PETER S. LOWENTHAL

PROFESSIONAL EXPERIENCE

August 1996 till Present

Executive Director, Solar Energy Research and Education Foundation (SEREF) Direct foundation's activities to facilitate and develop export markets opportunities for industry members who manufacture, distribute and install solar energy products and services. Produce educational literature specific to emerging markets such as: tourism water pumping agriculture and Micro-credit financing. Conduct research specific to market opportunities, developed support in multilateral financial organizations to fund pilot projects in core market sectors. Founding board member of Caribbean Action for Sustainable Tourism, created to establish a proactive, private sector initiative, focus on renewable and energy efficiency training to assist hotel operators to improve the environmental quality of their establishments. Developed joint venture with Peruvian Ministry of Energy and Mines and International Lead Zinc Research Organization. SEREF's role is to insure appropriate sociological and sustainable economic development issues are addressed. Serve as Program Manager for the Export Council for Energy Efficiency and industry liaison for Task 29 International Energy Agency on Solar Drying Technology for agricultural applications, principally coffee, tea fruits and vegetables.

Director, International Programs, Solar Energy Industries Association. (SEIA) Collaborate with other renewable energy trade associations as a member of the US Export Council for Renewable Energy. Encourage companies to expand into international markets and seek potential dealers and distributors for US companies. Analyze market opportunities for renewable energy. Produce reports and monthly bulletin for industry on Intl. Markets. Assist in trade missions to Bolivia, Peru Philippines and Indonesia.

September 1993 till August 1996

Director, Solar Thermal & Building Products Division, Chapter President's Council, at the Solar Energy Industries Association, responsible for solar heating division and the thirteen state Chapters of SEIA. Project management included developing consensus within solar thermal industry to clarify tasks that will benefit industry by expanding markets, providing market research and developing market sectors such as new home construction, tourism and agricultural processing.

January 1986 till September 1993

President: Solar Service & Supply Co. Exported fully integrated solar electrical systems to for rural electrification to Africa, Latin America and Asia, including water pumping systems, solar home systems and rural school lighting systems. Completed installation of 10 kW Hybrid wind / PV/diesel energy system. Provided hands on training for a Nigerian company in the marketing, installation and maintenance of solar water pumps. Marketed solar energy equipment, thermal and photovoltaic, residential, commercial and wholesale. Licensed contractor experienced in equipment installation and service of systems. Commercial solar clients included Veterans Administration Medical Center, and the State of Maryland, Andrews Air Force Base. Installed PV-UPS system for NAHB Research Center.

President, Chapter Presidents Council, Solar Energy Industries Association 1990-1991 Represented all chapter presidents on the SEIA Board of Directors; President, Maryland-District of Columbia-Virginia Solar Energy Industry Association, MDV-SEIA. Maintained and managed chapter affairs since 1985. Founding member.

February 1983 - January 1986- Solar Division Manager and Institutional Sales Representative, N.H. Yates & Co. Inc. Cockeysville, M.D. Marketed solar energy and hydronic heating and pumping products for commercial and residential buildings. Served as Technical Services Manager, Solar Building Products, Division of Hydrasearch, Co., Inc., Annapolis, MD. Supervised customer relations and installation of solar energy systems for water and space heating.

November 1981-1983 **Residential and Commercial Energy Auditor, Volt Energy Systems:** Performed energy audit analysis evaluations of multi-family high rise buildings in New York City and residential property in Washington, DC and Charlotte, NC.

October 1979- May 1981 **Operations Manager, Solar Heating Division, Solar Science Industries, Inc.,** Beltsville, Maryland. Supervised installation and operations of solar water heating and pool heating systems for residential and commercial applications.

January 1976-August 1978 **Peace Corps Volunteer, Agricultural Extension Agent, Paraguay**. Stationed with the Ministry of Agriculture: Office of Cooperative Extension. Crops included: cotton, wheat, soybeans and horticulture. Managed 4-H Clubs in villages. Conducted Peace Corps volunteer technical training while in service and upon completion of service.

EDUCATION

Raymond College, University of the Pacific, Stockton, CA. B.A. Liberal Arts, Class of 1975. University of Maryland, College Park, MD; College of Agriculture, Horticulture Dept.6/83-1/84 Certificates: Massachusetts Institute of Technology: Solar Energy Technology; University of Wisconsin: Engineering Solar Energy Systems and National Council of State Building Officials: Residential and Commercial Energy Auditor

Professional Knowledge and Expertise, Bilingual Spanish-English;

RENEWABLE ENERGY TECHNOLOGY: Spokesperson for the solar energy industry at international and regional meetings and conferences. Formulated a strategic plan for international activities of the industries association. Maintains excellent relationships with national and local industry members managing divergent interests and activities. Has focused association's work in emerging markets such as; PV-Wind-Diesel hybrid systems, larger systems for tourism and agricultural market sectors. Experienced in the design and utilization of solar energy for both electric and thermal applications of solar energy. Has extensive network of contacts in the solar industry, government and financial institutions. Vice-chairman of the North American Board of Certified Energy Practitioners

ENERGY CONSERVATION ANALYST Conducted energy audits of residential, commercial and institutional buildings for Consolidated Edison in New York, PEPCO in the Washington area and Piedmont Natural Gas in No. Carolina with Volt Energy Systems Inc. and CMC Corp. Specialist in hydronic heating equipment, lighting systems and heat recovery equipment. Researched and drafted an evaluation of projects funded by the Community Services Administration to the Energy Task Force of New York City. Have worked as a professional energy consultant and is a Certified Energy Manager by the Association of Energy Engineers.

INTERNATIONAL & AGRICULTURAL EXPERTISE: Industry liaison on International Energy Agency, IEA Task 29: Applications of solar drying technologies, focusing on coffee and fruit processing in Central America and Asia. Conducted Renewable energy focused trade missions to Bolivia, Peru and Costa Rica in Latin America and Philippines, South Korea, Japan, China and Indonesia in Asia. Extensive knowledge and experience with institutional structure at the World Bank Group and other multilateral development banks. Served as Agricultural Extension Agent in Paraguay with the Peace Corps from 1975 to 1978. Specialized in commercial horticulture, cotton and wheat production; 4-H clubs and agricultural cooperative development. Selected by Peace Corps to train future Volunteers in Paraguayan farm practices. Established forestry business in the assessment and culling of future timber resources for the U.S. Forest Service. Served as forest fire fighter for Plumas National Forest in Northern California.

MANAGEMENT & MARKETING: Organized trade association's annual conference, including hosting 40 international guests, Managed trade missions, expositions and public presentations. Responsible for government contract management. Served as retail and wholesale distributor for manufacturers of Radiant Barrier coating for commercial buildings; manufacturers of solar thermal collectors, solar electric modules, photovoltaics and other solar components. Completed AMA course on Management for the New Executive.

CERTIFICATES: Certified Energy Manager, CEM, and Issued by National Association of Energy Engineers, Atlanta, GA 1986; Certificate, Residential Energy Auditor; National Conference of States and Building Codes & Standards. Herndon, VA December 1981 Massachusetts Institute of Technology; Solar Energy Systems, Summer Program, 1981

PERSONAL: Native fluency in Spanish, Lived in Latin America for ten years. Interests: Traveling to remote places, outdoors sports, sailing, golf, skiing. Computer skills in Microsoft Word, Excel, PowerPoint, Internet, Memberships: International Solar Energy Society, American Solar Energy Society, World Future Society,