José A. Colucci-Ríos UPRM Chemical Engineering Box 9046, Mayaguez, PR 00681-9046 787-265-3826, biodieselpr1@aol.com

a. Professional Preparation

University of Puerto Rico	Chemical Engineering	B.Sc., 1979
University of Wisconsin-Madison	Chemical Engineering	Ph.D., 1985

b. Appointments

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

2005 to present: VITEC2 Incubator Advisory Board Member

2002 to present: Associate Dean of Engineering UPRM

2006: Acting Engineering Associate Dean of Academic Affairs UPRM

2000: Faculty Summer Internship at NASA John Glenn Research Center

1999: Faculty Summer Internship at Argonne National Laboratory

1997: Professor - University of Puerto Rico-Mayagüez (UPR-Mayagüez)

1995 - 1998: Chemical Engineering department Director - UPR-Mayagüez

1994/1995: Faculty Summer Internships at Sandia National Laboratories

1992 - 1996: Associate Professor - University of Puerto Rico-Mayagüez

1992: Market Manager - Union Carbide Corporation (UCC), Danbury, Connecticut

1990 - 1992: Business Analyst - UCC, Danbury, Connecticut

1987 - 1990: Project Scientist - UCC, Texas City, Texas

1985 - 1987: Research Scientist - UCC, South Charleston, West Virginia

1979 - 1985: Ph.D. in Chemical Engineering (Fuel Cells), University of Wisconsin - Madison

1975 - 1979: BS in Chemical Eng. (magna cum laude), University of Puerto Rico - Mayagüez

c. Publications

- i) Effect of Ultrasonication on Droplet Size in Biodiesel Mixtures, Wu,P.; Yang,Y.; Colucci, J.;Grulke,E., *JAOCS*, **2007**, 84 (9), 877 884
- ii) Sustainable Energy @ Puerto Rico, Colucci, J.A.;O'Neill-Carrillo, E.O.;Irizarry-Rivera, A., *Proceedings of ES2007*, ES2007-36010, June 2007,
- iii) Hydrogen Production Using Autothermal Reforming of Biodiesel and Other Hydrocarbons for Fuel Cell Applications, Colucci, J. A.; Ospinal, M., *Proceedings ISEC 2006*, July 2006.
- iv) Biodiesel from Alkaline Transesterification Reaction of Soybean Oil Using Ultrasound Mixing, Colucci, J.A., Alape, F.A., Borrero, E., *JAOCS*, **2005**, 82 (7), 525 530
- v) Biodiesel for Puerto Rico, Colucci, J.A., Alape, F.A., Borrero, E., *Green Chemistry & Engineering Proceedings*, **2003**, 37 40.
- vi) Carbon Mass Balance Evaluation of Cellulase Production on Soluble and Insoluble Substrates, J. C. Sáez, D. J. Schell, A. Tholudur, J. Farmer, J. Hamilton, José A. Colucci, and James D. McMillan, *Biotechnology Progress*, **2002**, 18, 1400 - 1407
- vii) Comparing the Performance of Various Advanced Oxidation Processes for Treatment of Acetone Contaminated Water, Hernandez R., Zappi, M., Colucci, J., and Jones, R., *Journal of Hazardous Materials*, 92, 2002.

d. Synergistic Activities

Coordinator of UPRM CHEM E Sloan Foundation Undergraduate Feeder program since 1996. This program encourages students to seriously consider pursuing a doctoral degree in science and engineering.

Grease Biodiesel for Puerto Rico Initiative Principal Investigator. This project involves a strong dissemination effort that includes workshops for high schools students and the industrial/government sectors.

e. Awards and Honors:

2006: Golden Key Honorary Member

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

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 Award, UCC

1979: Top Chemical Engineering Student, UPR-Mayagüez

f. Collaborators & Other Affiliations

(i) Collaborators.

- 1. Dr. Ted Krause, Argonne National Laboratory
- 2. Dr. John Crittenden, PE, ASU
- 3. Dr. Carlos Cabrera, UPR-Rio Piedras
- 4. Dr. Luciano Castillo, RPI
- 5. Dr. Efrain O'Neill, UPRM
- 6. Dr. Arup Sen, SABI President
- 7. Engineer Pedro Panzardi, Panzardi-ERM
- 8. Dr. Manuel Gómez, UPR-RP
- 9. Dr. Govind Nadathur, UPRM Marine Science
- 10. Iván Lugo, Executive Director, INDUNIV
- 11. Dr. Lorenzo Saliceti, UPRM
- 12. Dr. Miguel Vélez, UPRM

(ii) Graduate and Postdoctoral Advisors.

1. Prof. Stan Langer, University of Wisconsin-Madison

(iii) Thesis Advisor and Postgraduate-Scholar Sponsor

- 1. Juan Carlos Flores, MS, 2007 (PPCPs Remediation Technologies)
- 2. Mónica Ospinal, MS, 2006 (Autothermal Reforming)
- 3. Jessica Ruiz, MS, 2005 (Fuel Cells, Current Interruption)
- 4. Fabio Alape Ph.D. 2004 (Biodiesel Synthesis Fundamentals)
- 5. Ritsdeliz Pérez, MS 2004 (Autothermal Reforming)
- 6. Yaritza López, MS 2004 (Fuel Cells, Impedance Spectroscopy)
- 7. Zoraya Berríos, ME, 2003. (Biodiesel Commercialization)
- 8. Gabriel Ruiz, MS, 2003. (Fuel Cells, Humidification)
- 9. Amilcar Orengo, MS, 2003 (Fuel Cells, CHP)
- 10. Ernesto Borrero, MS, 2002 (Biodiesel Ultrasound Synthesis)
- 11. Radamés Ayala, MS, 2002 (Fuel Cells, Impedance Spectroscopy)
- 12. Abner Delgado, MS, 2001 (Fuel Cells, Humidification)
- 13. Paulette Torres, MS, 2001 (Solar Detoxification)
- 14. Yen Cardenas, MS Thesis, 2001 (Fuel Cells, Methanol)