

MESSAGE FROM

DEPARTMENT HEAD

Dear Alumni and Friends,

Greetings from Purdue! We are halfway into our spring term and I thought that it would be a good time to update you with some of the great things we are doing in the Chemistry Department at Purdue. This year started out with exciting news from the American Chemical Society (ACS) with two major awards bestowed upon Professor Arun Ghosh and Professor Ei-ichi Negishi. Arun has been selected as a 2010 Arthur Cope Scholar and Ei-ichi has been selected as the recipient of the ACS Award for Creative Work in Synthetic Organic Chemistry. 2010 is also Professor Joe Francisco's year to serve as the President of the ACS! Congratulations to each of them for their tremendous accomplishments and contributions to the discipline of chemistry.

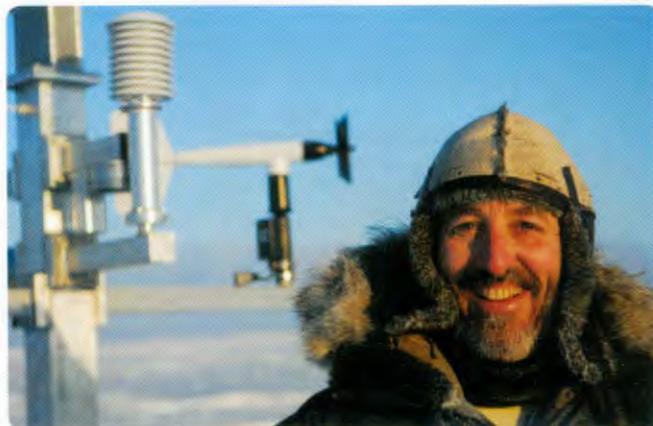


Photo by Spencer Brown

Last November, the Chemistry Department adopted a strategic plan that focuses on several major initiatives: significantly raising our departmental rankings, expanding our research facilities, enhancing the undergraduate experience (e.g. by improving our students study abroad options), and investing in strategic areas for growth (specifically, drug discovery, energy, and soft materials). This is an ambitious plan for our future and we hope that you will partner with us to help achieve our goals. The full plan is available online at www.chem.purdue.edu.

One of our major goals is to cultivate a more engaging and vibrant chemistry community environment. First, we are in the process of raising private funds to create a state-of-the-art, multimedia display in the entrance of Wetherill Laboratories, just outside WTHR 200, emphasizing Chemistry as a central science as exhibited by a series of "wow!" moments/achievements/creations of chemistry. We are also in the planning stages for the creation of a new collaborative space (the "Wetherill Commons")—a place where students, staff and faculty can gather and connect, exchange and incubate ideas formed in classrooms, and expand upon discoveries made in our laboratories.

As you can see, we continue to strive to be the best possible Chemistry Department and contribute to a better Purdue, and we appreciate all that you do for us to help us reach our goals.

Best wishes for the spring,

Paul Shepson

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SCIENCE FEATURE



Dean Roberts (right) meets with postdoctoral student, Chi-Tung Chiang, in his Brown laboratory. Photo by S. Scherer

Jeffrey Roberts has joined Purdue as the Frederick L. Hovde Dean of the College of Science. Roberts is an accomplished scientist in the field of physical and materials chemistry, and most recently was chairman and Distinguished McKnight University Professor of Chemistry at the University of Minnesota. He is the third chemist to serve as Dean of Science at Purdue.

In addition to his administrative duties, Roberts plans to continue his research in the surface chemical properties of aerosol nanoparticles. His work at Minnesota was highly collaborative—especially in engineering. Roberts noted, “A large majority of the funded faculty members in my department had funded collaborations with other people outside of the chemistry department.”

With that experience, Roberts will encourage large-scale group research at Purdue. “There is a lot of it going on that will lead to more,” he says. He is pleased with the science, agriculture, and engineering collaboration within the Purdue Climate Change

Research Center. And plans for future campus projects are promising. “The new drug discovery building is going to be a very interdisciplinary facility that is going to bring faculty members from different areas together—with common lab space and meeting rooms,” he added.

➔ ONLINE! More about Dean Jeffrey Roberts:

- His academic experience
- Goals for the College of Science
- Surface chemistry, aerosol nanoparticle science

During the fall semester, Roberts met with Purdue Chemistry’s 2009 Outstanding Alumni awardees. “It was just a lot of fun to talk to them—the things that they remember about the institution. The Department of Chemistry is very impressive both in terms of the quality of its alumni, but also how much energy it puts into making sure their contributions are recognized,” Roberts said.

Mary Wirth has returned to Purdue as the W. Brooks Fortune Professor of Chemistry. She received her doctorate from Purdue in 1978 and is excited to be back at her alma mater. “Purdue is one of the leaders in analytical chemistry. The people here have great vision,” she added.

