EAPS WEEKLY NEWSLETTER
23 March 2020

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BE SURE TO CHECK OUT ALL OF THE EAPS COMMUNICATIONS MEDIA!
Facebook
Twitter
Department Magazine
Website News

DEPARTMENT NEWS

EAPS COLLOQUIA

Jim Thomas
University of North Carolina, Chapel Hill
Monday, March 23, 2020
10:30 am
REMOTE VIA WEBEX

Robert Wills
Washington University
Thursday, March 26, 2020
3:30 pm
REMOTE VIA WEBEX

EAPS FRONT OFFICE

The EAPS front office staff will be working remotely. Both Kathy Kincade (kkincade@purdue.edu) and Katherine Huseman (khuseman@purdue.edu) are reachable via email and if needed can come into the office should you require something.

http://www.eaps.purdue.edu/
At this time, the Business Office is uncertain if they will be in or working remotely – please contact them via email: Alicia Carroll (aschragg@purdue.edu) and Jennifer Anderson (ander927@purdue.edu).

**EAPS NEW PUBLICATIONS**


**DR. AGEE RETIREMENT CELEBRATION POSTPONED**

Due to the Coronavirus and limiting the number of participants at gatherings, Dr. Agee’s retirement celebration is postponed. We will announce a new date as soon as possible.

**OUTREACH NEWS**

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 Robert Nowack, Michael Baldwin, Andy Najafiarab, and Greg Nearing.

Interested in upcoming outreach events? Check out our calendar of events: [http://www.eaps.purdue.edu/outreach/Outreach_News.html](http://www.eaps.purdue.edu/outreach/Outreach_News.html)

Did you know that in addition to the Podcast, EAPS K-12 Outreach is on Twitter (@Purdue SOS), YouTube (Superheroes of Science), Facebook (EAPS.out), and Pinterest.

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**PURDUE UNDERGRADUATE RESEARCH CONFERENCE CALL FOR JUDGES**

Attention Grad and Post-Doc students, we are needing judges for this year’s Purdue Undergraduate Research Conference Poster Symposium. The Poster Symposium is Tuesday, April 14th in the Purdue Memorial Union Ballrooms from 9:30am – 12:00pm & 2:00pm – 4:30pm.

Please register at the following link: [https://www.purdue.edu/undergrad-research/conferences/spring/judges.php](https://www.purdue.edu/undergrad-research/conferences/spring/judges.php)

**Tuesday, April 14**

**Poster Symposium**

Purdue Memorial Union Ballrooms

9:30/am – 12/pm & 2/pm – 4:30/pm

Light refreshments will be available at the symposium.

[See flier attached for more information]

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**STUDENT NEWS**

**RESEARCH ASSOCIATE – HAZARDOUS WEATHER TESTBED**

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma currently is seeking a research associate to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the implementation of severe weather applications to support research to operations initiative via transition into the National Weather Service’s Advanced Weather Interactive Processing System- 2nd generation (AWIPS2) operational software platform. The position is located in Norman, Oklahoma.

The duties of this position are:

1. Integration of NSSL's experimental datasets into AWIPS2;
2. Development of new applications and visualization techniques in the AWIPS2 environment and platform;
3. Support and participate in applied research and development and operational experiments in the Hazardous Weather Testbed;
4. Acquire and apply expertise about severe local storms in the warning decision-making process.

[For complete information please see flier]

POSTDOCTORAL RESEARCH SCIENTIST AT OU

There is a job opening for a postdoctoral research scientist position in the School of Meteorology at the University of Oklahoma.

The successful candidate will contribute toward the NASA-funded project that seeks to understand the evolution of convective systems over the West African coast. This project will utilize multiple datasets including satellite, a cloud-resolving model, and field campaign data that will be collected from the CPEX-AW (https://espo.nasa.gov/cpex-aw). The appointment is for two years and can be extended for the third year.

More information about this position is available here: http://nsakaeda.ucreate.com/open-postdoctoral-position/

CIMMMS RESEARCH ASSOCIATE – SCIENTIFIC PROGRAMMER FOR DEVELOPING GRAPHICAL FORECAST EDITOR TRAINING IN AWIPS

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMMS) at the University of Oklahoma (OU) seeks to fill a Research Associate position to support the National Oceanic and Atmospheric Administration (NOAA) Forecast Decision Training Division (FDTD) in Boulder, Colorado, on training for the Advanced Weather Interactive Processing System (AWIPS) Graphical Forecast Editor (GFE).

The principal duties of this position are:
- Development of training and online reference material for new and existing AWIPS GFE Focal Points at NWS Weather Forecast Offices and National Centers
- Analysis of current and future versions of the GFE software, including local settings and implementation at various NWS weather forecast offices, in order to identify operational best practices.

[See flier for additional information]

ACCEPTING APPLICATIONS FOR GRADUATE STUDENT COORDINATORS FOR SUMMER URM PROGRAM

The Office of Graduate Diversity Initiatives (OGDI) is now accepting applications from Purdue Graduate Students, to participate as Student Coordinators, in the 2020 Summer Research Opportunities Program (SROP).

8-10 Coordinators will be hired for the 8 week program (June 1st through July 24th), at a 50% (20 hrs) position.

Application located here: Summer2020_Coordinator_Apply

The deadline for applications is April 17th, with decisions being made by the beginning of May 2020.

[See attached flier for additional information]

FED PBL MODELER AT NSSL

NSSL is hiring a Federal scientists with expertise in PBL parameterization on aspects associated with convective scale prediction. If interested, please see:

Job Announcement # (MAP): OAR-NSSL-2020-0010
- https://www.usajobs.gov/GetJob/ViewDetails/560575900

NSSL has posted a Meteorologist, ZP3 or ZP4 with full promotion potential to the ZP4, position within FRDD. These announcements close on 3/10/2020

Job Announcement # (DE): OAR-NSSL-2020-0011
- https://www.usajobs.gov/GetJob/ViewDetails/560576000

http://www.eaps.purdue.edu/
The Atmospheric Sciences Research Center (ASRC) of the University at Albany, State University of New York, invites applicants to hire a tenure-track Professor of Empire Innovation (rank open), effective Fall 2020. This New York State supported college-year appointment allows for supplementary summer salary from external research funding. We currently seek to fill this position, with an emphasis on the area of High-Resolution Atmospheric Modeling. The ideal candidate will have expertise in meteorological as well as air quality and photochemical modeling, be interested in urban environments and land-sea interaction, be fluent in modern computational methods including data assimilation approaches, and have a firm understanding boundary-layer meteorology. ASRC has a tradition in research, joy in discovery, and enthusiasm for working with colleagues in different disciplines. ASRC also values collaboration with researchers from diverse backgrounds who bring fresh perspectives. The successful candidate will be expected to pursue and secure funding to support a robust research program, publish in relevant academic fields, and lead efforts that support the planned continuing investment in this area of SUNY strength and focus. Priority will be given to candidates willing to engage in cross-disciplinary collaboration, especially with the University’s Public Health program in environmental epidemiology and community health management (e.g., modeling of particulate matter and reactive gases). Outstanding candidates from other areas of Atmospheric Science will also be considered and are encouraged to apply.

Follow link for additional information:
https://www.albany.edu/asrc/job_opportunities.php

GOVERNOR’S SUMMER INTERNSHIP (2020) – IDEM GROUNDWATER SECTION

Grow your career with the State of Indiana! With more than 50 executive branch agencies, the State of Indiana is a diverse workforce offering employees stimulating and challenging projects across a broad scope of career opportunities. As a State of Indiana employee, you impact the well-being of Indiana’s communities every day.

Indiana Department of Environmental Management (IDEM):
Our mission is to implement federal and state regulations to protect human health and the environment while allowing the environmentally sound operations of industrial, agricultural, commercial, and governmental activities vital to a prosperous economy. We issue air, water, and solid and hazardous waste permits that restrict discharges to environmentally safe levels. Staff members inspect and monitor regulated entities; provide compliance and technical assistance; monitor and assess air, land, and water quality; use enforcement actions as necessary to ensure compliance; and respond to incidents involving spills to soil or waters of the state.

About the Governor’s Public Service Summer Internship Program:
The Governor’s Public Service Summer Internship (GPSSI) is designed to give college students real world, hands-on experience in their desired field of study to enhance marketability upon graduation. Participation in the Governor’s Public Service Summer Internship will offer students a multitude of experiences including networking with state employees, resume building and soft skills workshops, agency head panels and much more.

