EES NEWSLETTER
Week of December 13, 2022

IMAGE: BIRDS FEEDER (GETTY IMAGES)

TAKE A PEEK INSIDE:

THIS WEEK...
• ANNOUNCEMENTS
• EES 5010 SEMINAR

IOWA LAKESIDE LAB COURSES SUMMER 2023

JOB OPPORTUNITIES
• UNDERGRAD/ENTRY-LEVEL
• PROFESSIONAL/POST-GRAD

INTERNSHIPS, SCHOLARSHIPS, FELLOWSHIPS, & GRANTS (UNDERGRAD & GRAD)

THIS WEEK...

THERE IS NO SEMINAR THIS WEEK.

GOOD LUCK WITH FINALS!

HAVE A SAFE BREAK & WE WILL SEE YOU IN JANUARY!

Congratulations to our Fall '22 Geoscience and Environmental Sciences graduates!

UPCOMING THESIS DEFENSES

Cameron Parrelly (MS Candidate, 12/14/22): THE SYSTEMATICS AND PALEOECOLOGICAL SIGNIFICANCE OF A NEW GENERALIZED EUSUCHIAN FROM THE EARLY PALEOCENE OF NORTH DAKOTA

Alice Hinzmann (MS Candidate, 12/15/22): EVALUATING THE CAPABILITY OF FLO-2D AND HEC-RAS-DF TO MODEL THE ST. SOPHIA DEBRIS FLOW OF DEC. 2003 AT THE ST. SOPHIA CHURCH CAMP IN SOUTHERN CALIFORNIA

REMINDIRS:
• FINALS WEEK: 12/12 - 12/16
• COMMENCEMENT: 12/15 - 12/18
• WINTER SESSION CLASSES: 12/19/22 - 1/13/2023
• SPRING SEMESTER CLASSES RESUME: 1/17/2023
• EES MAIN OFFICE WILL SWITCH TO WINTER BREAK HOURS STARTING 12/19/22: 8AM - 4PM MONDAY - FRIDAY
• ALL UNIVERSITY OF IOWA OFFICES CLOSED: 12/26 - 12/27/22
• ALL UNIVERSITY OF IOWA OFFICES CLOSED: 1/2/2023
**JOB OPPORTUNITIES**

**UNDERGRAD/ENTRY-LEVEL**

**Postdoctoral Position in the Space Sciences, Washington University in St. Louis**

Washington University in St. Louis invites applicants to conduct independent research as a postdoctoral fellow of the McDonnell Center for the Space Sciences. Areas of interest include astromaterials, cosmochemistry, astrophysics, planetary science, particle and nuclear physics, cosmology, and Earth as a planet. Candidates must have a PhD or be a May 2023 degree candidate.

The initial appointment is for one year, renewable for a second year. Washington University is committed to equal employment opportunity and encourages applications by those underrepresented in their academic fields. The University’s policy is to recruit, hire, train, and promote persons in all job titles regardless of race, color, age, religion, sexual orientation, gender identity, national origin, protected veteran status, or disability.

Applications should include a CV, a brief statement of their three most significant publications, a 2-page research proposal, and names/contact info for three professional references. Applicants should contact referees, who will need to have letters uploaded to the link provided by the application site. Applications and letters are due January 15, 2023 through Interfolio: http://apply.interfolio.com/117533. Direct questions related to the application process to: spacesciences@wustl.edu. Full advertisement link: https://mcss.wustl.edu/news/postdoctoral-fellowship-opening.

**Center for Oldest Ice Exploration (COLDEX) REU Program - The Center for Oldest Ice Exploration**

**Various locations**

The Center for Oldest Ice Exploration (COLDEX) is excited to announce that applications are OPEN for the Summer 2023 COLDEX Research Experience for Undergraduates (REU) Program!

During your COLDEX REU experience, you will work with ice core scientists and researchers to answer questions that will help in our mission to find the oldest ice in Antarctica and make important contributions to our understanding of Earth's climate history.

Applications are open to current undergraduate students. Due to NSF funding, participants must be U.S. citizens or permanent residents. Note: this REU does not include travel to Antarctica.

Student participants will receive a $6,000 stipend over the course of 10 weeks (from June - August, 2023). Students will be placed in a COLDEX laboratory, with full funding for travel to and from the host institution. Students will also be funded to present their research at the COLDEX annual meeting in Corvallis, Oregon September 6 - 7, 2023.

