EAPS WEEKLY NEWSLETTER

October 4, 2021

Facebook Twitter LinkedIn Instagram Website

EAPS MEETINGS & EVENTS

Faculty Meetings (3:30-5pm, Executive Committee 3-3:30pm)

- 26 October
- 9 November
- 7 December

PURDUE CALENDAR 2021-22

EAPS K-12 OUTREACH CALENDAR OF EVENTS

REPORT YOUR OUTREACH AND ENGAGEMENT ACTIVITIES

OUTREACH NEWS

Did you know, faculty use the Superheroes of Science <u>YouTube</u> channel for broader impacts on their grants and in their instruction? The channel has had over 10,000 views this year so far. Help us continue to grow the channel and increase the impact by subscribing and sharing videos.

The Purdue University Superheroes of Science Podcast is on most podcast players as well as YouTube!

Social sites:

TikTok SuperHeroesofScience
Facebook EAPS Outreach
Facebook Superheroes of Science
Twitter EAPS departmental outreach web page

WANT TO HELP OUTREACH? Write a favorable review on the Superheroes of Science podcast. This helps their ratings go up and helps them become more visible in various podcast platforms.

DEPARTMENTAL NEWS AND OPPORTUNITIES

INDIANA STORM CHASER'S CONVENTION

This year is our 10th anniversary of the convention and we have a two-day event set for Sat.

November 13 - Sun. November 14, 2021 in Danville, Indiana. We have already received interest from students from around the region about attending and wanted to reach out to some of the universities around the area to let them know there is a discount price for students! This is a great opportunity for students to not only learn, but network with others in the field of meteorology. Here is the lineup of speakers we have for this year's event.

- Reed Timmer- Meteorologist/Storm Chaser
- Brian Wilkes Chief Meteorologist at FOX 59 Indianapolis
- Sam Lashley- Warning Coordination Meteorologist at NWS Indy
- Dr. Victor Gensini Associate Professor at NIU, Meteorologist, Storm Chaser
- Liz Szewczyk Meteorologist at WPTA Ft. Wayne, IN
- Jay Farlow 30 Year Storm Spotter & HAM Radio Operator
- Adam Lucio Veteran Storm Chaser
- Simon Brewer Meteorologist & Extreme Weather Journalist

If you have any questions or would like to see more about the event please <u>visit</u> or feel free to email us at <u>inchasercon@gmail.com</u>.

LUNAR SURFACE SCIENCE WORKSHOP

Landing Sites and Capabilities for Future CLPS Deliveries

November 18, 2021, Virtual

This LSSW session will solicit input from the community on high-priority landing sites for upcoming CLPS deliveries. The overall goal of this session is to build upon previously identified landing sites of high scientific value for near-term CLPS deliveries and identify new strategic targets. Science conducted at these sites should answer outstanding science questions as outlined in the Planetary Decadal Survey and key community documents (e.g., the Artemis III Science Definition Team Report, 2018 NASA Strategic Plan, the Scientific Context for the Exploration of the Moon,

http://www.eaps.purdue.edu/	Page 1 of 6

LEAG Advancing Science of the Moon Strategic Action Team Report, etc.).

Call for Abstracts Abstract submission deadline -- October 8, 2021, 5:00 p.m. U.S. Central Daylight Time (GMT -5)

Abstracts are solicited for presentations and posters describing target areas on the Moon for insitu science, network science, and sample return missions. Concepts that require or utilize campaign science (i.e., multiple landings), especially those that build up to crewed Artemis landings and beyond, may also be described. Registration deadline: November 15, 2021 Registration fees are not being collected for this LSSW virtual session, but registration is required to continue receiving e-mail updates. Registered attendees will receive an e-mail from Houston Meeting Info with connection information.

DECADAL SURVEY ON BIOLOGICAL & PHYSICAL SCIENCES RESEARCH IN SPACE 2023–2032

The Decadal Survey on Biological and Physical Sciences Research in Space 2023–2032 is now accepting white papers. White papers can either be "topical" and focus on a single research area, scientific investigation, or experiment, or be for "research campaigns" that address broad or large-scale goals and can span multiple topics or research disciplines. Of particular interest is "transformative research" for ideas, discoveries, or tools that radically change our understanding of an important existing scientific or engineering concept or that lead to the creation of a new paradigm or field of science or engineering.

