ADMINISTRATOR PROFILE

1. Name: Irvin W. Osborne-Lee Date of Birth: February 1, 1958

2. Academic Rank: Associate Professor and Head, Chemical Engineering Department

3. Degrees: Ph.D. in Chemical Engineering, The University of Texas at Austin, 1985

M.S. in Chemical Engineering, The University of Texas at Austin, 1983

B.S. in Chemical Engineering, The University of Texas at Austin, 1979

4. Number of Years on this Faculty: Employment date June 22, 1998

5. Other Related Experience--teaching, industrial:

Industrial: 2000 - Present Gulf Coast Waste Disposal Authority, Board of Directors

1985 - 1998 Oak Ridge National Laboratory (ORNL), Chemical

Technology

1994 - Present Lecturer AIChE Speaker's Bureau

1986 - 1998 Lecturer, Department of Energy Traveling Lecturer Program

Teaching: 1986 - 1987 University of Tennessee, Adjunct Faculty Member

6. Consulting, Patents and Research Contracts

 a. College of Engineering Scholars Program (CESP)-funded by NSF CSEMS Program, Co-Principal Investigator (2003-2007)

- b. Nuclear Engineering Pipeline Program grant funded by the U. S. Department of Energy, **Principal Investigator** (2002-2005)
- c. Measurement and Prediction of Flashpoints of Flammable Liquids funded by the State of Texas Coordinating Board, **Principal Investigator** (2001-2003)
- d. Mercury Waste Treatment Innovate Technology Summary Report Development, funded by ORNL, **Principal Investigator** (2001-2002)
- e. Mercury Waste Treatment Technology Development Support, funded by ORNL, **Principal Investigator** (1998- 2000)
- f. Development of a path forward for special case wastes, ORNL, Task Leader (1997-1998)
- g. Modeling and analysis of novel technologies with FLOW, an in-house process simulator, various sponsors including the U.S. DOE, **Project Leader** (1993-1996)
- h. Investigative research on the beneficial uses of ²⁵²CF, **Principal Investigator** (1993-1995)
- 7. State in Which Registered: None
- 8. Principal Publications of Last Five Years:
 - a. G. Awuku-Budu and I. Osborne-Lee, "Investigative Study of Flammable Mixtures of Alcohol and Alkane Series," Southwest Regional LSAMP Student Research Conference, South Padre Island, Texas, September 24-26, 2003.
 - b. O. Sonaike and I. Osborne-Lee, "Comparison of Mathematical Models for Predicting the Flash Points for Binary Ideal and Non-ideal Solutions," Southwest Regional LSAMP Student Research Conference, South Padre Island, Texas, September 24-26, 2003.
 - c. "Improving the Scientific Basis for Managing DOE's Excess Nuclear Materials and Spent Nuclear Fuel." National Academies Report, 2003 (published as a book, co-author).
 - d. Morris, M., I. Osborne-Lee, and G. Hulet, Demonstration of New Technologies Required for the Treatment of Mixed Waste Contaminated with 260 ppm Mercury, ORNL/TM-2000/147, Oak Ridge National Laboratory, January 2002 (primary author).
 - e. Osborne-Lee, I., A. Phillips, and J. Etsibah, The Role of Modeling in the Development of Fuel Cell Technology, AIChE Spring National Meeting, New Orleans, March 10-14, 2002.
 - f. Osborne-Lee, I. W., T. B. Conley, M. I. Morris, and G. A. Hulet. Demonstration Results on the Effect of Mercury Speciation on the Stabilization of Wastes. ORNL/TM-1999/120. Oak Ridge

- National Laboratory, Oak Ridge, Tenn., August 1999 (primary author).
- g. Osborne-Lee, I., The Fundamentals of Engineering Exam as an Assessment Tool for Engineering Programs, 6 th World Congress of Chemical Engineering, Melbourne, Australia, September 2001.
- h. Nyandoto, G., J. Ferrada, and I. Osborne-Lee, Simulation Based Evaluation of Alternatives for Production of Marketable Chemicals from Depleted Uranium Hexafluoride, AIChE Spring National Meeting (Houston), April 22-26, 2001.
- Morris, M.I., T.B. Conley, and I.W. Osborne-Lee, Processing of Mixed-Waste Compressed-Gas Cylinders on the Oak Ridge Reservation, proceedings of Waste Management '98, Tucson Arizona, March 1-5, 1998.

9. Scientific and Professional Societies:

- a. American Chemical Society (ACS)
- b. American Institute of Chemical Engineers (Lifetime Member of AIChE)
- c. National Organization of Black Chemists and Chemical Engineers (NOBCChE)
- d. Sigma Xi (the Scientific Research Society)

10. Honors and Awards:

- a. **Best of Show Publication Award** (2003), Society for Technical Communications
- b. Distinguished Publication Award (2003), Society for Technical Communications
- c. Member of the Career and Education Operating Council, AIChE 2002
- d. Award for Service to Society (1999), AIChE
- e. Meeting Program Chair, 2001 Spring National Meeting, AIChE
- f. Appreciation Award (2001), National Society of Black Engineers, PVAMU Chapter
- g. Certificate of Appreciation (2001), Society of Physics Students, PVAMU Chapter
- h. Student Chapter Advisor Honor Roll recognition (1999, 2000, 2001, & 2002), AIChE
- i. Significant Event Awards (1994, 1995 & 1996), Lockheed Marietta Energy Corporation
- j. Distinguished Service Award (1995), AIChE Minority Affairs Committee
- k. Dedicated Service Award (1995), AIChE Fuels and Petrochemicals Division
- 1. Walk of Fame Award (1994), AIChE Public Relations Committee
- m. Outstanding Scientific Achievement Award (1991), East Tennessee Chapter, NOBCChE
- n. Technical Communication Award (1991), Society for Technical Communication

11. Subjects of Courses Taught – N/A.

- a. Modern Engineering (Freshman)
- b. Materials Science (Sophomore)
- c. Equilibrium Staged Separations (Junior)
- d. Kinetics & Reactor Design (Junior)
- e. Professional Engineering I (Junior, FE Review)
- f. Engineering Research (Undergraduate)
- g. Design of Process Engineering Systems (Senior)
- h. Senior Design & Professionalism I & II (Senior)
- i. Numerical Methods (Graduate)
- j. Decision Analysis (Graduate)
- k. Research (Graduate)
- 1. Thesis (Graduate
- 12. Specific Programs in Which Faculty Member has Participated to Improve Teaching and Professional Competence during Last Five Years (partial listing):
 - a. AIChE spring and annual meetings 1998-2003 (one ore both conferences each year).
 - b. National Instruments Technical Symposium (Houston), October 16, 2003.
 - c. "Leadership Training Conference" (Woodcliff Lawn, New Jersey), AIChE, June 5-9, 2003.
 - d. "How to Engineer Engineering Education" workshop (Bucknell University in Lewistown, Pennsylvania), July 6-11, 2003.
 - e. 2002 Summer Academy (Mt. Snow, Vermont), AAHE, July 17-21, 2002.
 - f. "Minority ChE Faculty 2001+: A Workshop to Develop Minority Leaders in the ChE Academy" (Washington, D.C.), March 2-6, 2001.
 - g. Faculty Enhancement Workshop (Evanston, Illinois), Northwestern University, sponsored by the NSF Center for Advanced Cement-Based Materials (ACBM), July 18-21, 1999.
 - h. Green Engineering Educators Workshop for Chemical Engineering Professors (Charlotte), sponsored by American Society for Engineering Education (ASEE), June 20, 1999