EAPS WEEKLY NEWSLETTER
23 April 2018 | EAPS on Facebook | EAPS on Twitter

Contents:
Meetings/Events & Dept. News........................................1
Undergrad/Graduate Student News.................................2
University News..........................................................7

DEPARTMENT NEWS

BE SURE TO CHECK OUT ALL OF THE EAPS COMMUNICATIONS MEDIA!

Facebook
Twitter
Department Magazine
Website News

EAPS PUBLICATIONS


EAPS COLLOQUIA

Erich Peitzsch
USGS Northern Rocky Mountain Science Center
Thursday, April 26, 2018
3:30 PM
HAMP 1252

Jeffrey Freymueller
Department Head Faculty Candidate
University of Alaska, Fairbanks
Monday, April 30, 2018
3:30 PM
HAMP 1252

EAPS GSA CLEAN-UP DAY

Some graduate students went to Trailhead Park in West Lafayette to pick up trash along the trail and creek.

EARTH DAY MESSAGE FROM DR. FEUSTEL

Dr. Feustel published the following message from the International Space Station on Earth Day:

“Such a beautiful view as we fly 250 miles above Earth!

On a southwest to northeast trajectory headed for Mexico, I spotted this mass of rock apparently oozing from the ocean, fighting to break above the waterline. This swell has long been asleep, having reached its goal, yet it still serves as a reminder of the dynamics of this active and alive planet that we live on. This is the island of Socorro, 400 miles off the coast of Mazatlán in Mexico.

From our vantage point on the International Space Station, geology and tectonics are all so clear, and clearly complex. From our vantage point on the International Space Station (ISS), the geology and tectonics are all so clear, and clearly complex. Entire mountain ranges come into view, and volcanoes and impact craters are obvious at first glance.

We have a rare perspective to see the Earth as an entire globe, floating freely in space. There are no borders, and we can barely see large cities without looking closely with the naked eye. Earth is our spaceship, and the ISS is just a traveling companion as we hurtle around the Sun together, again and again.

As Earth Day approaches, I hope all inhabitants of our beautiful planet learn to see it without borders, as we do. We all live out in space.”

DR. FILLEY INTERVIEWED BY NPR

An interview with Dr. Tim Filley, focusing on a partnership between a Peruvian university and Purdue University, aired on the NPR radio show/podcast Tech Nation. You can listen to the interview on the show’s website. For more information on this partnership, see this press release.

STUDENT NEWS

http://www.eaps.purdue.edu/
OFFICE OF INTERDISCIPLINARY GRADUATE PROGRAMS 2018 SPRING RECEPTION

Join us to see more than 120 research posters from graduate students across multiple disciplines! This event is open to campus. The event details are as follows:

Wednesday, May 2, 2018
North & South ballrooms, Purdue Memorial Union
10:00 – 11:30 AM : Poster Session, Light Refreshments
11:30 AM – 12:00 PM : Award Presentation, Keynote

For more information, see the attached flyer.

FORREST RESEARCH FOUNDATION FELLOWSHIPS

The Forrest Research Foundation awards prestigious fellowships to postdoctoral researchers undertaking their world class research at any one of the Western Australian universities.

Offered to outstanding postdoctoral researchers from all disciplines, Forrest Fellows are selected based on their:

• Exceptional academic achievements
• Developed collaborations with outstanding researchers in their field
• Potential to make a positive difference in the world through their research

Value

• Forrest Fellowships are valued at over $115,000 per annum for 3 years
• Fellows are accommodated at Forrest Hall premium one and two bed apartments located on the Swan River and designed to suit the needs of academics intent on achieving excellence in their field.

The application deadline is May 18, 2018. For more information, see the attached flyer, or go to www.forrestresearch.org.au.

2018 COLLEGE OF SCIENCE GRADUATE STUDENT INTERNATIONAL TRAVEL AWARDS

The deadlines for the 2018 College of Science Graduate Student International Travel Awards have been announced. For travel between July 1, 2018 and December 31, 2018 the deadline is 4:00 P.M. on June 1, 2018. Students must be full-time PhD students in the College of Science, and must be making an oral or poster presentation at an international conference. Priority will be given to travel to make an oral presentation at a conference, attendance at an interdisciplinary conference, and/or students who have passed their prelims.

