

Department of Earth, Atmospheric, and Planetary Sciences

# EAPS WEEKLY NEWSLETTER

#### October 24, 2022

Facebook Twitter LinkedIn Instagram Website

### EAPS MEETINGS & EVENTS

#### PURDUE CALENDAR 2022-23

EAPS K-12 OUTREACH CALENDAR OF EVENTS

REPORT YOUR OUTREACH AND ENGAGEMENT ACTIVITIES

# NEWS/OPPORTUNITIES AT PURDUE

EVPRP WORKSHOP: MANAGING YOUR AWARD

Good news! You've just been notified that your research project is receiving funding. Now what? The EVPRP, along with Sponsored Program Services, is please to host this informative workshop to address questions related to award management and compliance concerns. Presenters at this informative workshop will discuss Purdue's policies and processes related to the management of awards as well as issues for compliance that all researchers should know. This workshop will be especially helpful to new faculty but all faculty are invited to attend.

Topics to be covered in this session include:

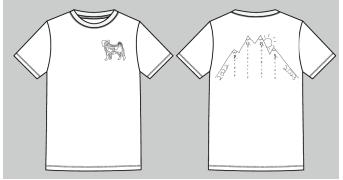
- Award management
- · Project reporting
- · Working with human research subjects
- · Working with animals
- Working with biohazards, rDNA, radiation, lasers, or other controlled substances
- · Grant to protocol reviews
- · Avoiding financial conflicts of interest
- Research information assurance (including confidential information and export control regulations)

This workshop will take place on **November 8<sup>th</sup>**, **11:30AM-1:00PM in Stewart Center**, room 202. While lunch is not provided at this workshop, you are welcome to bring your own. <u>Registration is required</u>.

#### PURDUE UNIVERSITY GEOLOGICAL SOCIETY (PUGS) T-SHIRTS FOR SALE

PUGS, a geological student group at Purdue, is selling t-shirts to raise funds for their student organization. Orders are due Nov. 14, 2022 with a projected cost of \$10 to \$15.

To order your PUGS shirt(s), please contact Austin Rushinsky, <u>arushins@purdue.edu</u>, with your <u>full name</u> <u>and T-shirt size</u>. He will email you back regarding payment and order timeframe once PUGS gets sufficient orders.



#### ASIAN AMERICAN AND ASIAN RESOURCE AND CULTURAL CENTER (AAARCC)

Fall 2022 Programming and AAARCC Speaker Series have been announced. The AAARC plans for weekly events, fun times, speakers, and gatherings. Check it out!

#### 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, <u>click here</u>. A short video about the CIGP/CSE program can be found <u>here</u>. **Spring Application Deadline:** March 1 **Fall Application Deadline:** October 1

#### EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

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

### PUBLICATIONS

- A.C. Morales, J.M. Tomlin, C.P. West, F.A. Rivera-Adorno, B.N. Peterson, S.A.L. Sharpe, Y. Noh, S.M.T. Sendesi, B.E. Boor, J.A. Howarter, R.C. Moffet, S. China, B.T. O'Callahan, P.Z. El-Khoury, A.J. Whelton, A. Laskin. Atmospheric emission of nanoplastics from sewer pipe repairs. *Nature Nanotechnology*, 2022, published online. https://www.nature.com/articles/s41565-022-01219-9
- W. Zhang, H. Yu, A.P.S. Hettiyadura, V. Verma, A. Laskin. Field Evidence for Enhanced Generation of Reactive Oxygen Species in Atmospheric Aerosol Containing Quinoline Components. Atmospheric Environment, 291(15), 119406. (2022).

https://doi.org/10.1016/j.atmosenv.2022.119406

- Molly M. Range, Brian K. Arbic, Brandon C. Johnson, Theodore C. Moore, Vasily Titov, Alistair J. Adcroft, Joseph K. Ansong, Christopher J. Hollis, Jeroen Ritsema, Christopher R. Scotese, He Wang, "The Chicxulub Impact Produced a Powerful Global Tsunami," 04 October 2022 <u>https://agupubs.onlinelibrary.wiley.com/doi/10.1029/20</u> 21AV000627
- Zhao, L., Y. Wang, C. Zhao, X. Dong, Y. Yung, "Compensating biases in cloud radiative and physical properties over the Southern Ocean in CMIP6 climate models", Adv. Atmo. Sci. (2022) <u>https://link.springer.com/article/10.1007/s00</u> <u>376-022-2036-z</u>
- Zhang, Y., J. Fan, M. Shrivastava, C. R. Homeyer, Y. Wang, J. Seinfeld, "Notable Impacts of Wildfires in the Western US on Weather Hazards in the Central US", Proc. Natl Acad. Sci. 119(44) (2022)
- <u>https://www.pnas.org/doi/10.1073/pnas.2207329119</u>

