



Name: Mubarak J. Al-Mubarak
Rank: Assistant professor
Department: Electrical engineering
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Specialty: Power systems
Research interests:

- Power system modelling and analysis
- Power system operation and control
- Power system expansion planning
- Integration of renewable energies
- Multi-energy systems

Degree

Degree	Field	Institution	Year
Ph.D.	Electrical and Computer Engineering	The Ohio State University	2021-2024
M.S.	Electrical and Computer Engineering	The Ohio State University	2019-2020
B.S.	Electrical Engineering	Kuwait University	2013-2018

Academic Rank

Rank	Year
Assistant professor	2024 – Present

Thesis

Title	Degree	Supervision
Coordinated Operation and Expansion Planning of Power and Freshwater Systems.	Ph.D.	Prof. Antonio Conejo

Current Membership in Professional Organizations

Organization	Country	Membership	Period
Institute of Electrical and Electronics Engineers	USA	Member	2018 - Present
Kuwaiti Society of Engineers	Kuwait	Member	2018

Experience (Academic)

Institution	Designation	Period	Full-Time/Part-Time
Kuwait University	Assistant Professor	2024 - Present	Full-Time
The Ohio State University	Teaching Assistant	2023	Part-Time
Kuwait University	Teaching Assistant	2018	Part-Time

Editorship

Designation	Journal	Period
Reviewer	Sustainable Energy, Grids and Networks	2024 - Present
Reviewer	Energy	2025 - Present

Academic Committee Work

Committee Work	Role	Level	Academic year
Strategic Plan Development	Coordinator	College	2025 – Present
Academic Sabbatical Committee	Member	Department	2024 - 2025
Engineering Design Expo Assessment Committee	Member	Department	2024 - 2024

Non-Academic Committee Work

Committee Work	Organization	Role	Year
Electrical System Efficiency and Stability Improvement	Ministry of Electricity & Water & Renewable Energy	Member	2025 - Present

JOURNAL PAPERS

No.	Information
1	Al-Mubarak, Mubarak J., and Antonio J. Conejo. "Expansion planning via decomposition to achieve fully renewable power and freshwater systems." Sustainable Energy, Grids and Networks (2025): 101713.
2	Al-Mubarak, Mubarak J., and Antonio J. Conejo. "Operation of interconnected power and freshwater networks." Sustainable Energy, Grids and Networks 38 (2024): 101240.
3	Al-Mubarak, Mubarak J., and Antonio J. Conejo. "Storing freshwater versus storing electricity in power systems with high freshwater electric demand." Journal of Modern Power Systems and Clean Energy 12, no. 2 (2023): 323-333.
4	Baidas, Mohammed W., Emad Alsusa, Motasem Alfarra, and Mubarak Al-Mubarak. "Multi-relay selection in energy-harvesting cooperative wireless networks: game-theoretic modeling and analysis." Telecommunication Systems 73 (2020): 289-311.

5	Baidas, Mohammed W., Mubarak Al-Mubarak, Emad Alsusa, and Mohamad Khattar Awad. "Joint subcarrier assignment and global energy-efficient power allocation for energy-harvesting two-tier downlink NOMA HetNets." IEEE Access 7 (2019): 163556-163577.
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CONFERENCE PAPERS

No.	Information
1	Baidas, Mohammed W., Mubarak Al-Mubarak, Emad Alsusa, and Mohamad K. Awad. "A Two-Stage Solution Procedure to Joint Subcarrier Assignment and Global Energy-Efficient Power Allocation in Energy-Harvesting Two-Tier Downlink NOMA HetNets." In 2020 IEEE Eighth International Conference on Communications and Networking (ComNet), pp. 1-8. IEEE, 2020.
2	Baidas, Mohammed W., Emad Alsusa, Motassim Al-Farra, and Mubarak Al-Mubarak. "Game-Theoretic Modeling and Analysis of Multi-Relay Selection in Energy-Harvesting Wireless Networks." In 2018 IEEE Global Communications Conference (GLOBECOM), pp. 206-212. IEEE, 2018.