To apply, send the following electronically as one file to Robin Sipes (rsipes@purdue.edu):

• CV (2 page limit)
• Brief statement of purpose for attending conference specifying whether your presentation is oral or poster
• Web link to conference
• Letter of support from research advisor

For more information, see the attached flyer.

CIMMS RESEARCH SCIENTIST – WARN ON FORECAST NUMERICAL MODELER

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma seeks to fill a Research Scientist position for its collaborative research as a Cooperative Institute with the National Oceanic and Atmospheric Administration (NOAA) Office of Oceanic and Atmospheric Research (OAR) National Severe Storms Laboratory (NSSL). The Research Scientist will participate in NSSL’s Warn on Forecast research program.

Desired Qualifications:

- PhD in the physical sciences (Physics/Math/Remote Sensing/Meteorology or related area) with professional experience as a scientific researcher and programmer.

http://www.eaps.purdue.edu/
Experience with running numerical weather prediction models and familiarity with ensemble data assimilation methods (WRF/DART and/or GSI-EnKF experience is a plus).

Proficiency with common programming and scripting languages (emphasis on FORTRAN, CSH, Python languages) in UNIX environments.

Ability to work and communicate in a team environment effectively.

Ability to write proposals to obtain funding support for research activities.

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

Tracy Reinke
Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
treinke@ou.edu
ATTN: WoF Data Assimilation

For more information, see the attached flyer.

CIMMS RESEARCH ASSOCIATE – AWIPS2

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 duties of this position are:

1. Integration of experimental datasets (ex. Phased Array Radar, Warn-on-Forecast products, multi-sensor products, NUCAPS, satellite, etc.) into AWIPS2;

2. Support and participate in applied research experiments in the Hazardous Weather Testbed;

3. Development of new applications and visualization techniques in the AWIPS2 development environment.

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.);

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 http://www.hr.ou.edu/employment/WorkingatOU.asp. The position is expected to begin May 2018.

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

Tracy Reinke
Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
	house/ou.edu
EMAIL BUDDIES WANTED

New students always have many questions and we feel that you can be a valuable partner in helping them navigate their first steps at Purdue and the College of Science. We are asking you to participate in an email exchange with a first semester student.

If you participate in this program, you will be required to exchange 3-4 emails within the first few weeks before and after the start of the semester. Entering students will be informed that this is an email only relationship.

If you would like to be part of this program, please fill out the short survey. For more information, see the attached flyer, or email Terry Ham at hamt@purdue.edu.

CERTIFICATE IN ENVIRONMENTAL AND SUSTAINABILITY STUDIES

The Certificate in Environmental and Sustainability Studies is a new, interdisciplinary undergraduate certificate administered by the Center for the Environment. The Certificate gives students working in multiple disciplines a broad exposure to how environmental and sustainability challenges and solutions are conceived, represented, and researched in the Humanities, Social Sciences, Agriculture, and STEM disciplines. The certificate introduces students to a wide range of environmental issues from diverse perspectives so that they can more effectively comprehend and evaluate today’s environmental and sustainability challenges.

To learn more, visit the program’s website.

2018 HITCHHIKER’S GUIDE TO THE BIOMOLECULAR GALAXY PROTEIN SYMPOSIUM

We are pleased to announce the 4th installment of ‘The Hitchhiker’s Guide to the Biomolecular Galaxy’, a Purdue mini-symposium on integrating structure, function, and interactions of the biomolecular universe. This symposium is an interdepartmental event focusing on interdisciplinary research in biophysics and structural biology. The event provides an exceptional platform for students and postdoctoral scholars to present their work, learn about cutting-edge research, and network with young scientists and faculty members from Purdue and regional institutions. In addition to student and postdoc presentations, Dr. Matthew Redinbo from University of North Carolina - Chapel Hill will be giving a keynote address.

The symposium will take place May 9-10 in Neil Armstrong Hall of Engineering, with a Career Development Session the evening of May 8th at Lafayette Brewing Company.

We invite you to register and submit abstracts for oral and poster presentations on our website: https://www.hg2bg.com/.