Find out more about the COLDEX REU program and apply at coldex.org/reu or apply here: https://oregonstate.qualtrics.com/jfe/form/SV_dak395aMNqLCm?jfefe=new

**Applications are due February 1, 2023 at 11:59 pm Eastern Time.**

**PROFESSIONAL / POST-GRAD**

**Electron Microprobe Research Scientist, University of Minnesota, Twin Cities**

University of Minnesota, Twin Cities - Minneapolis, Minnesota

The University Minnesota seeks applications for an Electron Microprobe Research Scientist. Responsibilities will include operation, supervision and routine maintenance of a state-of-the-art field emission JEOL JXA-8530FPlus Electron Probe Microanalyzer (EPMA). Further details of the EPMA and laboratory features are here https://probelab.esci.umn.edu/.

Responsibilities for this position will be divided 50% each between the Dept. of Earth and Environmental Sciences (https://cse.umn.edu/esci) and the College of Science and Engineering Characterization Facility (https://cse.umn.edu/charfac).

Experience analyzing geological samples by EMPA is essential, including quantitative analysis, mapping, imaging, standardization, and familiarity with EPMA hardware and software. Some experience maintaining a microprobe is desirable, but some amount of on-the-job training is expected. The successful applicant will also be expected to provide user training, including teaching ESCI classes on microprobe theory and applications, and to assist/consult/collaborate with UMinn researchers and students, as well as customers from industry and external academic institutions, on research projects. The position also provides opportunities to conduct independent research using the microprobe as well as other facilities available at UMN. The successful applicant is expected to participate in collegial, mentoring, outreach and DEI activities in the ESCI department, and interface with both the technical and administrative staff of the Characterization Facility as needed (including outreach/marketing events and materials aiding both the core facility and the scientist's professional visibility)

An M.S. or Ph.D. degree in physical sciences or engineering is required. This non-tenure research track position, candidates should go to https://hr.umn.edu/jobs/Find-Job and search for job ID 352825 to upload a cover letter, resume (CV), statement of research interests, and names/contact information of three references. Application review will begin immediately and continue until the position is filled. For further information, contact Marc Hirschmann mmh@umn.edu or Greg Haugstad haugs001@umn.edu
Assistant Professors in Earth and Planetary Sciences, The University of Texas at Austin
The University of Texas at Austin = Austin, Texas

The Department of Geological Sciences at The University of Texas at Austin seeks to hire innovative scholars in Earth and planetary sciences who will advance our mission to conduct world class research and provide an exceptional education to our students. The specific area of research specialization within the Earth and planetary sciences is unrestricted. We are interested in novel approaches to understanding fundamental processes occurring within and among the various 'spheres' of Earth and/or other planets. Candidates are encouraged to describe how their work may address topics of acute scientific interest and/or critical societal importance. We are especially interested in candidates who demonstrate an ability to think across traditional disciplinary boundaries and forge collaborative research endeavors within and beyond the Department of Geological Sciences. The Department of Geological Sciences (DGS) is part of the Jackson School of Geosciences (JSG), which includes two other closely allied research units: the Institute for Geophysics and the Bureau of Economic Geology. Altogether, the JSG has a large outstanding community of faculty and research scientists with a broad range of specialties and access to outstanding research facilities and support. In DGS there is a vibrant blend of basic and applied research organized into three programs: Surface Subsurface and Life; Lithosphere and Deep Earth; and Water, Climate and the Environment. We seek faculty members who will develop new and/or expand collaborations among faculty, researchers, and students within the JSG, across campus and around the globe.

A Ph.D. is required at the time of appointment. The University of Texas at Austin is an Equal Opportunity Employer with a commitment to diversity at all levels. The JSG is committed to expanding our vibrant and culturally diverse intellectual community, and we strongly encourage applications from all groups including those historically-underrepresented in the Geosciences. The university, school and department are interested in and value candidates who have experience working with diverse and underserved populations and have demonstrated a commitment through their actions to improving the diversity, equity and inclusivity of their academic communities. The university is located in the thriving Austin metropolitan area with a rapidly growing community of over 2 million people.

Review of applications is planned to begin January 15, 2023 and continue until the position is filled. Interested applicants should submit a cover letter; CV; research statement that articulates scientific questions and a plan for addressing them including a collaborative research vision; teaching and mentoring statement that describes a philosophy and a plan for enacting it; and a statement addressing past and/or planned efforts and actions that promote diversity, equity, and inclusion through research, teaching, and/or service. Contact information for at least three individuals who would be able to provide letters of reference should be supplied on a separate document. Submit copies of these materials through Interfolio’s ‘Apply Now’ option: http://apply.interfolio.com/118086. Questions concerning the application process should be sent to Dan Breecker at breecker@jsg.utexas.edu.

