

EAPS WEEKLY NEWSLETTER

March 20, 2023

Facebook Twitter LinkedIn Instagram Website

EAPS MEETINGS & EVENTS

PURDUE CALENDAR 2023

EAPS K-12 OUTREACH CALENDAR OF EVENTS

REPORT YOUR OUTREACH AND ENGAGEMENT ACTIVITIES

OUTREACH NEWS

Don't forget to submit any activities you do with K-12: https://bit.ly/EAPSOut

Did you know that Outreach is working on an online science demonstration repository?

If you know a science demo that educators would enjoy, let us know!



Follow us on Social media to see now demos on Fridays.

Social sites:

<u>Twitter</u> <u>Facebook EAPS Outreach</u> <u>Instagram</u> <u>Facebook Superheroes of Science</u> EAPS departmental outreach web page

SUPERHEROES OF SCIENCE

Please help us by subscribing and sharing our podcast and our YouTube channel!

On Apple: https://bit.ly/SOS_apple
On Spotify: https://bit.ly/SOS_spotify

On Amazon: https://bit.ly/Superheroes amazon

NEWS/OPPORTUNITIES AT PURDUE

SPEAKER DR. KAUSHIK MITRA WEDNESDAY, MARCH 22

Dr. Kaushik is from Stony Brook University HAMP 2201 10:30 am – 11:30 am

<u>LEVANDOWSKI LECTURE – JAMES FARQUHAR</u> <u>THURSDAY, MARCH 23</u>

James Farquhar is from the University of Maryland Host: Greg Michalski In-person HAMP 1252 3:30pm – 4:30 pm

SPEAKER DR. CAUÊ S. BORLINA FRIDAY, MARCH 24

Cauê S. Borlina is from John Hopkins University HAMP 2201 10:30 am – 11:30 am

MS AND PHD EAPS STUDENTS BROADEN YOUR GRAD EXPERIENCE

For those MS and PhD students in EAPS that would like to broaden their graduate experiences while at Purdue, EAPS is affiliated with the Computational Interdisciplinary Graduate Programs (CIGP) at Purdue. While working toward a graduate degree in EAPS, graduate students can also have a concentration (specialization) in the area of Computational Science and Engineering (CSE). For more information, click here. A short video about the CIGP/CSE program can be found here.

Spring Application Deadline: March 1 **Fall Application Deadline:** October 1

STEM TEACHER RESIDENCY PROGRAM BECOME A STEM TEACHER IN 18-MONTHS

Purdue's Indianapolis STEM Teacher Residency program, in partnership with Indianapolis Public Schools, aims to strengthen the educational outcomes of students in one of the largest urban school districts in Indiana. We will prepare you to become a culturally competent, highly qualified

http://www.eaps.purdue.edu/

Page 1 of 7

teacher who will elevate student achievement in middle and high school science, technology, engineering, and mathematics (STEM). After successfully completing the program, graduates must commit to a three-year STEM-related teaching position with Indianapolis Public Schools.

GET PAID TO CONTINUE YOUR EDUCATION

Stipend: \$46,500

Program Cost: (\$16,875)

Remaining Stipend for Living Expenses: \$29,625

100% ONLINE COURSEWORK AND IN-PERSON STUDENT TEACHING

- Master of Science in Secondary STEM Education
- Graduate Certificate in K-12 Integrated STEM
- Education
- Initial Teaching Licensure

Learn more.

EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

If you are interested in an EAPS grad research opportunity, <u>click here</u> for more information.

