

# Tri Nang Tran



## Biography of Nang Tran

A McKnight distinguished visiting professor and a teaching professor at University of Minnesota, Nang Tran received his PhD in solid state materials and device physics from Osaka Prefecture University-Japan in 1979 and did his postdoctoral research at Harvard University and University of California, Irvine. His two significant technical achievements are : (i) co-inventor of a direct x-ray digital radiography detector, a major medical breakthrough for digital mammography (1990). Products based on this invention are currently available in many hospitals worldwide for early detection of breast cancer ; (ii) co-inventor of transparent conducting ZnO film doped with group III elements (1983). At present, most of the commercial thin film photovoltaic solar modules have at least one layer of this oxide in the device configuration.

During his tenure with the industry, Dr. Tran was instrumental in winning the funding for several multi-million- dollar research projects and had brought in millions of dollars in royalties from his inventions. He has participated in the technical communities as an invited speaker, a committee member of international conferences , a lecturer at seminars and workshops. He is a life senior member of the Institute of Electrical and Electronic Engineers and was listed in Who's Who in America. He has received more than 62 patents and many awards including the prestigious R&D 100 (100 best products of the year worldwide, 2 times) , and Photonic Circle of Excellence (25 best photonic products of the year worldwide). Prof. Tran was also the co-founder of Ecosolar International, a consulting company on solar energy, thin films and water filtration.

Contact information:

College of Science & Technology

University of Minnesota, USA

e-mail: [binh\\_an\\_tran@hotmail.com](mailto:binh_an_tran@hotmail.com) or [tranx051@umn.edu](mailto:tranx051@umn.edu)

Tel. 651-592-4369

