

Luisa Amelia Dempere
Extended Green CV

Education:

Doctor of Philosophy. Materials Science and Engineering, University of Florida, Gainesville, (January 1997 - August 1999).

Master of Science. Materials Science and Engineering, University of Florida, Gainesville, (January 1994-December 1996).

Licentiate in Chemistry "Cum Laude", Universidad de Oriente, Cumaná, Venezuela, (June 1992).

Employment:

Associate Engineer, Director of the Major Analytical Instrumentation Center (MAIC), Materials Science and Engineering (MSE) Department, University of Florida, Gainesville (October 2006 - Present).

Assistant Engineer, Director of the Major Analytical Instrumentation Center (MAIC), MSE Department, University of Florida, Gainesville (November 2001 – October 2006).

Assistant-In Engineering, Director of the Major Analytical Instrumentation Center (MAIC), MSE Department, University of Florida, Gainesville (June 2000 - October 2001).

Research Scientist, Major Analytical Instrumentation Center (MAIC), MSE Department, University of Florida, Gainesville (August 1999 – June 2000).

Teaching and Seminars:

- Instructor of the MSE graduate course “*Sustainable Engineering*” in the summer of 2006.
- Instructor of the undergraduate course “*Engineering for a Sustainable Future*” for freshman in the college of engineering (Fall 2006, Spring 2007, Summer B 2007, Fall 2007)
- Incorporated sustainable engineering concepts in product selection and design to the lab component of the undergraduate course *Analysis of the Structure of Materials*, Spring 2007.
- Guest Lecturer on sustainable engineering topics for the MSE undergraduate courses “*Materials Selection and Failure Analysis*” and “*Stability of Materials*”. Spring and Fall 2007.
- Approved instructor for the Construction Industry Licensing Board (CILB) of the Florida Department of Business and Professional Regulation.

- Instructor of two continuing education courses at the Southeast Building Conference in Orlando, FL in July 2007. Courses: “*Green Building Certification with the FGBC*” and “*Going Green: What it means to the Builder*”.
- Invited Lecturer on Global Warming & Engineering for the undergraduate course EGN 1002 – *Introduction to Engineering* at the University of North Florida, September 2006.
- Graduate seminar on Sustainable Engineering at the MSE Seminar Series, October 10, 2006.
- Graduate seminar on Sustainable Engineering at the MSE Department, University of North Texas, November 15, 2006.
- Undergraduate seminar on Sustainable Engineering for the Interdisciplinary Materials Seminar at the University of Central Florida, February 19, 2007.

Proposals and Grants:

- **Florida Center for Solid and Hazardous Waste Management (FCSHWM).**
 - “Use of Waste-to-Energy Ash in Concrete” – Proposal – December 2001. This study proposed to evaluate the effects of waste-to-energy ash on concrete properties, particularly strength and durability of concrete. Replacing fly-ash with waste-to-energy ash in concrete mixes provides a low cost resource to concrete producers, save valuable landfill space, and assist in closing the loop from this waste stream by using waste as a raw material.
 - “Reverse Engineering and Analysis of CRT Monitor and LCD Screen Components to Determine their Potential for Environmental Hazard” – Proposal – March 2002. This study proposed to analyze the majority of the components of Cathode Ray Tubes (CRT) and Liquid Crystal Displays (LCD), assess their potential environmental impact when disposed in landfills, and evaluate viable routes for selective disassembling, handling and diverting before recycling or final disposal.
- **Office of the Provost at UF**
 - Mini-grant to introduce Sustainable Engineering in the curriculum in 2007.

Research and Projects:

- **Florida Center for Solid and Hazardous Waste Management (FCSHWM).** Evaluation of Arsenic content in treated wood used in playgrounds, as part of a larger project evaluating the environmental impacts of treated wood.
- **Environmental and Occupational Health Sciences Institute of the University of Medicine and Dentistry of New Jersey and the Environmental Protection Agency (EPA).** Analysis of samples of

particulate pollution generated by a local cement plant collected at surrounding areas.

- **Boran Craig Barber Homes (BCB Homes), a Naples-Florida based builder.** Analysis and verification of specs regarding toxic materials in treated wood for flooring imported from China.
- **Florida Department of Transportation (FDOT).** Chair of the Graduate Committee of two Ph.D. students evaluating methods of characterization of concrete to develop chlorine concentration profiles that are reliable and accurate. FDOT Long-Term Goal: “The 100 year Bridge”.

Training and Workshops:

- Workshop “**Engineering in Transition**”, NSF-EPA funded Center for Sustainable Engineering at Carnegie Mellon in July 2006.
- UF Office of Human Resources, most relevant training and courses:: Building Team Trust, Problem Solving, Budget & Commitment Control, The Color of Money, Internal Controls at UF, Managing Conflict at Work, Achieving Results, Relationship Strategies, Power of Feedback, Asset Management, Fair & Legal Workplace, Interviewing and Hiring, Coaching for Success, and The 7 Habits on Highly Effective People.
- “**Supervisory Challenge**” Certificate from the Office of Human Resource Services.
- Selected for “**Next level Leadership at UF Program**”, Office of Human Resources, 2007-2008.

Committees and Activities:

- Member of the UF Faculty Senate Sustainability Committee.
- Member of the Environmental Health and Safety Committee (2003-2006)
- Participated representing the MSE Department in the Sustainability Academic Showcase for the Conversations on Sustainability in Business Summit at UF, September 10, 2007.
- Group discussion session with Bob Willard regarding *U.S. corporations implementing sustainable practices and the impact on their engineering decisions and solutions*” on September 11, 2007.
- Visioning session for Energy and Climate Change that was conducted as part of developing a university-wide sustainability vision report.
- Organizer of the display on Sustainable Engineering for the MSE open-house hosting the event “Showcasing the Possibilities”, September 28, 2007.
- Materials Consultant for Trifecta Construction Solutions.

Professional Societies and memberships:

- UFGBC, USGBC (through UF)