Eduardo Santillan-Jimenez, Ph.D.
Chemist with Expertise in Heterogeneous Catalysis

Contact Information	
Address	2582 Research Park Drive. Lexington, KY 40511
Phone	(859) 257 0395
E-mail	e.santillan@uky.edu
Education	
Degree	Ph.D. in Chemistry
Year	2008
Institution	University of Kentucky
Degree	B.S. in Chemistry
Year	2003
Institution	University of San Luis Potosi, Mexico
Experience	
Position	Fulbright Specialist
Topics	Internationalization of STEM higher education Development of interdisciplinary academic and training curricula
Period	2021-present
Position	Adjunct Assistant Professor & Associate Graduate Faculty Member
Period	2019-present
Place of Employment	University of Kentucky Department of Chemistry
Duties & Responsibilities	Advising and supervising graduate and undergraduate students Teaching undergraduate and graduate courses
Position	Senior Research Scientist (RS) | Principal RS | Program Manager
Period	2011–2014 2014–2019 2019-present
Place of Employment	University of Kentucky Center for Applied Energy Research
Duties & Responsibilities	Writing of research proposals and management of awarded grants Writing of publications and progress reports for funding agencies Supervision of students and technical staff
Research projects	Catalytic upgrading of biomass to fuels and chemicals Broadening participation in science and engineering
Position	Visiting Researcher at the National Center for Scientific Research
Period	2019
Place of Employment	University of Burgundy Institute Carnot
Research projects	XPS study of bimetallic deoxygenation catalysts
Position	Postdoctoral scholar
Period	2010–2011
Place of Employment	University of Kentucky Center for Applied Energy Research
Research projects	Catalytic upgrading of the products of lignin depolymerization to fuels and chemicals

Position	Postdoctoral fellow
Period	2009–2010
Place of Employment	Utrecht University Department of Chemistry
Research projects	Phase behavior of reactants and products during Fischer-Tropsch synthesis *via in situ* spectroscopy Operando studies on alkane dehydrogenation catalysts

Position	Visiting Scientist
Period	2008
Place of Employment	University of Alicante Department of Inorganic Chemistry
Research projects	Mechanistic studies on the selective catalytic reduction of nitrogen oxides over carbon nanotube-supported metal catalysts

Languages

Language	English	Spanish	French	German
Proficiency	100%	100%	100%	30%

Service

Memberships	American Chemical Society | North American Catalysis Society
Refereed journals	Energy & Environmental Science Applied Catalysis B ACS Catalysis Green Chemistry Journal of Catalysis Renewable Energy Catalysis Communications ChemCatChem Energy Conversion and Management Bioresource Technology ACS Sustainable Chemistry & Engineering Applied Catalysis A Catalysis Science & Technology Chemical Engineering Journal Journal of Colloid and Interface Science Environmental Pollution Fuel Journal of Molecular Catalysis A Catalysis Today Energy & Fuels Fuel Processing Technology RSC Advances Catalysts Nanomaterials Industrial & Engineering Chemistry Research Journal of Analytical and Applied Pyrolysis Journal of Chemical Technology & Biotechnology

	Biomass Conversion and Biorefinery International Journal of Chemical Kinetics Journal of Porous Materials Journal of the American Oil Chemists' Society
Reviewed grant proposals	National Science Foundation – Energy for Sustainability program National Science Foundation – Division of Chemical, Bioengineering, Environmental and Transport Systems National Science Foundation – Broadening Participation in Engineering program National Science Foundation – Emerging Frontiers in Research and Innovation program U.S. Department of Energy – SBIR/STTR program Kentucky Science and Engineering Foundation – SBIR/STTR program Czech Science Foundation
Lectured courses	Power Generation Technologies EGR/CME/ME/EE 599/EGR 542 Innovations at the Nexus of Food, Energy & Water Systems CHE 580 Transferable Skills for Scientists & Engineers CHE 580
Committee participation	UK Defined Contribution Plans Administrator Selection Committee UK Retirement Plan Oversight Committee UK KY-WV LSAMP Director Hiring Committee UK CAER Staff Award Committee UK CAER Research Performance and Promotion Committee UK CAER Research Seed Grant Committee
Board participation	UK KY-WV LSAMP Bridge to the Doctorate Advisory Board Kentucky Distillers Association Diversity, Equity & Inclusion Advisory Group

