Canfield and Thiel Named to National Academies Committees

Senior physicist Paul Canfield and senior chemist Pat Thiel have been selected to serve on two committees for the National Academies. Canfield was named to the Condensed Matter and Materials Research Committee and Thiel was selected to serve on the Chemical Sciences Roundtable.

The Condensed Matter and Materials Research Committee and the Chemical Sciences Roundtable are important standing committees of the National Academies, which include the National Research Council, the National Academy of Sciences, the National Academy of Engineering and the Institute of Medicine. They operate in an advisory role to the government and its various science agencies, identifying new trends and issues and helping to set the research agenda.

CMMRC and CSR members are appointed on the basis of their depth and breadth of knowledge, in the expectation that they will share their wisdom to the benefit of the nation.

Canfield's position is on a standing committee responsible for advising the Board on Physics and Astronomy and the National Research Council on the fields of condensed matter science and materials research, including the physics, chemistry and biological applications of these fields.

According to the National Academies Web site, the CCMRC "holds discussions with researchers in academe, industry and government laboratories; managers of the research enterprise; and policy leaders in science and technology communities.

"The committee also meets with representatives from federal agencies providing support for the fields noted above, with those discussions focusing on current programs, policies, trends and issues. The CMMRC plans and develops prospectuses for studies and other activities, which are to be carried out by separately appointed ad hoc committees/panels and can result in National Research Council reports. Such reports may contain assessments of research areas with recommendations aimed at facilitating scientific progress in the forefront areas of research in these fields."

Thiel will serve a three-year term on the Chemical Sciences Roundtable, which is made up of leaders in chemical research and enterprise. Its objective is to facilitate communication between all segments of chemistry research and industry. The group seeks to enhance understanding of issues in the chemical sciences that affect the government, industry, academic, national laboratory and nonprofit sectors and to be a vehicle for education and discussion of issues and trends in chemical sciences.

To achieve this, the group organizes workshops and publishes proceedings on emerging topics in the chemical sciences that are likely to have a high impact on the scientific community or on society at large.

"The CMMRC and CSR committees are quite small, so membership is an unusual distinction and it represents no small amount of work, either," says Ames Laboratory Director Alex King. "The Ames Laboratory is very fortunate to have two of our researchers appointed to these influential roles in the same year; it is a sign of our growing role in enabling the future."

Pat Thiel

Paul Canfield

O'Donnell Receives $750,000 DOE Early Career Research Award

Jennifer O'Donnell, associate and Iowa State University assistant professor of chemical and biological engineering, has been awarded $750,000 over five years as part of the Department of Energy's new Early Career Research Program. O'Donnell's research project was one of 69 funded through the new program, which is designed to bolster the nation's scientific workforce by providing support to exceptional researchers during their crucial early career years.

Jennifer O'Donnell

Her research project, under the title "Templating of Liquid Crystal Microstructures by Reversible Addition Fragmentation Chain Transfer Polymerization," involves the design and synthesis of polymer nanoparticles with internal microstructures identical to those of liquid crystals. Such nanoparticles could be used for catalysis or for drug delivery, and even have implications for renewable energy. "We're looking at putting the internally structured nanoparticles into a larger microstructured domain for capturing solar energy," O'Donnell says.

Four Named AAAS Fellows

Four Ames Laboratory scientists have been named Fellows of the American Association for the Advancement of Science.

Mufit Akinc, Ames Lab associate and Iowa State University professor of materials science and engineering, was honored, according to the AAAS award citation, "for using chemistry to prepare advanced inorganic materials with tailored properties, such as infrared transmission in high-temperature applications."

Mark Gordon, director of Ames Lab's Applied Mathematics and Computational Sciences program and ISU Distinguished Professor and Frances M. Craig Chair in chemistry, was honored for "outstanding achievement in the development of new computational models for research and education in the chemical, materials and biological sciences."

Mei Hong, Ames Lab associate and ISU John D. Corbett Professor of Chemistry, was honored for "distinguished contributions to the field of biophysical chemistry and solid-state nuclear magnetic resonance spectroscopy, and for leadership in organizing scientific conferences advancing NMR."

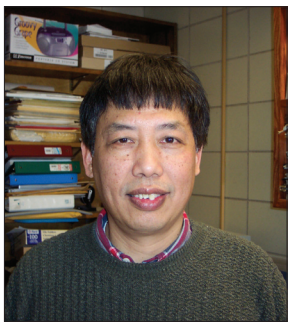
Michael L. Thompson, Ames Lab associate and ISU Pioneer Hi-Bred Professor of Agronomy, was honored for "investigations of the fate and transport of organomineral complexes, phosphorous, and anthropogenic organic compounds in soils."

The researchers are being recognized by their peers within AAAS for "scientifically or socially distinguished efforts to advance science or its applications."

Mei Hong, Michael L. Thompson, Mufit Akinc, Mark Gordon

Wang and Ho's Paper on *JPCM* "Most Cited" List

A paper by Ames Lab physicists Cia-Zhuang Wang, Kai-Ming Ho, and collaborators, Che Ting Chan and Chia-Ren Hu, has been selected for a *Journal of Physics: Condensed Matter* collection of most cited papers. To mark its 20th anniversary, *JPCM* created a special compilation of the most cited paper each year since 1989. Wang, Ho, Chan and Hu's paper titled "A Transferable Tight-binding Potential for Carbon" is the most cited paper for 1992.



Cia-Zhuang Wang

Kai-Ming Ho

Biswas and Bud'ko Named APS Fellows

Rana Biswas

Rana Biswas, physicist, was named a Fellow of the American Physical Society for his "theoretical contributions to the dynamics of semiconductors, solar materials and photonic crystals."

Sergey Bud'ko, physicist, was named a Fellow of the American Physical Society "for significant contributions to the study of superconducting, magnetic transport properties of metals, such as field-induced quantum criticality in heavy fermions and superconductivity in layered cuprate, rare-earth nickel borocarbide, magnesium diboride, and iron arsenide-based compounds."

No more than one half of one percent of APS members are elected Fellow each year.

Bud'ko and Clem Named APS Outstanding Referees

Physicists Sergey Bud'ko and John Clem are among the class of 2010 Outstanding Referees of the *Physical Review* and *Physical Review Letters* journals. The American Physical Society honors the essential work that anonymous peer reviews do for their journals with the Outstanding Referees award. Each year, only a small percentage of the 42,000 referees are selected for the award based on number, quality and timeliness of referees' reports. The selection was made based on 20 years of referee records on over 50,000 referees.

Sergey Bud'ko

John Clem