

## Leon D. Betowski, Research Chemist, in EPA's National Exposure Research Laboratory

Exposure Methods and Measurements Division

[Mailing Address](#)

[betowski.don@epa.gov](mailto:betowski.don@epa.gov)

### Area of Expertise:

My expertise is both the development of methods using mass spectrometric techniques and using computational chemistry to complement experimental work in environmental analytical chemistry. Additionally, the computational chemistry is used to monitor global warming.

### Select Publications:

Estimation of Radiative Efficiency of Chemicals with Potentially Significant Global Warming Potential. Don Betowski, Charles Bevington, and Tom Allison. *Environmental Science and Technology*. DOI: 10.1021/acs.est.5b04154

The Development and Inter-laboratory Verification of LC-MS libraries for organic chemicals of environmental concern. Charlita Rosal, Don Betowski, Joe Romano, Joshua Neukon, Dennis Wesolowski, and Lawrence Zintek. *Talanta* 2009, 79 810-817.

Calculation of Electron Affinities of Polycyclic Aromatic Hydrocarbons and Solvation Energies of Their Radical Anion. Leon D. Betowski, Mark Enlow, Lee Riddick, and Donald H. Aue. *Journal of Physical Chemistry A*, 2006, 110(47), 12927-12946.

Electron Affinities of Polynuclear Aromatic Hydrocarbons and Negative-Ion Chemical-Ionization Sensitivities. Leon D. Betowski, Mark Enlow, and Donald H. Aue. *Int. J. Mass Spectrom.* 2006, 255-256, 123-129.

A High-Level Calculation of the Proton Affinity of Diborane. L.D. Betowski and Mark Enlow. *Journal of Molecular Structure: THEOCHEM*.2003, 638(1-3), 189-195.

The Phototoxicity of Polycyclic Aromatic Hydrocarbons: A Theoretical Study of Excited States and Correlation to Experiment. Leon D. Betowski, Mark Enlow, and Lee Riddick. *Computers & Chemistry*. 2002, 26(4), 371-377.

View more research publications by [Leon Betowski](#).

### Education:

- Ph.D. in Physical Chemistry, 1974, Cornell University
- B.S. in Chemistry, 1966, Georgetown University

## **Professional Experience:**

### Awards and Honors:

- The Friends of ORCR award, December 2009 presented by the Office of Resource Conservation and Recovery of the EPA in Washington, D.C.
- U.S. EPA Scientific and Technological Achievement Awards (STAA) for 2010 (level II award); 1990, 1985, 1984, and 1982 (level III awards).
- U.S. EPA Scientific and Technological Achievement Awards (STAA) for 2007 (honorable mention).
- NERL Internal Grant Awardee (1996)
- EMSL-Las Vegas Innovative Research Awards (1994, 1993 [2 awards], 1991, and 1989):
- EMSL-Las Vegas Nomination for the OMMSQA Innovative Research Award for 1993.
- U.S. EPA Bronze Medal for contributions for computational chemistry (1995).
- U.S. EPA Bronze Medal for Commendable Service (1991).
- 1997 Southern Nevada Federal Executive Association Outstanding Scientific and Technical Award under the State's Distinguished Public Service Awards Program.