
in memoriam



James G. Knudsen, 1920–2010

In January, we lost one of our own, James G. Knudsen. Jim was Professor Emeritus in Chemical Engineering at Oregon State University. With heat transfer as his chosen specialty, he lived in, and contributed immeasurably to what could arguably be called its “golden era.”

Jim grew up on a farm in Alberta, Canada of Danish immigrant parents. His attraction to Chemical Engineering resulted from his association with a family friend who had preceded him into the profession. He received his B.S. from the University of Alberta in 1943 followed by his M.S. in 1944. While teaching at U.A., his mentor encouraged him to go to the University of Michigan for a Ph.D., which he completed in 1950. He then took the position at Oregon State which he held until his retirement. During his tenure there, he held the positions of Assistant and Associate Dean of the College of Engineering, and Director of

the Engineering Experiment Station. He served a term as Director for the Accreditation Board for Engineering and Technology (ABET). A dedicated professional, for a number of years he also was Oregon’s Chemical Engineering member and President of its Board of Examiners for Engineering and Land Surveying.

In 1958, he co-authored (with Don Katz) the classic text, *Fluid Dynamics and Heat Transfer*. He also was a chapter editor of *Perry’s Chemical Engineers Handbook* and contributed to a number of sections of the *Heat Exchanger Design Manual*.

Concurrent with his academic career, Jim provided consulting support to several industrial companies. When Heat Transfer Research, Incorporated (HTRI) came into existence in 1962, he was a key player in formatting and implementing its conceptual and research objectives, remaining as a consultant until his retirement. As HTRI later evolved, Jim concentrated his technical focus on exchanger fouling and extended surface heat transfer issues. It is fair to say that, at the end of his career, he was the world’s leading authority on cooling water fouling and its control, and one of the top half dozen on fouling in general.

Jim was a Past President and Fellow of the American Institute of Chemical Engineers (AIChE). He received that institute’s 1977 Founders Award and, in 1983, its D.Q. Kern Heat Transfer Award. He was a founding officer of AIChE’s first division, the Heat Transfer and Energy Conversion Division (now Transport and Energy Processes).

Jim is survived by a daughter, Shelley Lindauer, a faculty member at Utah State University, her husband and two grandchildren. He was predeceased by his wife, Joyce, and an older daughter, Kathryn.

A close personal as well as professional friend, I shall dearly miss Jim (and Joyce), and toast him with a glass of his favorite Oregon Sauvignon Blanc.

Emmett R. Miller, P.E.