About The Job:
As an intern, you will function as a member of the Ground Water Section supporting the implementation of the Ground Water Monitoring Network and will also support the efforts of the Source Water Protection Program. You will work independently in the field collecting ground water samples from private and public drinking water wells. Additionally, you will learn proper ground water sampling techniques for chemical and stable isotope analysis and be trained in the use of various field logging equipment and their use in ground water sampling. There are two (2) positions available in this program.

A Day In The Life:
You should expect to be involved in a mixture of office and field work activities supporting the sampling and analysis of ground water supporting
the Statewide Ground Water Monitoring Network and source water protection efforts. Experiences gained during the internship will be directly applicable to a future career in the environmental industry.

Your tasks will include ground water analytical data management, locational mapping, and field sampling ground water wells supporting the Indiana Ground Water Monitoring Network. Depending on the your background, you could become involved with working with Microsoft Office (Excel and Access) and ESRI’s GIS products, ArcView 3.2 and/or ArcGIS 10.0. You will be tasked with taking ground water samples on your own and will be responsible for all accompanying tasks and paperwork.

**What We're Looking For:**
You must be currently enrolled as an undergraduate or graduate with an accredited post-secondary institution and have completed at least one (1) year of undergraduate education. What You’ll Need For Success:

Knowledge of environmental health sciences, public and environmental health Interest and experience in ground water and geology is highly desirable.

A valid driver's license is required, since you will be driving to sample locations. Ability to read maps and efficiently find remote sampling locations.

Ability to communicate, verbally and in writing, with individuals and in group situations. Experience with Microsoft Office (Access and Excel) and ESRI ArcGIS is desirable, but not required.

Expected to be dependable, capable of making decisions, have the ability to work without close supervision, and be self-motivated.

This job requires overnight travel (2-3 nights per week) from June through as long as possible in August to accommodate fieldwork necessities. You should be able to cover travel expenses (approximately $1500 or have a credit card) at the onset of the summer field activities until the first reimbursement is processed which could take 3-4 weeks.

**Supervisory Responsibilities/Direct Reports:**
This role does not provide direct supervision to direct reports.

**LINK:**
[https://workforindiana.in.gov/job/Indianapolis-Governor's-Summer-Intern-IDEM-Ground-Water-IN-46204/631381000/](https://workforindiana.in.gov/job/Indianapolis-Governor's-Summer-Intern-IDEM-Ground-Water-IN-46204/631381000/)

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**SAY IT IN 6 REGISTRATION OPEN!**

Registration for the Graduate School’s annual Say It In 6 competition is open! So, please take a moment to share this excellent opportunity with your graduate students, postdocs, and faculty members. In addition to generous cash prizes, finalists’ will be recognized at the annual Three Minute Thesis (3MT®) competition, and given an opportunity to talk about their graduate experience and how it inspired their submission. **The registration deadline for this competition is March 27th!** To register and learn more, students should visit:  

**Say It In 6®** is a competition that challenges you to tell a story about your graduate experience — in a clear, concise and, most importantly, creative way — by using only six words and a visual aid. The competition is open to all graduate and professional students, nondegree students, and postdoctoral fellows at Purdue. Students can check out previous winners at the following page:  

**1st Prize:** $1,000  
**2nd Prize:** $500  
**3rd Prize:** $500  

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**AMS VIRTUAL CAREER FAIR**

The American Meteorological Society (AMS) is hosting a Virtual Career Fair on April 2nd from 12:00-3:00 p.m. EST. This event is being marketed to 13,000+ AMS members, as well as 14,000+ registered job seekers, and is the perfect way to connect with professionals who are seeking a new career! You can connect with candidates with the qualifications you are looking for, and you can
do it without leaving your desk or home computer!

Attached a flyer to this which includes a breakdown of the different options, as well as a link to a video to show you how the event works.

Here's How It Works

[See attached flier for additional information]

GRAD SCHOOL 3 MT REGISTRATION OPEN

The Graduate School’s annual Three Minute Thesis competition is approaching! In addition to the substantial cash prizes mentioned below, students will have the opportunity to share their research with university leadership, alumni, donors, community members, and peers! The registration deadline is April 10, 2020. Students can register and learn more at the following link:
https://www.purdue.edu/gradschool/professional-development/competitions/3mt/index.php

For those of you that don’t know, Three Minute Thesis (3MT®) is a research communication competition aimed at developing your students’ academic, presentation, and research communication skills. This competition supports the development of students’ capacities to effectively explain their research in language appropriate to an intelligent but nonspecialist audience.

[See attached flier for additional information]

GLOBAL ACADEMIC INVENTORS NETWORK (GAIN)

Gain advice from the experts. Connect to a Global Network of Inventors. It’s easy and free!

[See flier attached for more information]

WUSTL MIDWEST AEROSOL SUMMER SCHOOL

Aerosol Science and Engineering is an enabling discipline with applications in fields such as environment, Energy, Advanced Materials, Medicine, and Agriculture.

Experience two days of interactive learning with peers from the Midwest! Discussions and activities will be led by leading researchers in the aerosol field.

Registration is required, please visit:
https://sites.wustl.edu/aerosolsummerschool

For more information, please contact Katie Bay: k.bay@wustl.edu

[See attached flier more additional information]

OPERATIONAL METEOROLOGIST JOB OPENING AT SOUTHERN CALIFORNIA EDISON

Job Description

Are you looking for a diverse team of inventors, pioneers, and problem solvers working together? Look no further.

We want team members who want to invest their skills and intellect into something that matters—like solving one of the most important issues of our time. It’s what we do. Powering the planet while drastically reducing carbon emissions and creating cleaner air for everyone. You’re a critical piece of the solution.

As we look onto creating a cleaner energy future, our customer needs are also changing and as part of our Business Resiliency organization you will have an opportunity to help us support this effort.

The Job…..

This position will support the Weather Services group within Business Resiliency. The position will be responsible for blue sky operational support for the Situational Awareness Center and incident operational support when Emergency Operating Center is activated for gray and black sky conditions.

You will also be responsible for developing tools and models to aid in forecasting accuracy and fidelity. Additionally, the position will also be responsible for operational forecasting support for the procurement of energy within the Energy Procurement and Management organization.

Detailed things you will be doing…..
• You develop and implement procedures to monitor, analyze and produce short, medium and long-range weather forecasts and reports for
situational awareness from the Situational Awareness Center (SA-Center). This could be during day-to-day operation and leading up to and during times of Incident Management Team Activations.

• Work closely with the Watch Office to inform reports to executives and send alerts about extreme weather to grid operations and other affected organizations across the company

• Project manager for complex projects – specifically, projects aimed at the mitigation of asset failure due to weather, fires and climate impacts.

• Lead projects with multiple work streams or complex tasks and provides direction to more junior staff in development and execution of situational awareness tools, fire prevention and monitoring, hazard modelling, and climate adaptation efforts etc.

• Ensures timely development of products needed to support the SA-Center, Business Resiliency and Operations. Reviews work product and mentors more junior team members.

• Supports the Energy Procurement and Management (EPM) organization through the operation, testing, and maintenance of quantitative forecasting, modeling and analysis tools, to produce data to support power procurement transactions, hedging, position management, regulatory reporting, bidding and resource optimization in energy markets.

• Reviews and provides guidance on the work of more junior staff.

• Maintains proficiency in and influences company operations through weather monitoring, forecasting and reporting.

• Works with the lead Meteorologist to identify requirements and opportunities for the team to work and train in the field with key stakeholders to maintain proficient knowledge of company operations.

• Works and trains with people in the field and key stakeholders from multiple organizations across the company to understand and learn about equipment, assets and business functions across the territory.

• Use knowledge to develop tools aimed at improving operational support.

• Routinely interacts with T&D Grid Operations, field operations and Fire Management personnel to gain and maintain knowledge of grid systems and develop relationships with field personnel and external stakeholders.

• Provides subject matter expertise and consults on projects across the company and internal to Business Resiliency.

• Develops relationships and key partnerships with meteorology, scientific and technology communities to align and continuously improve in-house weather forecasting skills, statistical weather forecasting models and information and tools need to support operations.

• Continuously improves in-house weather forecasting skills and statistical weather forecasting models; Works with vendors on improving their weather forecasting services;

• Completes own work independently;

• Works with the scientific community to maintain up to date expertise on state of the art modeling and empirical weather related monitoring technologies.

• Maintains proficiency in the use of all existing weather related technical tools and explores and implements new technical solutions used at SCE Qualifications

Qualifications we need you to have.......  
• Bachelors or Master’s degree in meteorology, atmospheric sciences or a related technical area of study.

