

## Ronald M. Gilgenbach

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Dr. Ronald M. Gilgenbach is Chair and Chihiro Kikuchi Collegiate Professor in the Nuclear Engineering and Radiological Sciences Department at the University of Michigan (UM). He earned his Ph.D. in Electrical Engineering from Columbia University in 1978. His B.S. (1972) and M.S. (1973) degrees were received at the University of Wisconsin. In the early 1970s he spent several years as a Member of the Technical Staff at Bell Telephone Labs. From 1978-1980, he performed gyrotron research at the Naval Research Lab (NRL) and performed the first electron cyclotron heating experiments on a tokamak plasma in the USA at Oak Ridge National Laboratory. Dr. Gilgenbach joined the faculty of the University of Michigan in 1980 and became Director of the Plasma, Pulsed Power and Microwave Laboratory.

At UM, Dr. Gilgenbach has supervised 48 graduated Ph.D. students, has published over 180 articles in refereed journals, and has 5 patents granted. His efforts at Michigan have concentrated on research and education utilizing pulsed power to drive high energy density plasmas and electron beams, advanced particle accelerators, high power microwave generation, as well as biological interactions of radio-frequency and ultrawideband radiation, particularly for killing cancer cells. He originated a new course on particle accelerators and updated the plasma curriculum. He has collaborated in research with scientists at Air Force Research Lab, Sandia National Laboratory, NASA Glenn, Northrop-Grumman, L-3 Communications, General Motors Research Labs, Los Alamos National Laboratory, Fermilab, Naval Research Laboratory and Institute of High Current Electronics (Russia). He received the UM College of Engineering Research Award in 1993, the NSF Presidential Young Investigator Award (1984) and the 1997 Plasma Sciences and Applications Committee (PSAC) Award from the IEEE, served as PSAC Chair in 2007-2008 and received an Outstanding Young Engineer Award from the American Nuclear Society. He is a Life Fellow of the IEEE and fellow of the American Physical Society Division of Plasma Physics. He is a past Associate Editor of the journal, Physics of Plasmas.