Wirth returns to West Lafayette from the University of Arizona in Tucson. Her research is centered on novel separation approaches for biological molecules, such as proteins. She’s an expert in the area of separations and optical spectroscopy, interfacing chemistry and medicine to create technology for earlier detection of diseases, such as cancer and infectious diseases.

“If we could identify signs of cancer and infectious diseases through a blood test, treatment could begin long before symptoms become apparent, when diseases are much more easily treatable,” Wirth says. “The information is there in your blood, but the problem is that the early biomarkers have not been identified by researchers.”

➔ ONLINE! More about Professor Wirth:

- Biomarker research
- The company she oversees
- Her childhood interest in science

ALUMNI FEATURE



Professor Mary Wirth in her laboratory Photo by S. Scherer

SPECIAL FEATURE

Melvin Guy Mellon (1893-1993) has been called 'the wise man' of Purdue Chemistry—an appropriate nickname when considering his seven decades as a professor in the department. Many alumni may only know him as the man for whom the Chemistry Library is named. But to others, Professor Mellon was a teacher, advisor, librarian, architect, and sage.

Mellon arrived at Purdue in 1919 as the second faculty member of the analytical division during its formative years. However his role as an administrator, expanding the library and building both Wetherill and Brown Labs, is perhaps his greatest legacy—experience that made him an international authority on chemical literature and a well-known lab designer.



ONLINE! More about Professor Mellon:

- Biography & photos
- Colorimetry spectroscopy science
- Glimpse of academic life at Purdue in 1920
- Alumni and faculty memories of Mellon



Professor Mellon with his Ostwald color solid in foreground.
Photo: Chemistry Archives

FALL 2009 GRADUATES

ADVANCED DEGREES

Dr. Meaghan Clark (Professor McMillin)
Dr. Olivia Colon-Villafane (Professor Savinov)
Dr. Christopher Dehen (Professor Simpson)
Dr. Liang Gao (Professor Cooks)
Dr. Iris Geisler (Professor Chmielewski)
Dr. Joseph Greene (Professor Lipton)
Dr. Steven Habicht (Professor Kenttämaa)
Dr. T. Brandon Huff (Professor Cheng)
Dr. William James (Professor Zwier)
Dr. Kwanyoung Jung (Professor Regnier)
Dr. Sameer Kothari (Professor Cooks)
Dr. Sumith Kularatne (Professor Low)
Dr. Sarang Kulkarni (Professor Ghosh)
Dr. Jian Liu (Professor McLuckey)
Ms. Alejandra Llorca-Overall (Professor Robinson)
Dr. Nicholas Manicke (Professor Cooks)
Dr. Levi Mielke (Professor Shepson)
Dr. Josh Newby (Professor Zwier)
Ms. Laura Nikstad (Professor Weaver)
Dr. Mohammad Noshi (Professor Fuchs)
Dr. Richard Perry (Professor Cooks)
Dr. Mildred Rodriguez (Professor Wilker)
Dr. Nathaniel Sanders (Professor Cooks)
Mr. Jonathan Slade (Professor Shepson)
Dr. Ryan Spray (Professor Choi)
Ms. Asama Tanaudomngkon (Professor Yang)
Ms. Irin Tanaudomngkon (Professor Mao)
Dr. Jill Tomlinson Philips (Professor Ben-Amotz)
Dr. Bala Vaitilingam (Professor Low)
Dr. Chun-Xiao Xu (Professor Ghosh)
Dr. Wei Xia (Professor Low)
Dr. Yi Xue (Professor Skrynnikov)

UNDERGRADUATE DEGREES

Brianna Combs
Daniel McMahon
Nathan Lawrence
John Gray
Samuel Utley
Aaron Tram
James Williams



by A. Hancock



MORE CHEMISTRY NEWS ONLINE!

2009 Outstanding Chemistry Alumni bios
Chemistry's involvement in campus-wide C3Bio initiative
Chmielewski Group tissue engineering research
Choi Group electrochemical control of material shapes
Mao Group crystal engineering: DNA in 3D
Wei Group twinkling nanostar research
Shepson Group snowflake chemistry
Simpson Group protein crystal detection
Ren Group organometallic molecular wire research
ACS Awards for Professors Negishi and Ghosh
NSF CAREER Awards for Professors Slipchenko and Yang
Professor Francisco's national activities as ACS President
The Chemistry Department's new strategic plan

- Want to stay up-to-date on what is happening at Purdue? Sign-up to receive monthly Chemistry e-News.
Contact: Steve Scherer
scherer@purdue.edu

- Reunite with classmates by joining the Purdue Chemistry Alumni Group on

facebook

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2009 Outstanding Chemistry Alumni - (left to right) Dr. Robert Peoples, Dr. Gary Molander, Dr. Terry Taber, Dr. Judith Melville, Dr. Thomas Lane, Dr. Dudley Herron (accepting for Dr. Dorothy Gabel), and Dr. James Tour.

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