

Bulent Basol, Ph.D.

Bulent received his B.S (Bogazici University) and Ph.D. (UCLA) degrees in the fields of electrical engineering and solid state electronics, respectively. His Ph.D. dissertation topic was in the field of thin film photovoltaics (PV). After graduation, he led the R&D activities at Monosolar Inc., where he continued the development of high efficiency cadmium telluride (CdTe) solar cell technology he initiated as part of his Ph.D. work. In 1984, this technology was sold and transferred to British Petroleum and eventually yielded the highest efficiency thin film PV modules at that time.

In 1985, Bulent co-founded International Solar Electric Technology (ISET) in California where he directed several solar cell development efforts supported by DOE, NASA, DOD, DOC, and California Energy Commission, and innovated vacuum and non-vacuum based techniques for copper indium gallium selenide (CIGS) and CdTe solar cell fabrication. Among these techniques were novel painting approaches for low cost CIGS device fabrication that yielded over 10% efficient devices for the first time, and high power density flexible CIGS solar cells fabricated for the first time on polymeric substrates; a technology that received an innovation award from NASA.

In 2000, Bulent joined NuTool, Inc., a Silicon Valley start-up company, as a Board Member and CTO, where he led the efforts to develop novel electrochemical and/or mechanical copper deposition and removal processes and manufacturing tools to be used in integrated circuit manufacturing, specifically in back-end wafer interconnect applications. In 2004 ASMI acquired NuTool, and Bulent became the CTO of the new company until late 2005.

In November 2005, Bulent co-founded SoloPower Inc. in Silicon Valley to develop an electroplating-based, low cost, high efficiency thin film CIGS solar cell technology and served as a Board member/CTO of the company. Presently, SoloPower has a manufacturing and research facility in San Jose, California.

Bulent has been active in professional organizations as well as in Turkish American organizations. Through the years, he held various positions on the program committees of IEEE Photovoltaic Specialists Conferences, and participated as the leader or member of National Teams formed by the DOE in the field of PV. He is a past President of the American Turkish Association of Southern California and a past President of the Assembly of Turkish American Associations (ATAA) in Washington DC. Bulent has over 100 publications/conference presentations in the fields of PV, electronic materials processing, and semiconductor manufacturing. He holds 116 US Patents and has over 60 pending patent applications.