

Dhabia M. Al-Mohannadi

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Work Experience

2022-Current	Research Assistant Professor in Chemical Engineering Texas A&M University at Qatar (Title change due to campus wide policy change)
2018- 2022	Assistant Professor of Chemical Engineering Texas A&M University at Qatar
June 2018	Visiting graduate student at Imperial College of London
2013-2018	Graduate Fellow, Science-Track Trainee, Qatar Research Leadership program (QRLP), Qatar Foundation

Education

2022	Qatar Leadership Center (QLC), Rising Leaders Program State of Qatar Program
2016-2018	Texas A&M University, College Station, USA PhD in Chemical Engineering Dissertation Title: Systematic Methods for the Design of Industrial Clusters with Capped Carbon Emissions
2012-2014	Texas A&M University at Qatar, Doha, Qatar M.S. in Chemical Engineering
2008-2012	Texas A&M University at Qatar, Doha, Qatar B.S. in Chemical Engineering Minor in Chemistry

Certificates and Professional Development

November 2022	Creative Leadership University of Chicago Booth School of Business, Executive Education
October 2022	Delivering Service Excellence and Innovation Module Judge Business School, Executive Education, University of Cambridge
October 2022	Business Simulation Module HEC Paris, Executive Education
September 2022	Transformational Leadership Saïd Business School University of Oxford
August 2022	Finance and Business Acumen Duke University, Corporate Education
May 2022	Understanding the Corporate Context and Leading a Business Unit Module Harvard Business School (HBS)-Executive Education
March 2022	Dealing with the Media Aljazeera Media Institute
February 2022	Advanced Methods in Negotiation International Negotiation Program
January 2022	Strategy and Leadership Harvard Business School (HBS)-Executive Education

Research Grants

2022-2024	Development of Low-Cost Strategies for CO ₂ Capture Utilization and Storage, TotalEnergies-TAMUQ Total Budget: \$50,000
2022-2024	Energy Transition in the Marine and Offshore Industries, ABS-TAMUQ, Total budget: \$62,000
2019-2023	Qatar Shell Research Fellowship, Total budget: \$20,000
2020-2024	Qatar National Research Fund (Principal Investigator) Proposal title: Continuous and Scalable Hybrid Photo-Electro Chemical Production of Renewable Hydrogen from Non-Potable Water Sources, Total budget: \$699,957
2020-2024	Qatar National Research Fund (Principal Investigator) Proposal title: Industrial crop production in Qatar with biosolids and treated sewage effluent and industrial water, Total budget: \$698,643
2020-2021	Qatar National Research Fund Undergraduate Research Experience Mentor Proposal title: Towards Carbon Neutral Industrial Parks Total budget: \$10,000
2021	Texas A&M University at Qatar conference funding Title: 3 rd Natural Gas Utilization Award: \$25,000
2020	Texas A&M University at Qatar Transformative Educational Experiences (TEE) grant Proposal title: Product [X] Challenge Total budget: \$15,000

Awards and Honors

2021	Optimization for Energy Saving and Pollution Reduction (PRES) 2021 Conference, Merit Award (faculty advisor)
2020	Chemical Engineering Faculty of the year
2020	Best Poster Award, Process Integration, Modeling and Optimization for Energy Saving and Pollution Reduction (PRES) 2020 Conference, 1st Place (faculty advisor)
2019	Received Academic Excellence Award for outstanding Doctorate Dissertation by HH Tamim Bin Hamad Al-Thani
2018	Winner of Oryx GTL Qatar post graduate PhD student award future research leaders in Qatar
2016	Winner of Oryx GTL Qatar post graduate master's student award for future research leaders in Qatar
2015	Best Paper Poster Award, Process Integration, Modeling and Optimization for Energy Saving and Pollution Reduction (PRES) 2015 Conference, 1st Place
2014	Poster Award in Energy and Environment, Qatar Foundation Annual Research Conference (ARC'14), 2 nd Prize
2014	Received Qatar Foundation Thanaa Award for exemplary employee performance

Roles and Positions

Institutional Committees

Chemical Engineering Graduate Committee Member, 2023-current
Member of Texas A&M University at Qatar Center of Teaching and Learning Committee, 2022-current

