

UC SANTA BARBARA

# *THE* **Current**

October 10, 2011

Eileen Conrad

## **UC Santa Barbara Awarded \$15 Million by Dow Chemical Company to Establish Collaborative Institute for Materials Research and Education**

The Dow Chemical Company has awarded UC Santa Barbara up to \$15 million to establish a collaborative research initiative that will help shape the future of technology in areas that will benefit society. The Dow Materials Institute at UCSB will educate future scientists and engineers and advance the discovery of revolutionary new materials with applications that range from novel polymers to next-generation microelectronics.

The pioneering institute will be housed in the Materials Research Laboratory (MRL), a National Science Foundation Materials Research Science and Engineering Center (MRSEC) that is widely recognized as one of the top materials research facilities in the world.

UCSB is among 11 leading U.S. research universities that have partnered with Dow to "accelerate research and stimulate collaborative innovation in traditional scientific fields important to the company and the nation's future."

"This new partnership with the Dow Chemical Company is dedicated to inspiring a new age of scientific achievement in the United States through collaborative

research and interactions with industry, thereby serving as a catalyst to transform people's lives," said Craig J. Hawker, director of the MRL and professor of materials.

"By actively engaging in productive partnerships with industry, the MRL with National Science Foundation MRSEC support has proven to be an economic engine here and around the world."

Materials science is a core area of global interest due to its contributions to manufacturing processes and innovative products

The Dow Materials Institute will build on groundbreaking fundamental research supported by the National Science Foundation, with enormous potential for new product development to enhance the U.S. economy, Hawker said.

"This unique, industry-leading institute will give Dow direct access to breakthrough technologies and enable new opportunities for greater innovation, while developing our pipeline of future scientists and engineers," said Theresa Kotanchek, vice president of Sustainable Technologies and Innovation Sourcing at Dow.

"Here we will have the opportunity to work side-by-side with the nation's top materials scientists and engineers in creating the next generation of nanomaterials and processes."

UCSB's MRL is engaged in research that could result in the development of new paradigms for energy-efficient microelectronics and the creation of adhesives and coatings inspired by marine bio-organisms. It also focuses on magnetic thermoelectronic nanomaterials, highly efficient heat conducting materials that could be used in the next generation of renewable energy technology.

"We are excited about the creation of our new Dow Materials Institute at UC Santa Barbara, under the visionary leadership of Professor Craig Hawker," said UCSB Chancellor Henry T. Yang.

"We are honored by this significant investment in our campus by Dow Chemical.

I extend my sincere congratulations and appreciation to Director Hawker and all of our contributing colleagues across the campus. UC Santa Barbara is top-ranked in the nation in the field of materials, and so this new institute will build on our existing strengths and our culture of interdisciplinary collaboration to advance the frontiers of research, enhance the educational opportunities for our students, and contribute

to our society."

The recent five-year award also includes a philanthropic component consisting of a \$2 million endowment that will provide ongoing funding to support the research of outstanding graduate students. "The Dow Discovery Fellowships are an enormous validation and boost for our doctoral program in chemical engineering," said Michael Doherty, chair of chemical engineering at UCSB.

"They will enable our very best doctoral students to provide solutions to the most pressing engineering problems of our time."

Dow scientists and engineers and UCSB faculty members from chemistry, chemical engineering, and materials will work together at the institute, along with postdoctoral researchers, graduate students, and undergraduates.

The partnership also includes corporate student internships, and provides essential support for student outreach and entrepreneurial opportunities through the campus's Technology Management Program.

"I am pleased that Dow Chemical appreciates UCSB's national leadership in Materials Research," said Michael Witherell, UCSB vice chancellor for research.

"We look forward to a long-term partnership that will boost both research and graduate education on campus."

To learn more about Dow's \$25 million annual investment in research and development at premier universities, visit: [www.dow.com/innovation/partnership/](http://www.dow.com/innovation/partnership/).

Other participants include UC Berkeley, the California Institute of Technology, and the University of Michigan.

#### About the Dow Chemical Company

Dow combines the power of science and technology with the "Human Element" to passionately innovate what is essential to human progress. The company connects chemistry and innovation with the principles of sustainability to help address many of the world's most challenging problems such as the need for clean water, renewable energy generation and conservation, and increasing agricultural productivity. Dow's diversified industry-leading portfolio of specialty chemical, advanced materials, agrosociences and plastics businesses delivers a broad range of

technology-based products and solutions to customers in approximately 160 countries, and in high growth sectors such as electronics, water, energy, coatings and agriculture. In 2010, Dow had annual sales of \$53.7 billion and employed approximately 50,000 people worldwide. The company's more than 5,000 products are manufactured at 188 sites in 35 countries across the globe.

More information about Dow can be found at [www.dow.com](http://www.dow.com).

Related Links

[Materials Research Laboratory](#)

[Dow Chemical Compan](#)

---

## **About UC Santa Barbara**

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.