The National Academies of Science, Engineering and Medicine (NASEM) has released this call for white papers and the white papers will contribute to the development of their report for the next Decadal Survey on Life and Physical Sciences Research in Space 2023-2032. These white papers serve as the input from the scientific community into the decadal survey. The report will be used by the Science Mission Directorate of the National Aeronautics and Space Administration (NASA) to provide the framework for the vision, priorities, and strategic plan and budget for NASA's research efforts in the area of biological and physical sciences in reduced gravity environments.

The <u>call for 2- to 5-page white papers</u> have the following due dates:

• "Topical" white papers should be received by **October 31, 2021**.

• "Research Campaign" white papers should be received by **December 23, 2021**.

Information about past microgravity materials science research conducted aboard the International Space Station (ISS) may be found at A Researcher's Guide to Microgravity Materials Research.

The most recent decadal survey was entitled "Recapturing a Future for Space Exploration: Life and Physical Sciences Research for a New Era," which was subsequently followed by "A Midterm Assessment of Implementation of the Decadal Survey on Life and Physical Sciences Research at NASA."

LOW-COST SCIENCE MISSION CONCEPTS FOR MARS EXPLORATION - CALL FOR ABSTRACTS

January 11-13, 2022

The Low-Cost Science Mission Concepts for Mars Exploration workshop is scheduled for January 11-13, 2022, in the Southern California area (final location to be announced soon). Emerging small spacecraft capabilities and innovative new mission concepts offer opportunities for compelling science discoveries at Mars at unprecedented low costs. NASA's Mars Exploration Program invites the community to this three-day workshop to explore this potential new class of Mars missions from multiple perspectives. In this forum, Mars scientists, engineers, technologists, and industry representatives will share ideas and approaches for low-cost exploration of the Red Planet. Here, "low-cost" equates to mission costs that fall well below the current Discovery Program cost cap. The recent Mars Architecture Strategy Working Group suggested that small spacecraft missions in the \$100-\$300M cost range (including delivery) may offer a sweet spot in terms of achievable science per unit cost. Missions in this class could represent an important new program element in a future balanced portfolio of Mars missions.

Abstract submission deadline — October 28, 2021, 5:00 p.m. U.S. Central Daylight Time (GMT -5)

SCHOLARSHIP OPPORTUNITY - SWANA

SWANA, a solid waste disposal organization has statewide scholarships available to college students. Applicants must be student members of the organization but membership is free. For more information.

http://www.eaps.purdue.edu/	Page 2 of 6

EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

If you are interested in an EAPS grad research opportunity, click here 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, click here. A short video about the CIGP/CSE program can be found here.

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

UNIVERSITY NEWS

INFORMATION ABOUT UNDERGRADUATE RESEARCH FOR 2021-22

Learn about opportunities with undergraduate research <u>here</u>.

2021-22 INTERNATIONAL PROGRAMS CURRICULUM GRANTS

These grants are meant to encourage the development of online courses or projects with international partners that intentionally plan for intercultural learning outcomes. Learn more.

COVID VACCINES

<u>Purdue is offering COVID vaccines</u>. Have you been fully vaccinated? Purdue requests that you <u>submit documentation to Protect Purdue Health Center</u>.

PURDUE WRITING LAB SCHEDULE

<u>Workshops</u> are from 2:30-3:30 PM, in HEAV 220, on the dates below. In the event that a workshop needs to be rescheduled, the listed backup dates will be followed. To sign up now, use the Group Programs tab in MyWCO using the <u>online scheduler</u>.

- Citing and Documenting Sources October 20- Style guides and citations can be tricky to navigate. At this workshop you will learn how to properly cite and document sources in your writing.
- Strategies for Self-revision and Self-editing
 November 10- Join us to learn strategies for revising and editing your academic, professional, and personal writing.

Grad Writers' Rooms

Writers' Rooms for the Fall 2021 sessions will be held virtually from 3:00 p.m. - 5:00 p.m. on the following days. This is a great opportunity for graduate students to make progress on their dissertations or thesis. Sign up will be available starting next week in MyWCO using the online scheduler.

