate and graduate levels, and (iii) contribute to synergistic efforts within the department, school and university. A PhD in civil engineering, environmental engineering, or a closely related discipline must be in hand at the time of the appointment, with expertise in one or more areas related to intelligent community environments and infrastructure. Applications should include a (i) cover letter (ii)

complete curriculum vitae, (iii) statement of research, (iv) statement of teaching, (v) statement of diversity and inclusion, and (vi) a minimum of three references. Application materials are to be submitted online at http://apply.interfolio.com/81978. Applications will be reviewed as they are received; those received by January 15, 2021 will be given maximum consideration.

Located on 330 park-like acres 1.5 miles from downtown Nashville TN, Vanderbilt is a private, internationally recognized research university that embraces convergent research frontiers and delivers challenging and high-quality educational and immersion experiences to a diverse group of learners. The University offers a full range of undergraduate, graduate, and professional degrees. The School of Engineering is on a strong upward trajectory in national and international stature and prominence, and it has built infrastructure to support a significant expansion in faculty size.

Long known as a hub for health care and music, Nashville is a technology center with a considerable pool of health care, artificial intelligence, and defense-related jobs available. In recent years, the city has experienced an influx of major office openings by some of the largest global tech companies and prime Silicon Valley startups. With a metro population of approximately 1.9 million people, Nashville has been named one of the 15 best U.S. cities for work and family by Fortune, was ranked as the #1 most popular U.S. city for corporate relocations by Expansion Management, and was named by Forbes as one of the 25 cities most likely to have the country's highest job growth over the coming five years.

Switzer Fellowship Applications

Switzer is pleased to announce that the application period for **2021 Switzer Fellowships** is now open! Switzer Fellowships are given to **top graduate students in New England and California** who demonstrate outstanding leadership potential, and who are committed to a career in **environmental improvement**.

The Switzer Fellowship includes:

- A one-year \$15,000 unrestricted cash award;
- Two multi-day leadership training and cohort-building retreats;
- Access to other <u>Robert and Patricia Switzer Foundation grant programs</u> and career support; and
- Engagement with the Switzer Network, an active community of nearly 700 environmental leaders in the U.S. and around the world.

They encourage applications from students with a variety of backgrounds and life experiences, and they strongly encourage students of color, first-generation college and graduate students, and those from groups traditionally underrepresented in environmental graduate programs to apply. They are interested in receiving as many applications as possible from appropriate Master's-level programs. (Ph.D applicants are encouraged to apply as long as there is an applied focus of their work, and they can articulate the vision for the near-term application of their work.)

Eligibility Requirements for 2021

Last year, they expanded the eligibility requirements for the Switzer Fellowship to include not only U.S. citizens, but also U.S. permanent residents ("green card" holders) and Deferred Action for Childhood Arrivals (DACA) recipients. Those requirements are still in place for 2021. (International students are not eligible.)

This year's application deadline is January 8, 2021 at 11:59 p.m. Eastern Standard time.

The <u>fellowship program guidelines</u> contain links to the application form and related materials and instructions. The <u>Call for Applications</u> describes the Switzer Fellowship program and its requirements. Please pass this on to eligible candidates and colleagues, and post with your financial aid, diversity, and graduate student offices.

If you have any questions about the Switzer Fellowship or the guidelines, please contact <u>Erin Lloyd</u>, Program Director.

Advanced Research Project Agency-Energy (ARPA-E) Summer Scholar Program ARPA-E has begun recruiting for this year's Technology-to-Market Summer Scholar program.

This is a paid internship geared towards graduate students. This internship opportunity offers experience in advancing the transition of cutting-edge energy technologies to market applications in a fast-paced environment. Scholars work with Technology-to-Market professionals on program efforts in one or more topical areas. ARPA-E recruits Technology-to-Market Scholars who have a unique combination of technical and business skills to assist in defining commercialization pathways for high-impact technology development programs. Please see the attached document for more information.

Assistant or Associate Professor Position at the South Dakota School of Mines & Technology

The Civil and Environmental Engineering (CEE) department at the South Dakota School of Mines & Technology (SD Mines) seeks exceptional candidates for a tenure-track faculty position at the rank of Assistant or Associate Professor. An earned doctorate in Environmental Engineering or Civil and Environmental Engineering or a closely related discipline is required. Ability to develop an externally funded research program and to grow the undergraduate and graduate environmental-emphasis areas is expected. Areas of expertise sought include environmental chemistry, physicochemical processes, water treatment, and air quality, as well as areas that complement the strengths of the department and existing centers at the university. Current CEE faculty have expertise in biological processes, sustainability and life

cycle assessment, surface water hydrology, and convergence research at the intersection of 2D materials, biofilms, and big-data. Applicants should demonstrate a commitment to excellence in teaching graduate and undergraduate courses. Excellence in research and teaching will be expected. The desired start date is August 2021. Direct questions to venkata.gadhamshetty@sdsmt.edu with the subject line: Environmental Engineering Assistant or Associate Professor.

