

Department of Earth, Atmospheric, and Planetary Sciences

EAPS WEEKLY NEWSLETTER

August 15, 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

PUBLICATIONS

- Michalski, Greg, Adriana E. Larrea Valdivia, Elizabeth Olson, Lisa Welp, Huan Fang, Kento Magara-Gomez, Lino Morales Paredes, Juan Reyes Larico, and Jianghanyang Li. "Identifying NOx Sources in Arequipa, Peru Using Nitrogen Isotopes in Particulate Nitrate." Frontiers in Environmental Science 10 (June 28, 2022): 916738. https://doi.org/10.3389/fenvs.2022.916738.
- van Zalinge, M.E., Mark, D.F., Sparks, R.S.J., Tremblay, M.M., Keller, C.B., Cooper, F.J., and Rust, A., 2022, Timescales for pluton growth, magma chamber formation and super-eruptions. *Nature*, doi:10.1038/s41586-022-04921-9
- Harshvardhan, H., Ferrare, R., Burton, S., Hair, J., Hostetler, C., Harper, D., Cook, A., Fenn, M., Scarino, A.
 J., Chemyakin, E., and Müller, D.: Vertical structure of biomass burning aerosol transported over the southeast Atlantic Ocean, Atmos. Chem. Phys., 22, 9859–9876, https://doi.org/10.5194/acp-22-9859-2022, 2022.
- Menten, S.M., M.M. Sori, and A.M. Bramson (2022), Endogenically sourced volatiles on Charon and other Kuiper Belt Objects, *Nature Communications* 13, <u>https://www.nature.com/articles/s41467-022-31846-8</u>.

NEWS/OPPORTUNITIES AT PURDUE



YOU ARE INVITED TO PURDUE EAPS ANNUAL WELCOME BACK TO SCHOOL PICNIC!

Date: Friday, August 26, 2022 Start Time: 4pm – dusk Eating: 5/pm Location: Happy Hollow Park – Shelter #1

EAPS FACULTY AND STAFF RETREAT Friday - August 19, 2022 9:00 AM – no later than 5:00 PM

101 Foundry Dr., West Lafayette, IN South off West State Street (Foundry Dr. is between Airport Road and MacArthur Drive). Free parking at gravel lot off Nimitz Drive/Gates Road by the Martin Jischke Dr roundabout.

EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

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

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>.

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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. <u>Check it out!</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:

Purdue Homecoming.

09/24/2022

The College of Science will have a tent and we will be doing hands-on activities.

Wonders on the Wabash:

- Volunteers to help be in the raft with students. Responsibilities include ensuring the safety of the students in your raft, making sure your students always adhere to the rules, staying with your students, and keeping your raft moving and on schedule.
- Dates: 8:30am 3:00pm
 - o Wed. Sept. 14th
 - o Thurs. Sept. 15th
 - o Tues. Sept. 20th
 - o Wed. Sept. 21st
 - o Thurs. Sept. 22nd
 - Yes, you can just help one day or multiple days!
- <u>Register here</u>
 - NOTE you cannot wait until the last minute to register. You have to send in the background check form prior to the event.

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.
- Dates:
- 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 OUTSIDE OF PURDUE

CICAWG FIELD TRIP OPPORTUNITY - SAT SEPT 24

We are excited to announce our next <u>CICAWG</u> event, a field trip on Saturday, September 24 from 1pm - 4pm led by Indiana State Geologist, Todd Thompson! Join us for a chance to learn about the Salem limestone and ask Todd all of your burning questions about Indiana geology! The field trip will start at Cascades Park, Bloomington, and have three stops in the Salem Limestone including stops at Reed Quarry, Crown Quarry, and a world-renowned tidalite exposed in a local road cut. The field trip is open to all who are interested - bring your friends and family to learn more about Indiana geology! Email us at cicawg@gmail.com or keep an eye on our website for more details.

MIDWEST STUDENT CONFERENCE ON ATMOSPHERIC <u>RESEARCH | ATMOSPHERIC SCIENCES AT ILLINOIS</u> MSCAR Conference: 25-26 September 2021

<u>MSCAR conterence</u>: 25-26 September 2021 <u>MSCAR will be a held as a hybrid of in-person</u> <u>attendance at the University of Illinois Urbana-</u> <u>Champaign and everywhere virtually</u>. Though not mandatory, wearing of face masks for in-person attendees is STRONGLY ENCOURAGED. Submit an Abstract & Register Today!