- October 6
- October 20
- November 3
- November 17
- December 1

English Conversation Groups

If you are a Purdue University student or scholar whose first language is not English, the Writing Lab's conversation groups are a terrific way to improve your fluency and expand your vocabulary. Sign up will be available starting September 7th in MyWCO using the online scheduler.

- Mondays 2:30 p.m. 3:30 p.m.
- Tuesdays 2:30 p.m. 3:30 p.m.
- Virtual Wednesdays 2:30 p.m. 3:30 p.m.
- Thursdays 2:30 p.m. 3:30 p.m.
- Fridays 2:30 p.m. 3:30 p.m.

POSITIONS AVAILABLE-CAREER OPPORTUNITIES

FULL TIME METEOROLOGIST WITH KDRV-TV

Full-time newsroom opening for an on-air meteorologist. Will prepare and present the forecast for weekday morning and midday newscasts. This is a great opportunity for a meteorologist looking to develop his or her forecasting skills in a dynamic weather environment with ocean beaches, mountain ranges, and scenic river valleys as microclimates in our coverage area. For more information, contact Mark Hatfield, former News Director,

http://www.eaps.purdue.edu/	Page 3 of 6

turned General Manager for KDRV-TV, the Allen Media Broadcasting-owned ABC affiliate in Medford, Oregon: markhatfield@kdrv.com Recent grads or students soon to be graduating are encouraged to apply.

POSTDOCTORAL RESEARCH ASSOCIATE - TEXAS A&M

Texas A&M is looking for a postdoc starting in the January-May 2022 time period. This opportunity is part of the TAMU component of the DOE TRACER project. While there is an aerosol-cloud interaction component, they are particularly looking for someone with experience or interests in idealized modeling of convection and/or radar analysis. They are also looking for someone that can take a leading role in field deployments (mobile radiosonde launches) in summer 2022. LEARN MORE

ASST PROFESSOR, SYNOPTIC METEOROLOGY THE OHIO STATE UNIVERSITY

The Department of Geography in the College of Arts and Sciences at The Ohio State University invites applications for a tenure track position at the assistant professor level, commencing autumn semester 2022. We seek a scholar with research interests in synoptic meteorology and weather forecasting. Our undergraduate Atmospheric Science Program has >70 majors and has grown significantly in recent years. This position will support our Atmospheric Sciences Program at the undergraduate (BS) and graduate (MS, PhD) levels. The successful candidate will teach synoptic meteorology and forecasting courses at the undergraduate level and graduate classes in atmospheric science that are commensurate with their research interests. We are particularly interested in candidates whose research focuses on mid-latitude weather systems, numerical weather prediction, radar meteorology, or severe weather. The successful candidate will be expected to attract external funding and have a demonstrated commitment to excellence in teaching. MORE INFO

Inquiries: Dr. Darla Munroe, munroe.9@osu.edu

POSTDOC IN STABLE ISOTOPES AND REACTION KINETICS – INDIANA UNIVERSITY

<u>Applications</u> are invited for a Postdoctoral Research Associate at Indiana University, USA.

The project aims using non-traditional stable isotopes to measure reaction rates and understand the mechanisms of mineral-aqueous solution reactions. See our recent publications for details (Zhu et al., 2016, Chemical Geology; Zhu et al., 2020, 2021, GCA). The project will employ a combined experimental, analytical, theoretical, and modeling approach.

The successful candidate will hold a Ph.D. in earth sciences or a closely related field. A strong background in either stable isotopes or kinetics and thermodynamics is required. Experience performing aqueous geochemical experiments, and using geochemical equilibrium and kinetics models is highly desirable.

Salary is competitive and includes fringe benefits. The initial appointment will be for one year, with the expectation of renewable for another two years, subject to performance and funding availability. The candidate will be based on the Bloomington campus of Indiana University, and will have access to an extensive suite of analytical tools, including MC-ICP-MS, TIMS, ICP-OES, ICP-MS, FESEM, and FETEM. Indiana University has some of the most powerful high-performance computing facilities in the nation that are free for faculty and students to use. The position requires excellent communication and interpersonal skills, intellectual curiosity, and a willingness to explore unfamiliar aspects of earth sciences.

