

EAPS WEEKLY NEWSLETTER

17 August 2020

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MESSAGE FROM EAPS DEPARTMENT HEAD

2020 has presented our Department and University with not one but two challenges. First, the ongoing COVID pandemic and, more recently, the continuing racial issues and discrimination we as a country need to address. Neither of these follows the format of a TV Sitcom with an easy solution in



EAPS MEETINGS & EVENTS

EAPS DEPARTMENT PHOTOS SCHEDULED

Those individuals who would like their photo taken or would like to have your photo updated, please stop by **room 2201 on Tuesday, August 18 at 2:00pm.** Social distancing will be practiced.

EAPS K-12 OUTREACH CALENDAR OF EVENTS

http://www.eaps.purdue.edu/outreach/Outreach_News.html

REPORT YOUR OUTREACH AND ENGAGEMENT ACTIVITIES

<http://bit.ly/EAPSOut>

30 minutes. Instead, we will be working together to solve both problems, more than likely for years to come.

As we start the fall semester, I want to express my sincere thanks to everyone in the Department for the hard work they have put in to addressing both problems. We've spent a great deal of time planning a course of action to increase inclusion and improve our diversity while simultaneously revamping our teaching for both in person and online options.

~Dr. Daniel J. Cziczo

EAPS NEW PUBLICATIONS

Liu, L., Zhuang, Q., Oh, Y., Shurpali, N. J., Kim, S., & Poulter, B. (2020). Uncertainty quantification of global net methane emissions from terrestrial ecosystems using a mechanistically based biogeochemistry model. *Journal of Geophysical Research: Biogeosciences*, 125, e2019JG005428. <https://doi.org/10.1029/2019JG005428.PDF>

Guo, M., Q. Zhuang, Z. Tan, N. Shurpali, S. Juutinen, P. Kortelainen and P. Martikainen, 2020, Rising methane emissions from boreal lakes due to increasing ice-free days, *Environ. Res. Lett.* 15 064008. <https://doi.org/10.1088/1748-9326/ab8254.PDF>

Wang S, Adhikari K, **Zhuang Q,** Yang Z, Jin X, Wang Q, Bian Z. 2020. An improved similarity-based approach to predicting and mapping soil organic carbon and soil total nitrogen in a coastal region of northeastern China. *PeerJ* 8:e9126 <http://doi.org/10.7717/peerj.9126.PDF>

Yu, T. and **Zhuang, Q.:** Modeling biological nitrogen fixation in global natural terrestrial ecosystems, *Biogeosciences*, 17, 3643–3657, <https://doi.org/10.5194/bg-17-3643-2020>, 2020.

Rocadenbosch, F., R. Barragan, S. J. Frasier, J. Waldinger, D. D. Turner, **R. L. Tanamachi,** and **D. T. Dawson II,** 2020: Ceilometer Based Rain-Rate Estimation: a Case-Study, Comparison with S-Band Radar and Disdrometer Retrievals in the Context of VORTEX-SE. *IEEE-TGRS*, <https://doi.org/10.1109/TGRS.2020.2984458>.

Tanamachi, R. L., D. T. Dawson, and L. C. Parker, 2020: Students of Purdue Observing Tornadoic Thunderstorms for Research (SPOTTR): A severe storms field work course at Purdue University. *Bull. Amer. Meteor. Soc.*, **101**, E847–E868, <https://doi.org/10.1175/BAMS-D-19-0025.1>.

Sun, W.Y., and , O. M. Sun, 2020: Inertia and diurnal oscillations of Ekman layers in atmosphere and ocean. *Dynamics of Atmosphere and Oceans*, 90, (2020),101144.

Haines, P., **W, Y, Sun,** S. H. Chen, W. R. Hsu, and M. E. Hsieh, 2019: NTU/PU model simulations and observed flow over mountain. *Terr. Atmos. Ocean. Sci.* 30, 171-184.

Sun, W.Y., and O. M. Sun, 2019: Revisiting the parcel method and CAPE, *Dynamics of Atmospheres and Oceans* 86, 134-152.

