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Department of Green Technology (IGT)
SDU Biotechnology
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Qualifications

Engineering, PhD, Khalifa University
5. Jan 2014 → 30. Dec 2017
Award Date: 8. Feb 2018

Chemical Engineering, MSc, American University of Sharjah
1. Sep 2011 → 8. Jun 2013
Award Date: 8. Jun 2013

Chemical Engineering, BSc
15. Sep 2006 → 1. Jun 2010
Award Date: 11. Jan 2011

Employment

Postdoc

Department of Green Technology (IGT)
University of Southern Denmark
Odense M
1. May 2019 → 30. Apr 2022

Postdoc

SDU Biotechnology
University of Southern Denmark
Odense M
1. May 2019 → 30. Apr 2022

Postdoc

Khalifa University
Abu Dhabi, United Arab Emirates
15. Sep 2018 → 30. Apr 2019

Graduate Teaching Assitant

American University of Sharjah
Sharjah, United Arab Emirates
15. Sep 2011 → 1. Jun 2013

Process Engineer

Lotte Chemicals Pakistan Ltd
Karachi, Pakistan
1. Sep 2010 → 31. Aug 2011

Research outputs

Direct inoculation of a biotrickling filter for hydrogenotrophic methanogenesis

Jønson, B. D., Sieborg, M. U., Ashraf, M. T., Yde, L., Shin, J., Shin, S. G. & Triolo, J. M., Dec 2020, In: Bioresource Technology. 318, 8 p., 124098.

Enhanced short-chain carboxylic acids yield in dark fermentation by cyclic product removal

Ashraf, M. T., Bastidas Oyanedel, J-R., Ahmad, A., Hai, A., AlBlooshi, H. T., Schmidt, J. E. & Banat, F., 15. Oct 2020, (E-pub ahead of print) In: *Biomass Conversion and Biorefinery*.

Biomethanation in a thermophilic biotrickling filter — pH control and lessons from long-term operation

Ashraf, M. T., Sieborg, M. U., Yde, L., Rhee, C., Shin, S. G. & Triolo, J. M., Sep 2020, In: *Bioresource Technology Reports*. 11, 100525.

Techno-Economic Assessment of Whey Protein-Based Plastic Production from a Co-Polymerization Process

Chalermthai, B., Ashraf, M. T., Bastidas Oyanedel, J-R., Olsen, B., Schmidt, J. E. & Taher, H., 7. Apr 2020, In: *Polymers*. 12, 4, 21 p., 847.

Systematic production and characterization of pyrolysis-oil from date tree wastes for bio-fuel applications

Bharath, G., Hai, A., Rambabu, K., Banat, F., Jayaraman, R., Taher, H., Bastidas-Oyanedel, J. R., Ashraf, M. T. & Schmidt, J. E., Apr 2020, In: *Biomass and Bioenergy*. 135, 11 p., 105523.

Biomethanation in a thermophilic biotrickling filter using cattle manure as nutrient media

Sieborg, M. U., Jønson, B. D., Ashraf, M. T., Yde, L. & Triolo, J. M., Feb 2020, In: *Bioresource Technology Reports*. 9, 8 p., 100391.

Assay for Testing Packing Materials for Ex-situ Bio-methanation

Ashraf, M. T., Triolo, J. M. & Yde, L., 2020, *28th European Biomass Conference: Bioeconomy's role in the post-pandemic economic recovery*. p. 317-321 (European Biomass Conference and Exhibition).

Analysis and Optimization of Multi-actor Biorefineries

Ashraf, M. T., Torres, A. I., Schmidt, J. E. & Stephanopoulos, G., 2019, *Biorefinery: Integrated Sustainable Processes for Biomass Conversion to Biomaterials, Biofuels, and Fertilizers*. Bastidas-Oyanedel, J-R. & Ejbye Schmidt, J. (eds.). Springer, p. 49-75

Thermophilic BioMethanation in a Trickle Bed Reactor using Cattle Manure as Nutrient Media

Triolo, J. M., Ashraf, M. T., Sieborg, M. U., Jønson, B. D., Yde, L. & Schmidt, J. E., 2019.

