

Robert G. Hunsperger
Professor, Electrical and Computer Engineering - University of Delaware

Education

B.S.E.E., Drexel University, 1962
M.S.E., Princeton University, 1963
Ph.D., Applied Physics, Cornell University, 1967

Professional Background

Dr. Robert G. Hunsperger has been a Professor of Electrical Engineering at the University of Delaware since 1976. Prior to this he spent ten years in semiconductor microwave and optical device research as a member of the technical staff of Hughes Research Laboratories in Malibu, California. He has taught at the University of Southern California and at UCLA, and served as a Consultant in the fields of semiconductor and optical devices and systems. Organizations that have called upon Dr. Hunsperger's expertise in this area include Hughes Aircraft Company, Martin Marietta Laboratories, E.I. DuPont Company, ISC Defense Systems, National Institute of Standards and Technology (NIST) and the U.S. Army. He has over 100 publications and holds 18 patents. Included in his patents are devices fabricated in gallium arsenide by ion-implantation doping, such as optical waveguides, a monolithically-coupled integral waveguide/detector, a junction laser, and a microwave field-effect transistor. He also has patents on a system for optical-injection locking of microwave oscillators and on dual-function devices which are capable of both emitting and detecting light (light emitting and detecting diodes - LEAD's). His recent work includes development of a method of detecting corrosion in encased steel reinforcing cables and rods in structures by using microwave time domain reflectometry (TDR), done in collaboration with Professor Michael Chajes of the Civil and Environmental Engineering Department. Dr. Hunsperger is the author of the book *Integrated Optics: Theory and Technology*, 6th Edition, (Springer-Verlag, 2009) which is widely used as a basic text in the field of integrated optics, being available in Russian and Chinese translations, as well as English. He is also the editor of the multi-author volume *Photonic Devices and Systems* (Marcel Dekker, 1994).

Professional Societies

Fellow, Institute of Electrical and Electronic Engineers
Optical Society of America
American Association for the Advancement of Science
Society of Photo-Optical Instrumentation Engineers
International Platform Association

Recognition

University of Delaware Excellence in Teaching Award for OnLine Teaching 2006

Listed in

Membership in
Phi Kappa Pi
Tau Beta Pi
Eta Kappa Nu

Who's Who in the United States
Who's Who in the World
Who's Who in Education
Who's Who in Technology Today American
Men & Women of Science International
Who's Who in Engineering Men of
Achievement
Dictionary of International Biography
Directory of World Researchers