• Seven years of experience in weather forecasting and analysis

• Experience communicating how extreme weather events effect the environment.

Other qualifications that will set you up for success…..  
• Experience using GIS systems and programming in languages such as python and matlab
• Graduate degree in meteorology, atmospheric sciences or a related technical discipline

• Ten years of academic or work experience in weather forecasting and statistical analysis.

• Experience integrating various weather outlooks and briefing users on uncertainties and impacts.

• Experience forecasting one to seven-day ahead surface temperature and forecasting weather utilizing a wide variety of observational and model data, both at surface and upper air.

• Experience analyzing renewable power production (wind, solar, hydro) and how weather impacts those resources.

• Extensive knowledge of NWS system and demonstrated experience using National Oceanographic and Atmospheric Administration (NOAA) products.

• Ability and experience with configuring and running WRF model.

• Experience performing statistical analysis and modeling.

• Experience using SAS, R, or other tools for statistical analysis and forecasting.

• Weather forecasting experience for California and the Western United States.

• Experience forecasting for conditions pertaining to or around wildfires.

• Experience with long-term (month ahead or more) weather forecasting.

• Electric/Gas Utility work experience.

• A broad understanding of power markets and the related regulatory requirements that govern SCE’s participation in them by assisting strategy development to increase the value of SCE resources and lower customer costs.

• Fire weather forecasting experience.

• Experience preparing findings and presenting complex technical information to technical and nontechnical audiences.

• Experience using Microsoft Word, Excel, Access and PowerPoint.

Comments
• You are legally authorized to work directly as employees for any employer in the United States without visa sponsorship.

• We offer a Total Rewards Package that includes things like a wide selection of health plans, preventative health reimbursement, 401(k) savings plan with company match and automatic company contributions, tuition reimbursement, professional development, volunteer programs, employee assistance program, electric service discount, and many more perks!

• Relocation may be offered for this position

Do you feel ready to be a part of something bigger than yourself? Join the Clean Energy Revolution at Southern California Edison (SCE).

The people at SCE, don't just keep the lights on. Our mission is so much bigger. We are fueling the kind of innovation that is changing an entire industry, and quite possibly the planet. The safety of our employees, customers, and everyone else also comes first. At SCE, you’ll have a chance to grow your career and make a difference in the world.

SCE serves a population of approximately 15 million via 5 million customer accounts in a 50,000-square-mile service area within Central, Coastal and Southern California. As a company, we have big dreams and we know nothing big is ever accomplished alone. Join one of the nation’s leading electric utilities in making sure California, and all of us who live here.

At SCE we celebrate our differences. We are a proud Equal Opportunity Employer and will not discriminate based on race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status or any other protected status. *LI-JS1

Job Link: https://www.edisoncareers.com/ShowJob/Id/719936/Meteorology%20Advisor
OPENING FOR A NUMERICAL WEATHER PREDICTION (NWP)

DTN has an opening for a Numerical Weather Prediction (NWP) Scientist in its Norman, OK, office. The successful candidate will assist with supporting and enhancing DTN’s WRF-based NWP capabilities. Key tasks involve applying WRF data assimilation techniques and developing relevant applications while working in an AWS high-performance computing (HPC) environment.


MOBILE IOS APPLICATION DEVELOPER POSITION

DTN currently has a Mobile iOS Application Developer opening for an individual with a passion for learning and solving challenging problems.


LOOKING FOR A LEVEL 1 SOFTWARE ENGINEER

DTN is looking for a Level 1 Software Engineer to join our team! This person will be an addition to an industry-specific team (such as offshore energy, transportation, or sports and safety) that creates full-stack product and platform applications, from user interfaces to backend services, using a cloud-first distributed systems approach. Each team is fully responsible for its products, from initial concept, through iteration based on market feedback, to production implementation and delivery.


METEOROLOGICAL DATA SCIENTIST POSITION

DTN is looking for a Meteorological Data Scientist to join our team!


MS OR PHD ASSISTANTSHIP AVAILABLE AT THE UNIVERSITY OF NEBRASKA-LINCOLN

This assistantship is available for Fall 2020 semester. Selected student will complete an MS or a PhD. in Natural Resources Sciences degree with an Applied Climate Science specialty (e.g., Climate Assessment and Impacts or Bio-Atmospheric Interactions).

Salary
$24,000 per year for MS Students with health insurance and tuition waiver (student is responsible for fees).

$26,000 per year for PhD. students with health insurance and tuition waiver (student is responsible for fees).

Start Date
August 1, 2020 (classes begin on August 24, 2020)

Description
Exact topic of research will be developed after consultation with the advisor. However, it is expected that research may focus on land-atmosphere interactions and climatological (and other related) data analysis. Any modeling (e.g., WRF) experience would be a plus.

Qualifications
B. S. or M.S. in meteorology, geography, climate science, engineering, natural resources, or closely related field.

Previous programming background is not required, however, past experience would be a plus for the student.

To Apply
Applicants must create a single document (e.g., a Word or pdf document) and the name of the file must contain the applicant’s first and last name. Application document must include:
1. A cover letter that articulates their interest pursuing an advanced degree
2. Curriculum Vitae or Resume
3. Unofficial transcripts
4. Unofficial general GRE scores
5. List of three references and their email addresses.

Send file to Dr. Rezaul Mahmood, rmahmood2@unl.edu. Applications will be screened as they are received. Formal application to UNL, including official transcripts, GRE, and recommendations, is required subsequent to selection of the successful candidate.

For information about the School of Natural Resources, visit: https://snr.unl.edu. Contact Dr. Rezaul Mahmood (rmahmood2@unl.edu) with general questions about the assistantship.

GUIDELINES, REPORTING AVENUES IN PLACE TO SAFEGUARD GRADUATE STUDENT MENTORING

Purdue’s Graduate School is reminding graduate students of the guidelines established to foster optimal graduate student mentoring as well as the methods in place for reporting detrimental or questionable mentoring practices.

“Recent events at another institution have drawn attention to the tremendously negative impact detrimental mentoring practices can have on graduate students,” says Linda Mason, dean of the Graduate School. “One of the most important parts of the graduate student experience is the mentoring received from a major professor, as well as the numerous other individuals who can positively impact them.”

In 2017, the Graduate Council put forth a document on guidelines for graduate student mentoring and advising. Graduate students who are experiencing mentoring relationships that are not aligned with these guiding principles should report it, Mason says.

Students can speak to the head of the department or the chair of the department’s graduate program as a first course of action. Another avenue for reporting is to visit the Graduate School’s Office of Graduate Assistance. The office can provide confidential advice and, if necessary, referrals to other sources of help.

Students also can anonymously report negative mentoring behaviors to the University Hotline at 866-818-2620 or via the web.

"Purdue University and the Graduate School want every graduate student to have a rich and meaningful graduate experience," Mason says. "For that to happen, students need effective mentors."

CIMMS POST-DOCTORAL RESEARCH ASSOCIATE – SEVERE WEATHER

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) is currently looking for a Post-doctoral Research Associate to work with the National Severe Storms Laboratory (NSSL). This position will work at NSSL in Norman, OK, which is located within the National Weather Center (NWC), a highly collaborative operational, research, and academic environment containing a number of NOAA and OU organizations. Here, you will work in an exciting environment focused on the development of operationally relevant severe weather warning applications and techniques and have opportunities to interact with NOAA scientists, NWS forecasters and academic scientists within both the NWC and the broader meteorological community.

As a CIMMS Postdoctoral Research Associate working with NSSL, you will provide scientific and meteorological expertise, along with technical support, for the development of severe convective weather applications for the prediction (0-60 minute time scale) and detection of hazards such as tornadoes, damaging wind, large hail, and lightning. This position is heavily oriented in applied research, and the list below describes potential projects:

1. Develop and/or improve calibrated Probabilistic Hazard Information for the prediction of severe weather hazards;

2. Develop, test, and implement new severe weather warning guidance algorithms for use in the Multi-Radar Multi-Sensor (MRMS) system and on the WSR-88D radar network;

3. Develop machine learning techniques for use in severe weather data analysis and short term
nowcasting of tornadoes, hail, damaging wind and lightning;

4. Improve lightning forecasts and applications of lightning data in operational use.

The minimum qualifications for the position are:

1) A Doctorate Degree in Meteorology, Atmospheric Science, or related area.