Member of the Texas A&M University liberal arts and science reorganization committee, Texas A&M University (TAMU), 2022

Member of Information Technology Advisory Council (ITAC), TAMUQ, 2019-2021

Chemical Engineering retention and student liaison, TAMUQ, 2018 – current

Committee member of the women mentorship program, TAMUQ 2020- current

Academic Committees

Co-chair of the Arab American Frontiers in collaboration with the National Science Engineering and Medicine (NSEM), Qatar 2023

Co-chair of the American Institute of Chemical Engineers (AIChE) 3rd Natural Gas Utilization Workshop

Session Chair of American Institute of Chemical Engineers (AIChE) 2021, 2022, 2023 Annual Meeting

- Design and Optimization of Integrated Energy Systems
- Fundamentals of Food, Energy, and Water Systems

National Committees

Board member of the Arab Climate Youth Movement (ACYM)

Board member of the Qatar Women Engineering Association (QWEA)

Technical Sustainability Committee, Qatar Foundation (QF)

Scientific Journal Roles

Review Editor for Frontiers Process and Energy Systems Engineering

Review Editor for Frontiers Computational Methods in Chemical Engineering

Reviewer for:

- The journal of current opinion in Chemical Engineering
- Energy
- American Chemical Society Sustainable Chemistry & Engineering
- Chemical Engineering Journal
- Frontiers

Supervision

Doctor of Philosophy

[5] Yasir Ibrahim, PhD'27 (chair)

[4] Elizabeth Abraham, PhD'26 (chair)

[3] Manar Oqbi, PhD'25 (chair)

[2] Hesam Elfaki, PhD'25 (chair)

[1] Mohammad Lameh, PhD '24 (co-chair)

Masters of Science

[12] Fatimah Aysha Jiffry, MS'24 (chair)

[11] Soha Mousa, MS'24 (chair)

[10] Wafaa Majzoub, MS'24 (chair)

[9] Waad Isamail, MS'24 (co-chair)

[8] Sarah Alnouri, MS' 22 (chair)

[7] Taha Kubbar, MS' 22 (committee member)

[6] Malek Helali, MS' 22 (committee member)

[5] Elizabeth Abraham, MS' 22 (chair)

[4] Yasir Ibrahim, MS' 21 (chair)

[3] Razan Ahmed, MS' 21 (co-chair)

[2] Shaza Shehab, MS'20 (co-chair)

[1] Mohammad Lameh, MS'20 (co-chair)

Courses Taught

Texas A&M University at Qatar

Undergraduate courses

- Process Integration, CHEN 425 (Fall 2018)
- Process Design, CHEN 426 (Spring 2019)
- Numerical Analysis, CHEN 320 (Fall 2019, 2020, 2021, 2022)
- Global Engineering Design, ENGR 410 (Fall 2022)
- Special Topics in Sustainable Design of Chemical Processes (Spring 2020,2021,2022,2023)
- Special Topics in Product Design (Summer 2023)
- Oil and Gas (Summer 2023)

Graduate Courses

- Sustainable Design of Chemical Process, CHEN 665 (Spring 2020, 2021,2022,2023)

Research Interests

Process system engineering

Process integration, modeling and optimization

Sustainable design and operation of eco-industrial parks

Carbon dioxide mitigation and natural resource management

Inter-disciplinary approaches to decision-making and problem solving

Strategic planning and techno-economic modeling

Collaborations

Texas A&M University (TAMU), Petroleum department Texas A&M University at Qatar (TAMUQ), Maastricht University (MU), American University of Beirut (AUB), Imperial College of London (IMC), Qatar University (QU), Hamad Bin Khalifa University (HBKU), Sacramento California State University (SCSU), Qatar Shell Research Technology Center (QSRTC), Virginia Commonwealth University at Qatar (VCU-Q), Wageningen University (WU), Industrial Research–National Chemical Laboratory (CSIR-National Chemical Laboratory), Ministry of Municipality and Environment (MME), American Bureau of Shipping (ABS), Total Energies, Earthna-Qatar Foundation.