### **OUTREACH NEWS**

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

#### OPPORTUNITIES FOR PARTICIPATING IN OUTREACH PROGRAMS IN THE FALL OF 2022:

#### Hands on Purdue and AP Fridays:

- The Hands-on Purdue program is for middle school and high school classes. These labs provide students with hands-on science labs in the K-12 Outreach Lab in the Brown building on the West Lafayette Campus.
- Web Site

#### Virtual Labs

If you like to help but not necessarily hands on. We create virtual labs and other programs for teachers and students. Examples of <u>virtual labs</u>, <u>virtual student programs</u>, and <u>demos</u>

SUPERHEROES OF SCIENCE

#### Please help us by subscribing and sharing our podcast and our <u>YouTube</u> channel!

On Apple: <u>https://bit.ly/SOS\_apple</u> On Spotify: <u>https://bit.ly/SOS\_spotify</u> On Amazon: <u>https://bit.ly/Superheroes\_amazon</u>

#### Social sites:

TikTok SuperHeroesofScienceTwitterFacebook EAPS OutreachInstagramFacebook Superheroes of ScienceEAPS departmental outreach web page

### MEETINGS/EXPOS/ OPPORTUNITIES OUTSIDE OF PURDUE

#### INDIANA STORMCHASERS CON (INCHASERCON) NOV. 5, 2022

Hendricks Co Convention Center, located at 1900 E Main St, Danville, IN 46122

#### Meeting info

Join us for any weather enthusiast, storm chaser, the 11<sup>th</sup> annual Indiana Storm Chasers Convention! Open to meteorologist, and the public! NOT limited to those in Indiana. <u>Registration is open</u>. One of the <u>Featured Speakers</u> is our very own Robin Tanamachi!

#### **2023 NOAA LAPENTA STUDENT INTERNSHIPS**

Applications are now open for the <u>2023 NOAA</u> <u>Lapenta Student Internship</u>

- Open to undergrad sophomores, juniors, and grad students
  - Internship dates: 6/5/23 8/11/23
- Apply by January 5th

There will be two information sessions for interested students:

#### October 27, 2-4 pm EDT

(http://meet.google.com/eyj-bapt-ocx)

#### December 8, 1:30-3:30 pm EDT

(http://meet.google.com/zzd-upba-wtd).

Lapenta staff members will be on hand to answer questions and provide application guidance.

#### POSTER AND RESEARCH TALK JUDGES NEEDED FOR 2022 FALL EXPO

Currently seeking faculty, staff, post-docs, and graduate students to help in judging posters and research talks both in-person and virtually for the 2022 Fall Expo. many students wanting to take the

opportunity to present in-person are anticipated. Those who are interested and available can indicate their interest using the <u>Qualtrics link</u> on the <u>Judging Registration website</u>. Individuals can sign up to judge in-person posters in morning (10-11:30) or afternoon (1-2:30) sessions on Monday, Nov. 14 in the PMU Ballrooms, research talks on Wednesday, Nov. 16 in STEW 214, and/or virtual presentations that can be judged Nov. 14-17. Note: This is the first time the Fall Expo will be formally judged with awards distributed to top presentations.

#### MASTER OF ARTS IN TEACHING EARTH SCIENCE RESIDENCY PROGRAM ACCEPTING APPLICATIONS

The Master of Arts in Teaching Earth Science Residency Program in the Richard Gilder Graduate School at the American Museum of Natural History in New York City is looking for graduates with Earth and space science backgrounds (geology, mineralogy, paleontology, oceanography, astronomy, environmental geology, and more) who want to make a difference in the world of STEM education. This teaching fellowship combines coursework, mentoring, and real-world experience to prepare Earth and space science graduates for rewarding careers as culturally responsive middle and high school teachers. All degree candidates will receive free tuition, books, and a \$30,000 living stipend. In return, candidates commit to teaching in a high-needs school for three years.

