

Francis Crowe Society Distinguished Inductee



Dale Flanders was selected as the Francis Crowe Distinguished Inductee for 2009. Dr. Flanders is a native of Guilford, Maine. He attended Massachusetts Institute of Technology (MIT) where he received his B.S. and Masters Degree. He began his Ph.D. studies at the University of California, Berkeley where he met his wife Julia, who received her degree in Anthropology from California, Berkeley. Dale returned to MIT to complete his Ph.D. He is the holder of 74 U.S. patents and has published a large number of research papers in multiple technical fields. In 1998 Dale founded Axsun Technologies in Billerica, Massachusetts and served as the CEO and Chairman of the Board of Directors. Axsun presently has 85 employees and develops and manufactures high performance micro-optical systems for the Telecom, Industrial Process Control, and Medical Imaging markets. In December of 2008 Axsun was acquired by Volcano Corp., a public medical company with headquarters in San Diego, California.

Dr. Flanders is a great supporter of the University of Maine. He is a member of the Electrical and Computer Engineering Advisory Board and has established the Dale and Julia Flanders Engineering Scholarship. Dale has a strong interest in promoting sustainable development in Maine contributing to the Mitchell Center for the Environment at UMaine and working with Dr. David Hart, Director of the Center.

Dale is a modern day “renaissance man” with a very broad range of interests. Besides his intense interest in high technology that has been the foundation of his career, he also has strong interests in organic gardening, gourmet wood fired oven cooking, fine woodworking, boating, classical piano, traditional blacksmithing, community building and reading.

Haskell Energy Conference

The Haskell Energy Conference that was announced in the [April Newsletter](#) was held on April 2 at the Bangor Hilton Garden Inn. It brought approximately 200 people from engineering companies, businesses, government, researchers and students for a day of presentations and exchange of ideas on renewable energy. Speakers included:

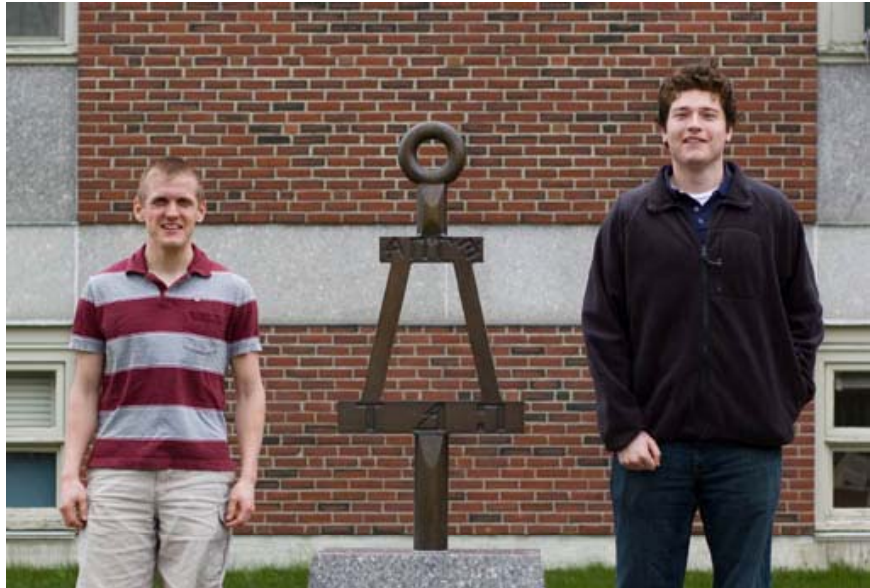
Michael Eckardt, UMaine Vice President for Research
Dana Humphrey, Dean, College of Engineering
Mohamad Musavi, Chair and Professor, Electrical and Computer Engineering
Larry Kazmerski, National Renewable Energy Laboratory
Carroll Lee, Bangor Hydro Electric Company
Richard Hill, UMaine Emeritus Professor of Mechanical Engineering
Gerry Chasse, Bangor Hydro Electric Company
David Conroy, Central Maine Power
Brian Conroy, Central Maine Power
Jack Cashman, Maine Public Utilities Commission
Habib Dagher, UMaine Prof. of Structural Engineering, BIW Prof. of Civil Engineering
Hemant Pendse, Professor and Chair, Chemical and Biological Engineering Dept.
Matthew Kearns, First Wind
John Ferland, Ocean Renewable Power Company

The conference was a great success. In response to the question of, “Were your expectations of this conference met?” 40% of the participants answered, “Exceeded” and 60% answered “Met.” Further information about the conference and some of the presentations are available at: <http://www.eece.maine.edu/conference/>. We are hopeful to have similar conferences in the future and present our activities in the development of smart grid.



ECE Students Receive Tau Beta Phi Scholarships

David Hunter (l) and Evan McClellan (r) have been selected as recipients of the Tau Beta Phi scholarships for senior-year study in the 2009-10 academic year. Scholarships of \$2,000 are awarded to members on the competitive bases of scholarship, campus leadership and service, and promise of contributions to the engineering profession, with consideration given to economic need and academic commitment.



David is from Unity, Maine and is majoring in electrical engineering with a minor in math and business administration. He is a past recipient of the Microelectronics Scholarship from Fairchild Semiconductor (2007-08), the IEEE Scholarship (2007-08) and the first year ECE scholarship (2006-07). David is Chair of the IEEE Student Chapter and a brother of Sigma Phi Epsilon.

Evan is from Freeport, Maine and is majoring in computer engineering. He has also received the Analog Devices Microelectronics Scholarship for 2009-10. Evan is a past recipient of the Rajendra and Neera Singh Scholarship (2007-08), the William Lambert Scholarship (2007-08), the University of Maine Presidential Scholars Award (2006-07) and the first year ECE scholarship (2006-07).