Lin, M-Y, **W. Y. Sun,** M-D. Chiou, C-Y. Chen, H.-Y. Cheng, and C.-H. Chen, 2019: Development and evaluation of a storm surge warning system in Taiwan. *Ocean Dynamics*. <https://doi.org/10.1007/s10236-018-1179-z>.

Wang S, Adhikari K, **Zhuang Q,** Yang Z, Jin X, Wang Q, Bian Z. 2020. An improved similarity-based approach to predicting and mapping soil organic carbon and soil total nitrogen in a coastal region of northeastern China. *PeerJ* 8:e9126 <http://doi.org/10.7717/peerj.9126>

Prince, B. S., Magnuson, M. P., **Chaves, L. C., Thompson, M. S.,** & Loeffler, M. J. (2020). Space weathering of FeS induced via pulsed laser irradiation. *Journal of Geophysical Research: Planets*, 125, e2019JE006242. <https://doi.org/10.1029/2019JE006242>.

PROFESSOR LAURA PYRAK-NOLTE - REGINAL FESSENDEN AWARD RECIPIENT

Congratulations to Laura Pyrak-Nolte on being the recipient of the Reginald Fessenden Award of the Society of Exploration Geophysicists. The Reginald Fessenden Award recognizes a person who has made a specific technical contribution to exploration geophysics which merits special recognition. Well done and well deserved Professor Pyrak-Nolte. Congratulations!

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EAPS ALUMNI FOUNDERS SIGNATURE PROGRAMS RECEIVES AMAZING RECOGNITION

Angel Torres- Valcárcel (EAPS PhD 2013) <https://www.linkedin.com/in/angel-torres-valcárcel-719434167/>. One of our EAPS alumni founded an environment / sustainability nonprofit in Puerto Rico, and one of its signature programs is a Sustainable Schools Program.

This program just received an amazing recognition "**A National Energy Globe Award**" – this is a worldwide recognition for sustainability efforts: <https://www.energyglobe.info/national/winner/puertorico>.

OUTREACH NEWS

If you know an educator, let them know we have made and have been updating the College of Science's e-learning page. We have created worksheets to go along with many of our Superheroes of Science podcasts, put together a list of online resources (arranged by content), created Virtual Tours, and posted videos of various content demos. These resources are being updated regularly! <http://bit.ly/PUElearning>
Speaking of resources, we have been working to create virtual tours of the departmental wall wraps and other campus resources. Check out the current draft of the Gold Mine display: <https://bit.ly/EAPSGold>

The Purdue University Superheroes of Science Podcast is on most podcast players as well as YouTube! Check out some of the latest episodes including interviews with Jeffery Lucas, Christopher Roemmele, Jani Sparks, and Birgit Kaufmann. EAPS K-12 Outreach is on Twitter (@Purdue SOS), YouTube (Superheroes of Science), Facebook (EAPS.out), Pinterest, and most podcast players as Purdue Superheroes of Science.



STUDENT NEWS

AGU STUDENT/EARLY CAREER GRANTS/FELLOWSHIPS

If you know someone who is attending #AGU20 online experience who would appreciate some financial assistance, please recommend they apply for these fellowships/grants.

Some will cover technology needs such as Wi-Fi, laptops and other technology accessories while others will pay for lost wages, childcare and other needs.

Applications are due 25 August. All amounts are in USD.

- **Fall Meeting Virtual Student Travel Grant** for students to receive \$1,000, with \$500 for #AGU20-related expenses and \$500 for educational expenses: <https://www.agu.org/Learn-and-Develop/Learn/Travel-Research-Grants/Fall-Meeting-General-STG>
- Berkner Fellowship is for those 35 or younger from [low/low-middle income countries](#) who are attending #AGU20. Berkner winners will receive \$2,500 USD, with \$1,000 USD to cover Fall Meeting-related expenses and \$1,500 USA to cover educational expenses <https://www.agu.org/Learn-and-Develop/Learn/Travel-Research-Grants/Berkner>
- **Miller Scholarship** for undergraduate and graduate students in geo-environmental sciences or engineering for \$1,500: <https://www.agu.org/Learn-and-Develop/Learn/Travel-Research-Grants/David-S-Miller-Young-Scientist-Scholarship>
- **Lumley Scholarship** for high school and undergraduate students who are interested in environmental science and energy. Winners will receive \$500 to participate in #AGU20, which includes purchasing/renting technology, transportation, dependent care, lost wages, etc. AND \$1,000 college scholarship: <https://www.agu.org/Learn-and-Develop/Learn/Travel-Research-Grants/David-E-Lumley-young-scientist-scholarship>
- **Basu Innovation Scholar** for early career scientist/recent Ph.D. graduate in space physics

and aeronomy to receive up to \$2,000 for #AGU20: <https://www.agu.org/Learn-and-Develop/Learn/Travel-Research-Grants/Basu-Innovation-Scholar-Grant>