References

Name	Prof. Mark Crocker
Affiliation	University of Kentucky Center for Applied Energy Research
E-mail	mark.crocker@uky.edu
Name	Prof. dr. ir. Bert Weckhuysen
Affiliation	Utrecht University Department of Chemistry
E-mail	b.m.weckhuysen@uu.nl

Awards

1. 2017 International Collaborative Research Initiation Award. $5,000 award sponsored by the National Science Foundation given to recognize excellence in the mentoring of students participating in an international Research Experience for Undergraduates.
2. 2007 Dissertation Enhancement Award. $3,000 award sponsored by the University of Kentucky (UK) Graduate School given to doctoral candidates to conduct research at a site away from UK's campus (in this case the University of Alicante in Spain).

Awarded Grants

1. E. Santillan-Jimenez (PI), G. Caboche (co-PI). *Novel global and "pandemic-proof" approach to STEM teaching*. United States Department of State, Bureau of Educational and Cultural Affairs – Fulbright Foreign Scholarship Board. $8,000. 06/13/21-07/13/21.
2. E. Santillan-Jimenez (PI), C. Crofcheck (co-PI), F. Williams (co-PI), B. Guerrant (co-PI), N. Minion (co-PI). *Research Innovators in Sustainable Energy (RISE)*. University of Kentucky Office of Sustainability – Sustainability Challenge Grant. $24,986. 05/01/20-06/30/22.
3. M. Crocker (PI), E. Santillan-Jimenez (co-PI). *NRT: IN FElloWS & an Academy of Innovators at the Nexus of Food, Energy & Water Systems*. National Science Foundation Division of Graduate Education. $2,998,456. 09/01/19-08/31/24.
4. E. Santillan-Jimenez (PI). *SPORES: Students Participating in Outreach and Research for Environmental Sustainability*. University of Kentucky Student Sustainability Council. $8,580. 01/01/19-12/31/19.
5. S. DeBolt (PI), E. Santillan-Jimenez (Senior Personnel). *A multiscale, multiphysics modeling framework for genome-to-phenome mapping via intermediate phenotypes*. National Science Foundation Experimental Project to Stimulate Competitive Research Track II. $3,000,000. 08/15/18-07/31/22.
6. E. Santillan-Jimenez (PI). *Probing the economic and industrial viability of converting algae, hemp and waste oils to diesel and jet fuel*. University of Kentucky Office of the Vice President for Research – Research Support Grant. $17,378. 07/01/17-06/30/18.
7. M. Crocker (PI), E. Santillan-Jimenez (co-PI). *SusChEM: Promotion of Nickel Catalysts for the Conversion of Biomass-derived Oils to Fuel-like Hydrocarbons – REU Supplement*. National Science Foundation Catalysis and Biocatalysis program. $10,968. 01/24/17-08/31/17.
8. E. Santillan-Jimenez (PI), Rebekah Radtke (co-PI), Margaret Mohr-Schroeder (co-PI). *From SEE(E)D to (S)STEM: Scientists, Engineers, Entrepreneurs, Educators & Designers developing didactic tools to promote Sustainability, Science, Technology, Engineering & Mathematics*. University of Kentucky Office of Sustainability – Sustainability Challenge Grant. $25,184. 01/01/16-12/31/16.
9. M. Crocker (PI), E. Santillan-Jimenez (co-PI). *MRI: Acquisition of a Gas Chromatograph with Dual Detection Capabilities to be Used in Sustainable Energy Research*. National Science Foundation Major Research Instrumentation program. $145,161. 08/01/15-07/30/16.
10. E. Santillan-Jimenez (PI), W. Henderson III (co-PI). *Using a research center-based mentoring program to increase the participation of African Americans, Hispanics and Native Americans in engineering*, National Science Foundation Broadening Participation in Engineering program. $447,770. 12/01/14-11/30/18.
11. M. Crocker (PI), E. Santillan-Jimenez (co-PI). *SusChEM: Promotion of Nickel Catalysts for the Conversion of Biomass-derived Oils to Fuel-like Hydrocarbons*. National Science Foundation Catalysis and Biocatalysis program. $371,737. 09/01/14-08/31/17.
12. E. Santillan-Jimenez (PI), M. Crocker (co-PI). *Use of carbide catalysts for the upgrading of biomass-derived liquids to renewable fuels*. University of Kentucky Office of the Vice President for Research – Research Support Grant. $14,467. 02/01/13-01/31/14.