When applying, please indicate your preference(s) as to which project areas in which you are interested. Additionally, please include information related to your experience in software development, web development, graphic design/visualization, and Linux (UNIX) environments including the AWIPS2/N-AWIPS systems. Your ability to communicate clearly is of utmost importance.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments, or workshops conducted at remote locations. General supervision will be provided by CIMMS staff with technical oversight provided by NSSL and CIMMS management. You will work under general supervision but are expected to work independently and determine action to be taken in handling all but unusual situations. This is a non-supervisory position. Salary is based on your education, experience, skills, and knowledge.

Information on University of Oklahoma benefits may be found at [https://hr.ou.edu](https://hr.ou.edu).

To apply for the position, please send your CV, cover letter, and list of three references to:

CIMMS Careers
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
CIMMS-careers@ou.edu
Job Requisition: Severe Weather Post-Doc

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CIMMS RESEARCH ASSOCIATE – SEVERE WEATHER RESEARCH ASSOCIATE

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) is currently looking for a Research Associate to work with the National Severe Storms Laboratory (NSSL). These positions will work at NSSL in Norman, OK, which is located within the National Weather Center (NWC), a highly collaborative operational, research, and academic environment containing a number of NOAA and OU organizations. Here, you will work in an exciting environment focused on the development of operationally relevant severe weather warning applications and techniques and have opportunities to interact with NOAA scientists, National Weather Service forecasters and academic scientists within both the NWC and the broader meteorological community.

As a CIMMS Research Associate working with NSSL, you will work as part of a team to provide scientific and meteorological expertise, along with technical support, for the development of severe convective weather applications for the prediction (0-60 minute time scale) and detection of hazards such as tornadoes, damaging wind, large hail, and lightning. This position is heavily oriented towards the Research-to-Operations process, and the list below describes potential projects:

1. Develop and/or improve calibrated Probabilistic Hazard Information for the prediction of severe weather hazards;

2. Develop, test, and implement new severe weather warning guidance algorithms for use in the Multi-Radar Multi-Sensor (MRMS) system and on the WSR-88D radar network;

3. Develop machine learning techniques for use in severe weather data analysis and short term nowcasting of tornadoes, hail, damaging wind and lightning.

The minimum qualifications for the position are:

1) A Masters Degree in Meteorology, Atmospheric Science, or related area.

When applying, please indicate your preference(s) as to which project areas in which you are interested. Additionally, please include information related to your experience in software development, web development, graphic design/visualization, and Linux (UNIX) environments including the AWIPS2/N-AWIPS systems. Your ability to communicate clearly is of
As a CIMMS Research Scientist working with NSSL, you will provide scientific and meteorological expertise, along with technical support, for the development of severe convective weather applications for the prediction (0-60 minute time scale) and detection of hazards such as tornadoes, damaging wind, large hail, and lightning. This position is heavily oriented towards the Research-to-Operations process, and the list below describes potential projects:

1. Develop and/or improve calibrated Probabilistic Hazard Information for the prediction of severe weather hazards;

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3. Develop machine learning techniques for use in severe weather data analysis and short term nowcasting of tornadoes, hail, damaging wind and lightning;

4. Improve lightning forecasts and applications of lightning data in operational use.

The minimum qualifications for the position are:

1) A Doctorate Degree in Meteorology, Atmospheric Science, or related area;

When applying, please indicate your preference(s) as to which project areas in which you are interested. Additionally, please include information related to your experience in software development, web development, graphic design/visualization, and Linux (UNIX) environments including the AWIPS2/N-AWIPS systems. Your ability to communicate clearly is of utmost importance. Please indicate any experience with writing proposals and managing projects as well.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments, or workshops conducted at remote locations. General supervision will be provided by CIMMS staff with technical oversight provided by NSSL and CIMMS management. You will work under general supervision but are expected to work independently and determine action to be taken in handling all but unusual situations. This is a non-supervisory position, although you may serve as a leader of technical teams. Salary is based on your education, experience, skills, and knowledge. Information on University of Oklahoma benefits may be found at https://hr.ou.edu.

To apply for the position, please send your CV, cover letter, and list of three references to:

CIMMS Careers
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
CIMMS-careers@ou.edu
Job Requisition: Severe Weather RA

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CIMMS Careers  
University of Oklahoma CIMMS  
120 David L. Boren Blvd., Suite 2100  
Norman, OK 73072-7304  
CIMMS-careers@ou.edu  
Job Requisition: Severe Weather RS  

**FRENCH CULTURE, FOOD, & HEALTH**  
May 23-31, 2020  
Roanne, France  
NUTR 39800  
[See attached flier for additional information]  

**EXPLORER-IN-TRAINING OPPORTUNITY**  
The Cooperative Program for the Advancement of Earth System Science (CPAESS), a community program of the University Corporation for Atmospheric Research (UCAR) is currently seeking Mapping trainees to participate in the NOAA Office of Ocean Exploration and Research Okeanos Explorer Program’s Explorer-in-Training program [http://oceanexplorer.noaa.gov/edu/explorer-in-training/welcome.html](http://oceanexplorer.noaa.gov/edu/explorer-in-training/welcome.html) for the 2020 field season. This program is open to enrolled undergraduate and graduate students as well as those who have recently graduated from a higher education program. The Explorer-in-Training program will provide the opportunity to gain experience using an advanced multibeam bathymetric sonar mapping system. While contributing in a significant way to the Okeanos Explorer ocean exploration mission.

A typical placement will consist of one (1) 20-30 day expedition offshore aboard the Okeanos Explorer during the spring, summer and fall of 2020, in the Atlantic Ocean. EITs will stand an eight-hour mapping watch each day while on board. The duties of mapping watchstanders typically include the acquisition and processing of multibeam data and associated sound velocity profile data, as well as precise record keeping. Each trainee will also complete an onboard project of their own interest, with approval and support from experienced mapping team personnel. A generous pre-tax daily stipend of $150 is provided, as well as travel costs to and from the ship.

To apply please go to: [https://cpaess.ucar.edu/okeanos-application-2020](https://cpaess.ucar.edu/okeanos-application-2020)

[See attachment for more information]

**GRADUATE RESEARCH ASSISTANTSHIP OPPORTUNITY AT THE UNIVERSITY OF NORTH DAKOTA**  
Opportunity for a prospective ATMS graduate student, located at the University of North Dakota, starting next fall.

[See attached flier for more information]

**EARTH SYSTEM OBSERVATIONS & MODELING (ESOM) GRADUATE SYMPOSIUM**  
The Center for Ocean-Land-Atmosphere Studies (COLA) and the College of Science at George Mason University (GMU) are hosting the 2nd annual Earth System Observations & Modeling (ESOM) Graduate Symposium on April 22, 2020. We would be delighted to host any students from your earth atmospheric and planetary sciences department at Purdue to present their graduate research at this upcoming event.

The inaugural ESOM Graduate Symposium, hosted on Earth Day 2019, was a hugely successful event that hosted over 50 graduate students from across the Mid-Atlantic region. To encourage a unique and growing attendance, our committee would like to broaden the submission topics to host an even larger event.

For this upcoming symposium, we encourage earth science graduate students to share their research focused on observational and modeling topics related to our climate. Symposium topics will be based upon the number and theme of submissions, so all interested earth science graduate students are encouraged to apply.

This one-day event will include multiple poster sessions, presentations from attendees and
keynote speakers, and intimate space for masters and doctoral students to network with their peers and meet scientists from Mason, nearby universities and federal labs in the Washington, DC area.

Any interested students should submit their abstracts to [https://gmuscience.co1.qualtrics.com/jfe/form/SV_dj2UvV3owiZFlq5](https://gmuscience.co1.qualtrics.com/jfe/form/SV_dj2UvV3owiZFlq5).

There is funding available from our department to facilitate transportation and accommodations for presenters. We look forward to receiving submissions from your students! Please contact us at this email address (esomsym@gmu.edu), visit tinyurl.com/esom2020 for more information, and share the attached flyer to department staff and students.

**JOB OPENING FOR SATELLITE LIAISON/RESEARCHER AT THE OPG**

Looking for someone to work as a Satellite Liaison and Researcher with the talented team at the NWS Operations Proving Ground (OPG) in Kansas City, MO. The position is through CIRA and stationed with the OPG. Details can be found here:

[https://jobs.colostate.edu/postings/73877](https://jobs.colostate.edu/postings/73877)

**CIMMS RESEARCH ASSOCIATE - SMALL UNMANNED AIRCRAFT SYSTEMS**

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) seeks a research associate to assist in a new project that aims to transition small Unmanned Aircraft Systems (sUAS) into operations within NOAA. This position will be located at the NOAA/ARL Atmospheric Turbulence and Diffusion Division (ATDD) in Oak Ridge, TN. The associate will play a vital role in operating the sUAS, as well as acquiring and processing the data collected by the sUAS. The most critical task will be performing daily flights at a nearby site using ATDD’s vertical takeoff and landing (VTOL) and fixed-wing sUAS to sample boundary layer temperature, moisture, and wind fields. These datasets will be provided to the nearest National Weather Service office to assist with short-term weather forecasts. Additionally, the associate will operate ATDD’s other fixed-wing sUAS used for obtaining in-situ meteorological and flux measurements, as well as spectral characteristics of the land surface. Following data collection, the research associate will lead efforts to process the data for further analysis. This work will provide opportunities for the associate to author research papers.

