

Renewable Energy, Energy-Efficient and Emission Reduction Technologies

Energy supply, energy security and the environment are becoming major constraints for the future of our industrial development and healthy living. In this presentation, Mehrzad will discuss the status of energy technologies, the importance of the renewable energy ones and their integrations into existing energy infrastructure and the environment. Also the danger of the existing level of emissions released into the atmosphere and “Business as Usual” attitude will be discussed, along with recent research energy activities at BCIT including small wind power.

Bio

Dr. Mehrzad Tabatabaian (Taba-taba-ian) is a faculty member in the Mechanical Eng. Dept., at BCIT. Currently, he is also leading the energy-initiative activities at the School of Manufacturing, Electronics and Industrial Processes at BCIT. Mehrzad graduated from McGill University (PhD 1990), worked in academia, as a Professor and in leading alternative energy industries, as a Research Scientist/Engineer. Within the past 18 years he has worked passionately in alternative/renewable energy and efficient energy conversion fields. He started with developing computational fluid dynamics (CFD) models and new designs for fuel cells, and recently small wind power, which led him deeper into these fields and resulted in several registered patents and publications. He has a great passion and interest in performing research and teaching energy related subjects pertinent to alternative and green technologies. His current research focus areas are; enhancing efficiency of photovoltaic systems and small wind turbines. Mehrzad has a Leadership Certificate from University of Alberta, Certification of Green Building Technologies, and Professional Engineering (P.Eng.) license from APEGBC.