Candidates who will complement the department strengths and extend departmental opportunities for convergence research are needed. Opportunities are available for the candidate to collaborate with the Atmospheric and Environmental Sciences program (www.sdsmt.edu/ATM/) and multi-disciplinary centers including 2D-materials for Biofilm Engineering Science and Technology (2D-BEST: sdepscor.org/2dbest/), the Data Driven Materials Discovery Center (NSF Award #1920954); the Composites and Polymer Engineering Laboratory (CAPE; www.sdsmt.edu/CAPE/), the Composites and Nanocomposites Advanced Manufacturing - Biomaterials Center (CNAM-Bio; cnambiocenter.org/), the Direct Write Laboratory (DWL; www.sdsmt.edu/Research/Labs-and-Centers/Direct-Write-Lab/... the Sanford Underground Research Facility (SURF; www.sdsmt.edu/SURF/), the Biochemical Spatiotemporal NeTwork Resource (Bio-SNTR; www.sdepscor.org/biosntr/index.php), and the Surface Engineering Research Center (SERC; www.sdsmt.edu/SERC/). Established in 1885, South Dakota School of Mines & Technology is one of the nation's leading engineering, science and technology universities located in Rapid City, South Dakota. For prospective college students who are serious about their future, passionate about STEM and eager to solve society's most pressing problems, South Dakota Mines delivers a best-in-class education at an affordable price, with a supportive and collaborative campus community that prepares graduates to become in-demand leaders in today's fastest-growing industries. Known for our academic rigor, we maintain an average class size of 24 and our students benefit from immersive learning experiences including undergraduate research, coops/internships, and numerous nationally competitive engineering teams. Our Research Programs are concentrated in four areas: energy and environment; materials and manufacturing; STEM education; and underground science and engineering. South Dakota Mines is a growing university that enrolls around 2,500 students from 45 states and 40 countries and is ranked as the best engineering school for return on investment out of 319 similar institutions across the United States. The placement rate for recent Mines graduates is 96 percent.

Rapid City is the state's second largest city (with an urban population of 77,503 and metropolitan population of 148,749) and is nestled at the foot of the beautiful Black Hills. Mount Rushmore, Badlands National Park and Crazy Horse Memorial are all within an hour of the University. Rapid City enjoys a relatively mild climate and offers year-round recreational opportunities, including, hiking, biking, skiing, snowboarding, fishing, and hunting, to name a few. For more information about South Dakota Mines and Rapid City, visit: sdsmt.edu/The-Rushmore-Region/.

South Dakota Mines is committed to recruiting and retaining a diverse workforce and offers an

excellent comprehensive benefits package including medical, dental, vision, and life coverage options for employees, spouses and dependents; retirement plans; paid holidays; and a generous vacation and sick day allowance. Individuals interested in this position must apply online at www.sdsmt.edu/employment.. Human Resources can provide accommodation to the online application process and may be reached at (605) 394-1203. Review of applications will begin February 1, 2021 and will continue until the position is filled. Employment is contingent upon completion of a satisfactory background investigation.

Events & Programs

Beyond the Barriers Initiative

The <u>Beyond the Barriers</u> initiative seeks to address the impacts of the carceral system on our campus community.

An uncounted number of UC Davis students, staff, and faculty have been impacted by the carceral system, meaning they or an immediate family member have been incarcerated or detained. The financial and social challenges of being system-impacted are substantial, and yet have been largely invisible.

Last spring, UC Davis committed to addressing the deeply rooted structural inequities and injustices that impact our nation and our campus. By offering a support structure and community for our system-impacted students, and fostering student and faculty research, Beyond the Barriers takes up this crucial challenge in the spirit of the University of California's values of research, teaching, and service.

Please take a moment to read and share this <u>introduction</u>, view the <u>website</u>, and spread the word. They are planning an online event in December to celebrate the launch and gather with the community.

Course Offering: Seminar on College Teaching

Are you interested in learning more about effective teaching at the university level? Do you want to improve your teaching skills to get ready for the job market? If so, consider enrolling in EDU 398: Seminar on College Teaching during the Winter 2021 quarter!

The Seminar on College Teaching (EDU 398) is an interactive course designed to help graduate students and postdoctoral scholars develop essential skills for effective instruction in college-level courses. If you plan to teach face-to-face, hybrid, and online courses in your career, this class provides you with core skills for implementing research-based practices for university teaching. Students engage with peers in thought-provoking discussions and activities about the implementation of pedagogical techniques. For more information,

visit: https://cee.ucdavis.edu/courses. For a CRN or to ask questions, e-mail Patricia Turner at pturner@ucdavis.edu.