

Foster A. Agblevor
Utah State University
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Education

PhD, University of Toronto, 1988.
Major: Chemical Engineering
Supporting Areas of Emphasis: Applied Chemistry

M.A.Sc., University of Toronto, 1984.
Major: Chemical Engineering
Supporting Areas of Emphasis: Applied Chemistry

BS, University of Science and Technology, 1979.
Major: Chemical Engineering

Professional Positions

Professional

Utah Science Technology and Research Endowed Professor, Department of Biological engineering, Utah State University. (2011 - Present).

Professional Memberships

American Association of Advancement of Science.

American Chemical Society.

American Institute of Chemical Engineers.

American Society of Materials and Testing.

Institute of Biological Engineers.

ACADEMIC INSTRUCTION

Teaching Experience

Utah State University

BENG 5600,6600, Downstream Processes in Biological Engineering, 1 course.

Directed Student Learning

Master's Committee Chair, Biological Engineering. (August 2013 - Present).
Advised: Yonas Kidane

Supervised Research/URF, "Fractionation of Poultry litter pyrolysis oils," Biological Engineering.
(June 2013 - Present).
Advised: Jacob Weston

Supervised Research/URF, "Synthesis of non-formaldehyde adhesives from catalytic pyrolysis oils," Biology. (June 2013 - Present).
Advised: Justin Judd

Dissertation Committee Chair, Biological Engineering. (August 29, 2012 - Present).
Advised: Hamza Abdellaoui

Supervised Research/URF, "Design and fabrication of corona discharge polymerization reactor," Mechanical & Aerospace Engineering. (June 2012 - Present).
Advised: Kyle Artwood

Undergraduate Honors Thesis/Project, "Modification Pilot plant pyrolysis unit," Mechanical & Aerospace Engineering. (June 2012 - Present).
Advised: Jacob Whittle

Major Professor, Biological Engineering. (August 29, 2011 - Present).
Advised: Che Nyendu

Master's Committee Chair, Biological Engineering. (August 2011 - Present).
Advised: Oumou Diallo

Major Professor, Biological Engineering. (January 15, 2011 - Present).
Advised: Bo Zhao

RESEARCH & OTHER CREATIVE ACTIVITIES

Published Intellectual Contributions

Refereed Journal Articles

Journal Article, Academic Journal (Published)

Tabassum, R., Khaliq, S., Rajoka, M. I., Agblevor, F. (2014). Solid state fermentation of raw starch digesting alkaline alpha-amylase from *Bacillus licheniformis* RT7PE1 and its characteristics. *Biotechnology Research International*, 2014, 8 pages, Online publication. [dx.doi.org/10.1155/2014/495384](https://doi.org/10.1155/2014/495384)

Presentations Given

Agblevor, F. (Presenter & Author), Mante, O. D. (Presenter & Author), Oyama, T. S. (Author Only), McClung, R. (Author Only), 2011 AIChE Annual Meeting, "Catalytic pyrolysis of biomass: The effect of hydrothermal treatment of FCC catalyst and ZSM-5 additive," AIChE, Minneapolis, MN.

Agblevor, F. (Presenter & Author), Masmoudi, A. (Author Only), Jao, T.-C. (Author Only), Aradi, A. (Author Only), 2011 AIChE Annual Meeting, "Low temperature gasification of impregnated biomass feedstocks," American Institute of Chemical Engineers (AIChE), Minneapolis, MN.

Agblevor, F. (Presenter & Author), Mante, O. D. (Author Only), 2011 AIChE Annual Meeting, "Rule of Thumb for the design of catalytic biomass pyrolysis in bubbling fluidized bed reactors," American Institute of Chemical Engineers (AIChE), Minneapolis, MN.

Agblevor, F. (Presenter & Author), Mante, O. D. (Author Only), Oyama, T. S. (Author Only), McClung, R. (Author Only), 2011 AIChE Annual Meeting, "The Influence of Nickel Phosphide

On the Fractional Catalytic Pyrolysis of Hybrid Poplar Wood," American Institute of Chemical Engineerinf (AIChE), Minneapolis, MN.

Agblevor, F. (Presenter & Author), Mante, O. D. (Author Only), Oyama, T. S. (Author Only), McClung, R. (Author Only), 2011 AIChE Annual Meeting, "The influence of non-condensable gas recycling on the yield of fractional catalytic pyrolysis products," American Institute of Chemical Engineers (AIChE), Minneapolis, MN.

