

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

**ON THE DEATH OF PROFESSOR EMERITUS RICHARD WALTER HEINE**

Richard Walter Heine, professor emeritus of materials science and engineering at the University of Wisconsin-Madison, passed away at Oakwood Village West in Madison on May 17, 2009. He was ninety years of age, having been born on July 22, 1918, in Detroit, Michigan. His beloved wife, Mary, preceded him in death in September 2006. Their two children, Sally and Robert, survive them, as do two grandchildren and four great-grandchildren. Professor Heine received his BS degree in chemical engineering in 1940 from Wayne State University and his MS degree in metallurgical engineering in 1948 from the University of Wisconsin.

Professor Heine started his career at the former General Motors Institute before serving as a lieutenant in U.S. Naval Ordinance from 1943-46. His long and fruitful academic career at the University of Wisconsin started in 1947 and culminated with his dedicated service as chair of his department from 1964 through 1974. This period happened to coincide with a world-wide expansion of metallurgical engineering into the more comprehensive field of materials science, and although Dick's interests remained in metallurgical engineering, he promoted the concept of a departmental evolution to materials science, and so is largely responsible for the international reputation the department has today. In addition to departmental administration, Dick's service to the College of Engineering also included periods of service as associate director of the Engineering Experiment Station and associate director of the University Industry Research Program.

Professor Heine's scholarly output was focused especially on the science and technology of metal casting, and his specific and lasting contributions to this field have included the development of principles governing the heat treatment of malleable irons and the way additives incorporated into green sands enhance their molding characteristics. Over three hundred research manuscripts and the internationally used textbook, "Principles of Metal Casting," co-authored with colleagues Carl R. Loper Jr. and Phillip C. Rosenthal and which is now in its 33rd reprinting, stand as testament to his scholarship. During his career at the University of Wisconsin, Dick was the major advisor for over 90 MS dissertations and 20 PhD theses. Further recognition of his professional standing is witnessed by his many honors which include: American Foundryman's Society (AFS) Award of Scientific Merit (1957); Wayne State University Distinguished Alumnus (1960); AFS Divisional Best Paper Awards 11 times during the period 1966-1989; AFS W.H. McFadden Gold Medal (1967); AFS Howard Taylor Award for best paper 1967, 1973 and 1993; the American Welding Society Charles H. Jennings Memorial Award (1976); The C.W. Briggs Award of the Electric Furnace Society (1975); and the Iron Casting Society Award for Technical Excellence (1983). Dick also received the College of Engineering Ragnar Onstad Award for Service to Science and Society in 1979 and was elected a fellow of the American Society of Metals in 1991.

Dick's full academic life did not mean that he did not have other abilities and interests. His skill at handball more than once led him to the winners' podium in handball tourneys, and he was active in community affairs in various ways, but especially the Madison YMCA where he was a member of the board for a dozen years. Along with his wife Mary, Dick participated in choral music both inside the church and elsewhere. He maintained that interest after Mary's death and right up to his own passing.

**MEMORIAL COMMITTEE**

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