Process Simulation and Economic Assessment of Hydrothermal Pretreatment and Enzymatic Hydrolysis of Multi-feedstock Lignocellulose - Separate vs Combined Processing

Ashraf, M. T. & Schmidt, J. E., 2018, In: *Bioresource Technology*. 249, p. 835-843

Hydrothermal pretreatment and enzymatic hydrolysis of mixed green and woody lignocellulosics from arid regions

Ashraf, M. T., Thomsen, M. H. & Schmidt, J. E., Aug 2017, In: *Bioresource Technology*. 238, p. 369-378

One-dimensional modeling of pervaporation systems using a semi-empirical flux model

Ashraf, M. T., Schmidt, J. E., Kujawa, J., Kujawski, W. & Arafat, H. A., Mar 2017, In: *Separation and Purification Technology*. 174, p. 502-512

Hydrothermal Pretreatment: Process Modeling and Economic Assessment within the Framework of Biorefinery Processes

Torres, A. I., Ashraf, M. T., Chaturvedi, T., Schmidt, J. E. & Stephanopoulos, G., 2017, *Hydrothermal Processing in Biorefineries: Production of Bioethanol and High Added-Value Compounds of Second and Third Generation Biomass*. Springer, p. 207-235

Estimation of Bioenergy Potential for Local Biomass in the United Arab Emirates

Tahir Ashraf, M., Fang, C., Bochenski, T., Cybulska, I., Alassali, A., Sowunmi, A., Farzanah, R., Brudecki, G., Chaturvedi, T., Haris, S., Schmidt, J. E. & Thomsen, M. H., Nov 2016, In: *Emir. J. Food Agric*. 28, 2, p. 99-106

Optimization of Lignocellulosic Waste Biorefinery using Multi-Actor Multi-Objective Mathematical Framework: 26 European Symposium on Computer Aided Process Engineering

Ashraf, M. T., Torres, A. I., Cybulska, I., Fang, C., Thomsen, M. H., Schmidt, J. E. & Stephanopoulos, G., 25. Jun 2016, *Computer Aided Chemical Engineering*. Kravanja, Z. & Bogataj, M. (eds.). Elsevier Editora, Vol. 38. p. 1317-1322 6 p.

Evaluation of the production of lipids for fuels and proteins from microalgae by decomposition of the processing network: 26 European Symposium on Computer Aided Process Engineering

Bocheński, T., Torres, A. I., Ashraf, M. T., Schmidt, J. E. & Stephanopoulos, G., 2016, *Computer Aided Chemical Engineering*. Kravanja, Z. & Bogataj, M. (eds.). Elsevier Editora, Vol. 38. p. 1635-1640 6 p.

Conversion Efficiency of Biogas to Liquids Fuels through Fischer-Tropsch Process

Ashraf, M. T., Schmidt, J. E. & Bastidas Oyanedel, J-R., 3. Jun 2015, *23rd European Biomass Conference and Exhibition*.

Biogas potential of Bermuda grass and Clerodendrum inerme from the Emirate of Abu Dhabi

Ashraf, M. T., Al-Boainain, S., Belasri, D., Bastidas Oyanedel, J-R. & Schmidt, J. E., 2014, *XI Latin American Symposium of Anaerobic Digestion*.

Optimization and Cost-Oriented Comparison of Ammonia- and Propane-Compression Refrigeration for the Recovery of Natural Gas Liquids

Chebbi, R., Qasim, M., Darwish, N. A. & Ashraf, M. T., 1. Oct 2013, In: *Energy Technology*. 1, 10, p. 573-580 8 p.

Process of p-Xylene Production by Highly Selective Methylation of Toluene

Ashraf, M. T., Chebbi, R. & Darwish, N. A., 25. Sep 2013, In: *Industrial & Engineering Chemistry Research*. 52, 38, p. 13730-13737 8 p.