

Name: Robert Patrick Wichert

Education: Bachelor's Degree in Mechanical Engineering from California State University, Sacramento. Also attended University of California San Diego and University of California Berkeley. Obtained Master's Candidacy (ABD) in Communication Studies at California State University, Sacramento in 1994.

Contact information:

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Experience:

I am currently employed by my company, Robert P Wichert Professional Engineering, Inc. I am a mechanical engineer licensed to practice in California and Oregon. My firm provides consulting services in California and Oregon as a licensed professional engineer as well as consulting services in other areas as well.

My post-graduate work in Communication Studies and more than ten years of experience writing and managing technical standards for the safety, performance and use of energy systems helps me to communicate effectively on technical subjects.

My clients have included architects, builders, building owners, companies, agencies and associations, including the Fuel Cell & Hydrogen Energy Association (FCHEA), The Methanol Institute, the Taiwan Institute of Economic Research, Inovatek (Japan) and others. During my work for FCHEA I have personally crafted standards language which has been published and codified in the United States and around the world. In addition I have personally written regulatory language for the commercial transportation of fuel cells, fuel cell cartridges, fuel cell vehicles, fuel cell engines and hydrogen stored in metal hydrides while working at the International Civil Aviation Organization (ICAO) Dangerous Goods Panel as well as at the United Nations (UN) Sub-Committee of Experts on the Transport of Dangerous Goods which culminated in full acceptance of these items for routine cargo transport, even by air, eliminating the need for special provisions and the like. My presentations at the United Nations and ICAO were instrumental in gaining these advantages. In order to solidify an industry position, I worked with dozens of individual stakeholders and companies with differing viewpoints. Reaching consensus was difficult, but it was accomplished.

As a result of my work at the United Nations and the International Civil Aviation Commission I have become an expert on the shipping of fuel cells, fuel cell fuels, and other hazardous materials. I have interfaced extensively with US Department of Transportation and the Federal Aviation Administration agency with regard to shipping regulations and related matters.

I have personally written and Chaired NFPA Standards, ASME Standards, IEC Standards and others. I am currently the Convener (Chairman) responsible for IEC 62282-5-1, Portable fuel cell power systems – Safety; and a member of the working group responsible for IEC 62282-6-1/100, Micro fuel cell power systems – Safety; and a member of the working group responsible for IEC 62282-3-400, Small stationary fuel cell power systems with combined heat and power output. I was previously the secretary responsible for IEC 62282-6-1 and IEC PAS 62282-6-1 which were written with my support to facilitate the transport of small fuel cell power systems on board passenger aircraft.

I understand and apply construction and safety standards and regulations in California, Oregon, and by extension through the International Code Council, throughout the United States. This includes Fire Codes, Building Codes, Mechanical Codes, Plumbing Codes, Fuel Gas Codes, Energy Codes and other applicable regulations for design and construction.

I am a building commissioning agent and I have previously received ASNT TC-1A certification as a Level II Test Engineer. I am also a CABEC Certified Energy Analyst and Certified Energy Plans Examiner as well as a CalCERTS HERS I and HERS II Rater.

In addition to my previous certifications, I am also certified by the Building Performance Institute (BPI) as a Building Analyst Professional.

Previous to establishing my own company, I worked at the Desert Research Institute in Reno, Nevada under the auspices of the University of Nevada, Reno on fuel cell projects including a fully functional fuel cell scooter.

Prior to that I worked at the Sacramento Municipal Utility District (SMUD) as the Superintendant (manager) of a five year Advanced & Renewable Technology program that covered fuel cells, solar, wind, geothermal, energy efficiency and other research and development projects. Our 1993 budget was \$10.3 Million. As part of that work I was personally responsible for operations and maintenance of two 200 kW UTC Power Phosphoric Acid Fuel Cells, one in a combined heat and power configuration at a Kaiser Permanente Hospital. While at SMUD I provided written and verbal testimony to the California Energy Commission and the US Senate and worked in support of the California Energy Commission Electricity Reports while SMUD was actively adding generation and I was serving as their Generation Planning Supervisor.

During my work at SMUD I was also personally responsible for the first customer- choice all-renewable electrical energy option in California, SMUD Greenergy®. This program, that I started, continues as a successful program today.

Professional Affiliations, Registrations, Certifications and Licenses:

Licensed Professional Engineer in California (M021652) and Oregon (74040PE).

LEED Accredited Professional, Building Design and Construction

Full member of ASME, NFPA, IEEE, SAE and ASHRAE

United Nations Sub Committee of Experts on the Transport of Dangerous Goods

Consultative NGO Status

International Civil Aviation Commission Dangerous Goods Panel Participatory Observer Status

Publications, Awards, Honors and Professional Recognition:
International Electrotechnical Commission 1906 Award
CSUS Alumni Award

Employment History

Robert P Wichert Professional Engineering, Inc.
6342 Parkcreek Circle, Citrus Heights, CA
2005 – Present

Self Employed Engineer
1999 - 2005

Desert Research Institute
2215 Raggio Parkway
Reno, NV 89512
1998 – 1999

Sacramento Municipal Utility District
6201 S Street
Sacramento, CA
1976 - 1997

References:

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