SES07-2007-000065

Abstract for an Invited Paper for the SES07 Meeting of the American Physical Society

Embedding Industrial Methods and Organizational Training in an Interdisciplinary Science/Engineering Graduate Program¹ KEN VICKERS, University of Arkansas

An interdisciplinary science/engineering graduate program was created at the University of Arkansas in 1998 with a goal of providing not only the same rigorous technical content and research skills development present in traditional science and engineering graduate programs, but also with the goal of creating PhD graduates proficient in the effective and efficient application of these traditional graduate school outcomes. This new interdisciplinary program has as its educational and research focus micro and nanoscale materials, processing, and devices, and issues its own MS and PhD degrees in Microelectronics-Photonics (microEP). In this talk the authors will discuss the methods used to bring high tech industrial effectiveness training and practice into the academic arena during the creation and evolution of this microEP graduate program, as well as key components of the extra training given all microEP students that was developed with the financial support of the NSF through IGERT, MRSEC, REU, PFI, and GK-12 grants won by the program since its inception in 1998.

¹This program is financially supported by the National Science Foundation under Grant No. DGE-9972820.