With a sole focus on preparing new Earth science teachers, the program is a full-time, 15-month Master's degree program that takes place at the Museum and in urban partner schools. We seek a student body with a passion for social justice and diverse life and career experiences.

We are currently accepting applicants for the class that will begin in June 2023. Prospective students are encouraged to attend an Information Session or to contact us for more information. Please share this email with your students and colleagues. You can also visit the program website to learn more and/or join our mailing list (make sure to click MAT for Earth Science Grads). For questions, you can contact the program office directly mailto:atmat@amnh.org or (212) 313-7464.

#### INNOVATED SEEKING GRAD STUDENT SUBMISSIONS

The Graduate School is seeking article submissions for the 2022-23 edition of its graduate research magazine, InnovatED! InnovatED is Purdue University's premier graduate research magazine. Its mission is to showcase the influential and inspirational graduate research conducted at our university. Each publication features ten students, selected by Graduate School leadership. Graduate Students:

#### What's Dequired?

What's Required?

 Submissions should be in the form of a popular press piece and should consist of 700 to 800 words. To get an idea of how submissions should be formatted, students can check out the 2021- 22 edition of InnovatED.

Why Submit?

- The student author or co-authors selected will receive an award of \$250 per accepted manuscript, with the cover story receiving \$500.
- Students selected for publication will receive one-on-one coaching focused on communicating complex information to a lay audience.
- Research published in InnovatED is shared widely, reaching readers in more than 45 countries.

The submission deadline for the 2022-23 Edition is November 11. Those interested can learn more and submit here.

#### DOD SMART SCHOLARSHIP APPLY AUG. 1 – DEC. 1

The <u>Science</u>, <u>Mathematics</u>, <u>and Research for</u> <u>Transformation (SMART) Scholarship-for-Service</u>

**Program** is now accepting applications. SMART offers students pursuing a bachelor's, master's, or Ph.D. in science, technology, engineering, and mathematics (STEM) fields an opportunity to receive a full scholarship and guaranteed civilian employment with the Department of Defense upon degree completion. SMART offers students the chance to pursue their passion in STEM while supporting the mission of the Department of Defense.

Eligibility Requirements:

- Be a U.S. Citizen
- Be 18 years of age or older
- Minimum GPA of 3.0 on a 4.0 scale
- Be pursuing a bachelor's, master's, or Ph.D. in one of the <u>21 STEM fields</u>

Application deadline is December 1, 2022. Students can view the <u>SMART videos</u> and visit <u>smartscholarship.org</u> to learn more. <u>Click here</u> to access a flyer and other materials about the program.

#### FORD FOUNDATION FELLOWSHIP PROGRAMS

#### LEARN MORE

Through its program of fellowships, the Ford Foundation seeks to increase the diversity of the nation's college and university faculties by increasing their ethnic and racial diversity, maximize the educational benefits of diversity, and increase the number of professors who can and will use diversity as a resource for enriching the education of all students.

Predoctoral, dissertation, and postdoctoral fellowships are awarded in a national competition administered by the National Academies of Sciences, Engineering, and Medicine on behalf of the Ford Foundation.

Eligibility to apply for a Ford fellowship is limited to:

- All U.S. citizens, U.S. nationals, and U.S. permanent residents (holders of a Permanent Resident Card); individuals granted deferred action status under the Deferred Action for Childhood Arrivals Program;1 Indigenous individuals exercising rights associated with the Jay Treaty of 1794; individuals granted Temporary Protected Status; asylees; and refugees, regardless of race, national origin, religion, gender, age, disability, or sexual orientation;
- Individuals with evidence of superior academic achievement (such as grade point average, class rank, honors or other designations); and
- Individuals committed to a career in teaching and research at the college or university level in the U.S.

#### 2023 Competition Dates

- 2023 Dissertation and Postdoctoral application deadlines: December 8, 2022, 5:00 PM Eastern Standard Time (EST)
- 2023 Predoctoral application deadline: December 15, 2022, 5:00 PM Eastern Standard Time (EST)
- Supplementary Materials deadline for submitted applications January 5, 2023, 5:00 PM Eastern Standard Time (EST)
- Notification of 2023 awards: TBD

EXOPLANETS IN OUR BACKYARD 2 NOVEMBER 2-4, 2022 Albuquerque, New Mexico (location changed)/Virtual Meeting Info

