Travel Grants to Foster International Collaborations

S. L. Burkett,[*] A. J. Walton,[#] and S. Spiesshoefer[^]

[*]The University of Arkansas, Department of Electrical Engineering, 3217 Bell Engineering
Center, Fayetteville, AR 72701, SBurkett@uark.edu
[#]The University of Edinburgh, Scottish Microelectronics Centre, School of Engineering and
Electronics, Kings Buildings, Edinburgh, EH9 3JF, UK, Anthony.Walton@ee.ed.ac.uk
[*]The University of Arkansas, Department of Microelectronics-Photonics, 248 Physics,
Fayetteville, AR 72701, sspiess@uark.edu

Abstract

The successful achievement of goals and objectives in science and engineering research projects requires a broad and diverse perspective to propose and implement solutions. Many project solutions thus require a “team” approach with the appropriate technical knowledge coming from a variety of disciplines. Collaboration between scientists and engineers has become a conventional way to attack complex problems. This collaboration often times extends beyond the national borders and the important potential outcomes of globalization drive an interest in increasing international collaborations. An opportunity for women scientists and engineers to initiate international collaborations is described in this paper. A travel grant award, the Women's International Science Collaboration (WISC), provides funding for international travel to initiate research collaborations and to write a grant proposal with a foreign scientist. The award is administered by the American Association for the Advancement of Science (AAAS) and supported by the National Science Foundation (NSF). The paper describes the experience of an awardee, a female faculty member in Electrical Engineering at the University of Arkansas. The international collaborator is an Engineering faculty member affiliated with the University of Edinburgh through the Scottish Microelectronics Centre (SMC) in Scotland and the collaborators’ common research interest is in the area of silicon through-wafer interconnects, an enabling technology for three-dimensional (3-D) packaging of microelectronic devices. The grant application process will be described including the choosing of an international collaborator, a specific collaborative research project, and potential funding agencies. Next, the international collaboration experience in terms of specific outcomes is described, including the unique involvement of a U.S. graduate student doing research in this specific technical area. The added benefits gained from this experience will be discussed.