Greetings - I hope your new year has gotten off to a great start! Spring semester is always very exciting to us as we get ready to host many exciting events, including EAPS Awards Banquet, Alumni Advisory Board meeting, and sending off our graduating students to exciting career paths. Last year, we were able to present over 70 scholarships and awards totaling over $98,000 thanks to the generous support of our alumni and friends. It was great to see a number of our alumni present the awards to our students, and I hope to welcome many of you back to the campus again this year.

Last year was a very exciting year for us. Five new faculty joined the department, and many of our faculty, staff, and students were recognized with a number of prestigious awards. We concluded a five-year external review of our department and developed a new five-year strategic plan. I would like to extend my appreciation to many of our Alumni Advisory Board members who had provided constructive comments to strengthen our strategic plan.

Please mark your calendar for a number of events we have planned, and I look forward to interacting with you this year.

Best regards,
Indrajeet Chaubey
Professor and Head
Fourteen people were honored as Purdue University College of Science Outstanding Alumni in 2014. Among those awarded were EAPS alumni, Mr. Jeff Ahbe (MS '78) and Dr. Bin Wang (PhD '93). This award was presented to both Mr. Ahbe and Dr. Wang to honor and recognize their outstanding professional achievements since graduating from Purdue.

Mr. Ahbe graduated with BS ('76) and MS ('78) degrees in Geophysics/Geology. He completed the Executive Development Program at Kellogg Business School in '93. He is founder of the ACIG Capital and Advisory (2002) and has advised, helped structure and manage projects in various industry sectors, predominantly mining, technology, land development and oil and gas. He has worked extensively in N. America, Africa and Europe with significant emphasis in South Africa over the last decade. He is retired Chairman/CEO of Ferroxx Holdings Ltd. a titanium, vanadium and iron company with a large resource base in South Africa.

From 1984 to 2000 he worked for Union Pacific Resources (UPR) in various executive and management positions in Denver, Ft Worth and Calgary. He was part of the executive team involved in the merger with Anadarko as well as the acquisition of Norcen Canada. As a result of the Norcen transaction he was named Senior Vice President Exploration and Exploitation, Corporate Development of UPR Canada. Other key positions held by Mr. Ahbe include General Manager of the Gulf Onshore Business Unit; General Manager of the South Texas, Plains States; and VP of Canadian Business Units.

He has served on a number of public and private boards including the TSE (Toronto), AIM (London), JSE (Johannesburg), OTC (New York), and is an advisor to Purdue's Earth and Atmospheric Sciences Department. He has been recognized by Kellogg as an invitee member of the Kellogg Global Leader Innovation Network and contributor to their Africa Business Conference.

Mr. Ahbe is active in his community along with his wife, Nina, who is Co-Chair of Cancer Cure which provides funding to Colorado University's Anschutz Cancer Center among other groups.

Dr. Wang earned a BS ('84) and MS ('87) in Electrical Engineering from Beijing University, China and a PhD ('93) in Geophysics from Purdue University. He also obtained an MBA ('01) from Southern Methodist University, while working for Mobil Oil in Dallas. He started his career with Mobil Oil in 1993, later worked for CGGV before joining TGS as a Research Manager in 2007. In 2012, he was promoted to the Director of Research and Development. As the Director of Research and Development, Dr. Wang has led and contributed to the successful advancement of TGS' imaging technology. His dedication, guidance and leadership has propelled TGS' Imaging Research and Development to one of the best in the industry.

Dr. Wang currently serves on the research committee of SEG and was a member of technical committees for the SEG Annual Conventions in 1997, 2008, 2009, 2010, 2012, and 2013. In addition, he has served as a lead organizer for various post-convention workshops and as session chairman for numerous technical sessions. He also organized a few well-attended SEG summer workshops. Furthermore, Bin also served as an Associated Editor for Geophysics since 2007. He has authored and co-authored over 80 technical papers, five of which received special recognitions. Bin was also named an EAGE Distinguished Lecturer in 2010 and an EAGE e-Lecturer in 2013, and received the SEG Life Membership award in 2014.

The two were recognized at a department reception and ceremony. They both spoke about their careers and the role that their EAPS experiences have played in their lives. Mr. Ahbe and Dr. Wang were also able to visit with EAPS faculty members and students. The department was very pleased to host both of them and present them with this significant honor!

We also have a booth at each of these meetings. We encourage you to stop by and say hello, if you are attending any of the conferences!
Two EAPS professors, Dr. Melosh and Dr. Minton, were recently part of a research team that studied chondrules. Their study suggests chondrules were created through collisions of planetary embryos. This research and their findings were included in a recent paper in Nature.