Assistant/Associate/Full Professor, Chair in Mineral Resources Geology, Oregon State University
Oregon State University - Corvallis, Oregon

The College of Earth, Ocean, and Atmospheric Sciences (CEOAS) invites applications for a tenure-track (Assistant/Associate/Full Professor) faculty position to fill the newly created Barrow Family Endowed Chair in Mineral Resource Geology. The Barrow Endowed Chair generates funds on an annual basis to be used at the discretion of the appointee. We are particularly interested in individuals that conduct field and laboratory-based investigations of ore genesis, evolution, and exploration. Specific areas of interest include, but are not limited to, the role of fluids in crustal processes, structural and tectonic controls on magma and fluid flow, magmatic, hydrothermal and other processes that determine the concentration and dispersion of mineralized materials, geothermal or active magmatic or metamorphic systems, or related fields. Research strategies should integrate some combination of field investigation, petrology, structural geology, remote-sensing, high-temperature and isotope geochemistry, and/or other lab-based or modeling approaches.

The successful candidate will have demonstrated capabilities and/or high potential for research and teaching excellence that will inspire the next generation of geology students and early career researchers. The candidate will contribute to teaching undergraduate courses such as mineralogy, petrology-petrography-optical mineralogy, and field geology, as well as graduate courses in their specialty. We are particularly interested in applications from early career individuals. The ideal candidate will demonstrate a capacity for (1) creative research and teaching in geology, geophysics or cognate fields, (2) building an externally-funded research program, (3) developing an international reputation in Mineral Resources Geology, (4) establishing connections with industry partners and (5) contributing to on-going college- and university-wide efforts to improve diversity, equity and inclusion (https://ceoas.oregonstate.edu/del).

For academic-track positions, it is CEOAS policy to hire as a 12-month, 0.75 FTE (equivalent to the traditional 9-month, 1.0 FTE where additional salary can be supported by external grants). Consideration for indefinite tenure is coincident with evaluation for promotion to Associate Professor.

Oregon State University (OSU) and the College of Earth, Ocean, and Atmospheric Sciences are committed to maintaining and enhancing its collaborative and inclusive community that strives for equity, and equal opportunity. All OSU faculty members are responsible for helping to ensure that these goals are achieved. CEOAS faculty are expected to demonstrate a commitment to diversity and inclusion, including efforts promoting equitable outcomes among learners of diverse and underrepresented identity groups (https://diversity.oregonstate.edu/strategic-plan; https://leadership.oregonstate.edu/president/initiatives/moving-forward-together). OSU and CEOAS strive to build and sustain a welcoming, collegial and inclusive campus environment.

The College of Earth, Ocean, and Atmospheric Sciences is an internationally recognized leader in the study of the Earth as an integrated system. It operates numerous state-of-the-art laboratories, two oceanographic research vessels and several national facilities and centers. The College has an annual research expenditure budget of more than $80 million, with support coming from the National Science Foundation, National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, the Department of Energy, and other federal agencies. It has approximately 100 faculty, 200 graduate students and 800 undergraduate students. Graduate programs include M.S. and Ph.D. degrees in Ocean, Earth and Atmospheric Sciences; Geology; and Geography and an M.S. degree in Marine Resource Management. The college offers undergraduate degrees in Geology, Oceanography, Climate Science, Geography and Geospatial Sciences, and Environmental Sciences as well as several minors and certificate programs.

Application URL: https://jobs.oregonstate.edu/postings/128093

For full consideration apply 1/08/2023, applications close 4/08/2023
**Assistant Professor, Department of Geology & Geophysics (Economic Geology), University of Wyoming**

University of Wyoming - Laramie, Wyoming

The Department of Geology & Geophysics at the University of Wyoming welcomes applications for a tenure-track Assistant Professor of Economic Geology. The successful candidate will develop a nationally competitive, externally funded research program in the field of Economic Geology, broadly defined, and will teach core courses in Geology & Geophysics Department degree programs as well as in their area of specialization related to Economic Geology at the undergraduate and graduate level.

A minimum of a PhD degree in Geology or relevant discipline at time of appointment and evidence of past field-based research or teaching experience is required.

Preference will be given to applicants with:

- demonstrated ability and/or potential to develop a nationally competitive, externally funded research program
- potential to advise graduate students
- understanding of current and emerging energy minerals issues including critical minerals characterization and processing
- potential for contributing to core undergraduate coursework related to economic geology (possibly including: mineralogy or petrology or other coursework with a geochemical or structural focus or modules of our summer field camp and elective courses in their area of expertise)
- desire and potential to develop partnerships with industry and/or state entities
- a commitment to diversity and inclusivity

**Biogeochemistry Laboratory Analyst (2 positions)**

Cooperative Institute for Great Lakes Research - School for Environment and Sustainability - University of Michigan

The Cooperative Institute for Great Lakes Research (CIGLR) is seeking two (2) candidates to join our research team to work on harmful algal blooms, hypoxia, and invasive species in the Great Lakes. You will be responsible for performing laboratory analyses related to aquatic biogeochemistry in the Great Lakes and their watersheds.

