

Dana Alghool

Doha, Qatar
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RESEARCH INTERESTS Supply chain management, system modeling and optimization, mathematical models, renewable energy

EDUCATION *Ph.D. Management Engineering* at Politecnico di Milano 08/2022 -
Ph.D. Industrial and System Engineering at Qatar University 08/2022 -
Dissertation title: Design an Optimized of Hydrogen Supply Chain.
Supervisor: Prof. Mohamed Haouari and Prof. Paolo Trucco

M.Sc. Engineering Management, with highest distinction 08/2017 - 05/2019
Qatar University
Thesis title: Optimal Integration Of Solar Energy With District Cooling System:
Mathematical Modeling Approach
Supervisor: Prof. Tarek Elmekawy and Prof. Mohamed Haouari
GPA: 4.00 out 4.00

B.Sc. Industrial and System Engineering, with highest distinction 08/2012 - 01/2017
Qatar University
Senior project: Perspectives on Dual-Purpose Smart Water Power Infrastructures for
Households in Arid Regions
Supervisor: Prof. Farayi Musharavati
GPA: 3.92 out 4.00

EMPLOYMENT *Curriculum Development Specialist, Qatar University* 11/2020 -
Academic Planning and Quality Assurance Office

Quality Management Specialist, Qatar University 11/2019 - 11/2020
Institutional Quality Management Department

Field Engineer, HILTI Qatar 05/2018 - 08/2019
Engineering Department

Technical Support Engineer, HILTI Qatar 02/2017 - 05/2019
Engineering Department

PRE-PRINTS AND WORKING PAPERS

Alghool, D., Khir, R., Haouari, M. (2022). Comparison of Different Optimized Solar Energy Assisted District Cooling Systems using Multiple Criteria.

PUBLICATIONS

1. Alghool, D. M., Elmekawy, T. Y., Haouari, M., Elomri, A. (2021). Optimal design and operation of conventional, solar electric, and solar thermal district cooling systems. *Energy Science and Engineering*. <https://doi.org/10.1002/ese3.1033>
2. Alghool, D., Elmekawy, T., Haouari, M., Elomri, A. (2020). Data of the design of solar assisted district cooling systems. *Data in Brief*, 30, 105541. doi: 10.1016/j.dib.2020.105541

3. Alghool, D. M., Elmekawy, T. Y., Haouari, M., Elomri, A. (2020). Optimization of design and operation of solar assisted district cooling systems. *Energy Conversion and Management: X*, 6, 100028. doi: 10.1016/j.ecmx.2019.100028
4. Alghool, D., Al-Khalfan, N., Attiya, S., Musharavati, F. (2019). Perspectives on Dual- Purpose Smart Water Power Infrastructures for Households in Arid Regions. IntechOpen. doi:10.5772/intechopen.83626

CONFERENCES

1. Alghool, D. M., Elmekawy, T. Y., Haouari, M., Elomri, A. (2020). Mathematical Modeling of District Cooling System. In ICSEPD 2020, Toronto, Canada.
2. Haouari, M., Elmekawy, T., Ashour, M., Alghool, D. (2019). Optimal Design of a Solar Assisted Cooling System. In IAPE '19, Oxford, United Kingdom. UK: IAPE. doi:978-1-912532-05-6
3. Al-Ghoul, D., Matar, M., Aljindi, R., S. Luyt, A. (2018). Oral Reinforcement of Biodegradable Polymers with Electrospun nanowhisker Containing Nanofibers (3rd ed., Vol. 1). International Journal of Global Advanced Materials Nanotechnology.

RESEARCH PROJECTS

1. Participated in Undergraduate Research Experience Project funded by Qatar National Research Funds to work on Modeling and Analysis of the Internal Logistics within Qatalum (Qatar Aluminium) Production System using Arena Simulation Software.
2. Participated in Undergraduate Research Experience Project funded by Qatar National Research Funds to work on reinforcement of biodegradable polymers with electrospun nanowhisker containing nanofibers in the center of advanced materials at Qatar University.

HONORS AND AWARDS

1. The Order of Excellence Award, Qatar University, 2016. This is a merit-based award given to the top university graduates. Ranked 1st (highest GPA), College of Engineering, 2016.
2. The H.H. the Emir of Qatar's full-ride Scholarship for Academic Excellence, for undergraduate studies at Qatar University, 2012-2016.
3. The Field Engineer award of the year 2018 from HILTI QATAR for an outstanding performance.

COMMITTEES

1. Institutional Effectiveness Committee at Qatar University.
2. University Curriculum Committee at Qatar University.
3. Health Curriculum Enhancement Committee Qatar University.
4. Equivalency of Courses Committee Qatar University.
5. Non-Academic Unit Review Committee at Qatar University.
6. Restructuring the Arabic for Non-Native Speaker Center Committee at Qatar University.

TECHNICAL SKILLS

Software: Arena, Arduino, AIMMS, SIMIO, SQL Server Management, MatLab, Minitab
 Language: English, Arabic