# Ira D. Bloom

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## **Professional Experience**

Battery and fuel cell testing and evaluation, sodium-conducting glass electrolytes, composite materials for high-temperature batteries, superconducting ceramics, novel materials for solid oxide and molten carbonate fuel cells, fuel-reforming catalysis

## **Professional Society Activities**

Electrochemical Society

## Education

PhD, Inorganic Chemistry, University of Chicago BS, Chemistry, Brown University

#### Awards

Pacesetter Award 1996 IR100 Award 1987 for "Micro-Membrane Electrode Sensor"

#### Patents

"Compliant Sealants for Fuel Cell and Other Ceramics," I. Bloom and K.L. Ley, U.S. Patent No. 5,453,331, September 26, 1995

"Ionic Conductors for Soid Oxide Fuel Cells," M. Krumpelt, I.D. Bloom, J.D. Pullockaran, and K.M. Myles, U.S. Patent No. 5,232,794, August 3, 1993

"Solid Oxide Fuel Cell Electrolyte," I. Bloom, M.C. Hash, and M. Krumpelt, U.S. Patent No. 5,213,911, May 23, 1993

"Method of Electrode Fabrication and an Electrode for Metal Chloride Battery," I.D. Bloom, P.A. Nelson, and D.R. Vissers, U.S. Patent No. 5,194,343, March 16, 1993

"Processing Method for Superconducting Ceramics," I.D. Bloom, R.B. Poeppel, and B.K. Flandermeyer, Statutory Invention Registration No. H1138, February 1993

"Highly Conductive Electrolyte Composites Containing Glass and Ceramic, and Method for Manufacture," M.C. Hash and I. Bloom, U.S. Patent No. 5,154,987, October 13, 1992

"Membrane Reference Electrode," L. Redey and I.D. Bloom, U.S. Patent No. 4,814,062, March 21, 1989

"Sodium-Sulfur Cell and Glass Electrolytes," P.A. Nelson, I. Bloom, and M.F. Roche, U.S. Patent No. 4,659,637, April 27, 1987