Books and Book Chapters

1. M. Crocker, E. Santillan-Jimenez (eds.) (2020). *Chemical Catalysts for Biomass Upgrading*, 2020 Wiley-VCH Verlag GmbH & Co. KGaA., Weinheim, Germany. Print ISBN: 9783527344666; Online ISBN: 9783527814794; DOI: 10.1002/9783527814794.
2. R. Loe, E. Santillan-Jimenez, M. Crocker (2020). *Upgrading of Lipids to Fuel-like Hydrocarbons and Terminal Olefins via Decarbonylation/Decarboxylation*. In Chemical

Catalysts for Biomass Upgrading (eds. M. Crocker and E. Santillan-Jimenez). doi:10.1002/9783527814794.ch12.

Selected Publications

1. R. Pace, S. Kesner, E. Santillan-Jimenez, T. Morgan, M. Frazar, V. Kelly, M.A. Zeller, M. Crocker. *Evaluation of Near-ambient Algal Biomass Fractionation Conditions for Bioproduct Development. Biomass Convers*. Biorefin. (2020) IN PRESS – DOI: 10.1007/s13399-020-01090-5.
2. R. Radtke, E. Santillan-Jimenez, M. Mohr-Schroeder*. Collaboration by Design: Development of a Video Game for Energy Literacy.* International Journal of Designs for Learning 11 (2020) 46.
3. C. Beasley, M.K. Gnanamani, E. Santillan-Jimenez, M. Martinelli, W.D. Shafer, S.D. Hopps, N. Wanninayake, D.-Y. Kim*. Effect of Metal Work Function on Hydrogen Production from Photocatalytic Water Splitting with $MTiO_2$ Catalysts.* ChemistrySelect 5 (2020) 1013*.*
4. G.C.R. Silva, D. Qian, R. Pace, O. Heinz, G. Caboche, E. Santillan-Jimenez, M. Crocker. *Promotional Effect of Cu, Fe and Pt on the Performance of Ni/Al_2O_3 in the Deoxygenation of Used Cooking Oil to Fuel-Like Hydrocarbons.* Catalysts 10 (2020) 91.
5. J.C. Hower, D. Qian, N.J. Briot, E. Santillan-Jimenez, M.M. Hood, R.K. Taggart, H. Hsu-Kim. *Nano-Scale Rare Earth Distribution in Fly Ash Derived from the Combustion of the Fire Clay Coal, Kentucky*. Minerals 9 (2019) 206.
6. E. Santillan-Jimenez, R. Pace, T. Morgan, C. Behnke, D. Sajkowski, A. Lappas, M. Crocker. *Co-processing of hydrothermal liquefaction algal bio-oil and petroleum feedstock to fuel-like hydrocarbons via fluid catalytic cracking*. Fuel Process. Technol. 188 (2019) 164.