Publications

[39] Bishnu, S., Alnouri, S.Y., Al-Mohannadi, D.M. (2023) Computational applications using Data Driven Modeling in Process Systems: A Review, *Digital Chemical Engineering*, 100111

[38] Ibrahim, Y., Al-Mohannadi, D.M. (2023) Optimization of low-carbon hydrogen supply chain networks in industrial clusters, *International Journal of Hydrogen Energy* 48 (36), 13325-13342

[37] Abraham, E.J, Linke, P., Al-Mohannadi, D.M. (2023) Incorporating negative emissions technologies with policy instruments for net-zero emissions, *Computer Aided Chemical Engineering* 52, 2331-2337

[36] Al-Mohannadi, S.A., Al-Mohannadi, D.M. (2022) Qatar in the Energy Transition: Low Carbon Economy Challenges and Opportunities, *Sustainable Qatar: Social, Political and Environmental Perspectives*, 109-126

[35] Abraham, E.J, Linke, P., Al-Mohannadi, D.M. (2022) Optimization of low-cost negative emissions strategies through multi-resource integration, *Journal of Cleaner Production* 372, 133806

- [34] Lameh, M., Al-Mohannadi, D.M., Linke, P., (2022) On the development of minimum marginal abatement cost curves for the synthesis of integrated CO₂ emission reduction strategies, *Journal of Cleaner Production*, 132848
- [33] Abraham, E.J., Al-Mohannadi, D.M., Linke, P., (2022) Resource integration of industrial parks over time, *Computers & Chemical Engineering*, 107886
- [32] Lameh, M., Al-Mohannadi, D.M., Linke, P., (2022) Minimum marginal abatement cost curves (Mini-MAC) for CO₂ emissions reduction planning, *Clean Technologies and Environmental Policy* 24 (1), 143-159
- [31] Shehab, S., Linke, P., Al-Mohannadi, D.M., (2022) Chemical production process portfolio optimization considering resource integration, *Chemical Engineering Research and Design*, 179, 285-297
- [30] Ibrahim, Y., Al-Mohannadi, D.M., Linke, P., Modelling and Optimization of Hydrogen Production in an Industrial Cluster Accounting for Economic Cost and Environmental Impact, *Chemical Engineering Transactions* 88, 439-444
- [29] Alnouri, S.Y., Al-Mohannadi, D.M., Sengupta, D., (2021), Towards Sustainable Reuse of Gas-To-Liquid Biosludge for Industrial Crops Production, *Chemical Engineering Transactions* 88, 595-600
- [28] Lameh, M., Al-Mohannadi, D.M., Linke, P., (2021) Cost Analysis for CO₂ Reduction Pathways, *Chemical Engineering Transactions* 88, 583-588
- [27] Abraham, E. J., Al-Mohannadi, D.M., Linke, P., (2021) Multi-period Resource Integration in Carbon Dioxide Converting Networks, *Chemical Engineering Transactions* 88, 1279-1284
- [26] Al-Mohannadi, D.M., Alnouri, S.Y., (2021) Studying the effect of solvent properties in treatment design within CO₂ Integration Networks, *Computer Aided Chemical Engineering* 50, 295-300
- [25] Abraham, E. J., Ramadan, F. O., Al-Mohannadi, D.M., Linke, P., (2021) Synthesis of Sunlight, Seawater and CO₂ based Industrial Parks, *Computer Aided Chemical Engineering* 50, 1695-1700
- [24] Lameh, M., Al-Mohannadi, D.M., Linke, P., (2021) Carbon Policy in Process Integration, *Computer Aided Chemical Engineering* 50, 1327-1432
- [23] Ahmed R.O., Al-Mohannadi, D.M., Linke, P., (2021) Multi-objective resource integration for sustainable industrial clusters, *Journal of Cleaner Production* 316, 128237
- [22] Abraham, E.J., Ramadan, F., Al-Mohannadi, D.M., Synthesis of Sustainable Carbon Negative Eco-Industrial Parks, *Frontiers in Energy Research* 9, 345
- [21] Lameh, M., Al-Mohannadi, D.M., Linke, P., (2021) Minimum marginal abatement cost curves (Mini-MAC) for CO₂ emissions reduction planning, *Clean Technologies and Environmental Policy*, 1-17
- [20] Shehab, S., Al-Mohannadi, D.M., Linke, P. (2021) Chemical production process portfolio optimization, *Chemical Engineering Research and Design*, *Chemical Engineering Research and Design* 167, 207-217 DOI: 10.1016/j.cherd.2021.01.013
- [19] Lameh, M., Al-Mohannadi, D.M., Linke, P., (2020) Graphical analysis of CO₂ emissions reduction strategies, *Cleaner Engineering and Technology*, 1, DOI:10.1016/j.clet.2020.100023
- [18] Ahmad, R., Shehab, S.I., Al-Mohannadi, D.M., Linke, P., (2020) Synthesis of integrated processing clusters, *Chemical Engineering Science*, DOI: 10.1016/j.ces.2020.115922
- [17] Lameh, M., Al-Mohannadi, D.M., Linke, P., (2020) Developing Minimum Cost Targets For Carbon Reduction in Different Geographical Regions, *Chemical Engineering Transactions*, 91, 97-102
- [16] Al-Mohannadi, D.M., Linke, P., (2020) Optimal Utilization of Natural Gas in Processing Clusters with Reduced CO₂ Emissions through Material and Energy Integration, *Energy Technology*, 1901381