ASSISTANT PROFESSOR IN LITHOSPHERE DYNAMICS - USC

The Department of Earth Sciences, University of Southern California (USC), invites applications for a tenure track Assistant Professorship in lithospheric geoscience, to complement existing strengths in thermochronology, surface processes, and earthquake science. We seek an outstanding emerging scholar poised to tackle the complexity of lithospheric deformation processes from new perspectives, including a combination of field observations with recently developed analytical techniques and integration across traditional subdisciplines. The successful candidate will be expected to sustain and further develop the undergraduate and graduate curricula in solid-Earth geoscience in areas potentially including, but not limited to, field methods, structural geology, petrology, rock mechanics, and/or geochronology.

Applicants should have a Ph.D. (or equivalent) and the demonstrated ability to conduct

http://www.eaps.purdue.edu/	Page 4 of 6

compelling independent research and to attract external research funding. The review of applications will begin on November 15, 2021.

Applicants should submit a curriculum vitae, a cover letter, the contact information for 3-5 references, and research, teaching, and DEI statements, each not exceeding 3 pages.

ASSISTANT PROFESSSOR – DEPT OF GEOSCIENCES – PRINCETON UNIVERSITY

The Department of Geosciences at Princeton University is seeking applications for a tenure-track assistant professor faculty position in geology, broadly defined. Possible fields of specialty include, but are not limited to, petrology, geochemistry, volcanology, tectonics, glaciology, geomorphology, sedimentology, Earth history, and paleontology. We are particularly interested in interdisciplinary scientists who could interact productively with existing faculty across the department.

Applicants should send a curriculum vitae, including a publication list, statements of research and teaching interests, a separate statement outlining how they see themselves contributing to our mission of building a diverse and inclusive discipline, and contact information for three references. Evaluation of applications will begin as they arrive; for fullest consideration, apply by December 1, 2021, but applications will be accepted until the position is filled.

General information about applying to Princeton and how to self-identify.

OPEN POSITIONS AT UTAH STATE

Assistant Professor, Climate Resiliency Extension **Specialist**- We seek an individual with expertise in climate mitigation, adaptation, and resilience science alongside a depth of knowledge in any related natural resource management field (e.g., water resources and conservation, water quality, aquatic ecology, fish ecology, fisheries management, plant, riparian, and wetland management, biogeochemistry). Successful candidates must have a commitment to stakeholder engagement, co-production of knowledge, collaborative decision-making, teamwork, and communication, as well as strong interpersonal skills. We are particularly interested in innovative candidates committed to helping natural resource managers adapt to and mitigate climate change impacts. The primary clientele for this Extension Specialist will be local, federal, and

state agency staff and/or industry partners charged with managing natural resources in Utah and throughout the Intermountain West. The position consists of 60% extension, 30% research, and 10% service, with an anticipated start date of August 1, 2022.

Assistant Professor, Climate Data Analysis- We seek an engaging educator and researcher with the technical proficiency and broader conceptual awareness of climate science who can help position and adapt watershed science research and management within the realities of the climate emergency. Other valuable characteristics include experience working with large, multi-dimensional data (e.g., netCDF, HDF, GRIB, TIFF), climate model outputs (i.e., CMIP GCMs, downscaled data), translating gridded climate data into other formats for hydroclimate and ecological analysis, uncertainty and risk quantification, meteorological station time series data, and/or making climate data tools for policymakers and decisionmakers. Other preferred characteristics include proficiency in Python and/or R, strong data visualization and communication skills, and experience leading collaborative efforts. The position consists of 60% teaching, 30% research, and 10% service, with an anticipated start date of August 1, 2022.

<u>POSITIONS AVAILABLE –</u> ARGONE NATIONAL LABORATORY

<u>Postdoctoral Appointee – Al and Climate Science</u>

<u>Postdoctoral Appointee - Numerical</u> <u>Modeler/Regional Climate</u>

POSITIONS AVAILABLE IN METEOROLOGY AND ATMOSPHERIC SCIENCE

<u>View current career listings</u>

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

http://www.eaps.purdue.edu/	Page 5 of 6

campus. Active links to additional information will be provided as needed. Material for inclusion in the newsletter should be submitted to Cheryl Pierce (pierce81@purdue.edu) 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, <u>click here</u>. As an additional resource for information about departmental events, seminars, etc., see our <u>departmental calendar</u>.

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