

Thermal Spray Community Mourns Joachim Heberlein (1939-2014)



Emeritus Professor Joachim (Jockel) V.R. Heberlein passed away on February 17 after a long battle with ALS. Professor Heberlein was born in Berlin in 1939. He received his diploma in physics in 1966 from the University of Stuttgart. In 1967 he came to the University of Minnesota, where he received

his Ph.D. in mechanical engineering in 1975. After working for 14 years at Westinghouse R&D Center in Pittsburgh where he served as manager of applied plasma research, lamp research and nuclear and radiation technology, he rejoined the mechanical engineering department at the University of Minnesota in 1989 as associate professor. He was promoted to professor in 1994, was appointed Ernst Eckert Professor of Mechanical Engineering in 2000, and retired at the end of 2012.

Professor Heberlein published more than 140 journal papers, received 13 patents, and coauthored with Pierre Fauchais and Maher Boulos the recently published textbook *Thermal Spray Fundamentals* (Springer, 2013). He advised or co-advised nearly 30 Ph.D. students, an equal number of M.S. students, and advised seven students through completion of their diploma theses at several European universities. He was an internationally recognized authority on the subject of thermal plasmas of the type

used for industrial applications such as thermal spray coatings, plasma cutting, electrical circuit breakers, and materials synthesis. He was particularly known for his pioneering studies of arc-electrode interactions. Jockel had many interactions with industry, including research collaborations with Hypertherm on plasma cutting, Eaton Corp. on electrical circuit breakers, and Nitto Denko Technical Corp. on nanomaterials synthesis.

Jockel's students were famously devoted to him, and he was beloved among the faculty and staff of the M.E. department at the University of Minnesota. He and his wife Yuko often hosted dinner parties at their house. He loved music, telling stories about adventures past, and sharing good wine.

Jockel contributed greatly to the ASM Thermal Spray Society, having served as chair of the JTST Editorial Committee for 10 years (1996–2006) and chair of the TSS Awards Committee for seven years (2004–2001). He was also a past member of the Program Committee, Nominating Committee, Academic Advisory Council, and ITSC 2003 organizing committee. He was named ASM Fellow in 2001, inducted into the TSS Hall of Fame in 2004, and received a number of other awards, including the ASM Allan Ray Putnam Service Award in 2009 and the TSS President's Award in 2013. Jockel's lively spirit and amazing energy will be missed by all.

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