- [15] Al-Mohannadi, D. M., Kwak, G., Linke, P., (2020) Identification of optimal transitions towards climate footprint reduction targets using a linear multi-period carbon integration approach, *Computers and Chemical Engineering*, 140, 106907
- [14] Alnouri, S., Al-Mohannadi, D. M., (2020) Exploring Tradeoffs in Merged Pipeline Infrastructure for Carbon Dioxide Integration Networks, *Sustainability* 12, 7, 2678
- [13] Shehab, S.I, Ahmad, R.O., Al-Mohannadi, D.M., Linke, P., (2019) Resource Integration and CO2 Conversion in Industrial Clusters, *Chemical Engineering Transactions*, 76, 1201-1206.
- [12] Al-Mohannadi, D.M., Linke, P., Shah, N., (2019) A multi-objective multi-period optimization of carbon integration networks in industrial parks. *Computer Aided Chemical Engineering*, 46, 487-492.
- [11] Klaimi, R., Alnouri, S., Al-Mohannadi, D., Zeaiter, J., Linke, P., (2018) Synthesis of Carbon Integration Networks Coupled with Hydrate Suppression and Dehydration Options. *Chemical Product and Process Modeling*, DOI::10.1515/cppm-2018-0019
- [10] Al-Mohannadi, D.M., Fouladi, J., Linke, P., (2018) Sustainable carbon constrained natural gas monetization networks in industrial parks, *Computer Aided Chemical Engineering*, 44, 433-438
- [9] Al-Mohannadi, D.M., Hassiba, R., Abdulaziz, K., Linke, P., (2017) A Natural Gas Monetization Approach with Carbon Dioxide and Excess Heat Integration in Industrial Parks, *Computer-Aided Chemical Engineering*, 40, pp. 1963-1968
- [8] Al-Mohannadi, D.M., Abdulaziz, K., Alnouri, S., Linke, P., (2017) On the Synthesis of Natural Gas Monetization Networks under Carbon Dioxide Emissions Constraints, *Journal of Cleaner Production*, 168. DOI: 10.1016/j.jclepro.2017.09.012.
- [7] Al-Mohannadi, D.M., Abdulaziz, K., Alnouri, S., Linke, P., (2016) On the Systematic Allocation of Natural Gas Under Footprint Constraints in Industrial Clusters, *Chemical Engineering Transactions*, 52, pp. 769-774
- [6] Hassiba, R.J., Al-Mohannadi, D., Linke, P., (2016) Carbon Dioxide and Heat Integration in Industrial Parks, *Journal of Cleaner Production*, DOI: 10.1016/j.jclepro.2016.09.094, 155, pp. 47-56
- [5] Al-Mohannadi, D.M., Alnouri, S.Y., Bishnu, S.K., Linke, P., (2016) Multi-period Carbon Integration, *Journal of Cleaner Production*, DOI: 10.1016/j.jclepro.2016.03.027, 136, 2016, pp. 150-158
- [4] Al-Mohannadi, D.M., Linke, P., (2016) On the Systematic Carbon Integration of Industrial Parks for Climate Footprint Reduction, *Journal of Cleaner Production*, DOI: 10.1016/j.jclepro.2015.05.094. 112, 4053-4064
- [3] Al-Mohannadi, D.M., Linke, P., Bishnu, S.K., Alnouri, S.Y., (2015) Interplant carbon integration towards phased footprint reduction targets. *Computer-Aided Chemical Engineering*. 37, pp. 2057-2062
- [2] Al-Mohannadi, D.M., Linke, P. Bishnu S.K, Alnouri, S.Y., (2015).Systematic Multi-Period Carbon Integration in an Industrial City, *Chemical Engineering Transactions*. 45, pp. 1219-1224
- [1] Raza, B., Elmalik E., Al-Meer M., Ramahdan H., Al-Mohannadi D., Elbashir N.O., (2011), Characterization of synthetic Gas-to-Liquid jet fuel blends and properties correlation with hydrocarbon structure. Preprint Paper - *American Chemical Society, Division of Fuel Chemistry*, 56(2), pp. 431-433.