LUNAR POLAR VOLATILES CONFERENCE Houston, TX/Virtual Nov. 2-4, 2022 Meeting Info

20TH MEETING OF THE VENUS EXPLORATION ANALYSIS GROUP (VEXAG)

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

November 7-9, 2022 Albuquerque, New Mexico (location changed)/Virtual Meeting Info

#### **OUTER PLANETS ASSESSMENT GROUP (OPAG)**

MEETING November 15–16, 2022 Houston, TX/Virtual Meeting info

<u>COMMERCIAL LUNAR PAYLOAD SERVICES SURVIVE</u> <u>THE NIGHT TECHNOLOGY WORKSHOP</u> December 6-8, 2022 Cleveland, Ohio/Virtual <u>Meeting Info</u>

> ICES IN THE SOLAR SYSTEM January 9-11, 2023 Montreal, Canada <u>Meeting Info</u>

28th MEETING OF THE NASA SMALL BODIES ASSESSMENT GROUP January 24-26, 2023 Pasedena, CA/Virtual Meeting info

#### VENUS SURFACE AND ATMOSPHERE CONFERENCE

January 30 – February 1, 2023 Boulder, CO/Virtual <u>Meeting info</u>

54TH LUNAR AND PLANETARY SCIENCE CONFERENCE March 13–17, 2023 The Woodlands, TX/Virtual <u>Meeting info</u>

> <u>4TH INTERNATIONAL PLANETARY CAVES</u> <u>CONFERENCE</u> May 4-7, 2023 Haria Municipality, Lanzarote, Spain <u>Meeting info</u>

ASTEROIDS, COMETS, & METEORS CONFERENCE June 18-23, 2023 Flagstaff, AZ Meeting info

### **POSITIONS AVAILABLE-**

## **CAREER OPPORTUNITIES**

#### SENIOR GEOSCIENTIST AT FREEPORT-MCMORAN

Freeport-McMoRan is a leading international mining company with headquarters in Phoenix, Arizona. We operate large, long-lived, geographically diverse assets with significant proven and probable reserves of copper, gold, and molybdenum. The company has a dynamic portfolio of operating, expansion and growth projects in the copper industry. Freeport-McMoRan is one of the world's largest publicly traded copper producers, the world's largest producer of molybdenum and a significant gold producer. We have a long and successful history of conducting our business in a safe, highly efficient and socially-responsible manner. Please note: This position has the possibility to work remotely up to 100% of the time. Apply here.

#### ASSISTANT OR ASSOCIATE PROFESSOR ATMOSPHERIC AND PLANETARY SCIENCES – HAMPTON UNIVERSITY

The Hampton University (HU) Department of Atmospheric and Planetary Sciences (APS) invites nominations and applications for two tenure-track faculty positions at the rank of Assistant or Associate Professor beginning January 2023. Founded in 1868, Hampton University is a leading historically black university (HBCU) located on the Virginia Peninsula in the City of Hampton. It is a privately endowed, co-educational, nonsectarian institution. HU established the Center for Atmospheric Science (CAS) in 1996, which led to creation of the Department of Atmospheric and Planetary Sciences in 2007. APS offers M.S. and Ph.D. degrees in the fields of Atmospheric Science and Planetary Science. This program has established a reputation of excellence in education, outreach and research, with particular emphasis on satellite applications for atmospheric studies. 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.

#### POSTDOCTORAL APPOINTEE AT ARGONNE -WIND ENERGY AND CLIMATE SCIENCES

We have an exciting opportunity for a Postdoctoral Researcher position focusing on Wind Energy and Climate Science at the Argonne National Laboratory. This appointment will be at the Environmental Science Division embedded within our Computer, Environment, and Life Sciences Directorate. The project aims to improve our understanding of factors modulating winds in an offshore wind farm environment, with an ultimate goal of improving their representation in models used for forecasting wind energy. The three-year multi-institutional project titled Observationally driven Resource Assessment with CoupLEd models (ORACLE) is funded by Department of Energy Wind Energy Technology Office. Learn more here.

#### 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</u> <u>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
- 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 Qianlai Zhang if you are interested in applying and/or have any questions about the company and the opportunities.

#### NATIONAL WEATHER SERVICE **POSITIONS AVAILABLE**

Check here for available positions with the National Weather Service.

### **NEWSLETTER INFO**

IMPORTANT NOTICE ABOUT THIS NEWSLETTER

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

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.