

Invited Speaker Biography



Robert W. Collins, Professor of Physics and NEG Endowed Chair in Silicate and Materials Science, University of Toledo

Professor Collins's thirty-five year career (1973-pres) has focused on basic and applied science in support of solar thermal and solar photovoltaics (PV) technology. He received B.S. degrees in Physics and Mathematics from Clark University, Worcester MA, in 1977 and a Ph.D. in Applied Physics from Harvard University, Cambridge MA, in 1982. His Ph.D. Thesis research (1977-1982) was performed on the photoelectronic properties of amorphous silicon, currently one of the top three second generation technologies for PV. Professor Collins was a member of the Standard Oil of Ohio PV Team that supported Energy Conversion Devices, Inc. (Troy, Michigan) in their successful scale-up of amorphous silicon solar cells (1982-1988). He joined The Pennsylvania State University in 1988, where he performed basic research on amorphous silicon to improve the efficiency of solar cells in collaboration with Professor Christopher Wronski (1988-2004). While at Penn State, he received a Presidential Young Investigator Award for the development of new optical characterization methods for real time, in situ analysis of plasma CVD processing used to fabricate solar cells. Currently (2004-pres), Professor Collins is a member of the Photovoltaics Group at University of Toledo and the co-director of the Wright Center for Photovoltaics Innovation and Commercialization (PVIC), a State of Ohio-supported PV research and development center. See: <http://www.physics.utoledo.edu/~rcollins/collins.htm>