7. R. Loe, K. Huff, M. Walli, T. Morgan, D. Qian, R. Pace, Y. Song, M. Isaacs, E. Santillan-Jimenez, M. Crocker. *Effect of Pt promotion on the Ni-catalyzed deoxygenation of tristearin to fuel-like hydrocarbons*. Catalysts 9 (2019) 200.
8. R. Loe, Y. Lavoignat, M. Maier, M. Abdallah, T. Morgan, D. Qian, R. Pace, E. Santillan-Jimenez, M. Crocker. *Continuous catalytic deoxygenation of waste free fatty acid-based feeds to fuel-like hydrocarbons over a supported Ni-Cu catalyst*. Catalysts 9 (2019) 123.
9. E. Santillan-Jimenez, R. Loe, M. Garrett, T. Morgan, M. Crocker. *Effect of Cu promotion on cracking and methanation during the Ni-catalyzed deoxygenation of waste lipids and hemp seed oil to fuel-like hydrocarbons.* Catal. Today 302 (2018) 261.
10. T. Morgan, E. Santillan-Jimenez, K. Huff, K.R. Javed, M. Crocker. *Use of dual detection in the gas chromatographic analysis of oleaginous biomass feeds and biofuel products to enable accurate simulated distillation and lipid profiling.* Energy Fuels 31 (2017) 9498.
11. E. Santillan-Jimenez, R. Pace, S. Marques, T. Morgan, C. McKelphin, J. Mobley, M. Crocker. *Extraction, purification, characterization and catalytic upgrading of algae lipids to fuel-like hydrocarbons.* Fuel 180 (2016) 668.
12. R. Loe, E. Santillan-Jimenez, T. Morgan, L. Sewell, Y. Ji, S. Jones, M.A. Isaacs, A.F. Lee, M. Crocker. *Effect of Cu and Sn promotion on the catalytic deoxygenation of model and algal lipids to fuel-like hydrocarbons over supported Ni catalysts*. Appl. Catal. B: Environ. 191 (2016) 147.
13. E. Santillan-Jimenez, M. Perdu, R. Pace, T. Morgan, M. Crocker. *Activated Carbon, Carbon Nanofiber and Carbon Nanotube Supported Molybdenum Carbide Catalysts for the Hydrodeoxygenation of Guaiacol*. Catalysts 5 (2015) 424.
14. J. Choi, V. Schwartz, E. Santillan-Jimenez, M. Crocker, S. Lewis, M. Lance, H. Meyer, K. More. *Structural Evolution of Molybdenum Carbides in Hot Aqueous Environments and Impact on Low-Temperature Hydroprocessing of Acetic Acid*. Catalysts 5 (2015) 406.
15. E. Santillan-Jimenez, T. Morgan, R. Loe, M. Crocker. *Continuous catalytic deoxygenation of model and algal lipids to fuel-like hydrocarbons over Ni-Al layered double hydroxide*. Catal. Today 258 (2015) 284.