[See attached flier for complete information]

**DTN IS HIRING AN NWP SCIENTIST**

DTN is hiring a WRF/NWP scientist at their Norman, OK, location. This would be a great opportunity for a recent MS or PhD graduate, particularly someone with strong cloud computing or data assimilation experience. We also have an opening for a supporting AWS Cloud Engineer. Thanks.


**INVITATION TO EngAGE WITH UNDERGRADUATE RESEARCH EVENTS**

Purdue Undergraduate Research Conference Poster Symposium on April 14 from 8:30am to 4pm in the PMU Ballrooms.

Research Talks/Oral Presentations on April 15 from 8:30am to 4pm in STEW 214.

We are seeking volunteers to help judge student presentations. You may register on the website to indicate your interest.

**Celebrate Purdue’s Thinkers, Creators, and Experimenters Showcase**

April 16 from 1:30 to 3:30pm in the Co-Rec This “non-poster, poster session” encourages participants to “bring” their research to the Co-Rec for attendees to learn what they are working on through the five senses in a creative way. Examples have included autonomous cars, molecular models, ASL transcription programs, dance choreographies, a philosophical discussion of sin, invention designs, and new curricula.
We invite you to encourage student researchers to apply to present during these judged events and for students to attend these multi-disciplinary events. If you encourage students to attend with extra credit or as a course requirement, we have methods to track if a visiting student is present and can share that information with you. Contact UGresearch@purdue.edu to learn more.

These annual events are hosted by the Office of Undergraduate Research and Purdue colleges and schools. Attached is a flier that lists these events including the new Undergraduate Research Pitch Competition.

[Flier attached]

**CIMMS PETER LAMB POSTDOCTORAL FELLOWSHIP**

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma has established the Peter Lamb Postdoctoral Fellowship that we envision will be offered annually. CIMMS is a research organization that promotes collaborative research between National Oceanic and Atmospheric Administration (NOAA) and University of Oklahoma (OU) scientists on problems of mutual interest. This collaborative basic and applied research includes the study of mesoscale and storm-scale meteorological phenomena to help produce better forecasts and warnings that save lives and property and the investigation of the societal impacts of such phenomena. Research scientists within CIMMS use observations, analysis and models to improve the understanding and prediction of high-impact weather elements and systems ranging in size from cloud nuclei to multi-state areas.

Applications must include a 3-4 page novel proposal developed by the applicant that addresses at least one of the CIMMS research themes: 1) weather radar research and development; 2) storm-scale and mesoscale modeling research and development; 3) forecast improvements research and development; 4) impacts of climate change related to extreme weather events; and 5) societal and socioeconomic impacts of high-impact weather systems. Applicants are highly encouraged to contact a CIMMS scientist before writing their research proposal to receive guidance when drafting a proposal and to ensure the mentorship of an eligible CIMMS research scientist.

The CIMMS website http://cimms.ou.edu/index.php/research has more information on projects underway within these research themes as well as contact information for CIMMS scientists working on these themes.

**ENGAGEMENT SCHOLARSHIP CONSORTIUM CALLS FOR NOMINATIONS FOR EXCELLENCE AWARDS PROGRAM**

HARRISONBURG and BLACKSBURG, Va. — The Engagement Scholarship Consortium (ESC) — the premier resource for higher education institutions and community partners focused on promoting excellence in the scholarship and practice of engaged scholarship locally and globally — is accepting nominations for its 2020 Excellence Awards Program, which recognizes exemplary engagement scholarship. Nominations will be accepted through Friday, March 20, 2020. For more information on nomination procedures and submission, visit https://engagementscholarship.org/grants-awards/esc-awards-program.

Award recipients will be recognized during the 2020 Annual Conference in Philadelphia, Pa. The awards program is a key priority of ESC 20/20 — Vision. Focus. Impact. providing institutional recognition in five categories: Student, Faculty, Community Partner, Distinguished Engaged Scholar and Institutional Leadership. All two- and four-year public and private higher education institutions are eligible and are invited to submit nominations. Institutional award recipients will receive a cash award, certificate, two registration fee waivers for the 2020 ESC Annual Conference and will be invited to participate in an Excellence Awards Recipients Panel Presentation during the 2020 conference.
ESC Board President Samory T. Pruitt, vice president for community affairs at The University of Alabama, underscored the importance of the highly competitive program. "We know that each year, submissions will include many innovative and practical solutions to some of the most critical challenges facing our nation and world today. These awards recognize the best engagement scholarship has to offer," Pruitt said.

The ESC Excellence Awards Program recognizes activities that improve the quality of life for individuals, families and communities, while building capacity through engaged scholarship. The program also provides important recognition opportunities for students, faculty, community partners and higher education institutions and increases opportunities for enhanced peer learning.

Contacts: Melissa Maybury Lubin, Engagement Scholarship Consortium Awards Committee chair and dean of professional and continuing education, James Madison University, 540-568-4253, lubin2mm@jmu.edu and Susan E. Short, Engagement Scholarship Consortium Executive Committee liaison and associate vice president for engagement, Virginia Tech, 540-231-9497, sshort@vt.edu.

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**WORKING PAPER SERIES – FALL 2020 ISSUE CALL FOR ABSTRACTS**

The Susan Bulkeley Butler Center for Leadership Excellence, in partnership with ADVANCE-Center for Faculty Success, is continuing the Working Paper Series focusing on navigating careers in the academy. This peer reviewed series includes work by senior scholars, graduate students, and faculty at all stages as a space for the discussion of issues related to academic careers. The series will serve as a means for documenting and sharing interventions and/or practices and/or processes developed by and/or utilized by faculty and post-docs for navigating careers.

The call for abstracts for the fall 2020 issue is now open - nationally and globally. Complete details are in the attached pdf, as well as on the Working Paper Series website.

Abstracts must be 150 words or less and must be submitted via email to butler-advance@purdue.edu by **Friday, August 21, 2020**.

Any abstracts sent early in the spring semester may receive a response by the end of the spring semester. Abstracts received by the deadline of Friday, August 21st will receive a reply early in the fall semester.

[See attached flier for more information]
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
Oceanic mesoscales, ranging from 10-100 km horizontal scales, are constrained by the effects of rapid rotation and strong density stratification. Conventional wisdom in the past decades used to be that the turbulence phenomenology at these scales is set primarily by nonlinear interaction of mesoscale eddies, which are approximately in geostrophic and hydrostatic balance. However, satellite altimeter datasets, in situ measurements, and realistically forced global scale oceanic model outputs in recent times point out that oceanic mesoscales are rich with high energy internal gravity waves; consisting of wind generated high baroclinic near-inertial waves and gravitationally generated low baroclinic tides. Not only do these waves have spatial scales comparable to balanced mesoscale eddy field, in multiple parts of the world's oceans the wave energy levels are seen to significantly exceed balanced energy.

In this talk I will explain how interactions between waves and balanced flow shapes geophysical turbulence phenomenology at oceanic mesoscales. The talk will clearly distinguish and elaborate on how wind generated near-inertial waves, gravitationally generated low baroclinic tides, and the internal gravity wave continuum or the Garret-Munk spectrum of waves interact with geostrophically and hydrostatically balanced flow. The focus and goal of this research direction is to develop a comprehensive understanding of oceanic mesoscale wave-balance energetic interactions and the resulting turbulence phenomenology. An improved understanding of the flow at these scales will assist in developing better parameterization schemes for large scale general circulation models that are still far from capturing intricate fast and small scale oceanic flow dynamics.