PUBLICATIONS

- C.P. West, D. Mesa Sanchez, A.C. Morales, Y.-J. Hsu, J Ryan, A. Darmody, L. Slipchenko, J. Laskin, A. Laskin. Molecular and Structural Characterization of Isomeric Compounds in Atmospheric Organic Aerosols Using Tandem Ion Mobility Mass Spectrometry. Journal of Physical Chemistry A, 127 (7), 1656-1674. (2023). doi: 10.1021/acs.jpca.2c06459
- P.A. Alpert, W.P. Kilthau, D. W. Bothe, R. E. O'Brien, R. C. Moffet, M.K. Gilles, B. Wang, A. Laskin, J. Y. Aller, D.A. Knopf. Identifying the ice nucleating agents in sea spray aerosol and resolving associated/their immersion and deposition freezing rates. Science Advances, 8 (44), eabq6842, (2022). doi: 10.1126/sciadv.abq6842
- Armando Azua-Bustos, Alberto G. Fairén, Carlos González-Silva, Olga Prieto-Ballesteros, Daniel Carrizo, Laura Sánchez-García, Victor Parro, Miguel Ángel Fernández-Martínez, Cristina Escudero, Victoria Muñoz-Iglesias, Maite Fernández-Sampedro, Antonio Molina, Miriam García Villadangos, Mercedes Moreno-Paz, Jacek Wierzchos, Carmen Ascaso, Teresa Fornaro, John Robert Brucato, Giovanni Poggiali, Jose Antonio Manrique, Marco Veneranda, Guillermo López-Reyes, Aurelio Sanz-Arranz, Fernando Rull, Ann M. Ollila, Roger C. Wiens, Adriana Reyes-Newell, Samuel M. Clegg, Maëva Millan, Sarah Stewart Johnson, Ophélie McIntosh, Cyril Szopa, Caroline Freissinet, Yasuhito Sekine, Keisuke Fukushi, Koki Morida, Kosuke Inoue, Hiroshi Sakuma & Elizabeth Rampe, Dark microbiome and extremely low organics in Atacama fossil delta unveil Mars life detection limits. Nat Commun 14, 808 (2023). https://doi.org/10.1038/s41467-023-36172-1

MEETINGS/EXPOS/ OPPORTUNITIES OUTSIDE OF PURDUE

STUDENT SUMMER WORKSHOP IN EARTH AND ATMOSPHERIC SCIENCES JULY 4-6, 2023

CHINESE UNIVERSITY OF HONG KONG

This workshop is open to all potential applicants to our PhD programme. We welcome undergraduate students in their 3rd / final year of study or master students to apply. Every participant will have the PhD admission interview opportunity. The first batch of PhD offers will be made shortly after the workshop.

Please visit <u>workshop website</u> more information. Application Process: <u>submit application online</u> **Application Deadline: 31 March 2023 (Friday)** Enquiry: <u>eas@cuhk.edu.hk</u>; Tel: +852 3943 9323 / 3943 9624 Leaflet

Feedback from Past Participants

- "The arrangements for the workshop were fantastic.
 We were lucky to get an opportunity to attend the
 workshop and learned a lot about the EASC Ph.D.
 program. The communication way of professors was
 excellent."
- "It was a great opportunity to learn about the application procedure and I was able to get adequate information. I also would like to thank the speakers for answering our queries about the application."
- "The presentations are very interesting and the speakers are very passionate about their field. I aspire to be like them."
- "This workshop provides a great opportunity to directly communicate with skilled professors."

FREE COURSE PROVIDED BY THE ASSOCIATION FOR WOMEN GEOSCIENTISTS

Starting March 1, 2023 American Geosciences Institute, in partnership with the AAPG Foundation is offering AGI Member Societies FREE access to the Geologize online course, "Practical Geocommunication." This course, valued at \$400 per person, provides an excellent opportunity for geoscientists to become more effective and powerful public ambassadors for our field, something that is urgently needed. Given the challenges facing both our field and society more broadly, it has peraps never been more vital to

http://www.eaps.purdue.edu/	Page 2 of 7

effectively communicate geoscience to the public and other stakeholders. **The free offer is available for one year**, so you are encouraged to take advantage soon!

How to get free access to the training:

- Go to the AGI society landing page here.
- Click on the 'AGI Access' button
- Register for the course (free)
- Click on the link 'Have a Coupon?"
- Enter the code 'awg-agi-pggz-2324' to remove the price.