16. J.J.H.B. Sattler, J. Ruiz-Martinez, E. Santillan-Jimenez, B. Weckhuysen. *Catalytic Dehydrogenation of Light Alkanes on Metals and Metal Oxides.* Chem. Rev. 114 (2014) 10613.
17. M.H. Wilson, J. Groppo, A. Placido, S. Graham, S.A. Morton, E. Santillan-Jimenez, A. Shea, M. Crocker, C. Crofcheck, R. Andrews. *CO_2 recycling using microalgae for the production of fuels.* Appl. Petrochem. Res. 4 (2014) 41.
18. T. Morgan, E. Santillan-Jimenez, M. Crocker. *Simulated distillation approach to the gas chromatographic analysis of feedstock and products in the deoxygenation of lipids to hydrocarbon biofuel*. Energy Fuels 28 (2014) 2654.
19. E. Santillan-Jimenez, T. Morgan, J. Shoup, A.E. Harman-Ware, M. Crocker. *Catalytic deoxygenation of triglycerides and fatty acids to hydrocarbons over Ni-Al layered double hydroxide*. Catal. Today 237 (2014) 136.
20. E. Santillan-Jimenez, T. Morgan, J. Lacny, S. Mohapatra, M. Crocker. *Catalytic deoxygenation of triglycerides and fatty acids to hydrocarbons over carbon-supported nickel*. Fuel 103 (2013) 1010.
21. T. Morgan, E. Santillan-Jimenez, A.E. Harman-Ware, Y. Ji, D. Grubb, M. Crocker. *Catalytic deoxygenation of triglycerides to hydrocarbons over supported nickel catalysts.* Chem. Eng. J. 189-190 (2012) 346.
22. E. Santillan-Jimenez, M. Crocker. *Catalytic deoxygenation of fatty acids and their derivatives to hydrocarbon fuels via decarboxylation/decarbonylation.* J. Chem. Technol. Biotechnol. 87 (2012) 1041.
23. E. Santillan-Jimenez, M. Crocker, A. Bueno-López, C. Salinas-Martínez de Lecea. *Carbon nanotube-supported metal catalysts for NO_x reduction using hydrocarbon reductants: gas switching and adsorption studies.* Ind. Eng. Chem. Res. 50 (2011) 7191.
24. E. Santillan-Jimenez, V. Miljković-Kocić, M. Crocker, K. Wilson. *Carbon nanotube-supported catalysts for NO_x reduction using hydrocarbon reductants. Part 1: Catalyst preparation, characterization and NO_x reduction characteristics.* Appl. Catal. B 102 (2011) 1.
25. T. Morgan, D. Grubb, E. Santillan-Jimenez, M. Crocker. *Conversion of triglycerides to hydrocarbons over supported metal catalysts.* Top. Catal. 53 (2010) 820.
26. J.L. Shumaker, C. Crofcheck, S.A. Tackett, E. Santillan-Jimenez, T. Morgan, Y. Ji, M. Crocker, T.J. Toops. *Biodiesel synthesis using calcined layered double hydroxide catalysts.* Appl. Catal. B 82 (2008) 120.
27. A. Hutchinson, D. Atwood, E. Santillan-Jimenez. *The removal of mercury from water by open chain ligands containing multiple sulfurs.* J. Hazard. Mater. 156 (2008) 458.
28. J.L. Shumaker, C. Crofcheck, S.A. Tackett, E. Santillan-Jimenez, M. Crocker. *Biodiesel production from soybean oil using calcined Li–Al layered double hydroxide catalysts.* Catal. Lett. 115 (2007) 56.

