



Dorota Temple

Dr. Dorota Temple is Distinguished Fellow in Electronics and Applied Physics at RTI International. Throughout her professional carrier she has led scientists and engineers in research and development projects focused on semiconductor sensors and sensor networks for use in military and homeland security applications.

She began her career as Member of Technical Staff and then Principal Scientist at the MCNC Research and Development Institute, where she contributed to the fields of advanced integrated circuits, microfabricated electron emission sources, and flat panel displays. As Technical Director at RTI International, she led the development



of three-dimensional microsystem integration and advanced infrared focal plane array technologies under the sponsorship of the Defense Advanced Research Projects Agency (DARPA). These programs resulted in innovations that are now practiced by commercial defense companies and RTI spinouts.

In recent years, Temple has applied her expertise in semiconductor sensors, imaging devices, and advanced data analytics to the development of automated systems for detecting airborne chemical and biological threats. These systems use chemical and biological environmental sensors and wearable physiological devices and incorporate artificial intelligence/machine learning algorithms operating on the sensor signals to provide presymptomatic warning of exposure to respiratory toxins and pathogens.

Temple received M.S. and Ph.D. degrees in solid state physics from AGH University of Science and Technology, Krakow, Poland. She chaired and served on many organizing committees for international conferences, including SPIE Defense and Security Symposia, and was an elected member of the Board of Directors for the AVS Science and Technology Society. She is past Editor-in-Chief of the RTI Press. She has authored or coauthored over 170 scientific publications and holds 13 U.S. Patents.