

## Yifen Tsai

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### Professional Experience

- **September 2003 – Present.** Senior Scientific Associate, Chemical Sciences and Engineering Division, Argonne National Laboratory.
- **October 1994 – August 2003.** Scientific Associate, Chemical Technology Division, Argonne National Laboratory.
- **November 1989 – September 1994.** Scientific Assistant, Chemical Technology Division, Argonne National Laboratory.
- **September 1984 – September 1988.** Bacteriological Laboratory Supervisor / Water Quality Specialist, North Penn Water Authority, Lansdale, Pennsylvania.

### Education

- Master of Science Degree, Environmental Science, Drexel University, Pennsylvania, 1984.
- Bachelor of Science Degree, Nutrition and Food Science, Fu-Jen Catholic University, Taiwan, 1982.

### Awards

- Pacesetter Award, Argonne National Laboratory (2009)
- Pacesetter Award, Argonne National Laboratory (2003)

### Career Activities & Highlights

- As a key analyst providing superb analytical support to Argonne's crucial nuclear programs - Advanced Fuel Cycle Initiative (AFCI) Advanced Aqueous Separation, Yucca Mountain Repository, Reduced Enrichment for Research and Test Reactors (RERTR), and Nuclear Forensics
- Extensive experience in Inductively Coupled Plasma Mass Spectrometry (ICPMS) Analysis, and Method Development
- Extensive experience in elemental and radionuclide determinations, isotopic measurement, and impurity analysis
- Extensive experience in semi-volatile and volatile organic analyses using Gas Chromatography/ Mass Spectrometry (GC/MS)

### Publications

- Determination of Actinide and Fission-Product Isotopes in Very-High-Burnup Spent Nuclear Fuel, V. S. Sullivan, D. L. Bowers, M. A. Clark, D. G. Graczyk, Y. Tsai, W. E. Streets, M. H. Vander Pol, and M. C. Billone, Journal of Radioanalytical and Nuclear Chemistry, Vol. 277, No.1 (2008) 59-64
- Application of ICPMS and HR-ICPMS for the Characterization of Solution Generated from Corrosion Testing of Spent Nuclear Fuel, S. F. Wolf and Y. Tsai, Journal of Radioanalytical and Nuclear Chemistry, Vol. 263, No. 3 (2005) 575-579

- Corrosion Tests with Uranium- and Plutonium-Loaded Ceramic Waste Forms, L. R. Morss, S. G. Johnson, W. L. Ebert, T. DiSanto, S. M. Frank, J. L. Holly, A. J. Kropf, C. J. Mertz, M. Noy, T. P. O'Holleran, M. K. Richmann, W. Sinkler, Y. Tsai, and A. R. Warren ANL-02/09, April 2002
- Evaluation of Three Analytical Techniques Used to Determine High Level of Volatile Organic Compounds in Type IV Sludge from Rocky Flats Plant, K. J. Parish, D.V. Applegate, Y. Tsai, A. S. Boparai, and G. T. Reedy, ANL/ACL-96/3.