

Ira D. Bloom

Argonne National Laboratory
9700 South Cass Avenue, Bldg. 205
Argonne, IL 60439-4837
phone: 630/252-4516, fax: 630/972-4516
e-mail: bloom@cmt.anl.gov

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, The University of Chicago
- BS, Chemistry, Brown University

Awards

- Argonne National Laboratory Pacesetter Award 1996
- R&D 100 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 Solid 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