

## Dr. Aisha A. Alobaid

### Name and contact information

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### Education

Degree	Field	Institution	Country	Year
PhD.	Chemical Engineering	University of Maryland (UMD)	USA	2019
M.S.	Chemical Engineering	University of Maryland (UMD)	USA	2014
B.S.	Chemical Engineering	Kuwait University (KU)	Kuwait	2010

### Academic Experience

Institution	Designation	Country	Year/period
Kuwait University	Assistant Professor	Kuwait	2019 – Now
Kuwait University	Scholarship Teaching Assistant	Kuwait	2012 – 2019
University of Maryland	Teaching Assistant	USA	2015 – 2016

### Non-academic experience

Office/Organization	Designation	Year
KNPC-MAA	Process Engineer	2011 – 2012

### Membership in professional organization

Society Name	Type of Membership	Year
AIChE	Member	2018 – 2023

### Honors and awards (Most Recent/Distinguished)

Honor/Award	Date
Process Systems Engineering Conference (PSE 2018) Young Researcher Travel Grant.	2018
Graduate research fellowship from Kuwait University.	2012 – 2019
Awarded by his highness sheikh Sabah Al-Ahmed Al-Jaber Al-Sabah, the late Amir of Kuwait, and the Minister of Education for being among the top 10 Kuwait University graduates for the academic year 2009/2010.	2010
Dean's List award, Awarded by the Dean of College of Engineering and Petroleum.	2008
Awarded by his highness sheikh Sabah Al-Ahmed Al-Jaber Al-Sabah, the late Amir of Kuwait, and the Minister of Education for taking the 6th place among high school Kuwaiti graduates.	2006

### Journal Publications (Most Recent/Distinguished)

- Alobaid, A., and R. A. Adomaitis, " Optimal design of a coupled photovoltaic–electrolysis–battery system for hydrogen generation", Sustainable Energy & Fuels 7 (2023) 1395-1414, DOI: 10.1039/D2SE01555B.
- Alobaid, A., C. S. Wang, and R. A. Adomaitis, "Mechanism and kinetics of HER and OER on NiFe LDH films in an alkaline electrolyte", J. Electrochem. Soc. 165 (2018) J3395-3404.
- Alobaid, A., H. Salami, and R. A. Adomaitis, "On the Computation and Interpretation of Semi-Positive Reaction Network Invariants", Computers & Chem. Eng. 117 (2018) 236-248.

- Alobaid, A. and R. A. Adomaitis, "Monte Carlo Simulation for Optimal Solar Cell Configuration", Proceedings of PSE 2018, (2018), DOI: 10.1016/b978-0-444-64241-7.50304-9.

#### Conference Publications and Presentations (Most Recent/Distinguished)

- Alobaid A., and R. A. Adomaitis, "Optimal Design of a Coupled Photovoltaic-Electrolysis-Battery System for Hydrogen Generation", 10th European Conference on Renewable Energy Systems (ECRES), Istanbul, Turkey, May 7-9, (2022).
- Alobaid A., and R. A. Adomaitis, "Optimal Design of an Integrated PV-Electrolysis-Battery System", Graduate Research Appreciation Day UMD, College Park, MD, April 3rd (2019)/ Engineering Sustainability Day, UMD, College Park, MD, April 15th (2019).
- Alobaid A., C. Wang, and R. A. Adomaitis, "Kinetic investigation of nickel-iron layered double hydroxide for hydrogen evolution in an alkaline electrolyte", Paper 217f, AIChE Annual Meeting, Pittsburgh, PA, Oct 28-Nov 2, (2018).
- Alobaid A., and R.A. Adomaitis, "Optimal solar cell configuration under partially shaded conditions ", Paper 182B, AIChE Annual Meeting, Pittsburgh, PA, Oct 28-Nov 2, (2018).
- Alobaid A., C. Wang, and R.A. Adomaitis, "Kinetic investigation of nickel-iron layered double hydroxide toward hydrogen evolution in alkaline electrolyte", UMD Research Fest, College Park, MD, Jun 29, (2018).
- Alobaid A., and R.A. Adomaitis, "Monte Carlo simulation for optimal solar cell configuration", Paper 605, Process Systems Engineering (PSE 2018), San Diego, CA, Jul 1-5, (2017).
- Alobaid A., and R.A. Adomaitis, "Modeling a coupled photovoltaic-photoelectrochemical (PV-PEC) system for hydrogen generation", The Institute for Systems Research (ISR) Celebration of Research Event, UMD, College Park, MD, May (2017).

#### Recent professional development activities

Role in Service	Service Type	Surface Title / Description	Year
Attendee	Symposium	The first GCC Engineering Symposium, KU	2023
Attendee	Seminar	AI and the Future of Engineering Seminar, KU	2023
Attendee	Seminar	Scientific Research Obstacles, KU	2023
Attendee	Seminar	ChatGPT: Educational and Ethical Perspectives, KFAS	2023
Attendee	workshop	Young researchers' role in the advancement of research, KU	2022
Attendee	workshop	Effective Teaching Methods workshop, KU	2021

#### Supervision of graduate students (Most Recent/Distinguished)

Title	Type	Name of Student	Date of Completion
Evaluation of hybrid power system with hydrogen storage tanks (Co-advisor)	Thesis	Haneen A. Alasfour	May, 2025