Professor Stephen D. Hersee – University of New Mexico

Dr. Hersee is an IEEE Fellow and a Professor of Electrical and Computer Engineering at the University of New Mexico. He graduated from Brighton University in the UK then spent 6 years with Plessey Research in the UK. From 1980 to 1986 he worked at the Central Research Laboratories of Thomson CSF in France, where he established several world records for quantum-well laser performance. In 1986 he joined GE's Electronics Laboratory in NY state. He has been a faculty member of the ECE Department at the University of New Mexico since 1991.

During his international career in industry and academia, Dr. Hersee has worked on advanced III-V materials and many types of electronic and optoelectronic devices. His current research focuses on the nanoscale epitaxial growth of semiconductors and especially the use of nanostructures for defect reduction in GaN and for advanced photonic and electronic devices. He is the inventor of a scalable GaN-nanowire process that promises to move nanowire-based, semiconductor devices out of the laboratory and into production. This research has been highlighted in *Nature Nanotechnology* and cited by the National Research Council of the National Academies in their 2008 report on "Nanophotonics". He is currently collaborating with other universities, with Sandia National Laboratories and with industry to develop the intellectual property associated with this nanowire work and to transfer this process into industry.

Dr. Hersee has published and presented over 170 papers and has been awarded 10 patents. His research has been funded by NSF, DARPA, AFOSR, ARO, DOE and by industry. He has graduated 11 Ph.D and 4 MS students and has received awards for his research and for his teaching. In 2002 he was named the University of New Mexico's "2001/2002 Teacher of the Year".