Conference Presentations

- [50] Elizabeth J. Abraham, Dhabia Al-Mohannadi, Incorporating negative emissions technologies with policy instruments for net-zero emissions, ESCAPE 33, Athens, Greece, 18-21 June 2023 (Poster)
- [49] Wafaa Majzoub, Dhabia Al-Mohannadi, Techno-Economic Solid Waste-to-Product Screening Approach: Plastic Recycling Case Study, Material Science Symposium, May 2023

- [48] Elizabeth J. Abraham, Dhabia Al-Mohannadi, Patrick Linke, (2022) Synthesis of industrial parks with risk management, ESCAPE 32, Toulouse, France, 12-15 June 2022 (Poster)
- [47] Sabla Y. Alnouri, Ilkan Sarigol, Dhabia M. Al-Mohannadi, Hadi Jaber, (2022) Optimization of Sink Locations in Carbon Integration Networks, ESCAPE 32, Toulouse, France, 12-15 June 2022 (Poster)
- [46] Yasir Ibrahim, Dhabia Al-Mohannadi, (2022) Exploring Low Carbon Hydrogen Production and Export in Qatar, ESCAPE 32, Toulouse, France, 12-15 June 2022 (Poster)
- [45] Elizabeth Abraham, Dhabia Al-Mohannadi, Patrick Linke, (2022) Integrating Carbon Negative Technologies in Industrial Clusters, PSE 20+ Kyoto, Japan, 19-23rd June (oral presentation)
- [44] Yasir Ibrahim, Dhabia Al-Mohannadi, Patrick Linke, Mohammad Lameh, (2022) Low Carbon Hydrogen production in industrial clusters, PSE 20+ Kyoto, Japan, 19-23rd June (oral presentation)
- [43] Mohammad Lameh, Dhabia M. Al-Mohannadi, Patrick Linke (2022) Analysis and design of integrated renewable energy and CO₂ capture, utilization and storage systems for low cost emissions reduction, PSE 20+ Kyoto, Japan, 19-23rd June (oral presentation)
- [42] Ibrahim Y. , Al-Mohannadi D., Linke P., (2021) Modeling and Optimization of Hydrogen Production in an Industrial Cluster Accounting for Economic Cost and Environmental Impact, 24th Conference on Process Integration for Energy Saving and Pollution Reduction - PRES'21, (oral presentation)
- [41] Lameh M., Linke P., Al-Mohannadi D., Cost Analysis for CO₂ Reduction Pathways, 24th Conference on Process Integration for Energy Saving and Pollution Reduction - PRES'21 (oral presentation)
- [40] Alnouri S., Al-Mohannadi D., Sengupta D., (2021) Towards Sustainable Reuse of GTL Biolsudge for Industrial Crops Production, 24th Conference on Process Integration for Energy Saving and Pollution Reduction - PRES'21 (oral presentation)
- [39] Abraham E.J., Al-Mohannadi D.M., Linke P., (2021) Multi-Period Resource Integration in Carbon Dioxide Converting Networks, 31st European Symposium on Computer Aided Process Engineering (Poster)
- [38] Abraham E.J., Ramadan F.O., Al-Mohannadi D.M., Linke P., (2021) Synthesis of Sunlight, Seawater and CO₂ based Industrial Parks 31st European Symposium on Computer Aided Process Engineering (Poster)
- [37] Lameh M., Al-Mohannadi D.M., Linke P., (2021) Carbon Policy Assessment in Process Integration 31st European Symposium on Computer Aided Process Engineering
- [36] Al-Mohannadi D.M., Alnouri S. Y., (2021) Studying the effect of solvent properties in treatment design within CO₂ Integration Networks, 31st European Symposium on Computer Aided Process Engineering
- [35] Alnouri S., Hemachandra N., Debnath B., Singhapura V., Tasneem N., Al-Mohannadi D.M., Sengupta D., (2021) The Investigation of Industrial Crop Production in Arid Regions, American Institute of Chemical Engineers 2021 Annual Meeting, Nov 7 2021 (oral presentation)
- [34] Ibrahim Y., Al-Mohannadi D.M., (2021) Enabling Low Carbon Hydrogen Production Using Resource Integration Approach, American Institute of Chemical Engineers 2021 Annual Meeting, Nov 10 2021 (oral presentation)
- [33] Lameh M., Al-Mohannadi D.M., Linke P., (2021) Investigating the Sensitivity of CO₂ Reduction Costs, American Institute of Chemical Engineers 2021 Annual Meeting, Nov 15 2021 (Poster)