Some of their research suggests collisions of planetary embryos—the seeds to the planets in our solar system that existed 4 billion years ago—could be the origin of the material that formed asteroids.

When part of an asteroid falls onto the Earth it is called a meteorite. For years, scientists have studied chondrules, tiny beads of solidified melted rock that are some of the solar system’s earliest solids, but the origin of these grains remained a mystery, said Melosh. Minton said that some in the field may not warmly receive the study, however.

“Chondrule-bearing meteorites have long been thought to be similar to the building blocks of planets. This study suggests that instead chondrules might actually be byproducts of impacts between objects of an earlier generation, and meteorites may not be representative of the material that made planets.”

To read more about their research, scan the QR code included here:

Professor Profiles: Darryl Granger

Professor Darryl Granger is a geologist who earned his PhD at the University of California-Berkeley. A few of his research interests include tectonic geomorphology, landscape evolution, and cosmogenic nuclides applied to geomorphology and surficial processes.

During his time at Purdue, Dr. Granger has had many awards and accomplishments to his name. Most recently, he was named a 2014 winner of the Wiley Award. The award is for the best paper published in the British Society for Geomorphology’s journal, Earth Surface Processes and Landforms for 2014. The paper was titled, Quantifying effects of deep and near-surface chemical erosion on cosmogenic nuclides in soils, saprolite, and sediment.

AEG Award for Professor West

During the 58th annual meeting of the Association of Environmental and Engineering Geologists (AEG), in Scottsdale AZ, September 23-26, 2014, Terry R. West was awarded the Floyd T. Johnston Service Award at the annual banquet.

This major award given by the association is for long standing service to AEG and is the 29th award given at an annual banquet.

Dr. Christopher Stohr, of the Illinois State Geological Survey, and an alumnus of EAPS, served as the Citationist. Also at the meeting Dr. West served as the co-moderator of the session on Sanitary Landfills and presented the oral paper “Tippecanoe County Indiana Landfill, A Case of Overdesign and Excessive Cost”. EAPS Professors Featured in Elements Magazine

A recent issue of Elements Magazine was devoted to cosmogenic nuclides, an area in which EAPS and Purdue have become a world leader. Two out of the six articles are authored by EAPS faculty members, Darryl Granger and Nathaniel Lifton.

Both Dr. Granger and Dr. Lifton are also affiliated with the PRIME lab, the Purdue Rare Isotope Measurement Laboratory. It is a dedicated research and user facility for accelerator mass spectrometry.

EAPS Professor Named AGS Director at NSF

Last year, the National Science Foundation announced that Dr. Paul Shepson of EAPS would serve as the next Director of the Division of Atmospheric and Geospace Sciences. The NSF Division of Atmospheric and Geospace Sciences supports research to add new understanding of the behavior of the Earth’s atmosphere and its interactions with the sun, including through university grants and a cooperative agreement with the National Center for Atmospheric Research.

Professor Profiles: Dr. Briony Horgan

Assistant Professor, Briony Horgan, came to the department in the spring of 2014. Since her arrival, she has quickly become a very important part of the EAPS planetary group.

Dr. Horgan studied astronomy and space sciences at Cornell University. Today, some of her research interests include surface composition and geology of terrestrial planets and small bodies, reflectance and emittance spectroscopy, paleoclimate records and habitability in soils and paleosols, and more.

You may remember from the last issue of Inside EAPS reading about her role in the 2020 NASA rover mission to Mars. She is co-investigator of one of the instruments that will be used on the mission, the Mastcam-Z. It is one of seven instruments selected by NASA for the 2020 Mars rover.

Dr. Horgan is including both undergraduate and graduate students in her research. Two such undergraduate students are currently involved in a research opportunity that involves using official NASA Mars images. One student, Rachel Maxwell, is looking at photos and examining the soils and clays of an area of Mars called Mawrth Vallis. This spot could serve as a landing site for the 2020 mission. Another, Ellen Czaplinski, is using NASA images for a research project investigating how Martian dunes move. Dr. Horgan’s lab will increase its work over the next few years as the 2020 mission gets closer.
Upcoming Events - Mark Your Calendars!

EAPS Annual Awards Banquet
Monday, April 20, 2015

EAPS Alumni Advisory Board Meeting
Tuesday, April 21, 2015

SEG 2015: New Orleans, Louisiana
October 18 - October 23, 2015

GSA 2015: Baltimore, Maryland
November 1 - November 4, 2015

AGU 2015: San Francisco, California
December 14 - December 18, 2015

AMS 2016: Phoenix, Arizona
January 4 - January 8, 2016

EAPS will hold a reception at each of the meetings listed above. The time and location is TBD. Please check for updates at www.eaps.purdue.edu/alumni.

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