

**MEMORIAL RESOLUTION OF THE FACULTY
OF THE UNIVERSITY OF WISCONSIN-MADISON**

ON THE DEATH OF PROFESSOR EMERITUS Y. AUSTIN CHANG

Wisconsin Distinguished Professor Emeritus Yong-Shan Austin Chang of the Department of Materials Science and Engineering passed away on August 2, 2011 in Rochester, New York.

Chang was born in Goon village, in Honan province, China late in 1932. He grew up during the Sino-Japanese war period. For a time during his childhood, he lived in a cave with his illiterate mother, a simple stove, and no electricity. During that time, he might well have been kidnapped and forced into military service along with other young boys if his mother had not hidden him in the local school house. His elementary and high school education was interrupted frequently by the difficulties of the time. From these humble beginnings and with resolute determination and creativity, he grew into an international leader in the field of alloy thermodynamics.

Chang's scholarship is known globally for its exceptionally high rigor and reliability and its focus on technologically important alloy systems. His peers characterize his approach as an astute integration of fundamental science with a keen sense of technological relevance. He is credited with advancing key innovations on important problems that few others attempted to tackle with comparable depth and originality. His contributions in metallurgical thermodynamics and phase equilibria have had immense impact in materials science, materials engineering, physical metallurgy and chemical engineering. With his fundamental science approach, he advanced the understanding and applications of a variety of materials including structural materials (Al-alloys, Mg-alloys and Ni-based superalloys), compound semiconductors, magnetic materials and materials for applications in energy technologies. His international stature in the profession has been recognized by his induction into the National Academy of Engineering, the Chinese Academy of Sciences, and Academia Sinica (Taiwan), and by numerous research, education, leadership, and career awards from the University of Wisconsin and the professional societies of his field.

Chang earned undergraduate and master's degrees in chemical engineering from the University of California at Berkeley and the University of Washington at Seattle, and a PhD in metallurgy from the UC Berkeley. He began his academic career at the University of Wisconsin-Milwaukee in 1967. He served the UW-Milwaukee as department chair from 1971-1977 and as associate dean for research from 1978 to 1980, all the while building an outstanding reputation in research and in education. He joined the Department of Metallurgical and Mineral Engineering at UW-Madison in 1980. While serving as department chair at UW-Madison from 1982-1991, he guided the department's research and education programs toward the current comprehensive offerings across the broad spectrum of the materials field. Although he officially retired in 2006, he pursued his professional passions — research, research education, mentoring of junior faculty, and department leadership — up until his death.

In addition to his stellar scholarship, Chang was an outstanding teacher and educator. Austin's accomplishments as a teacher and mentor have been recognized by his peers and colleagues both within the University of Wisconsin and nationally through many awards, most recently though the Educator Award of The Minerals/Metals/Materials Society (TMS) and Albert Easton White Distinguished Teacher Award of the American Society for Materials International. However, the true, deep, and lasting impacts of his teaching and mentorship of students is much more vividly articulated in the respect, gratitude and love expressed in the memories shared by his students in his memorial guest book. Many of these students hold high positions in industry or are recognized leaders in academia at institutions around the world. Their comments were truly inspiring to those Austin left behind.

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Chang served the University of Wisconsin and the materials profession with distinction throughout his career as a member of many university and professional committees, chair of the Department of Materials Science and Engineering for nine years, and most recently as president of an internationally recognized materials professional society, the TMS. Based on computer programming codes that gained him international recognition, he founded CompuTherm LLC, a Madison-based company that develops powerful, user-friendly computer software and alloy database for thermodynamic calculations. Upon his retirement, he and his wife P. Jean Chang generously endowed a chair in the UW Department of Materials Science and Engineering.

Austin Chang will be remembered and admired as the best in the academic tradition. He was a brilliant, creative, productive and entrepreneurial scholar who took upon himself a significant and continuous presence in the classroom and a magnanimous role in service to University of Wisconsin, the state of Wisconsin, and the materials profession. One of his highly respected competitors once described him as “without question, the most gracious, generous and unselfish superstar I know.” His wisdom, leadership and grace will be sorely missed by his colleagues in Wisconsin and around the world.

MEMORIAL COMMITTEE

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Sindo Kou

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