ATMOSPHERE 2021 YOUNG INVESTIGATOR AWARD

We are pleased to announce that the 2021 Atmosphere Young Investigator Award (<https://www.mdpi.com/journal/atmosphere/awards>) is now open for nominations. The winner will be awarded 2000 CHF.

Eligibility Criteria

- 1) Ground-breaking contribution to the advancement of atmosphere studies;
- 2) Be planning an investigative career in atmosphere;
- 3) Age under 35 years (this is not a strict limitation; if you are 35 or over, you are welcome to contact us and we will happily review your request).

Application Materials

- 1) An up-to-date full Curriculum Vitae including publication history, scientific presentations, research achievements, and prior recognition of work (awards and funding);
- 2) A short essay highlighting your research achievements and impact in no more than 500 words;
- 3) Nomination letters from two recognized scientists in the field of atmosphere;
- 4) Ph.D. certificate.

We welcome nominations for this award until 30 November 2020. Application materials should be submitted via the link:

<https://www.mdpi.com/journal/atmosphere/awards/submit/931>. The winner will be announced on 30 December 2020. We would also be grateful if you could share this information with your colleagues and students. If you have any questions, please feel free to contact the Atmosphere Editorial Office.

We look forward to receiving your nominations. Atmosphere Editorial Office

CLIMATE AND EXTREME WEATHER OPPORTUNITIES

Central Michigan University is currently seeking two Ph.D. students to pursue an opportunity at the

climate/weather extreme interface at the Department of Earth and Atmospheric Sciences. These positions are supported by two grant funded four-year research assistantships as part of a project to further our understanding the processes that lead to severe convection around the globe and the links of these phenomena to a changing climate.

This project is all about the connection of scales, and working with large reanalysis and climate model datasets to explore favorable environmental conditions and our ability to resolve these environments. This position would suit students with either an interest in the impacts of climate change on extremes, or a more fundamental interest into the links between processes that lead to favorable severe storm environments and larger scales. In either direction, an interest in statistics and large datasets is a plus.

Start date for the position is flexible, with a start anywhere between Fall 2020 and 2021. Ideally, the applicants would have an M.S. in meteorology, atmospheric sciences, environmental data science or climate science, but I would also consider exceptional bachelors level applicants.

If you would like more information or know of interested parties please feel free to send an email to me, John T. Allen (allen4jt@cmich.edu). Details about our group at CMU can be found at the following link:

http://people.cst.cmich.edu/allen4jt/allen_home_page.html



CALL THE PROTECT PURDUE HEALTH CENTER IF YOU ARE EXPERIENCING SYMPTOMS OF COVID-19

If you are exhibiting symptoms of COVID-19, all Purdue students, faculty members and staff should immediately contact the Protect Purdue Health Center 24/7 at 765-496-INFO (4636) or toll-free at 833-571-1043 and pressing option "1." A call tree option will be available after hours to connect individuals to the Protect Purdue Health Center

case manager as well as the option to leave a voicemail. Individuals experiencing an emergency should always call 911. The Centers for Disease Control and Prevention provides a [list of symptoms here](#).

TIME FOR 2020-21 FACULTY/STAFF PARKING PERMIT RENEWALS

Annual parking permits are again offered for 2020-21, and the following additional parking options are available for faculty and staff who are continuing remote or hybrid schedules:

- **Monthly “A” or “B” Parking Permit**

Faculty or staff may purchase a temporary “A” or “B” parking permit that is valid for one month but may not be used in the Grant Street or Harrison Street parking garages. Faculty and staff can choose the beginning date for the permit during the purchasing process, and it will be valid for one month from that date. The effective dates of the permit will be displayed in the online parking portal. The costs are \$30 per month for “A” permits and \$15 per month for “B” permits. These virtual permits may be purchased through the Purdue Parking Portal at <https://purdue.t2hosted.com>.