Selected Presentations

1. E. Santillan-Jimenez. *Towards a multi-institutional approach to the transferable skill training of STEM students.* 2021 National Science Foundation Research Traineeship (NRT) Annual Meeting – Shaping 21st Century STEM Graduate Education, Jan. 28-29, 2021(Virtual Meeting).
2. J. Parker, M. Crocker, E. Santillan-Jimenez, C. Schutzman, S. Turner, Q. Duan. *IN FElloWS & an Academy of Innovators at the Nexus of Food, Energy & Water Systems (INFEWS).* 2021 National Science Foundation Research Traineeship (NRT) Annual Meeting – Shaping 21st Century STEM Graduate Education, Jan. 28-29, 2021(Virtual Meeting).
3. E. Santillan-Jimenez, Q. Duan, J. Dariotis, M. Crocker. *Enhancing graduate education by integrating research and professional skill development within a diverse, inclusive and*

supportive academy. 2020 American Society for Engineering Education Virtual Annual Conference & Exposition, June 22-26, 2020.

4. E. Santillan-Jimenez. *Help Position Your Students for Success: From Becoming Better Mentees to Going International.* 2019 Louis Stokes Midwest Center of Excellence Conference – Building a Diverse STEM Talent Pool: Classrooms to Careers, Indianapolis, IN, October 25-27, 2019.
5. E. Santillan-Jimenez, A.G. Villasante-Tezanos. *Broadening participation in engineering using research center-based mentoring: Evidence generated and lessons learned through a five-year program.* 2019 NSF Engineering Education and Centers Grantees Conference, Arlington, VA, October 21-23, 2019.
6. G.C.R. Silva, E. Santillan-Jimenez, T. Morgan, M. Crocker. *Conversion of Waste Oil to Renewable Diesel Over Supported Ni Catalysts Promoted with Cu, Fe or Pt*. 26th North American Catalysis Society Meeting, Chicago, IL, June 23-28, 2019.
7. E. Santillan-Jimenez, R. Loe, M. Abdallah, M. Maier, M. Walli, R. Pace, D. Qian, M. Crocker. *Catalytic Deoxygenation of Waste Lipids to Fuel-like Hydrocarbons over Supported Ni Catalysts Promoted with Cu*. 26th North American Catalysis Society Meeting, Chicago, IL, June 23-28, 2019.
8. E. Santillan-Jimenez, S. Hodges, A.G. Villasante-Tezanos. *Broadening participation in engineering through a research center-based mentoring program*. 2019 American Society for Engineering Education Annual Conference & Exposition, Tampa, FL, June 15-19, 2019.
9. E. Santillan-Jimenez, R. Loe, Y. Song, M. Isaacs, K. Wilson, A. Lee, M. Crocker. *Conversion of model, waste and highly unsaturated lipids to fuel-like hydrocarbons over bimetallic decarboxylation/decarbonylation catalysts*. 255th American Chemical Society National Meeting, New Orleans, LA. March 18-22, 2018.
10. E. Santillan-Jimenez, W. Henderson. *Increasing impact by synergizing research-center based mentoring with LSAMP, EPSCoR, iREUs and other initiatives to broaden participation in STEM*. 2017 NSF Engineering Education and Centers Grantees Conference, Arlington, VA, October 29-31, 2017.
11. E. Santillan-Jimenez, S. Hodges, F. Williams, R. Duran. *Using a research center-based mentoring program to broaden participation in STEM and facilitate access to an international research experience for undergraduates*. 2017 Louis Stokes Midwest Center of Excellence Conference – Take Action: Reaching Deeper into the Nation's Diverse Pool of STEM Talent, Indianapolis, IN, October 6-8, 2017.
12. R. Loe, E. Santillan-Jimenez, M. Crocker. *Catalytic Deoxygenation of Waste, Hemp and Algal Lipids to Fuel-like Hydrocarbons over Supported Ni Catalysts.* 25th North American Catalysis Society Meeting, Denver, CO, June 4-9, 2017.
13. E. Santillan-Jimenez, T. Morgan, R. Pace, D. Sajkowski, C. Behnke, A. Lappas, M. Crocker. *Co-Processing of Algae-Derived Hydrothermal Liquefaction Bio-Oil and Petroleum Feedstock via Fluid Catalytic Cracking for the Production of Fuel-like Hydrocarbons.* 25th North American Catalysis Society Meeting, Denver, CO, June 4-9, 2017.
14. E. Santillan-Jimenez, W. Henderson. *Using a research center-based mentoring program to increase the participation of African Americans, Hispanics and Native Americans in engineering.* 2017 American Society for Engineering Education Annual Conference & Exposition, Columbus, OH, June 25-28, 2017.
15. R. Pace, E. Santillan-Jimenez, M.H. Wilson, J.G. Groppo, S. Kesner, E. Frazar, A. Zeller, M. Crocker. *Processing of algae biomass for the production of fuels and bioplastics.* 7th International Conference on Algal Biomass, Biofuels and Bioproducts, Miami, FL, June 18-21, 2017.