Agblevor, F. (Presenter & Author), Mante, O. D. (Author Only), 2011 AIChE Annual Meeting, "The role of oxygen in the stability of biomass pyrolysis oils," American Institute of Chemical Engineers (AIChE), Minneapolis, MN.

Agblevor, F. (Guest Speaker), "Biochar production from agricultural residues," Nanjing Agricultural University, Nanjing, China.

Mante, O. D. (Presenter & Author), Agblevor, F. (Author Only), International Conference on Thermochemical Biomass Conversion Science, "Biomass catalytic cracking: The effect of FCC based ZSM-5 addition to FCC catalyst," Gas Technology Institute, Chicago, IL.

Agblevor, F. (Presenter & Author), Mante, O. D. (Author Only), Oyama, T. S. (Author Only), McClung, R. (Author Only), International Conference on Thermochemical biomass conversion science, "Co-Processing of standard gas oil and stable pyrolysis oil to hydrocarbon fuels," Gas Technology Institute, Chicago, IL.

Agblevor, F. (Keynote Address), Revell, K. (Author Only), Deng, N. (Author Only), Maguire, R. (Author Only), International Symposium on Biochar Research, Development and Application, "The potential role of biochar in sustainable agriculture and forestry," Nanjin University, Nanjin, China.

Agblevor, F. (Invited Lecture), Mante, O. D. (Author Only), Oyama, T. S. (Author Only), McClung, R. (Author Only), Battaglia, F. (Author Only), Investors International Meeting, "Fractional catalytic pyrolysis of biomass for biogasoline production," Metso Power, Helsinki, Finland.

Mante, O. D. (Presenter & Author), Agblevor, F. (Author Only), Restoring the West Conference 2011, "Thermochemical conversion of biomass to fuels and chemicals-Pyrolysis and gasification," Utah State University, Logan, UT.

Agblevor, F. (Invited Lecture), Revell, K. (Author Only), Maguire, R. (Author Only), Technology Summit Meeting, "Scale-up and production of biochar and valu-added products from poultry litter," Farm Pilot Projects Coordination, Annapolis, MD.

Contracts, Grants and Sponsored Research

Grant

Agblevor, Foster (Supporting), "MRI: Acquisition of a Field-Emission Scanning Electron Microscope to Catalyze Campus-Wide Research in Bio/Nano and Advanced Energy Materials," Sponsored by NSF, Federal, \$529,387.00. (September 1, 2013 - August 31, 2016).

Sponsored Research

Agblevor, Foster (Principal), "Gasification of biomass," Sponsored by Afton Chemical Inc, Private, \$28,000.00.

Agblevor, Foster (Principal), "Waste to Energy," Sponsored by USTAR, Other, \$100,000.00. (October 1, 2013 - September 30, 2014).

Agblevor, Foster (Principal), "Gasification/pyrolysis of coal and biomass," Sponsored by DOE/NETL/VT, Federal, \$254,000.00. (October 2011 - September 2014).

Agblevor, Foster (Principal), "Biooil separation and stabilization by supercritical fluid fractionation," Sponsored by DOE/INL, Federal, \$650,000.00. (December 2012 - February 2014).

Research in Progress

"Gasification/pyrolysis of coal/biomass mixtures" (On-Going)

"Preparation of catalyst to convert carbon dioxide to dimethyl ether" (On-Going)

"Waste to energy" (On-Going)

SERVICE

General Service

College

Committee Member, Faculty Senate, August 2012.

Committee Member, P&T Comminttee, December 2011.

Committee Member, P&T Committee, December 2011.

Department

Committee Chair, Graduate Committee, August 1, 2012.

Committee Chair, P&T, December 2011.

Committee Member, Curriculum Committee, August 2011.

Committee Member, P&T Committee, August 1, 2011.

Other

Program Organizer, 2011 AIChE Annual Meeting.

Session Chair, 2011 AIChE Annual Meeting.

Professional/Public

Natural Sciences and Engineering Research Council of Canada proposal

Board Member, SERBEP Report on Biofuel from Multicroping Production Systems in the Southeast

Editorial Review Board Member, Bioprocessing Technology

Member, American Association for Advancement of Science

Student Organization

Advisor, National Society of Black Engineers.

Utah State University

Advisor, USU Faculty Advisory Board, Microscopy Core Facility, July 2013.

Promotion and Tenure Committees

Tenure Review

Zhan, J. (Committee Chair), Zhou, A. (Committee Member), Britt, D. W. (Committee Member), Agblevor, F. (Committee Member), Hinton, H. S. (Outside Member).