**Required Qualifications**

- Bachelor's degree in environmental science or related field
- Upper-level coursework in analytical chemistry or related to surface water chemistry
- Professional or academic experience working in a laboratory with at least one year of experience performing analytical chemistry related to water quality or biogeochemistry
- Experience working independently on problem-solving and balancing demands of multiple projects
- Familiarity with data management and analysis using products such as Excel, R, MATLAB, Python, or similar platforms

**Desired Qualifications**

- Two (2) or more years of professional or graduate experience working in a laboratory
- Demonstrated experience developing, adapting, or troubleshooting analytical methods for biogeochemistry or water quality

For more information and to apply:
https://careers.umich.edu/job_detail/227569/biogeochemistry-laboratory-analyst

The application deadline is 1/3/23.

**Assistant Professor, Department of Geology & Geophysics (Economic Geology), University of Wisconsin Oshkosh**

University of Wisconsin Oshkosh - Oshkosh, Wisconsin

The UWO Geology Department, University of Wisconsin Oshkosh seeks a field-oriented groundwater hydrologist with expertise in environmental geology to be part of our high-quality undergraduate-only program. Review of applications will begin January 6, 2023.

**REQUIRED:**

- Ph.D. in Geology or a closely related field. ABD candidates will be considered, provided the Ph.D. is conferred by the start of appointment.
- Background and/or experience necessary to teach lecture, discussion, and lab sections in introductory Environmental Geology, Physical and Chemical Groundwater Hydrogeology with approaches that foster undergraduate student learning.
- Research experience with potential to establish a successful research program that includes creative approaches for engaging undergraduate students in research.
- Demonstrated commitment to equity, diversity, and inclusion.

The candidate will be expected to develop and maintain an active research program producing peer-reviewed scientific publications, be an outstanding teacher, and perform service. Teaching responsibilities include Environmental Geology, Physical & Chemical Hydrogeology. Expertise in Glacial Geology, Climate Change, and Geomorphology would be beneficial. We strive for an inclusive and equitable culture that welcomes everyone and values diversity.

The University of Wisconsin Oshkosh is a part of the University of Wisconsin system – one of the largest systems of public higher education in the U.S.

Complete job description and information here.
INTERNSHIP

Summer 2023 Science Undergraduate Laboratory Internships (SULI)
Department of Energy (DOE) / Office of Science's Workforce Development for Teachers and Scientists - Various locations

Are you an undergraduate student or recent graduate in science, technology, engineering, or math looking to develop your research skills?

Then the SULI program is for you. Gain hands-on research experience on an exciting project under the guidance of a mentor and build your professional network at a national lab. Present your research to scientists and peers, join in social activities, and engage in a variety of professional development activities to enhance your career skills.

The SULI program is sponsored and managed by the Department of Energy (DOE) / Office of Science's Workforce Development for Teachers and Scientists (WDTS) program in collaboration with 17 DOE national laboratories and facilities across the U.S.

Benefits
• $650/week stipend
• Housing accommodations or housing allowance
• Round-trip travel reimbursement

Learn how to apply at https://science.osti.gov/wdts/suli/How-to-Apply.
Applications are due January 10, 2023 at 5:00 PM ET.

For full eligibility requirements, please visit https://science.osti.gov/wdts/suli/eligibility

The Iowa Natural Heritage Foundation (INHF) is looking for college students seeking a paid internship that offers outstanding experience in land conservation — plus the knowledge that they’re helping to restore and protect Iowa's natural resources.

INHF will be hiring 17 summer interns to fill multiple land stewardship crews working in different regions of Iowa.

INHF Land stewardship internship locations:
Central Iowa Crew - Des Moines, IA
Blufflands Crew - Decorah, IA
Loess Hills Crew - Council Bluffs, IA
Eastern Iowa Crew - Iowa City, IA

We're looking for interns in environmental fields of study (Biological Sciences, Animal Ecology, Landscape Architecture, etc.) who can work for a period of 12 weeks during the summer of 2023. Land Stewardship interns gain hands-on experience with natural land management and restoration within prairies, wetlands, savannas, and other natural areas throughout Iowa. Interns will also learn about Iowa's ecology, work with a team, and enjoy the outdoors.

For more information about the Iowa Natural Heritage Foundation, internship opportunities, and how to apply, visit https://www.inhf.org/about-us/internships/

Deadline to apply: January 16th, 2023

Internships start on May 22, 2023 and end on August 10, 2023. Interns will work a total of 11 weeks within that period. The work week will consist of 10-hour days, Monday through Thursday. Pay is $13/hour.

Iowa Natural Heritage Foundation provides equal employment opportunities to all employees and applicants for employment without regard to race, color, ancestry, national origin, gender, sexual orientation, marital status, religion, age, disability, gender identity, results of genetic testing or service in the military.

Please reach out with any questions.