Registration is free, but space is limited so we ask that you register soon.

This year, we are also excited to announce that TTP Labtech is hosting a crystallization workshop on May 8th from 12-5 in Hockmeyer Hall. This is a great opportunity to learn about the different crystallization robots available on campus and even set up trays with your protein! Space is limited to 12 individuals, and slots are filled on a first-come, first-served basis.

We are also introducing an "Art of Science" display, where applicants may bring posters, prints, or physical models which explore the interplay between art and science. We hope that this exhibit will help seed interesting conversations and facilitate more interactions among attendees. One item of exceptional aesthetic merit, as judged by the symposium organizers, will be chosen for prizes. For more information, please visit our website.

Prizes will also be awarded for best presentations in the following categories: undergraduate poster, graduate poster, graduate oral, postdoc poster, and postdoc oral.

http://www.eaps.purdue.edu/
Deadline for registration, abstract submission, and travel grants is April 27th.

COLLEGE OF SCIENCE
GLOBAL SCIENCE PARTNERS

Are you interested in making friends from around the world? Are you interested in increasing your marketability by improving your intercultural competence? Do you enjoy learning about other cultures AND sharing things about your own culture? Would you be willing to mentor a new College of Science student (freshman, transfer or exchange)?

Global Partners are Purdue College of Science student leaders who work to create a comfortable and safe environment in which entering students can individually and collectively “find their feet” in the Purdue community. These partners provide new students with the tools and knowledge they need to start their college career, and aid them throughout their transitions as first-year students at Purdue University. The Global Partners program is also dedicated to enhancing cross-cultural understanding and to helping all students involved expand their knowledge of cultures other than their own.

To find out more about joining for the 2018/19 school year, visit the Global Science Partners Website.

DISCUSSION GROUPS AT PURDUE COUNSELING AND GUIDANCE CENTER

If you are stressed about a romantic breakup, or are grieving the loss of someone important to you, the Purdue Counseling and Guidance Center (PCGC) can help. The PCGC will be offering discussion groups on each of these topics on Wednesday nights, the next being April 25th. Each night will start with a free meal from 6:00 to 6:30pm and the groups will be from 6:30 to 8:00pm.

Topics for the groups are as follows:

* Grief discussion group—opportunity for college students who have experienced the death of someone important to them to talk about their experiences with grieving during college, with an emphasis on the uniqueness of grief.

* Romantic breakup discussion group—opportunity for college students who have recently experienced a breakup to talk about their reactions and responses, with an emphasis on the losses and gains that are often connected with the ending of significant relationships.

Students interested in attending one of these groups must contact the PCGC—spaces are limited. For more information and/or to sign up, call 494-9738. Limited spaces are also available for individual counseling for general concerns. Our email address is pcgc@purdue.edu and our website is www.edst.purdue.edu/pcgc.

http://www.eaps.purdue.edu/
DISCOVERY PARK
DISTINGUISHED LECTURE SERIES

Venkatesh Narayanamurti will give a lecture as part of the Discovery Park Distinguished Lecture Series, titled, “Bridging the Basic-Applied Dichotomy and the Cycles of Invention and Discovery.” Narayanamurti is the Benjamin Peirce Research Professor of Technology and Public Policy at Harvard University. The details of the lecture are as follows:

Tuesday, April 24, 2018
1:30 PM
Burton D. Morgan Center, Room 121

For more information, see the attached flyer.

ENTERPRISE AND THE ENVIRONMENT
SUMMER SCHOOL
July 1-13, 2018

The Smith School of Enterprise and the Environment at the University of Oxford. We would like to invite students at the Purdue department for earth, atmospheric and planetary sciences to apply for our Enterprise and the Environment Summer School, which will take place from 1st-13th July 2018 in Oxford. It is a summer school intended for undergraduates, as well as recent graduates passionate about leading environmental change in business, society and government. See attached for more information.

GLOBAL SCIENCE PARTNERSHIPS LEARNING COMMUNITY

Attention: all first year college of science students! See the attached flier for information about free dinners, trips, and activities that are designed to help you learn about other cultures…while having fun!