Monday, March 23, 2020
10:30 am
Room 2201, HAMP

Refreshments at 10:00 am
Room 2201/HAMP
Atmosphere-ocean Dynamics of Decadal Climate Variability

Robert Wills
Washington University

Acting as both signal and noise, internal variability of the atmosphere-ocean system may confound estimates of the climate response to anthropogenic forcing, but it also offers an opportunity to examine the processes governing the spatial pattern of climate change. In general, low-frequency internal variability arises though the interaction of atmospheric weather with slow climate system processes such as the thermodynamic and dynamic adjustment of the upper ocean. However, there has been an active debate in the literature on the extent to which ocean circulation dynamics (rather than simply atmospheric noise and ocean thermal inertia) contribute to low-frequency modes of climate variability. I investigate the atmosphere-ocean dynamics of decadal climate variability using a new statistical method that identifies representative patterns of low-frequency variability within spatiotemporally complex climate datasets. I show that ocean circulation changes are required to explain the relationship between large-scale sea-surface temperature anomalies and air-sea heat fluxes. I demonstrate that changes in the ocean overturning circulation and subpolar ocean gyres play a fundamental role in climate variability at decadal and longer timescales. The resulting physical understanding of decadal climate variability has immediate applications to the attribution of observed temperature changes and to decadal climate prediction. I will conclude with a discussion of how this work ties into my broader research agenda focused on understanding the atmospheric and oceanic processes that control the spatial and temporal evolution of climate.
Light refreshments will be available at the symposium.

PURDUE UNDERGRADUATE RESEARCH CONFERENCE

CALL FOR JUDGES

Tue., April 14 • Poster Symposium

Purdue Memorial Union Ballrooms
9:30am-12:00pm & 2:00pm-4:30pm

Register to judge posters & indicate your availability now at:

bit.ly/PURC2020Judges

Light refreshments will be available at the symposium

PURDUE UNDERGRADUATE RESEARCH CONFERENCE SPONSORED BY:

College of Agriculture  College of Education  College of Engineering
College of Health & Human Sciences  College of Liberal Arts  College of Pharmacy
College of Science  Honors College  Krannert School of Management
Office of Undergraduate Research  Purdue Libraries  Purdue Polytechnic Institute
The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of
Oklahoma currently is seeking a research associate to collaborate with scientists in the National
Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the
implementation of severe weather applications to support research to operations initiative via
transition into the National Weather Service’s Advanced Weather Interactive Processing System-
2nd generation (AWIPS2) operational software platform. The position is located in Norman,
Oklahoma.

The duties of this position are:
1. Integration of NSSL’s experimental datasets into AWIPS2;
2. Development of new applications and visualization techniques in the AWIPS2
   environment and platform;
3. Support and participate in applied research and development and operational experiments
   in the Hazardous Weather Testbed;
4. Acquire and apply expertise about severe local storms in the warning decision-making
   process.

The minimum qualifications for the position are:
1. A Masters Degree in Meteorology, Atmospheric Science, Computer Science/Software
   Engineering, Geographic Information Systems, or related area;
2. Computer programming experience (Linux, Java, Python, PostgreSQL, Eclipse, etc.);
3. US Citizenship or Permanent Residency.

Applicants should identify expertise with any of the following areas: AWIPS2; Computer
Programming; Visualization; Geographic Information Systems. Some knowledge of National
Weather Service warning and forecast operations and weather radar would be beneficial. Good
oral and written communication skills are needed for the position. Please indicate additional
experience with operating systems and programming skills (including web-based and mobile
applications) beyond the requirements stated above.

Normal working hours will be observed except for occasional irregular hours during data
collection, warning/forecast experiments, or workshops conducted at remote sites.

General supervision will be provided by the CIMMS leadership. Technical oversight will be
provided by CIMMS staff, NSSL scientists, and NSSL management. Appointee will work under
general supervision but is expected to determine action to be taken in handling all but unusual
situations. Incumbent in this position is not expected to supervise other employees, but may serve
as a leader of technical teams.
The beginning salary will be based on qualifications and experience with University benefits. Information on benefits may be found at https://www.hr.ou.edu. The position is expected to begin May 2020.

To apply for the position, please forward your resume, cover letter and list of three references to:

CIMMS Careers  
University of Oklahoma CIMMS  
120 David L. Boren Blvd., Suite 2100  
Norman, OK 73072-7304  
CIMMS-careers@ou.edu  
Job Requisition – AWIPS

*The University of Oklahoma is an equal opportunity/Affirmative Action employer.*
Employers
Connect with weather, water, and climate professionals from across the country – without leaving your office.

Save time and money recruiting online
Chat with candidates wherever you are

AMS Virtual Career Fair
April 2nd, 2020
12:00 - 3:00 p.m. EDT

Sign Up For Your Preferred Package

Standard - $595
- Fully Customized Booth
- Third Tier Booth & Logo Placement
- 1 Recruiter Seat

Silver - $1000
- Fully Customized Booth
- Second Tier Booth & Logo Placement
- 2 Recruiter Seats
- Event Candidate Resume Database
- Single 30-day Job Posting
- 30-day Resume Database Access
- 1 Featured Job on Registration Page

Gold - $1250
- Fully Customized Booth
- Top Tier Booth & Logo Placement
- 4 Recruiter Seats
- Event Candidate Resume Database
- Single 30-day Job Posting
- 60-day Resume Database Access
- 2 Featured Jobs on Registration Page

AMS Corporation Members (sustaining, regular, and small business) receive an additional 25% off their Virtual Booth!

Space is limited. Open Your Virtual Doors to Top Talent!
Contact Stephanie Guido at 727-497-6565 Ext. 3487 or by email at Stephanie.Guido@communitybrands.com.
YOUR THESIS IN 3 MINUTES
Are you up to the challenge?

$2,000
FIRST PLACE

$1,000
SECOND PLACE

$1,000
PEOPLE’S CHOICE

DEADLINE:
April 10th

Scan QR for registration & details
GAIN ADVICE FROM THE EXPERTS

Your Answers: Just a Click Away

1. To access GAIN, go to nai.firsthand.co/ & click “Get Advice”

2. Use your school email to create an account & customize your profile

3. Browse the custom-matched advisors & request a mentor consultation

4. Use the secure dial-in to talk to your chosen mentor

Connect to a Global Network of Inventors

The road to success can be bumpy. You don’t have to do it alone.

Whether you have a pioneering idea that you want guidance on, you need help filing a patent, or you are just curious about the industry of innovation—there is a mentor for you!

Join the Global Academic Inventor’s Network (GAIN) and invest in your future today!

It’s Easy and Free!

Through your school’s membership, you have exclusive, secure network access that’s just a click away.

What will you GAIN?

Connecting Today’s Experts with Tomorrow’s Innovators
The Center for Aerosol Science and Engineering at Washington University in St. Louis presents

Midwest Aerosol Summer School

May 17-18, 2020 in St. Louis, Missouri

Aerosol Science and Engineering is an enabling discipline with applications in fields such as Environment, Energy, Advanced Materials, Medicine, and Agriculture.

Experience two days of interactive learning with peers from the Midwest! Discussions and activities will be led by leading researchers in the aerosol field

Case Research Faculty, Washington University in St. Louis
Contemporary Topics in Aerosol Science and Engineering

Alexander Laskin, Purdue University
Chemical Imaging and Molecular Characterization of Aerosols

Daniel Cziczo, Purdue University
Microphysics and Chemistry of Droplet and Ice Nucleation

Christopher Sorensen, Kansas State University
Aerosol Light Scattering

Matthew Berg, Kansas State University
Single Particle Characterization Techniques

Nicole Riemer, University of Illinois at Urbana-Champaign
Models for Simulating Atmospheric Aerosols

Yang Wang, Missouri University of Science and Technology
New Particle Formation and Probing Techniques

Who should attend: Undergraduate and graduate students in Physics, Chemistry, and Engineering

Registration is required, please visit
https://sites.wustl.edu/aerosolsummerschool/
For more information, please contact Katie Bay - k.bay@wustl.edu
Purdue University
Chorafas Foundation Awards

Deadline: March 6, 2020

Purdue University will nominate one young PhD graduate student researcher for the 2020 Chorafas Foundation Award. The $5,000 award, made available by the Dimitris N. Chorafas Foundation, is intended as a prize for advanced studies and/or research during or shortly after graduation. The Dimitris N. Chorafas Foundation was founded in 1992 under the leadership of Prof. Dimitris N. Chorafas. Each year, the Foundation awards prizes to more than 20 universities, with the goal of stimulating promising young researchers.

Process:

• Selection of a Purdue nominee will be a two-phase process. Students are invited to submit pre-proposals for the Chorafas Foundation Award by Friday, March 6, 2020. A maximum of 5 finalists will be selected to submit a full nomination package. The deadline for submitting full nomination packets is March 31, 2020.

• The requirements and criteria for pre-proposals and final proposals are provided on page 2.