- [32] Abraham E.J., Al-Mohannadi D.M., Linke, P., (2021) Design of Carbon Neutral Industrial Clusters over a Time Horizon, American Institute of Chemical Engineers 2021 Annual Meeting, Nov 16 2021
- [31] Abraham E.J., Ramadan F., Al-Mohannadi D.M., (2021) Seawater-Air-Sunlight Based Industrial Clusters for Carbon Dioxide Utilization, American Institute of Chemical Engineers 2021 Annual Meeting, Nov 19 2021
- [30] Al-Mohannadi D.M., (2021) Assessing Economic Resilience of Hydrocarbon Products, American Institute of Chemical Engineers 3rd Enterprise and Infrastructure Resilience workshop, September 28th, 2021 (**invited speaker**)
- [29] Al-Mohannadi D.M., (2021) Resource Management in Arid Regions for Sustainable FEW Nexus, American Institute of Chemical Engineers 2nd conference on Food Water Energy nexus, Feb 11, 2020 (**invited speaker**)
- [28] Al-Mohannadi D.M., Nitin, R., (2020) Safety Consideration in Carbon Dioxide Integration Networks in Industrial Clusters. Annual Meeting of American Institute of Chemical Engineers 2020. Virtual due to COVID-19. Nov 16-20 2020.
- [27] Abraham, E., Ramadan, F., Linke, P., Al-Mohannadi D.M., (2020) Towards Zero-Waste Eco-Industrial Parks through Resource Integration. Annual Meeting of American Institute of Chemical Engineers 2020. Virtual due to COVID-19. Nov 16-20 2020.
- [26] Al-Rawashdeh, M., Al-Mohannadi D.M., Kakosimos, K., (2020) Product [X] –an Ongoing Experiment in Chemical Engineering Sustainability Education Using Project-Based Learning. Annual Meeting of American Institute of Chemical Engineers 2020. Virtual due to COVID-19. Nov 16-20 2020.
- [25] Ahmed, R., Al-Mohannadi D.M., Linke, P. (2020) Towards Sustainable Resource Integration Networks in Industrial Clusters. Annual Meeting of American Institute of Chemical Engineers 2020. Virtual due to COVID-19. Nov 16-20 2020.
- [24] Shehab, S., Al-Mohannadi D.M., Linke, P, (2020) On the Construction of Chemical Process Portfolios for Investment Decision. Annual Meeting of American Institute of Chemical Engineers 2020. Virtual due to COVID-19. Nov 16-20 2020.
- [23] Lameh, M., Al-Mohannadi D.M., Linke, P. (2020) Minimum Cost Carbon Reduction Pathways for Different Geographic Regions. Annual Meeting of American Institute of Chemical Engineers 2020. Virtual due to COVID-19. Nov 16-20 2020.
- [22] Lameh, M., Al-Mohannadi D.M., Linke, P. (2020) A Graphical Approach to the Planning of Integrated Carbon Capture Utilization. Annual Meeting of American Institute of Chemical Engineers 2020. Virtual due to COVID-19. Nov 16-20 2020.
- [21] Linke P., Shehab, S., Al-Mohannadi, D., (2020) Production process selection based on Modern Portfolio Theory, PRES20.0199, 17-21 August 2020, Xi'an, China (Best Poster Award)
- [20] Ahmed, R., Linke, P., Al-Mohannadi, D.M., (2020) Towards Sustainable Resource Integration Networks in Industrial Clusters, PRES20.0235, 17-21 August 2020, Xi'an, China
- [19] Lameh, M., Al-Mohannadi, D.M., Linke, P., (2020), Developing Minimum Cost Targets For Carbon Reduction in Different Geographical Regions, PRES20.0182. 17-21 August 2020, Xi'an, China (Keynote)
- [18] Al-Mohannadi, D.M. (2019), Systematic Design of Carbon Constrained Industrial Parks, Annual Meeting of American Institute of Chemical Engineers, 10-15 November 2019, Orlando, Florida, USA
- [17] Al-Mohannadi, D.M., Linke, P., Shah, N., (2019) A multi-objective multi-period optimization of carbon integration networks in industrial parks. ESCAPE 29th Conference, 16-19 June 2019, Eindhoven, The Netherlands
- [16] Al-Mohannadi, D.M., Fouladi, J., Linke, P., (2018), Sustainable carbon constrained natural gas monetization networks in industrial parks, 13th International Symposium on Process Systems Engineering – PSE 2018, July 1-5, 2018, San Diego, California
- [15] Al-Mohannadi, D.M., Hassiba, R., Abdulaziz, K., Linke, P., (2017) A Natural Gas Monetization Approach with Carbon Dioxide and Excess Heat Integration in Industrial