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

POC: Terry Ham: hamt@purdue.edu or globalsciencepartners@purdue.edu

PURDUE TO ADD TWO-FACTOR AUTHENTICATION FOR ALL FACULTY AND STAFF DURING SPRING SEMESTER

Coming soon, all of Purdue’s faculty and staff will need to begin using two-factor authentication, known at Purdue as BoilerKey, to log into the new employee portal, SuccessFactors, improving security of personal and University data alike. Signup for BoilerKey is now ready for all Purdue employees at www.purdue.edu/boilerkey. Purdue faculty and staff can expect reminders to sign up in the form of direct emails, social media posts and Purdue Today articles to give instructions on how and where to sign up throughout the coming spring semester. The employee portal allows employees to create leave requests and check paystubs. It also handles many of the University’s business functions.

What is two-factor authentication?

BoilerKey adds a second login requirement to go with your password. At Purdue, it’s a numerical code randomly generated on a smartphone app called Duo or a key fob. Essentially, even if someone were to get a hold of your password (if you fall for a phishing email, for instance), your account would still be protected because only you can physically access your smartphone or key fob to get the necessary login code.
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 Logan Judy (ljudy@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
GPS/GNSS: The Swiss Army Knife of Geoscience

Jeffrey Freymueller
University of Alaska, Fairbanks

GPS (or more generally GNSS) satellite navigation systems allow us to make an amazing variety of measurements to study the solid earth, ocean, surface processes, neutral atmosphere and ionosphere. I will review this “multi-tool” capability, with special emphasis on my own specialization of solid earth geophysics. I use GPS to study the kinematics and dynamics of the lithosphere, asthenosphere, and fault zones. I will present a summary of one application, to variations in slip behavior in the seismogenic zone in Alaska.

Monday, April 30, 2018
3:30 pm
Room 1252, HAMP Bldg.

Refreshments at 3:00pm
Room 2201/HAMP
Mountain ecosystems in the western U.S. and the Northern Rockies in particular are highly sensitive to climate change. These same ecosystems provide up to 75% of the water humans depend on as well as a host of other ecosystem services such as snow-based recreation, timber, unique flora and fauna, and critical habitat for rare and endangered species such as bull trout and grizzly bear. Erich will present a broad overview of their research group’s cryosphere projects, and then provide an in-depth look at two of their current projects: glacier mass balance and avalanche/snowpack mapping using remote sensing capabilities. CCME staff are monitoring many of the park’s glaciers to determine the causes of change, assess their ecological and hydrological effects, and predict future changes and effects. Intensive research to determine the mass balance of Sperry Glacier will determine whether small cirque glaciers like Sperry can serve as reliable indicators of current climate variability.

Thursday, April 26, 2018
3:30 p.m.
Room 1252 HAMP

Refreshments at 3:00 pm
Room 2201/HAMP
Forrest Fellows are outstanding researchers of exceptional ability and resourcefulness.
Offered to outstanding postdoctoral researchers from all disciplines, Forrest Fellows are selected based on their:
• Exceptional academic achievements
• Developed collaborations with outstanding researchers in their field
• Potential to make a positive difference in the world through their research

Value
• Forrest Fellowships are valued at over $115,000 per annum for 3 years
• Fellows are accommodated at Forrest Hall – premium one and two bed apartments located on the Swan River and designed to suit the needs of academics intent on achieving excellence in their field

Partner Universities
• Curtin University
• Edith Cowan University
• Murdoch University
• The University of Notre Dame
• The University of Western Australia

The Forrest Research Foundation is made possible by the Minderoo Foundation in collaboration with the five Western Australian universities.

Apply
2018 Forrest Fellowship applications open 20 March until 18 May 2018.

Contact
E: admin@forrestresearch.org.au
T: +61 8 6488 5598
www.forrestresearch.org.au

The Forrest Research Foundation awards prestigious fellowships to postdoctoral researchers undertaking their world class research at any one of the Western Australian universities.
CIMMS Research Scientist – Warn On Forecast Numerical Modeler

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma seeks to fill a Research Scientist position for its collaborative research as a Cooperative Institute with the National Oceanic and Atmospheric Administration (NOAA) Office of Oceanic and Atmospheric Research (OAR) National Severe Storms Laboratory (NSSL). The Research Scientist will participate in NSSL’s Warn on Forecast research program.