• All pre-proposals should be sent to the attention of Amber Everest, Office of Research and Innovation, College of Engineering (ARMS 3000), or electronically as one PDF File to evera@purdue.edu.

Subject Areas for the Chorafas Award:

Research projects in the following areas are eligible for the Chorafas prize:

• Research, Development and Applications in Advanced Technology
• Life sciences and Medicine
• Physics, Chemistry, Sciences of the Very Small and the Very Large
• Formal sciences: Mathematics, Logic, Statistics and their Applications
• Hard Science Solutions to Millennium Problems
• Interdisciplinary Scientific Research

 Eligibility:

• Applications are invited from PhD students enrolled in any college at Purdue.
• Applicants may not be older than 32 years on May 31, 2020 (born after 5/31/1988).
• Candidate students must have graduated or be expected to graduate between June 1, 2019 and December 31, 2020. Candidates can only be nominated once.
**Pre-proposals.** Applicants must submit cover page, a short cover letter, a curriculum vitae, a one page summary of the candidate’s dissertation research, and a one page description of the planned use of the Chorafas award. Candidates are strongly encouraged to include a list of publications, professional presentations, and examples of significant leadership.

**Final proposals.** Applicants selected as finalists must submit the following documents for consideration:

1) Cover page with the following information
   - Full Name (LAST, first)
   - Gender
   - Title (e.g. Dr)
   - Candidate’s home address (for issuing prize check)
   - Date of Birth (DD/MM/YYYY)
   - Title of the Thesis
   - Graduation Date (or expected graduation date) (MM/YYYY)
   - Field of Research (choose the closest one of the following fields: Life Sciences & Medicine, Physics, Chemistry, Mathematics, Informatics/Computer Science, Engineering of Finance & Risk Management).
   - Passport size photo

2) Complete CV (including internship if any) + a passport size photo

3) List of publications (only papers where the candidate is first author; the paper must be either published/in press/accepted in peer-reviewed journals)

4) Summary of Research (up to one page only)

5) Candidate’s personal note - *Why my research benefits humanity*… (up to one page only)

6) Two letters of recommendation. One must be from the PhD supervisor. The salutation that should be used is *Dear Members of the Board*

7) Abstracts of first authored papers in peer-reviewed journals (up to 5 abstracts - no longer than ½ page each)
COVER PAGE OF CANDIDATE FILE

Candidate’s Full Name:

Candidate’s Gender:

Candidate Title: (e.g. Dr.):

Candidate Home Address:

Candidate’s Date of Birth:

Title of Thesis:

Date or Estimated Date of Graduation:

Field of Research:
French Culture, Food & Health

May 23-31, 2020
Roanne, France
NUTR 39800

Program Highlights

- Cooking classes with a French Chef
- Pair wine and cheese
- Learn a little French
- Explore Lyon and Roanne
- Visit a chocolate factory
- Meet wine experts
- Stay in a French villa
- Taste wine with a local winemaker
- Visit a medieval village
- Earn 2 credits
- Meets STS learning outcome

For more information, contact:

Rachel Clark
rachelclark@purdue.edu

STUdy Abroad
www.studyabroad.purdue.edu
Applications are now being accepted for NOAA's Okeanos Explorer-in-Training Program

NOAA Office of Ocean Exploration and Research (OER) in partnership with Cooperative Programs for the Advancement of Earth System Science (CPAESS), hosts undergraduate and graduate students as well as individuals who have recently graduated from a higher education program in the Okeanos Explorer-in-Training program. Participants gain valuable experience in deepwater mapping and exploration using the latest tools and technology.

NOAA’s OER is the only federal program dedicated to exploring our deep ocean, closing the prominent gap in our basic understanding of U.S. deep waters and seafloor and delivering the ocean information needed to strengthen the economy, health, and security of our nation. OER explores previously unknown areas of our deep ocean, making discoveries of scientific, economic, and cultural value.

The NOAA Ship Okeanos Explorer is the Nation’s only federal vessel dedicated to ocean exploration. The ship is equipped with advanced tools that support systematic exploration of unknown ocean regions. High-resolution sonars, deep-water remotely operated vehicles, and telepresence technology are used to collect baseline information in unexplored areas.

CPAESS is currently seeking Mapping trainees to participate in the Okeanos Explorer Explorer-in-Training (EiT) program for the 2020 field season. The EiT program will provide the opportunity to gain experience using an advanced multibeam bathymetric sonar mapping system, while contributing in a significant way to the Okeanos Explorer.

Okeanos Explorer exploration for 2020 will focus on the Atlantic Ocean, including the US Exclusive Economic Zone near Puerto Rico, the US Virgin Islands, and New England; the Mid Atlantic Ridge, and Atlantic Maritime Canada. Current undergraduate and graduate students, and recent graduates from higher education institutions in these regions are encouraged to apply. Students traditionally underrepresented in the sciences are also encouraged to apply.
Application Deadline

Ocean Exploration
There are five 20–30 day cruises in April through September. The time at sea for this session begins April 5, 2020 and runs through September 12, 2020.

Curious?
Check out the live feed webcam and learn more about the work of Okeanos at: oceanexplorer.noaa.gov/welcome.html

Discover & Explore
Learn more about the NOAA Okeanos Explorer–In-Training program at:

oceanexplorer.noaa.gov/okeanos/training.html

Undergraduate, Graduate, and Recently Graduated Students may apply at:

cpaess.ucar.edu/okeanos-application-2020

A steeply sloped ridge along the Nova–Canton Trough mapped during the CAPSTONE Telepresence Mapping in Pacific Marine Protected Areas expedition. Onboard were Explorers–in-Training Sarah Rosenthal and Jay Chitnis. Image courtesy of the NOAA Office of Ocean Exploration and Research.
Graduate Research Assistantship Opportunity at the University of North Dakota

The Kennedy research group at UND has a M.S. Graduate Research Assistantship (GRA) position open for the 2020-2021 academic year. This position will focus on remote sensing of blowing snow at Atmospheric Radiation Measurement (ARM) climate research facilities. Activities will include the analysis and detection of the process using lidars, cloud radars, and ancillary instruments. These observations will be placed into context of meso- and synoptic scale meteorological fields. In addition to these duties, students within the research group are expected to assist with local winter weather fieldwork and outreach activities. This position includes a tuition waiver for 30 credit hours, equivalent to the requirements for a M.S. degree.

Ideal candidates have experience in programming (e.g. Python), communication skills, and possess (or are willing to gain) a tolerance of cold weather. Above all else, candidates should have an inquisitive mind and a passion for the field of atmospheric sciences. Interested individuals should contact Aaron Kennedy (aaron.kennedy@und.edu / 701-777-5269) and are encouraged to stop by the UND booth at the AMS career fair at the annual meeting!

Admissions at UND

Admission packets are due by February 15th 2020 for the fall semester. Admission requirements include:

1. A four-year bachelor’s degree from a recognized college or university. For U.S. degrees, accreditation must be by one of the six regional accrediting associations.
2. Completion of a minimum of 20 semester credits of appropriate undergraduate work, e.g., physics, mathematics, chemistry, engineering, and/or atmospheric science.
3. A cumulative GPA of at least 2.75 for all undergraduate work or a GPA of at least 3.00 for the last two years.
4. Scores on the general portion of the Graduate Record Examination (GRE).* This requirement is no longer required for domestic candidates.
5. Satisfy the School of Graduate Studies’ English Language Proficiency requirements as listed in the graduate catalog.

For more information on the admissions process, please visit:
https://und.edu/programs/atmospheric-sciences-ms/
CIMMS Research Associate – Small Unmanned Aircraft Systems

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) seeks a research associate to assist in a new project that aims to transition small Unmanned Aircraft Systems (sUAS) into operations within NOAA. This position will be located at the NOAA/Air Resources Laboratory (ARL) Atmospheric Turbulence and Diffusion Division (ATDD) in Oak Ridge, TN. The associate will play a vital role in operating the sUAS, as well as acquiring and processing the data collected by the sUAS. The most critical task will be performing daily flights at a nearby site using ATDD’s vertical takeoff and landing (VTOL) and fixed-wing sUAS to sample boundary layer temperature, moisture, and wind fields. These datasets will be provided to the nearest National Weather Service office to assist with short-term weather forecasts. Additionally, the associate will operate ATDD’s other fixed-wing sUAS used for obtaining in-situ meteorological and flux measurements, as well as spectral characteristics of the land surface. Following data collection, the research associate will lead efforts to process the data for further analysis. This work will provide opportunities for the associate to author research papers.

