



Established in 2006, the Tau Beta Pi-McDonald Mentor Award celebrates excellence in mentoring and advising among Tau Beta Pi educators and engineers who have consistently supported the personal and professional development of their students and colleagues. It recognizes those who have shown true concern for the individual, supported an environment for developing talents, and have earned respect and recognition for their contributions to their field and to the greater community.

2008 TBPI-MCDONALD MENTOR



Dr. Steven M. Cramer, P.E.

fOR HIS OUTSTANDING achievements in mentoring engineering students, **Dr. Steven M. Cramer, P.E.**, *Wisconsin Alpha '79*, is the 2008 Tau Beta Pi-McDonald Mentor.

Dr. Cramer is associate dean of academic affairs at the University of Wisconsin-Madison college of engineering and professor at the department of civil and environmental engineering there. He graduated from the college in 1979 with a B.S. in civil and environmental engineering. Moving to Colorado State University's department of civil engineering, Dr. Cramer earned an M.S. in 1981 and his Ph.D. in 1984. He returned to Madison in 1984 as an assistant professor and has become an authority on the subject of wood structures and concrete materials.

Tributes have been paid to Dr. Cramer's merits as a teacher, mentor, coach, and role model for students. He is actively involved in the campus chapter of ASCE and has advised both the concrete canoe and steel bridge teams for more than 10 years. The canoe team won its fifth straight national title in 2007, and no other institution in the 30-year history of the competition had won the event more than twice. His leadership has been praised for being available to help the students when needed and not micromanaging the teams. The success has created a positive *esprit de corps* among students, with an open culture and environment across the college. It has boosted student interest in engineering and the department.

Dr. Cramer's students rank his teaching, via student evaluations, as among the best in the department. His classes have a reputation for being technically demanding. His dean describes him as a gifted teacher who creates a culture of high expectations and high support to help all students succeed. He is a fellow of the institution's teaching academy and has received the outstanding



professor award from the ASCE student chapter nine times, including the last six consecutive semesters.

He has an active research program, with a reputation for publishing high-quality papers. Dr. Cramer's portfolio includes funding from leading federal agencies and strong participation from the private sector. Through his research, Dr. Cramer has mentored more than 60 students who have gone on to positions of leadership in practice and academia. His dedication to advising was demonstrated recently by 10 of his students involved in funded research activity totaling \$632,000.

Dr. Cramer has also taken part in diversity initiatives like the school of education's college for kids, the minority research apprentice program, and the graduate school's summer undergraduate research experience.

His contribution in different capacities at departmental, college, and institutional levels has included service on the university committee—the six-member executive committee of the faculty senate that addresses broad campus issues.

Dr. Cramer has also made his mark off campus, bringing back experience to help students and colleagues. This includes representing engineers on the U.S. Department of Commerce's American lumber standard committee, as well as serving as an associate editor of the *Journal of Structural Engineering*. He is a member of a National Academy of Science panel that reviews housing issues.

He has been a visiting scientist at the materials technology division of research and development at Weyerhaeuser Company, Tacoma, WA, for which he has also been a consultant. Dr. Cramer has also consulted for a number of insurance companies and law firms, as well as the Truss Plate Institute and the Wood Products Promotion Council. He holds three U.S. patents for methods of measuring properties in woods.