

Fernando L.P. Resende

Associate Professor and Department Chair
Jasper Department of Chemical Engineering, University of Texas at Tyler
RBN 2039, 3900 University Blvd, Tyler, TX, 75799
Phone: (903)565-6538, fresende@uttyler.edu

RESEARCH INTERESTS

Thermochemical conversion of lignocellulosic biomass into fuels, energy and high-value products. Kinetics and reaction engineering of biomass conversion.

EDUCATION

University of Michigan <i>Ph.D., Chemical Engineering</i> <i>M.S., Chemical Engineering</i>	Ann Arbor, MI January 2009 April 2008
State University of Campinas (Brazil) <i>M.S., Mechanical Engineering</i> <i>B.S., Chemical Engineering</i>	Campinas, SP April 2003 August 2000

PROFESSIONAL EXPERIENCE

University of Texas at Tyler <i>Associate Professor – Jasper Department of Chemical Engineering</i> <i>Department Chair – Jasper Department of Chemical Engineering</i> <i>Interim Chair – Jasper Department of Chemical Engineering</i>	Tyler, TX 2019-present 2020-present 2019-2020
University of Washington <i>Assistant Professor – School of Environmental and Forest Sciences</i> <i>Adjunct Assistant Professor – Chemical Engineering</i>	Seattle, WA 2011-2019 2011-2019
South Dakota State University <i>Post-Doctoral Research Associate - Mechanical Engineering Department</i>	Brookings, SD 2010-2011
Purdue University <i>Post-Doctoral Research Associate - School of Chemical Engineering</i>	West Lafayette, IN 2009-2010
University of Michigan <i>Graduate Student Research Assistant – Chemical Engineering Department</i>	Ann Arbor, MI 2004-2009
University of Zaragoza <i>Research Trainee - Chemical Engineering Department</i>	Zaragoza (Spain) 2003
State University of Campinas <i>Graduate Student Research Assistant – Mechanical Engineering Department</i> <i>Undergraduate Student Researcher - Mechanical Engineering Department</i>	Campinas, SP (Brazil) 2000-2003 1997-1998

HONORS AND AWARDS

- *Alien of Extraordinary Ability* (O-1 Visa), US Citizen and Immigration Services, 2012.
- *PhD Student Achievement* - 9th Annual ScholarPOWER Banquet, College of Engineering, University of Michigan, 2010.
- *2008 Walter J. Weber Jr. Student Award in Environmental and Energy Sustainability*, College of Engineering, University of Michigan.
- *AIChE Catalysis and Reaction Engineering Division Travel Award*, 2008.
- *2007 Outstanding Student Instructor Award* – Student Chapter of the American Society of Engineering Education, College of Engineering, University of Michigan.
- *NSF Student Scholarship* for the 11th Annual Green Chemistry and Engineering Conference, 2007.
- *Ph.D. Scholarship*, National Council for Scientific and Technological Development (CNPq), Brazil, 2004-2008.

RECENT PUBLICATIONS

- Chandler, D.S.; Seufitelli, G.V.S.; Resende, F.L.P.; *Catalytic Route for the Production of Alkanes from Hydropyrolysis of Biomass*, *Energy & Fuels* (2020), 34, 10, 12573-12585.
- Zhaoying, L.; Zhong, Z.; Zhang, B.; Wang, W.; Resende, F.L.P.; *Catalytic fast co-pyrolysis of waste greenhouse plastic films and rice husk using hierarchical micro-mesoporous composite molecular sieve*, *Waste Management* (2020), 102, 561-568.
- Zhaoying, L.; Zhong, Z.; Zhang, B.; Wang, W.; Seufitelli, G.V.S.; Resende, F.L.P.; *Effect of alkali-treated HZSM-5 zeolite on the production of aromatic hydrocarbons from microwave assisted catalytic fast pyrolysis (MACFP) of rice husk*, *Science of the Total Environment* (2020), 703, 134605.
- Chandler, D.S.; Resende, F.L.P.; *Comparison between Catalytic Fast Pyrolysis and Catalytic Fast Hydropyrolysis for the Production of Liquid Fuels in a Fluidized Bed Reactor*, *Energy & Fuels* (2019), 33, 3199-3209.
- Seufitelli, G.V.S.; Resende, F.L.P.; *Study of the catalytic reactions of ethylene oligomerization in subcritical and supercritical media over a NiBEA catalyst*, *Applied Catalysis A: General* (2019), 576, 96-107.
- Wise, H.G.; Dichiaro, A.B.; Resende, F.L.P.; *Ex-situ catalytic fast pyrolysis of Beetle-killed lodgepole pine in a novel ablative reactor*, *Fuel* (2019), 241, 933-940.
- Jan, O.; Song, K.; Dichiaro, A.; Resende, F.L.P.; *Oligomerization of supercritical ethylene over nickel-based silica-alumina catalysts*, *Chemical Engineering Science* (2019), 197, 212-222.
- Jan, O.; Resende, F.L.P.; *Liquid Hydrocarbon Production via ethylene oligomerization over Ni-H β* , *Fuel Processing Technology* (2018), 179, 269-276.
- Jan, O.; Song, K.; Dichiaro, A.; Resende, F.L.P.; *Ethylene Oligomerization over Ni-H β Heterogeneous Catalysts*, *Industrial & Engineering Chemistry Research* (2018), 57, 31, 10241-10250.

SYNERGISTIC ACTIVITIES

- Session Chair and Co-chair at AIChE annual meetings
- NSF Panel Reviewer – Catalysis and Biocatalysis Program: 2011-2012, Process and Reaction Engineering: 2015, Energy & Sustainability: 2015-2017.
- USDA NIFA Panel Reviewer – Forest Products Research Program: 2013
- Ad-hoc reviewer for NSF, USDA NIFA, Sun Grant, DOE Office of Science