

AMERICAN UNIVERSITY OF BEIRUT



FACULTY OF ENGINEERING AND ARCHITECTURE
Department of Electrical and Computer Engineering

&

IEEE Student Branch

CORDIALLY INVITE YOU TO A SEMINAR

SPEAKER: Dr. Omar Mardam-Bey

Time and Place: Thursday, December 13, 2007 at 18:30 in
Engineering Board Room (EBR/RCR)

TITLE

Introduction to Small Hydropower Generation and Potential in Lebanon

Abstract

With oil prices approaching US\$ 100/barrel, it is becoming imperative for Lebanon to utilize its Renewable Energy Resources as early as possible and to the maximum extent available. This seminar provides an introduction to Small Hydropower Generation by presenting its history, utilization in many world countries, generated power cost, economics, plant sizing definitions, generation schemes, mathematical formulation, types of equipment used and its environmental and social aspects. The final part of the seminar will present a preliminary assessment of hydropower potential in Lebanon. This can be a basis for further on the ground studies that will result in the implementation of hydropower generation projects.

Dr. Omar Mardam-Bey graduated in 1964 with a Bachelor Degree in Mathematics and in 1968 with a Bachelor Degree in Electrical Engineering, both from AUB. He then worked for a year in the UK as a digital systems design engineer after which he moved to the University of Kansas in the USA. He obtained a Master Degree in digital system design and a Ph.D. Degree in Optimal Control Systems and Avionics Design. Dr. Mardam-Bey returned to Beirut in 1974 where he formed a company with two activities. The company established an electronics industry where alarm systems, communication devices, power back-up systems and university laboratory training systems were designed, built, installed and maintained. The company supplied its products to a large number of customers and universities. In addition, the company had a trading activity in electronic test equipment, university laboratory equipment, UPS systems and computer equipment and peripherals. In 1999, Dr. Mardam-Bey moved to Saudi Arabia where he spent five years as the manager of the engineering consulting and design office of Khatib & Alami implementing a variety of oil & gas facilities design projects for Saudi Aramco. In 2004, he returned to Beirut with Khatib & Alami head office as the Industrial Engineering Manager and Quality Manager. In 2005, Dr. Mardam-Bey founded the Arab Research Institute in Science and Engineering (ARISE), which is a non-profit, scientifically oriented institute dedicated to strengthening collaboration between universities faculties of science and engineering on one hand and industry on the other hand. Dr. Mardam-Bey is a Senior Member of the IEEE and a certified Quality Auditor. He is an expert on the international standards ISO 9001 for Quality Management and ISO 14001 for Environmental Management. Dr. Mardam-Bey has written about 15 papers in a variety of subjects that were presented in international conferences and published in conference proceedings.