CROSSROADS ACCEPTING STUDENT ABSTRACTS FOR IU EARTH AND ATMOSPHERIC CONFERENCE

<u>Crossroads</u> 2023, is an annual Earth and Atmospheric Science departmental conference, organized by the Rho chapter of **Sigma Gamma Epsilon** at **Indiana University**, **Bloomington**.

The conference provides a platform for students to present their research findings and showcase their work. As a department that shares a passion for advancing Earth Science research and education, we would be delighted to have participants from your department.

The conference will take place on 24th March 2023 at the Geology Building, Indiana University Bloomington.

If you have any questions, please <u>contact</u> Charles Salcido, conference committee chair.

25TH ANNUAL SEVERE STORMS AND DOPPLER RADAR CONFERENCE MARCH 23-25, 2023 IN ANKENY, IOWA

For more information on the conference, please see the conference website - HERE.

Additionally, we are again offering two atmospheric science scholarships to deserving students in 2023. The Tim Samaras Memorial Scholarship is for students who are pursuing a career in research meteorology.

The Pam Daale Memorial Scholarship is focused on students pursuing careers in broadcast or operational meteorology.

The award for each scholarship will be \$1500. More information and the application form can be found in the links below:

- <u>Pam Daale Scholarship</u>
- <u>Tim Samaras Scholarship</u>

NAGT - 9TH ANNUAL EARTH EDUCATORS' RENDEZVOUS

The National Association of Geoscience Teachers (NAGT) is excited to announce that registration and

abstract submissions are now open for the <u>ninth</u> <u>annual Earth Educators' Rendezvous</u>, taking place in Pasadena, California, from July 10-14, 2023! registration, programming, and <u>contributed</u> program abstract submissions.

Register

Make sure you save your spot by <u>registering!</u> Register by the early registration deadline--Wednesday, May 3--for the best rates. NAGT members receive \$100 off registration.

Learn more

Check out the <u>Rendezvous website</u> and <u>participant</u> <u>information</u> for more details.

INTERNSHIP OPPORTUNITY – INFINITE COOLING CLOUD PHYSICS

Internship opportunity that requires grad-level experience/interest in experimental/numerical modeling. Infinite Cooling is an award-winning startup company, and our mission is simple: to mitigate the water scarcity around the world. We help power plants and other industrial processes reduce their water consumption and water treatment costs by recovering water from their cooling tower exhausts. We are a small team based in Malden, Massachusetts, and we are on a mission to be a global leader in the water services industry for power generation. Infinite Cooling has raised over \$16M in funding and has won the MIT \$100K, MassChallenge, the DOE national Cleantech competition and numerous other awards. We are looking for a sharp, tenacious, and creative R&D engineer intern to join our team and work on developing the next generation of our product. Strong communication, flexibility, and the desire to "wear many hats" will all be essential skills for a successful applicant. Career and contact info here. To gain more info about this internship, contact via email.

REU OPPORTUNITIES – 2023 COMMUNITY SOURCED DIRECTORY

We have launched the 2023 COMMUNITY SOURCED DIRECTORY of Research Experiences for Undergraduate - REU! This is to support students in finding powerful and well-supported Research Experiences. Furthermore - the directory includes many aspects of accessibility and identity that can help all our students. A new column this year is if a program has opportunities for non-US Citizens.

You can access v04 for Summer 2023 posted here. Subsequent versions will be posted ~weekly into March. While a majority of these are NSF funded, a

http://www.eaps.purdue.edu/	Page 3 of 7

growing number are funded by a wide range of organizations/institutions, and have a growing range of formats.

We recommend that users review the column headers (listed below), in order to help them find programs that fit their identities and needs, and that they can reach based on their exams / university calendars. A student in a quarter program should avoid programs that start in early May, and vice versa for students in semester programs who need to be in class in late August/September.