16. C. McKelphin, E. Santillan-Jimenez, M. Crocker. *Kinetic Study of Catalytic Decarboxylation/Decarbonylation of Triglycerides to Fuels*. American Institute of Chemical Engineers National Conference, San Francisco, CA, November 11-14, 2016.
17. E. M. Frazar, R. Pace, R. Loe, E. Santillan-Jimenez, M. Crocker. *Algae-mediated Conversion of CO_2 Emissions to Diesel Range Hydrocarbons*. American Institute of Chemical Engineers National Conference, San Francisco, CA, November 11-14, 2016.
18. E. Santillan-Jimenez. *Energy is elementary: Supporting elementary science education by enhancing energy literacy*. Kentucky Science Teachers Association 44th Annual Conference, Lexington, KY, Nov. 10-12, 2016.
19. E. Santillan-Jimenez, W. Henderson. *Using research center-based mentoring to increase minority participation in engineering*. 9th Annual Mentoring Conference, Albuquerque, NM, Oct. 24-27, 2016.
20. R. Loe, E. Santillan-Jimenez, M. Crocker. *Catalytic deoxygenation of model and realistic feeds to fuel-like hydrocarbons over supported nickel-copper catalysts*. 252nd American Chemical Society National Meeting, Philadelphia, PA, August 21-25, 2016.
21. R. Loe, E. Santillan-Jimenez, M. Crocker. *Catalytic Deoxygenation of Model and Realistic Lipid Feeds to Fuel-like Hydrocarbons over Supported Nickel Alloy Catalysts.* 9th International Conference on Environmental Catalysis, Newcastle, Australia, July10-13, 2016.
22. E. Santillan-Jimenez, M. Wilson, M. Crocker. *Algae-mediated conversion of coal-derived flue gas to fuels and bioplastics.* Bioenergy 2016, Washington, D.C., July 12-14, 2016.
23. C. McKelphin, E. Santillan-Jimenez, M. Crocker. *Optimization of Algal Extracts for the Production of Fuels*. 251st American Chemical Society National Meeting, San Diego, CA. March 13-17, 2016.
24. E. Santillan-Jimenez, T. Morgan, R. Loe, R. Pace, S. Marques, M. Crocker. *Extraction, Purification and Catalytic Upgrading of Algae Lipids to Fuel-like Hydrocarbons*. 2015 Algae Biomass Summit, Washington, D.C., September 29-October 2, 2015.
25. E. Santillan-Jimenez, M. Wilson, M. Crocker. *Algae-mediated conversion of flue-gas from a coal-fired power plant to drop-in hydrocarbon fuels*. Bioenergy 2015, Washington, D.C., June 23-24, 2015.
26. E. Santillan-Jimenez, T. Morgan, R. Loe, M. Crocker. *Continuous Deoxygenation of Model and Algal Lipids to Fuel-like Hydrocarbons over Supported Ni Alloy Catalysts*. 24th North American Catalysis Society Meeting, Pittsburgh, PA, June 14-19, 2015.
27. R. Loe, T. Morgan, E. Santillan-Jimenez, M. Crocker. *Catalytic deoxygenation of model and algal lipids to fuel-like hydrocarbons over supported nickel alloy catalysts*. 249th American Chemical Society National Meeting, Denver, CO, March 22-26, 2015.
28. E. Santillan-Jimenez, T. Morgan, R. Loe, M. Crocker. *Continuous deoxygenation of algal lipids to fuel-like hydrocarbons over inexpensive Ni-based catalysts.* 8th International Conference on Environmental Catalysis, Asheville, NC, August 24-27, 2014.
29. R. Loe, E. Santillan-Jimenez, M. Crocker. *Catalytic deoxygenation of tristearin to hydrocarbons over supported nickel alloy catalysts.* 8th International Conference on Environmental Catalysis, Asheville, NC, August 24-27, 2014.
30. R. Loe, T. Morgan, E. Santillan-Jimenez, M. Crocker. Catalytic Deoxygenation of Tristearin to Hydrocarbons over Supported Nickel Alloy Catalysts. Tri-State Catalysis Society Symposium, Louisville, KY, September 15, 2014.
31. J. Choi, V. Schwartz, E. Santillan-Jimenez, M. Crocker, S. Lewis, R. Connatser, H. Meyer, K. More. *Catalytic Performance of Mo_2C in Aqueous-Phase Hydroprocessing of Model Bio-oils*.

Southeastern Catalysis Society 12th Annual Fall Symposium, Asheville, NC, September 29-30, 2013.