Two ECE Graduate Students Receive Scholarship Awards

Patrick Spinney has been awarded the Maine Economic Improvement Fund (MEIF) Dissertation Fellowship for 2009-10. The MEIF is awarded to doctoral candidates who are completing their dissertations in aquaculture and marine sciences technology; biotechnology; composite materials engineering; environmental sciences technology; information sciences and technology; precision manufacturing; and forestry and agriculture. The award is given to students who are in their final year of doctoral study.

Michael Chasse was awarded the UMaine Trustee Scholarship for the 2009-10 academic year. This award pays a year's tuition and is given to students who are not supported by other scholarships, fellowships, or assistantships.

Congratulations 2009 Graduates!

This year we had 20 graduates of which 14 graduated in May, three will graduate in August and three in December. Ten have accepted employment with an average salary of \$57,310 and two are going on to graduate school. The ECE graduating students were inducted into the Francis Crowe Society on May 9 at a college ceremony attended by family members, distinguished inductees, and faculty. After the ceremony, family and friends gathered in the new Engineering and Science Research Building for a luncheon. The picture below shows part of this gathering. Each year Hovey Awards are given to one senior in each department of engineering. The selection is based on character, scholastic attainment and general promise as an engineer. This year's Hovey Award winner was James Knarr. Other awards were given to students for their Senior Projects. The 3rd place winners were Qian Gao and Aaron Cook, 2nd place winners were Bradley Demmons and Michael Fecteau and the 1st place winner was Taylor McDonald.



L-R, Front Row: Melinda Conroy, Marshall Ripley, Derek Bedard, Mohamed Mohideen, Qian Gao, Stephanie Duy, Nathan Broyer, Middle Row: Kendra Richards, Michael Brown, Jeremy Dear, Michael Fecteau, Bradley Demmons, James Knarr, Aaron Cook, Back Row: Taylor McDonald, Fred Schwaner, Jonah Bruce, Cameron Wise, Andrew Pellett, Robert England.



ECE Scholarships Awarded to Middle and High School Students

The sixth annual Maine Learning Technology Initiative (MLTI) Student Technology Conference was held in the University of Maine Collins Center for the Arts on May 29, 2009. This conference brought over 800 Maine middle & high school students, along with their teachers, to the UMaine campus. As in previous years, the Electrical and Computer Engineering (ECE) Department and faculty members, Bruce Segee and Yifeng Zhu, participated in the organization of this conference. The Department awarded \$10,000 in scholarship to ten students – five girls and five boys – for attending the ECE Department. These ten young students gained more than skills and knowledge at this conference, they now have a head start on financing their college education.

STEM (Science, Technology, Engineering, and Mathematics) is an educational focus across the country. Students who come to this conference are actively involved in Maine's unique one-to-one computer program, the MLTI. They are using technology as a primary tool in their learning, building a practical foundation of technology savvy that we look for in our applicants. By offering these scholarships we believe we will be making a clear statement to these students and their families that the time to think about the future is now. They need to know that a career in engineering -- working to build Maine's energy independence and broadband access across rural areas -- can be a reality. To be candid, getting connected early to some of Maine's best and brightest is a good investment for us.

And these lucky students will have more than the promise of \$1000 each upon high school graduation and acceptance into the Department's program. Understanding that making it into college is not simply about the money, the Department will offer to stay in touch with the winning students through the remainder of their middle and high school years, protecting their potential investment by showing real interest in the academic progress of the winners and providing support and encouragement.

For the Department to be able to award these scholarships and others, I would like to give our appreciation to alumni and friends for their generous support. If you are interested in assisting the department in this area, please contact the ECE chair, Mohamad Musavi, at musavi@eece.maine.edu or Patricia Cummings at Patricia.Cummings@umit.maine.edu.



MLTI Conference students with their laptops in the Collins Center for the Arts

If you have any interesting stories you would like to share with us, please send them to susan@eece.maine.edu with a short paragraph and include pictures if available.

Gifts/Donations

Haskell & Stetson Trusts, \$8,000, Apr. 1
IBM Corporation \$1,500, Apr. 27
Kepware Technologies, \$6,000, Apr. 1
Roger D. Moulton, \$1,000, Apr. 15
National Semiconductor Foundation \$23,000.00, Apr. 17

Other Contributors to the ECE Department

George T. Bouchard
John A. Bouchard

Kwok-Hei Chan
Matthew V. Crouse

Fannie Mae Foundation
Robert B. Field
GE
Deron L. Gerow
Roger D. Gould
Scott W. Gould
Mrs. Alisa B. and Mark P. Himelfarb
Mrs. Jeanette R. and Frederick E. Irish
Fred H. and Sally E. Irons
Miroslav Juric
Derek T. Johnson
Kagi
Roger P. Lambert
Lockheed Martin Scholarship Foundation

Michael J. Longtin
Joseph B. Oppenheim
Mrs. Paula J. and Henry O. Marcy
Paul F. McGuire
Microsoft
Timothy R. Osborne
David M. Pelletier
Gene D. Sawin
Stacy L. Shaw
Scott K. Springer
Textron
Michael D. Theriault
UMaine Alumni Assoc.

Publications

Book Chapter

A. Shareef and **Y. Zhu**, “Localization Using Extended Kalman Filters in Wireless Sensor Networks”, book chapter of *Kalman Filter: Recent Advances and Applications*, edited by Victor M. Morend and Alberto Pigazo, ISBN: 953307000-5, pp. 297-320, April 2009.

Other

Since April the faculty have submitted proposals for a total of about \$2,850,000.