PROGRAM CHARACTERISTICS

- ACCOMMODATION provided
- TRAVEL costs provided/reimbursed
- FOOD provided
- Overnight OFF-SITE travel required
- INTERNATIONAL requires passport
- OUTDOOR field work
- Working on/in WATER know how to swim
- DRIVING license required
- COVID VACCINATION required
- OTHER

STUDENT CHARACTERISTICS

- **Rising SOPHOMORES**
- **Rising JUNIORS**
- Rising SENIORS
- 2-YEAR Coll. Students
- 4-YEAR Coll. Students WITHOUT grad program
- 4-YEAR coll. students WITH grad program
- Post Baccalaureate (with degree / already graduated)
- **PRIOR Research Experience**
- NO prior research experience
- **TEACHERS** or other professionals
- **VETERANS**
- MINORS (<18)
- NON US CITIZENS (opportunities available)
- OTHER

ACCESSIBILITY

- **Encouraged Applicant Identities**
- Have not made accessibility plan
- YES, accessible to DEAF / ASL
- MOBILITY-AID/ WHEELCHAIR
- Yes GUIDE DOGS SERVICE ANIMALS
- Accommodate FOOD RESTRICTIONS

OTHER SUPPORT

- Stipend
- Describe additional supports provided by the program, which may include support for conferences attendance, early admission pathway to graduate program, support with research transition to senior thesis work, support for publication fees, etc.

Describe the plan for the REU should COVID restrictions limit in-person/on-site activities.

SCHOLARSHIPS AVAILABLE -AWG BRUNTON AWARD AND BRUNTON FIELD PROJECT AWARD

The AWG Brunton Award and Brunton Field Project Award promote the future of field mapping and data acquisition for the upcoming generation of people whose gender identity has been historically underrepresented in the geosciences. Applicants should have a passion for and exceptional experience with field work, including internships, field camp, coursework with a field-based research component, or research. The AWG Brunton Award has been active for >20 years and provides Brunton compasses to 1– 2 awardees each year. The AWG Brunton Field Project Award started in 2022 and awards a Brunton compass and up to \$1000 to support field activities to each of 1-2 awardees each year. <u>Learn more here</u>. Deadline for entry is Dec. 15th of each year.

EXTRATERRESTRIAL MATERIALS ANALYSIS GROUP

(EXMAG) April 25-27, 2023 Virtual Meeting info

OUTER PLANETS ASSESSMENT GROUP (OPAG)

May 2-3, 2023

Johns Hopkins University Applied Physics Laboratory Laurel, MD/Virtual

Meeting info

4TH INTERNATIONAL PLANETARY CAVES

CONFERENCE May 4-7, 2023

Haria Municipality, Lanzarote, Spain

Meeting info

BRINES ACROSS THE SOLAR SYSTEM: ANCIENT AND FUTURE BRINES CONFERENCE

May 15-18, 2023 Reno. NV

Meeting info

ASTEROIDS, COMETS, & METEORS CONFERENCE

June 18-23, 2023 Flagstaff, AZ Meeting info

http://www.eaps.purdue.edu/	Page 4 of 7

6TH PLANETARY DATA WORKSHOP

June 26-28, 2023 Flagstaff, AZ Meeting info

URANUS FLAGSHIP: INVESTIGATIONS AND INSTRUMENTS FOR CROSS-DISCIPLINE SCIENCE

July 25-27, 2023 Pasadena, CA Meeting info

2nd INTERNATIONAL ORBITAL DEBRIS CONFERENCE

December 4-7, 2023 Houston, TX / virtual Meeting info

PLANET CHARACTERIZATION IN THE SOLAR SYSTEM AND THE GALAXY WORKSHOP

February 21-23, 2024 Houston, TX / virtual <u>Meeting info</u>

POSITIONS AVAILABLE-CAREER OPPORTUNITIES

AGU INTERN, SCIENCE WRITER (FULLY REMOTE)

WHAT YOU WILL DO

- Work with the media relations team to identify and pitch newsworthy stories about new research published in AGU's peer-reviewed journals.
- Interview researchers about their work and write news-style press releases and research spotlights under deadline.
- Craft headlines and brief descriptions of new research for AGU's weekly highlights newsletter.
- Meet daily with media relations staff, prepare materials as requested and respond to editing.
- Use and explore social media and multimedia to promote scientific research.