<u>Click here to submit an abstract!</u> Click here to register!

Upcoming Dates & Deadlines

- Abstract Submission Deadline for Talks and Posters: 9 September 2022 at 11:59 PM CT
- Registration Deadline: 23 September 2022 at 4 PM CT
- MSCAR Conference Dates: 1-2 Oct 2022

<u>Check out info on our keynote speakers,</u> workshops and other events!

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

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
- Online Application Portal Opens: September 6, 2022
- 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

13TH PLANETARY CRATER CONSORTIUM MEETING

August 10–12, 2022 Southwest Research Institute Boulder, CO/Virtual <u>Meeting info</u>

85TH ANNUAL MEETING OF THE METEORITICAL SOCIETY August 14–19, 2022, Glasgow, Scotland Meeting Info

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

ANNUAL MEETING OF THE LUNAR EXPLORATION ANALYSIS GROUP August 23–25, 2022

Johns Hopkins University Applied Physics Laboratory, Laurel, MD/Virtual Meeting info

EXTRATERRESTRIAL MATERIALS ANALYSIS GROUP (ExMAG) FALL MEETING

October 12–13, 2022 Virtual

Meeting Info

OCEAN WORLD ANALOG FIELD SITE ASSESSMENT WORKSHOP October 13–15, 2022 Denver, Colorado/Virtual Meeting info

> SMD BRIDGE PROGRAM WORKSHOP October 17–21, 2022 Virtual

Meeting info

APOLLO 17 – ANGSA WORKSHOP

October 26–28, 2022 Lunar Planetary Institute Houston, Texas <u>Meeting info</u>

EXOPLANETS IN OUR BACKYARD 2 NOVEMBER 2-4, 2022 Pasadena, CA/Virtual Meeting Info

LUNAR POLAR VOLATILES CONFERENCE Houston, TX/Virtual Meeting Info Abstract submission deadline: August 25, 2022,

5:00 p.m. <u>U.S. Central Daylight Time</u>

20TH MEETING OF THE VENUS EXPLORATION

ANALYSIS GROUP (VEXAG) November 7-9, 2022 Pasadena, California/Virtual <u>Meeting Info</u>

ICES IN THE SOLAR SYSTEM January 9-11, 2023 Montreal, Canada Meeting Info 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 Meeting info

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

POSITIONS AVAILABLE-CAREER OPPORTUNITIES

PROJECT MANAGER – NASA APPLICATIONS DUE BY 8/15/2022

NASA and the European Space Agency (ESA) are working together to bring samples of Martian material to Earth for scientific study. Mars 2020 and its Perseverance rover is the first mission of this international interplanetary campaign; currently collecting samples to cache on Mars for future retrieval. Two additional missions are planned for the Mars Sample Return campaign to follow the Mars 2020 mission to bring samples to Earth in 2033. These samples will be important scientific evidence of a place, other than Earth, known to be friendly to life in the past to answer a key question: did life ever exist on Mars? The Role - NASA is searching for a hands-on Project Manager responsible for the overall technical and programmatic direction of the Mars Sample Receiving Project (SRP). This project is the final project of the Mars Sample Return campaign once samples are brought to Earth and includes all aspects of post-flight activities including spacecraft and sample recovery operations after Earth entry; design, development, and operation of a BSL-4 equivalent containment facility for sample safety assessment; enabling and administering mission sample science; and the curation of the Martian samples for study and longterm storage. The Project Manager will work with cross-Agency and international teams of scientists, engineers, architects, technicians, vendors and

international partners to develop plans, identify risks, and manage performance and schedule within budget to achieve project goals. They will partner closely with JSC, JPL, NASA HQ, and ESA leaders to proactively define and manage project content as well as determine or participate in determining the scope of each life cycle phase and develop the products for major reviews and decisions.

METEOROLOGIST POSITIONS AVAILABLE TEGNA

Multiple meteorology positions 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 Air Force Science & Technology Fellowship Program (AF STFP). 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

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- 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 <u>here</u>.

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 <u>Cheryl Pierce</u> by 5:00pm on Thursday of each week for inclusion in the Monday issue.

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

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