

Dr. José A. Colucci, PE
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2009 EPA Environmental Quality Award Recipient
UPRM-CHEME Professor, DHS UPRM-CIMES Director
2011 Distinguished Scholar Lecture – UPR Bayamón

Professional Accomplishments & Awards

- Technical project director and/or collaborator for the installation of several Renewable Energy demonstration projects at the Municipalities of Caguas and Bayamón in Puerto Rico with capital expenditures exceeding \$5 million including energy efficiency, photovoltaic, green building, fuel cell and biodiesel.
- Fast tracked (7 years) from Research Engineer to Market Manager. This includes a two year assignment as a Business Analyst working very closely with Engineering, Technology and Business Managers defining and approving capital appropriation requests, budget/actual reconciliations and strategic plans compilations of approximately ten businesses with total annual budgets of approximately 800 million dollars.
- Developed and implemented the next generation of UCC C3 to C12 alcohols catalysts using both liquid and gas phase hydrogenation reactors. Also developed *Operational Safety Standards* for high risk operations such as Synthesis gas and Hydrogenation Systems. These involved identifying and minimizing events or scenarios that could lead to loss of life, capital (>\$1 million) and operating time (> 1 month).
- R&D representative in an overall “revamp” of an 800 million pounds per year butanol production facility at Texas City, Texas using catalysts developed by my group. Also developed catalysts for polymers production.
- Developed Radiation Safety and Probability Risk Assessment courses at UPRM as part of a Nuclear Regulatory Commission proposal.
- Summer internships at Argonne National laboratory and NASA in the area of Direct Methanol fuel cells and fuel cell airplane viability, respectively.
- Close collaborations in proposals and projects with several Universities such as University of Hawaii, Georgia Tech, Cornell University, University of Alaska-Fairbanks, Carnegie Mellon, Arizona State University, University of Texas-Austin, University of Illinois-Urbana, Iowa State, University of Kentucky, etc.
- Chemical Engineering Department Director, Associate R&DD Engineering Dean and lately Director of the campus wide R&D Center. The latter is equivalent to a Dean of Research in other Institutions.

AWARDS AND HONORS

2011: *Lección Magistral* distinction (Distinguished Scholar Lecture) UPR – Bayamón campus

2009: EPA Region II Municipality Environmental Quality Award, *Caguas Fluorescente*

2006 to present: CMU-ASU-UT Center for Sustainable Development Board of Directors Member

2006: Golden Key Honorary Member

2004/2002/1998/1995/: Who is Who among American Teachers

2002 - Present: VITEC2 (PR First Incubator) Board of Advisors member

2002: 1st Prize AIDIS Research Projects Competition (Biodiesel Commercialization @ PR)

2000: UPR Distinguished Researchers Recognition

1998: Vice President XVIII Interamerican Congress of Chemical Engineering

1996: Puerto Rico's Distinguished Chemical Engineer, PR Institute of Chemical Engineers

1996 - 1999: UPR/PR Industry Development Agency Science & Technology Board Member

1995/1996: Distinguished Chemical Engineer Professor, UPR-Mayagüez

1994 - 1996: National Council of Examiners for Engineering and Surveying Item Writer

1990 & 1992: Special Recognition Awards (2), UCC

1989: R&D 100 Awards, UCC

1979: Top Chemical Engineering Student, UPR-Mayagüez

2000 – 2011 Research Portfolio & Direct Funding

2008 – 2013; Microalgae Derived Biofuels, Air Force Research Laboratory, \$562,000, PI

2008 – 2012; Center for Island, Maritime and Extreme Environment Safety, \$700,000, UPRM-PI

2008 – 2013; Sustainable Energy Laboratory, Department of Education, \$150,000, Collaborator
(Total Project - \$2.5 million)

2007 – 2012 ^(a); Caguas Energético Sustentable & Caguas ARRA, Municipality of Caguas, \$250,000, PI

2009 – 2010 ^(a); Bayamón ARRA, Municipality of Bayamón, \$80,000, Co-PI

2000 – 2011: Sloan Foundation UPRM-CHEM E Feeder Program, \$900,000, PI

2008 – 2010; Certificate Program in Nuclear Engineering, NRC, \$165,000, Co-PI

2006 – 2008; Achievable Renewable Energy Targets for Puerto Rico, Puerto Rico Energy Affairs
Administration, \$250,000, Co-PI

2001 – 2006; Puerto Rico Biodiesel Initiative, Department of Energy, National Renewable Energy
Laboratory, Municipality of Caguas, PR Energy Affairs Administration, \$500,000, PI

2000 - 2004; Autothermal Reforming, Argonne National Laboratory, \$100,000, PI

(a) Provided technical expertise and “transparency” to both municipalities for their ARRA projects with an overall budget of (\$5.4 million, \$4 million Bayamón, 600 kW Solar Canopy and \$1.4 million Caguas, PV (several), Green Roof, Fuel Cell, Green Loans & Energy Efficiency (LED & CFL) .

Other Accomplishments:

UPRM Principal and Co-Principal Investigator in several multimillion dollar center proposal site visits:

NSF-ERC (2010): *Urban Design Systems 2100*, Georgia Institute of Technology PI, Finalist

DHS (2007): *Center for Island, Maritime and Extreme Environment Safety*, University of Hawaii PI, Selected

DHS (2006): *Center for High Consequence Event Response and Preparedness (C-HCERP)*, University of South Florida PI, Finalist

NSF-ERC (2005): *System-Based Fuel Cell Design and Manufacturing Engineering Research Center (FCDMERC)*, UCONN PI, Finalist