WHAT YOU WILL BRING

- A bachelor's degree or higher in journalism, communications or Earth and space science.
- Coursework or equivalent experience in news-style writing about science for a lay audience.
- Familiarity with AP style.
- Experience managing multiple projects or assignments on deadline.
- Professional attitude and interpersonal skills.

- Proficiency with Microsoft Office Suite (Word, PowerPoint, Excel), internet browsers, and web search engines.
- Experience with social media preferred but not required.

HIRING SPECIFICS

- To Apply: Please submit RESUME along with 3 writing samples
- Pay \$16.50 per hour
- Full Time/ Non-Exempt, 3 month Summer 2023 Internship, remote in the US.
- AGU will make reasonable accommodations in compliance with the Americans with Disabilities Act of 1990.
- Work Authorization: We will not sponsor applicants for work visas in the US.
- AGU is an Equal Opportunity/Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply.

Link

<u>GRAND CANYON NATIONAL PARK –</u> HYDROLOGIC RESEARCH TECHNICIAN

This position will work on a cooperative project between NAU and the National Park Service (NPS) regarding water sources and quality in Grand Canyon National Park. Work will be done in conjunction with NPS hydrologists and geologists and with substantial office time at NPS facilities in Flagstaff, AZ and frequent field trips into the park. Field trips are, on average, 4 days, but can last as long as 14 days (rare) and will include work in springs, streams, caves, slot canyons, and/or exposed arid lands. Frequent field work will require backcountry travel and long hours including work over weekends. Link

MONTANA MESONET FIELD MANAGER, MONTANA CLIMATE OFFICE

The Montana Climate Office within the W.A. Franke College of Forestry and Conservation and at the University of Montana is seeking applications for an Applied Meteorologist/Mesonet Field Manager position. The Mesonet Field Manager (MFM) will oversee the installation and maintenance of climate monitoring stations (Montana Mesonet) across the state. The MFM will lead three Mesonet field crews: three full-time technicians and six seasonal employees in the construction and maintenance of the Montana Mesonet and ensure high-quality performance and operation of all stations. The Montana Mesonet is being developed through a US Army Corps of

http://www.eaps.purdue.edu/	Page 5 of 7

Engineers (USACE) award to the Montana Climate Office. Link

TEACHER OF PLANETARY ATMOSPHERES – ISAE-SUPAERO IN TOULOUSE

The teacher-researcher selected will be attached to the DEOS department of ISAE-SUPAERO. She or he will contribute to the development and animation of research around their own themes. She or he will ensure the fundamental missions of a teacher in his field of competence (face to face teaching, management of teaching programs). She or he will also be responsible for maintaining and developing relations and cooperation with regional, national and international academic and industrial partners. Link

TENURE HIRE IN ATMOSPHERIC OR EARTH SCIENCE - IU BLOOMINGTON

The Indiana University Bloomington Department of Earth & Atmospheric Sciences invites applications for a tenure hire in Atmospheric or Earth Science with applications to planetary science, to begin in Fall 2023. Candidates should have research interests in planetary atmospheric modeling or some aspect of planetary geology and have links to one or more of our research strengths in atmospheric sciences, geophysics, surface processes, sedimentology, hydrology, crustal processes, isotopic analysis, paleoclimate, or biogeochemistry. This hire is intended to be at the Associate or Full Professor level, but outstanding applicants at the Assistant Professor level with a strong record of publication and external funding will also be considered. Link

MULTIPLE POSITIONS OPEN WITH ENVIROPORENSICS

EnviroForensics is hiring! We're looking for motivated and collaborative individuals to join us as a Project Manager (Indianapolis or Louisville), Staff Professional (Indianapolis), Field Professional (Indianapolis), and Field Technician (Indianapolis). If you're interested in joining our team, visit our Careers and apply today! Click here to apply

ASSISTANT PROFESSOR OF ENVIRONMENTAL & GEOSPATIAL SCIENCES - WESTERN KENTUCKY UNIVERSITY

The Department of Earth, Environmental, & Atmospheric Sciences (EEAS) at Western Kentucky University is seeking highly qualified applicants for a 9-month tenure-track Assistant Professor of Environmental & Geospatial Sciences position beginning August 2023. Learn more here.