- Parks, Presented at the 10th World Congress of Chemical Engineering: ESCAPE 27, Barcelona, Spain (Poster)
- [14] Al-Mohannadi, D.M., Abdulaziz, K., Alnouri, S.Y., Linke, P., (2016) Carbon Integration in industrial parks to reduce GHG emissions, Global Cleaner Production and Sustainable Consumption Conference 2016, August 2016, Prague, Czech Republic
- [13] Al-Mohannadi, D.M., Abdulaziz, K., Alnouri, S.Y., Linke, P., (2016) Resource Allocation under footprint constraints, Presented at QF-ARC'16, Doha, Qatar (Poster).
- [12] Al-Mohannadi, D.M, Bishnu, S.K. Alnouri, S.Y., Linke, P., (2015) Carbon Integration in industrial parks to reduce GHG emissions, Global Cleaner Production and Sustainable Consumption Conference 2015, November 2015, Sitges, Spain
- [11] Al-Mohannadi, D.M., Linke, P., Alnouri, S.Y., (2015) Carbon and Energy Integration towards Footprint Reduction Targets. Presented at SDEWES 2015, Dubrovnik, Croatia, September 2015.
- [10] Al-Mohannadi, D.M, Bishnu, S.K., Alnouri, S.Y., Linke, P., (2015) Systematic Multi-Period Carbon Integration in an Industrial City. Process Integration, Modelling and Optimization for Energy Saving and Pollution Reduction, August 2015, Kuching, Malaysia (Poster).
- [9] Al-Mohannadi, D.M, Linke, P., Bishnu, S.K., Alnouri, S.Y., (2015) Interplant Carbon Integration Towards Phased Footprint Reduction Target. 12th International Symposium on Process Systems Engineering and 25th European Symposium on Computer Aided Process Engineering. 31 May – 4 June 2015, Copenhagen, Denmark
- [8] Al-Mohannadi, D.M, Linke, P., (2015) Systematic Carbon Integration for GHG footprint Reduction in Industrial Parks. 4th Annual Texas A&M University at Qatar Industry Research Showcase, April 2015, Doha, Qatar.
- [7] Al-Mohannadi, D.M., Linke, P., (2014) A Systematic Approach to Carbon Footprint Reduction Strategies in Industrial Parks. Presented at QF-ARC'14, DOI 10.5339/qfarc.2014.EEPP1154, November 2014. Doha, Qatar
- [6] Al-Mohannadi, D.M, Linke, P., (2014) Towards a Systematic Approach to Efficient Carbon Footprint Reduction Strategies in Industrial Parks. Participated in the 3rd Annual Texas A&M University at Qatar Industry Research Showcase. April 2014, Doha, Qatar.
- [5] Abul Rahman, AlMeer, M., AlMohanadi, D.,Ramadhan, H.,Raza, B., Elmalik, E., Elbashir, N., (2012),= Characterization of synthetic jet fuel blends: Experimental and statistical studies. PETR:76; Chemistry of Petroleum and Emerging Technologies.26th March .2012 <http://sandiego2012onsite.acs.org/i/57789>
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- [3] Orillano M., Al-Nuaimi I., Al-Mohannadi D., Warrag S., Elbashir N. O., (2012) *Role of aromatics and paraffinic hydrocarbons on synthetic jet fuels properties*. *Qatar Foundation Annual Research Forum Proceedings Abstract*, Vol. 2012 DOI: 10.5339/qfarf.2012.EEOS2.
- [2] Elbashir N.O., Raza B., Elmalik E.E., Ramadhan H., Al-Mohannadi D., Al-Meer M., (2011) Characterization of Synthetic Gas-to-Liquid Jet Fuel Blends and Properties Correlation with Hydrocarbon Groups. *Proceedings of the Qatar Foundation Annual Research Forum*, Vol. 2011, EGP20; pp. 164-165.
- [1] Elbashir N.O., Al-Meer M., Rahman A.H.M.J., Al-Mohannadi D., Ramadhan H., Elmalik E.E., Raza B., (2011) Experimental Analysis of Novel Synthetic Fuel Blends with Statistical Analysis. *Proceedings of the Qatar Foundation Annual Research Forum*, Vol. 2011, EGPS3; pp. 184-185.

