Dennis W. Dees

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Professional Experience

- More than 30 years experience in the theoretical and experimental aspects of electrochemistry and electrochemical engineering
- More than 25 years at Argonne as a research engineer, project manager, and group leader
- More than 15 years experience on advanced lithium and lithium-ion battery technologies
- 10 years experience in the research and development of solid oxide and polymer electrolyte fuel cell technologies
- Research and development on a wide range of electrochemical systems including molten salt technologies, calorimetry studies, and sensors
- Ceramics processing and materials development

Education

- Ph.D., Chemical Engineering, University of California, Berkeley, 1983.
- B.S., Chemical Engineering, University of Illinois, Champaign/Urbana, 1978.
- A.S., Southeastern Illinois College, 1976.

Awards

- Pacesetter Award, Argonne National Laboratory (2002)
- Pacesetter Award, Argonne National Laboratory (1997)
- Pacesetter Award, Argonne National Laboratory (1989)
- Member Distinguished Alumni, Southeastern Illinois College (1989)
- Distinguished Alumnus Award, Illinois Community College Trustee Association (1991)
- Numerous Undergraduate and Graduate Awards and Honors

Career Activities & Highlights

- Instrumental in creating research programs and building laboratories for several advanced electrochemical energy conversion and storage technologies including solid oxide fuel cells, polymer electrolyte membrane fuel cells, lithium polymer batteries, and lithium ion batteries
- Developed transport reaction models for simulating a wide variety of electrochemical systems including various battery and fuel cell

technologies, as well as electrochemical oxide reduction technologies. These electrochemical systems include both solid and liquid electrolytes (e.g. aqueous, non-aqueous, polymer, solid oxide, and molten salt) with operating temperatures from -40 to 1200°C.

- Actively responded to famous “Cold Fusion” announcement by quickly designing, building, conducting, and analyzing a series of electrochemical calorimetry experiments
- 30 year member of the Electrochemical Society
- Many talks and invited talks at symposia and meetings on advanced fuel cells or batteries

Publications & Patents

- Referred Publications : 27
- Patents: 10
- Many Reports, Extended Abstracts, and Proceedings Papers