INDIANA EHS ADVISOR JOB POSTING

U.S. Compliance: Searching for high performing EHS professionals who want to make a difference. Join our fast-growing EHS compliance firm to help us **CARE** for people, **PROTECT** the environment and **GROW** our clients' business. Link to posting.

METEOROLOGIST POSITIONS AVAILABLE TEGNA

Multiple <u>meteorology positions</u> are open with TEGNA.

BRYAN ENVIRONMENTAL CONSULTANTS

Homewood, IL

SEEKING PART-TIME TO FULL-TIME POSITIONS

- Bachelor's or Master's degree in environmental engineering, civil engineering, geotechnical engineering, geology
- Knowledge of State and Federal environmental regulations a plus
- Experience with Phase I and II Environmental Site assessments a plus
- Strong writing skills
- Proficient in all Microsoft Office applications
- Must have cell phone and computer (laptop)
- Valid Driver's License

POST-DOC OPPORTUNITY - AIR FORCE SCIENCE & TECHNOLOGY FELLOWSHIPS

The National Academies of Sciences, Engineering, and Medicine administers postdoctoral and senior research awards at the U.S. Air Force Research Laboratory (AFRL), the U.S. Air Force Institute of Technology (AFIT), and the U.S. Air Force Academy (USAFA) under the <u>Air Force Science & Technology Fellowship Program (AF STFP)</u>.

Seeking highly qualified candidates who are U.S. citizens and hold, or anticipate earning, a doctorate in a variety of fields of science or engineering.

Application deadline dates (four annual review cycles): February 1, May 1, August 1, November 1
Awardees have the opportunity to:

- Conduct independent research in an area compatible with the interests of the Air Force laboratories
- Devote full-time effort to research and publication
- Access the excellent and often unique Air Force research facilities
- Collaborate with leading scientists and engineers

http://www.eaps.purdue.edu/	Page 6 of 7

- Awardee benefits:
- Base stipend starting at \$76,542; may be higher based on experience
- Health insurance (including dental/vision), relocation benefits, and a professional travel allowance

Applicants should contact prospective AFRL, AFIT and USAFA Research Adviser(s) at the lab(s) prior to the application deadline to discuss their research interests and funding opportunities.

For detailed program information, to search for AFRL, AFIT, and USAFA Research Opportunities, and to contact prospective Research Adviser(s), visit www.nas.edu/afstfp.

PURDUE ENVISION CENTER (UNDER ITAP) RECRUITING EAPS STUDENTS

At the Envision Center looking to recruit EAPS students with background and interest in weather visualization. Details on the job opening can be found here.

POSITIONS AVAILABLE IN METEOROLOGY AND ATMOSPHERIC SCIENCE

View current career listings

AGI GEOSCIENCE JOB CENTER

Check listings here.

GRADIENT CORP MULTIPLE OPPORTUNITIES

Please feel free to contact <u>Qianlai Zhang</u> if you are interested in applying and/or have any questions about the company and the opportunities.

NATIONAL WEATHER SERVICE POSITIONS AVAILABLE

<u>Check here for available positions</u> with the National Weather Service.

NEWSLETTER INFO

IMPORTANT NOTICE ABOUT THIS NEWSLETTER

This newsletter is used as the primary information source for current and upcoming events, announcements, awards, grant opportunities, and other happenings in our department and around campus. Active links to additional information will be provided as needed. Material for inclusion in the newsletter should be submitted to Cheryl Pierce by 5:00pm on Thursday of each week for inclusion in the Monday issue.

For answers to common technology questions and the latest updates from the EAPS Technology Support staff, click here. As an additional resource for information about departmental events, seminars, etc., see our departmental calendar.

http://www.eaps.purdue.edu/	Page 7 of 7