International Representations

[2] Presented at the Qatar Pavilion in the United Nations Conference of Parties (COP28) Egypt, 2022

[1] In collaboration the ministry of foreign affairs at Qatar took part of the Center for the National Interest's Track II Dialogue on US-Qatar relations as part of the U.S. – Qatar Strategic Dialogue, 2021

Seminars

[2] Seminar at the World Affairs Council of Dallas/Fort Worth, November 5 2021, Titled: Systems analysis of climate emission targets: Delivering the Promise

[1] Seminar at Kozmetsky Center of Excellence at st. Edwards University, World Affairs Council of Austin, October 5, 2021, Titled: Global Challenges in Carbon Footprint

Panel Discussions

[3] Energy Education of the Future Forum, Engineering Sustainability Goals, December 6th 2021, Texas A&M University at Qatar

[2] From UNGA to COP26 & Beyond: The Future of Climate Governance, Responding to a “Code Red for Humanity”, A Virtual Side Event Discussion – UN General Assembly High-Level Week 2021 on Thursday, 23 September

[2] Atlantic Council Global Energy Center Gas Roundtable tomorrow, Tuesday, May 25th 2021, Virtual

Professional Affiliations

Member of the American Institute of Chemical Engineering (AIChE)

Member of American Chemical Society (ACS)

Member of Omega Chi Epsilon Honor Society

Member of Women Faculty Forum at Texas A&M University at Qatar

Member of the Qatar Women Engineering Association (QWEA), part of Qatar Engineers Council

References

Upon Request