- **Daily Parking Permit**

Faculty or staff may purchase a \$5 one-day parking permit to use in any “A” permit space, except those in the Grant Street or Harrison Street parking garages. These can be purchased through the Purdue Parking Portal at <https://purdue.t2hosted.com>.

- **Hourly Parking**

For visits to campus that are less than a full day, hourly parking may be available. This is offered in the Grant Street and Harrison Street parking garages and at [metered spaces at various locations around campus](#). Costs range from \$1 per hour to \$10 per day.

Please note that parking permits may be purchased throughout the year if working circumstances change; however, no prorated refunds for annual permits paid in full will be given after March 1, 2021; requests to cancel payroll deduction payments must be made prior to May

1. The monthly, daily and hourly options are not eligible for full or partial refunds.

Annual Parking Permit

Faculty and staff annual parking permits are now available for purchase at <https://purdue.t2hosted.com> for those who do not have outstanding citations. These permits will be valid from Aug. 1, 2020 through Aug. 15, 2021. In order to avoid delays or have a lapse in campus parking eligibility, faculty and staff should purchase a 2020-21 parking permit by Aug. 5, 2020 to allow time for delivery of the associated Garage Access Card (“A” permits only) or “Reserve” permit through campus mail. The cost of an “A” permit is \$250 per year, and a “B” permit is \$100 per year.

While each faculty/staff member may list multiple vehicles per online account, only three may be actively linked to a permit. Of the three linked vehicles, only one may be parked on campus at any given time.

Existing license plate numbers linked on your account will be listed as choices for your new permit, and you will not need to enter the associated vehicle information again. License plates continue to serve as an individual's parking permit, and a standard campus parking permit is not required to be displayed in a vehicle's windshield. However, some parking spaces require special permits to be displayed including those that are labeled reserved, university vehicle or handicap accessible.

Any vehicle that is parked on campus needs to be linked to an active Purdue parking permit to avoid receiving a citation, and each permit holder is responsible for maintaining the accuracy of vehicle information in the online account for parking enforcement. This includes but is not limited to vehicle make and model, license plate number and expiration date.

During the purchase process, please confirm that your campus department and building are listed correctly. If you purchase an “A” permit, a Garage Access Card for use in the gated parking garages will be sent to your campus building via campus mail. Access to gated garages should be granted based on your license plate that is

registered with your parking permit; however, the Garage Access Card may be needed at gated garages in the event that your license plate cannot be read or if cameras are inoperable. Garage Access Cards that were issued for 2019-20 will become invalid as of Aug. 15 and should be destroyed at that time.

Additional information about faculty and staff parking permits and alternate options is available online.

ID Permit

ID permits are available for a \$20 annual fee for employees who work second or third shift. These permits are valid from 7-8 a.m. and 3-5 p.m. Monday through Friday.

Disability Parking

If you have disability parking needs or related questions, please contact Susan Black, Parking assistant manager, at seblack2@purdue.edu or (765) 494-9493.

All other parking and permit questions should be directed to Parking and Transportation Services at (765) 494-9497 or parking@purdue.edu.

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. Individual email announcements will no longer be sent unless the content is time-sensitive. We will continue to include our publications, presentations and other recent news items as well.

Those using paper copies of the newsletter should go to our newsletter archive on the EAPS website at <http://www.eaps.purdue.edu/news/newsletters.html> and Click on News to access active links as needed. Material for inclusion in the newsletter should be submitted to Katherine Huseman (khuseman@purdue.edu) **by 5:00pm on Thursday of each week for inclusion in the Monday issue.**

If it is in the newsletter, we assume you know about it and no other reminders are needed. For answers to common technology questions and the latest updates from the EAPS Technology Support staff, please visit: http://www.eaps.purdue.edu/resources/information_technology/index.htm.

Also, as an additional resource for information about departmental events, seminars, etc., see our departmental calendar at <http://www.EAPS.purdue.edu/events-calendar.html>

