

AWARDS



Pat Thiel

Thiel Wins ACS and APS Awards

Pat Thiel, Ames Laboratory senior chemist, has been selected for major awards from both the American Chemical Society and the American Physical Society. She was named winner of the 2010 Arthur W. Adamson Award for Distinguished Service in the Advancement of Surface Chemistry. Following on the heels of that announcement, she was also selected for the APS 2010 David Adler Lectureship Award, which recognizes her as an outstanding contributor to the field of material physics, who is noted for the quality of her research, review articles and lecturing.



Thiel, who is also an Iowa State University Distinguished Professor in chemistry and materials science and engineering, will receive the Adamson Award during the 239th ACS national meeting in San Francisco in March 2010. The award consists of \$5,000 plus travel expenses, a medallion with a presentation box and a certificate. The medallion will be presented during the award address.



According to Thiel, a symposium will be held in her honor at the ACS national meeting. The Adamson award was first presented in 1993, and past recipients have been distinguished

researchers in the field, including David King, the 2009 award winner, who was science advisor to former British Prime Minister Tony Blair. Thiel holds the distinction of being the first woman selected for the award.

She will receive the Adler award at the APS 2010 March Meeting in Portland, Ore. The award consists of \$5,000, travel expenses to the conference and a certificate. The certificate will note that Thiel is honored "for seminal contributions to surface structure and dynamics of complex metallic alloys, including quasicrystals and kinetically limited growth and relaxation of nanostructures in thin metal films." Thiel will also deliver an invited talk at the APS meeting.

"Pat is an outstanding researcher as indicated by the many awards she has won," says Ames Laboratory Director Alex King. "The Adler Award reflects something that we take special pride in at the Ames Laboratory. Although Pat is most often recognized as a chemist or a materials scientist, this award comes from the American Physical Society, and that speaks to the interdisciplinary nature of Pat's work. We value interdisciplinary research highly at the Ames Laboratory, and Pat Thiel exemplifies it at the very highest level."

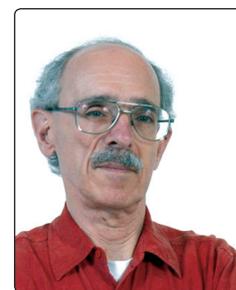
Gordon Named ACS Fellow

Mark S. Gordon, director of the Applied Mathematics and Computational Sciences program at Ames Laboratory, was named to the inaugural class of American Chemical Society Fellows. Gordon, who is also a senior chemist at Ames Lab and a Distinguished Professor of Chemistry at Iowa State University, joined 161 other chemistry researchers who received the honor when the group met in Washington, D.C. this past August.

"Some of the foremost names in U.S. chemistry are on this list, including Nobel Laureates and members of the National Academy of Sciences," Gordon says. "It is a great honor to be included with these folks."

Gordon was also the recipient of the 2009 ACS Award for Computers in Chemical and Pharmaceutical Research. The international award recognizes outstanding achievement in the use of computers in research, development or education in the chemical and biological sciences.

Gordon's research focuses on using high-performance computing to understand how molecules and atoms act, interact and react. He has devoted much of his career to developing the General Atomic and Molecular Electronic Structure System, or GAMESS, software suite, which is designed to run on massively parallel supercomputers. Such systems execute trillions of calculations per second. GAMESS, which has an estimated 100,000 users, can perform high-level modeling of complex physical, chemical and biological systems. Gordon's GAMESS work has been funded by the DOE's Office of Advanced Computing Research.



Mark S. Gordon



R&D 100 Award for Virtual Engineering Software

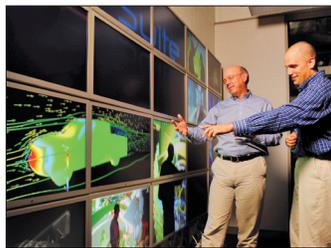
Two Ames Laboratory researchers won a 2009 R&D 100 Award for software that will help engineers design the next generation of highly efficient and low-emission power plants.

The software, developed by Mark Bryden, program director for Ames Lab's Simulation, Modeling and Decision Science program, and Doug McCorkle, associate scientist at Ames Lab, enables engineers to review and revise proposed designs more quickly, more efficiently and at less cost than ever before by integrating different types of engineering data into one virtual environment.

Often called the "Oscars of invention," the R&D 100 Awards are presented annually by *R&D* magazine for the top 100 products of technological significance.

This is the 17th R&D 100 Award won by Ames Laboratory scientists. The 2009 R&D 100 Award is the second for Bryden and McCorkle, who along with colleague Gerrick Bivens, also won in 2006 for another virtual engineering software application.

"We are honored to have our work recognized by a 2009 R&D 100 Award," says Bryden. "It has been exciting working with a collaborative research team to develop and bring to market new engineering tools that can help address the need for new and creative energy solutions."



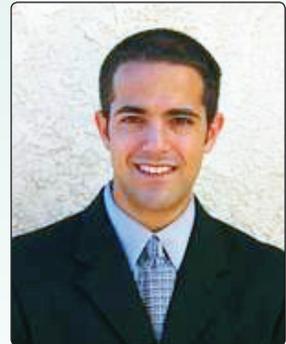
Bryden and McCorkle

Cochran Receives NSF Career Award

Eric Cochran, associate scientist at Ames Laboratory, received a National Science Foundation CAREER award, the organization's most prestigious award for junior researchers.

The NSF CAREER award recognizes researchers who exemplify the role of teacher-scholars through outstanding research, excellent education and the integration of education and research. The five-year, \$475,000 award will support Cochran's research work in Iowa State University's chemical and biological engineering department. Cochran will explore a new class of self-organizing block copolymer nanocomposites based on polymer-tethered dyes.

"I am excited and honored that the NSF has chosen to support this research through the CAREER award," says Cochran. "This is an important opportunity to explore a unique system of materials with potential for enormous impact in the field of polymer physics. Through this grant, I will also be better able to share my enthusiasm for research with teachers and students throughout Iowa."



Eric Cochran

At Ames Laboratory, Cochran is part of an interdisciplinary research team that is integrating polymers and nanoscale particles to create self-assembling materials for use in solar cells and hydrogen fuel cells. The work is funded by Ames Laboratory's royalty income seed funding program.