Job Responsibilities:

1) Operate the sUAS on a daily basis at weather-dependent times.
2) Download and process data collected for expedited transmission to the local National Weather Service forecast office.
3) Participate in further analysis of the data, and preparation of scientific research papers.

Job Requirements:

1) United States citizen or permanent resident;
2) An M.S. degree in aerospace engineering, meteorology, computer science, or a closely-related field, or a B.S. degree with at least three years of experience;
3) At least three years of experience with piloting sUAS and flight planning is desirable;
4) Expertise in one or more programming languages (IDL, C, Python, FORTRAN, etc.) is also desired;
5) CIMMS seeks candidates that are creative, have an ability to work independently, and have good communication skills;
6) The ability to travel to field study sites will also be required.

The salary will be based on qualifications and experience with benefits provided through the University of Oklahoma (https://hr.ou.edu/).

To apply for the position, please send your CV, cover letter, and list of three references to:

CIMMS Careers
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
CIMMS-careers@ou.edu
Job Requisition: Unmanned Aircraft

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UNDERGRADUATE RESEARCH PITCH COMPETITION
THREE MINUTES... TO PITCH... ONE PROJECT
March 10 | 7-9pm | RAWL 1086
Awards Available

PURDUE UNDERGRADUATE RESEARCH CONFERENCE
A TRADITIONAL APPROACH TO PRESENTING RESEARCH PROJECTS AND DISCOVERIES
Poster Symposium | April 14 | 8:30am-4pm | PMU Ballrooms
Oral Presentations | April 15 | 8:30am-4pm | STEW 214
Awards Available

CELEBRATE PURDUE’S THINKERS, CREATORS, & EXPERIMENTERS
SHOWCASE YOUR RESEARCH TO INVOLVE THE SENSES—ENGAGE THE AUDIENCE IN YOUR WORK
April 16 | 1:30-3:30pm | Co-Rec

purdue.edu/undergrad-research

CHECK OUT OUR SPRING SEMINAR SERIES

OFFICE OF UNDERGRADUATE RESEARCH
On Water Resources, Cooperation and Conflict
Prof. Marc Müller
Civil and Environmental Engineering and Earth Science, University of Notre Dame
Tuesday, March 3rd, 1:30 PM HAMP 1113

Abstract
The availability of water determines where people live and what they do and, reversely, human activities also affect the way water resources are distributed through time and space. The coupled, dynamic and locally specific nature of human-water interactions makes it challenging to attribute causes and effects and generate transferable understanding from place-based observational studies. Both tasks are essential to inform policy decisions that will have long-lasting impacts on the food, energy, water and ecological systems of tomorrow. This talk discusses recent progress in addressing these challenges along three important lines of inquiry: (i) the attribution of rapid hydrological change to climate vs. local human action, (ii) the emergence of cooperation over shared water resources and (iii) the interactions between water scarcity and violent conflicts. Marc Müller will present results from recent investigations on highly strategic water resources in the Middle East and South Asia.

Brief Bio
Marc Müller is an assistant professor in hydrology and water resources at the University of Notre Dame’s Department of Civil and Environmental Engineering and Earth Science. He takes a multidisciplinary approach to studying the interactions between humans and water, particularly in rapidly-changing regions where little data is available. His work focuses on new approaches to collecting, analyzing, and disseminating water information, and his research interests include water-related conflicts, surface hydrology, remote sensing, rural electrification, information/data science, applied statistics, and geostatistics. Marc has worked in multiple countries including Nepal, Bangladesh, Tanzania, Cambodia, Jordan, and Syria. He earned two Bscs and an Msc from the École Polytechnique Fédérale de Lausanne and a PhD from the University of California at Berkeley, where he was a Fulbright Science and Technology Fellow.
Butler Center-ADVANCE Working Paper Series
Navigating Careers in the Academy: Gender, Race and Class

The Butler Center in partnership with ADVANCE -Center for Faculty Success has a Working Paper Series focusing on navigating careers in the academy. This peer reviewed series includes work by senior scholars, graduate students, and faculty at all stages as a space for the discussion of issues related to academic careers. The series will serve as a means for documenting and sharing interventions and/or practices and/or processes developed by and/or utilized by faculty and post-docs for navigating careers.

The topics may include: strategies for diversifying faculty, staff and students; negotiating intersections of gender, race/ethnicity, and nationality in the academy; creating inclusive research environments; mechanisms for involving graduate and undergraduate students in research; traversing teaching/the classroom; considering inclusivity in mentoring faculty/students; lessons to be learned from experiences of faculty in the academy; gender biases – in the classroom, P&T evaluations, leadership; best practices around creating an inclusive climate; effective programs/interventions; intersectionality; role of professional societies in achieving success and excellence. This list is indicative of topics of interest but is by no means exhaustive. We encourage manuscripts that bridge the gap between research, policy, and practice. The following types of submissions will be considered for this working paper series: reflection papers; summaries of research; write-ups of speakers or meetings; white papers; preliminary findings; conceptual pieces; creative works; best practices.

The working papers may be anywhere between 2 pages (such as best practices) to 20 pages in length. The papers will be peer-reviewed. The authors will retain the copyright to their papers, allowing them to republish their work elsewhere.

www.purdue.edu/butler
CALL FOR ABSTRACTS FOR THE FALL 2020 ISSUE IS NOW OPEN
DEADLINE: Friday, August 21, 2020

Abstracts for the fall 2020 issue of the Butler Center-ADVANCE Working Paper Series’ titled “Navigating Careers in the Academy: Gender, Race, and Class” are now being accepted. The deadline for submission of abstracts is Friday, August 21, 2020.

We invite submissions that fall under the broad topic of academic careers (as noted below, please see our website for details). Abstracts must have specific aims or questions proposed to be addressed; clear argument/s; and make contribution/s that will benefit those in the academy. Abstracts should include the form/s of evidence that will be used – forms of data, cases, reflection based on experiences and so on.

Abstracts must be 150 words or less and should be emailed to butler-advance@purdue.edu. Please include the following information in your submission:
- Title of the paper (tentative is acceptable)
- Name of authors, rank or title, and name of department (in order of authorship)
- Email of corresponding author

Abstracts will be reviewed by the co-editors and the editorial board. If the abstract suggests that the paper is suitable for the Working Paper Series, the author/s will be required to submit the full-length paper within about six weeks. If the author/s require additional time for submission of the full-length paper, they may request for considering their submission for the following issue (Spring 2021). The co-editors’ decision to accept and publish the paper will be made based on peer reviews.

Past issues and more information about manuscript submission is available online at www.purdue.edu/butler/working/index.html or by emailing butler-advance@purdue.edu.
The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma (OU) seeks to fill a Research Associate position to support the National Oceanic and Atmospheric Administration (NOAA) Forecast Decision Training Division (FDTD) in Boulder, Colorado, on training for the Advanced Weather Interactive Processing System (AWIPS) Graphical Forecast Editor (GFE).

The principal duties of this position are:

- Development of training and online reference material for new and existing AWIPS GFE Focal Points at NWS Weather Forecast Offices and National Centers
- Analysis of current and future versions of the GFE software, including local settings and implementation at various NWS weather forecast offices, in order to identify operational best practices

Required Qualifications:

- A Master’s degree or higher in Meteorology, Atmospheric Science, Computer Science, or related area
- Strong web programming (e.g., HTML, XML) skills
- Experience developing training or technical documentation
- Experience with Python scripting
- Experience with Linux (or Unix) operating systems
- Excellent oral and written communication skills
- Ability to work and communicate effectively in diverse team environments
- U.S. Citizenship or Permanent Residency is required

Desired Qualifications:

- Experience developing interactive web-based learning applications for technical users
- Experience with GFE configuration and Python in the AWIPS environment
- Knowledge of how GFE is used, configured, and maintained by NWS field sites

Normal working hours will be observed. This position will primarily be located in Boulder, Colorado with possible trips to NWS WFO field sites and/or data centers.

Supervision will be provided by CIMMS staff. Technical oversight will be provided jointly by CIMMS Research Associates and FDTD management. Works under general supervision but is expected to work in a team environment and determine action to be taken in handling all but unusual situations. Incumbent is not expected to supervise other employees.
The salary for this position is very competitive and will be based on experience, skills, and knowledge. Information on University benefits may be found at [https://hr.ou.edu/](https://hr.ou.edu/). The position is expected to begin May-June 2020.

To apply for the position, please forward your resume, cover letter and list of three references to:

CIMMS Careers
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
CIMMS-careers@ou.edu
ATTN: Scientific Programmer AWIPS-GFE

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