32. M. Crocker, M.H.W. Wilson, J. Groppo, A. Placido, S. Graham, E. Santillan-Jimenez, T. Morgan, J. Shoup, D. Kim, L. Mills, H. Y. Shin, C. Crofcheck. *CO_2 recycling using microalgae for the production of liquid fuels*. 246th American Chemical Society National Meeting, Indianapolis, IN, September 8-12, 2013.
33. E. Santillan-Jimenez, T. Morgan, M. Crocker. *Conversion of triglycerides and fatty acids to fuel-like hydrocarbons over supported nickel catalysts*. 246th American Chemical Society National Meeting, Indianapolis, IN, September 8-12, 2013.
34. E. Santillan-Jimenez, T. Morgan, J. Shoup, M. Crocker. *Ni-Catalyzed Conversion of Lipids to Fuel-Like Hydrocarbons: From Proof of Concept to Catalyst Recycling Studies*. 23rd North American Catalysis Meeting, Louisville, KY, June 2-7, 2013.
35. J. Choi, V. Schwartz, E. Santillan-Jimenez, M. Crocker, S. Lewis, H. Meyer, K. More. *Catalytic Activity and Stability of Molybdenum Carbides in Aqueous Phase Hydrotreating of Acetic Acid*. 23rd North American Catalysis Meeting, Louisville, KY, June 2-7, 2013.
36. J. Choi, V. Schwartz, E. Santillan-Jimenez, M. Crocker, S. Lewis, H. Meyer, K. More. Catalytic *Performance of Molybdenum Carbides in Aqueous-Phase Hydrotreating of Acetic Acid*. 245th American Chemical Society National Meeting, New Orleans, LA, April 7-11, 2013.
37. J. Shoup, E. Santillan-Jimenez, T. Morgan, M. Crocker. *Conversion of Triglycerides and Fatty Acids to Hydrocarbons Using Supported Nickel Catalysts*. 2012 American Institute of Chemical Engineers Annual Meeting, Pittsburgh, PA, October 28-November 2, 2012.
38. E. Santillan-Jimenez, T. Morgan, M. Crocker. *Conversion of triglycerides and fatty acids to hydrocarbons via decarboxylation/decarbonylation ($deCO_x$) over supported nickel catalysts*. 7th International Conference on Environmental Catalysis, Lyon, France, September 2-6, 2012.
39. S. Mohapatra, T. Morgan, E. Santillan-Jimenez, M. Crocker. *Conversion of triglycerides and fatty acids to hydrocarbons over supported nickel catalysts.* 22nd North American Catalysis Society Meeting, Detroit, MI, June 5-10, 2011.
40. T. Morgan, S.A. Morton, M. Crocker, D. Grubb, E. Santillan-Jimenez. *Application of layered double hydroxides to the production of renewable diesel*. 239th American Chemical Society National Meeting, San Francisco, CA, March 21-25, 2010.
41. T. Morgan, D. Grubb, E. Santillan-Jimenez, S.A. Morton, M. Crocker. *Conversion of vegetable and algae oils to hydrocarbons over supported metal catalysts.* AIChE 2009 Annual Meeting. Nashville, TN, November 8-13, 2009.
42. E. Santillan-Jimenez, C. Salinas-Martinez de Lecea, A. Bueno-López, M.J. Illán-Gómez, M. Crocker. *Carbon nanotube-supported metal catalysts for NO_x reduction using hydrocarbon reductants.* Europacat IX, Salamanca, Spain, August 30-September 4, 2009.
43. T. Morgan, D. Grubb, E. Santillan-Jimenez, M. Crocker. *Conversion of triglycerides to hydrocarbons over supported metal catalysts.* Europacat IX, Salamanca, Spain, August 30-September 4, 2009.
44. E. Santillan-Jimenez, M. Crocker, J.E. Parks II, C. Salinas Martínez de Lecea. *Carbon nanotube supported metal catalysts for NOx reduction using hydrocarbon reductants. 5th* International Conference on Environmental Catalysis. Belfast, Northern Ireland, August 31, 2008.
45. J.L. Shumaker, C. Crofcheck, S.A. Tackett, E. Santillan-Jimenez, M. Crocker. *Biodiesel synthesis from soybean oil using calcined Li-Al layered double hydroxide catalysts.* Europacat VIII, Turku, Finland, August 26-31, 2007.

46. J.L. Shumaker, S.A. Tackett, E. Santillan-Jimenez, C. Crofcheck, M. Crocker. *Heterogeneous catalysts for biodiesel production derived from layered double hydroxides.* 19th Annual Michigan Catalysis Society Spring Symposium, Dearborn, MI, May 10, 2007.
47. J.L. Shumaker, S.A. Tackett, E. Santillan-Jimenez, C. Crofcheck, M. Crocker. *Development of heterogeneous catalysts for biodiesel production.* Tri-State Catalysis Society Fall Symposium, Lexington, KY, September 13, 2006.