Background:
CIMMS in collaboration with NSSL is funded to develop and demonstrate the value from a probabilistic ensemble-based convection-resolving model forecast system to help increase lead times for hazardous weather events. Increasing severe thunderstorm, flash flood, and tornado warning lead times is a key NOAA strategic mission goal designed to reduce the loss of life, injury, and economic costs of high impact weather. A successful candidate for this position will conduct a collaborative research program to improve NSSL’s storm-scale NWP efforts by researching improvements and/or alternative approaches to our current convective-scale ensemble and hybrid prediction systems. Candidates will be expected to develop new research efforts in one or more of the following areas: improvement of ensemble performance via algorithm development and/or the use of stochastic approaches, optimizing the use of high-resolution radar and satellite observations for convective scale data assimilation, or the use of machine learning for data assimilation or for post-processing of ensemble output. While a candidate will need to be self-directed, they will work closely with other members of NSSL’s Warn on Forecast team. The candidate will also have opportunities to participate in NOAA’s Hazardous Weather Testbed experiments each year, as well as collaborate with scientists from our partners at the National Weather Center as well as other NOAA laboratories working on high-impact convective weather. The candidate will be expected to present his/her work at national conferences and publish in peer-reviewed journals regularly.

Desired Qualifications:

- PhD in the physical sciences (Physics/Math/Remote Sensing/Meteorology or related area) with professional experience as a scientific researcher and programmer.
- Experience with running numerical weather prediction models and familiarity with ensemble data assimilation methods (WRF/DART and/or GSI-EnKF experience is a plus).
- Proficiency with common programming and scripting languages (emphasis on FORTRAN, CSH, Python languages) in UNIX environments.
- Ability to work and communicate in a team environment effectively.
- Ability to write proposals to obtain funding support for research activities.

The beginning salary will be based on qualifications and experience with benefits provided through The University of Oklahoma (https://hr.ou.edu/Employees/New-Employees-at-OU/OU-Benefits-Overview). The start date for the position is negotiable.

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

Tracy Reinke
Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
treinke@ou.edu
ATTN: WoF Data Assimilation

The University of Oklahoma is an equal opportunity/Affirmative Action employer.
2018 College of Science
Graduate Student
International Travel Awards

Deadline: 4:00 PM June 1, 2018

For travel between July 1, 2018 and December 31, 2018

~ 2 or 3 awards ranging up to $800 for international travel will be awarded~

Prerequisites:

• must be a full-time PhD student within the Department in the College of Science

• must be making an oral or poster presentation at an international conference

Priority will be given to:

• travel to make an oral presentation at a conference

• attendance at an interdisciplinary conference

• students who have passed their prelims

To apply, please send electronically as one file:

• CV (2 page limit)

• brief summary of research (1 page limit)

• brief statement of purpose for attending conference specifying whether your presentation is oral or poster

• provide web link to conference

• letter of support from research advisor

Send applications to Robin Sipes at rsipes@purdue.edu
Office of Interdisciplinary Graduate Programs Presents
2018 Spring Reception

Wednesday, May 2, 2018
North & South Ballrooms, Purdue Memorial Union
10:00 – 11:30 AM Poster Session & Light Refreshments
11:30 AM - 12:00 PM Award Presentation & Keynote

Join us to see over 120 research posters from graduate students across disciplines!
This event is open to campus.

Find more information at purdue.edu/gradschool/oigp
Questions? Contact us at 494-0379 or oigp@purdue.edu
EMAIL BUDDIES WANTED!

New students always have many questions and we feel that you can be a valuable partner in helping them navigate their first steps at Purdue and the College of Science. We are asking you to participate in an email exchange with a first semester student.

If you participate in this program, you will be required to exchange 3-4 emails within the first few weeks before and after the start of the semester. Entering students will be informed that this is an email only relationship.

Your role will be to respond to questions about the major, the College of Science, and Purdue in general. You will not be expected to answer any questions about academic requirements and if you find your freshman partner has any, please refer him/her to their advisor.

If you would like to be a part of this program, please fill out the short survey on the following link:

https://purdue.qualtrics.com/ControlPanel/?ClientAction=EditSurvey&Section=5V_3qWUpdI0dEvOyQ1&SubSection=&SubSubSection=&PageActionOptions=&TransactionID=2&Repeatable=0

It’ll look great on your resume!

Please feel free to contact me if you’d like me to send you the sign up link electronically or if you have any questions hamt@purdue.edu

Thank You,

Terry
Are you interested in making friends from around the world?
Are you interested in increasing your marketability by improving your intercultural competence?
Do you enjoy learning about other cultures AND sharing things about your own culture?
Would you be willing to mentor a new College of Science student (freshman, transfer or exchange)?

Global Partners are Purdue College of Science student leaders who work to create a comfortable and safe environment in which entering students can individually and collectively “find their feet” in the Purdue community. These partners provide new students with the tools and knowledge they need to start their college career, and aid them throughout their transitions as first-year students at Purdue University.

The Global Partners program is also dedicated to enhancing cross-cultural understanding and to helping all students involved expand their knowledge of cultures other than their own.

Join us for the 2018/19 school year for monthly dinners, trips and activities (free for you!) that are designed to help you learn about other cultures.......while having fun!

Orientation (2018 on Aug 19)                       Trip to the Eitlejorg in Indianapolis                                   Learning a folk dance

To find out more about the Global Science Partners, follow this link:  http://www.science.purdue.edu/gsp/

Getting acquainted at one of our events

To sign up for Global Science Partners, please follow this link:  https://purdue.ca1.qualtrics.com/jfe/form/SV_8Bo4arvA9JsL6f3

Halloween Service Event at the YMCA – October 2018

For more information, please contact Terry Ham at: hamt@purdue.edu or globalsciencepartners@purdue.edu
BRIDGING THE BASIC-APPLIED DICHOTOMY AND THE CYCLES OF INVENTION AND DISCOVERY

Venkatesh Narayanamurti
Benjamin Peirce Research Professor of Technology and Public Policy at Harvard.

Tuesday, April 24, 2018
1:30 p.m.,
Burton D. Morgan Center, Room 121

In this talk Venkatesh (Venky) Narayanamurti will reflect on the genesis of the Information and Communications revolution and through an analysis of the hard case of Nobel Prizes in Physics to show that the causal direction of scientific discovery and radical invention are often reversed. They often arose in a culture of so called “applications oriented research” in industrial laboratories and he will use those examples to enumerate the key ingredients of highly successful R&D institutions. His views have been shaped by his own personal experiences in industrial research, U.S National Laboratories and research intensive universities. By exploring the daily micro-practices of research, he will show how distinctions between the search for knowledge and creative-problem solving break down when one pays attention to how path breaking research actually happens. He will highlight the importance of designing institutions which transcend the ‘basic-applied’ dichotomy and contrasting them with models of the classic but still influential report Science, The Endless Frontier. The need for new integrative institutions to address global challenges such as climate change and alternative energy sources will be discussed.

Venkatesh Narayanamurti is the Benjamin Peirce Research Professor of Technology and Public Policy at Harvard. He has served on numerous advisory boards of the federal government, research universities and industry. He was formerly the John L. Armstrong Professor and Founding Dean of the School of Engineering and Applied Sciences, Professor of Physics and Dean of Physical Sciences at Harvard. From 2009 to 2015 he served as the Director of the Science, Technology and Public Policy Program at the Harvard Kennedy School. He served as Dean of the UCSB College of Engineering from 1992 to 1998. He is the author of more than 240 scientific papers in different areas of condensed matter and applied physics. He lectures widely on solid state, computer, and communication, and energy technologies, and on the management of science, technology and public policy. He is a fellow of the American Academy of Arts and Sciences, Indian Academy of Science, Indian National Academy of Engineering, IEEE, AAAS and an elected member of the U.S National Academy of Engineering, of the Royal Swedish Academy of Engineering Sciences and of the World Academy of Sciences.

www.purdue.edu/discoverypark/dls

Open to the public For more information contact Maria Longoria-Littleton at mlongori@purdue.edu