Date: 15-4-2026

CURRICULUM VITAE

Personal Information

Faculty Member Name: DR. Mohammad Fawzi Zaki Ismail
Academic Rank: Associate professor
College: Engineering
Department: Renewable Energy
Nationality: Jordanian
Address: Tabarbour
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Academic Qualifications

Degrees with fields, institution, and date

- B.S. Mechanical Engineering, Al Balqa Applied University, 2012.
- M.Sc. Mechanical Engineering, The University of Jordan, 2015.

theses title: Boundary layer analysis of slip velocity and temperature jump effects on a fluid saturated porous media

- Ph.D. Mechanical Engineering, Northumbria University, 2020.

Dissertation title: Intensification of heat transfer in thermal energy storage systems using phase change materials

Academic Experience

- Duration: 4 years
- University: Amman Arab University
- Academic Rank: Assistant professor
- Date the rank was granted: 15-9-2020
- The body granting the rank: Amman Arab University
- College: Engineering
- Country: Jordan

Non-Academic Experience

- Duration:
- Institution:
- Department:
- Country:

Certifications or Professional Registrations

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Current Membership in Professional Organizations

- Association of Jordanian Engineering
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Honors and Awards

- None

Service Activities

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The most Important Publications in last five years

1. Ismail, M., Alkhazaleh, A. H., & Ali, A. M. (2025). A comprehensive study of encapsulated phase change materials in latent heat thermal energy storage systems: Experimental and numerical insights. International Communications in Heat and Mass Transfer, 161, 108449. https://doi.org/10.1016/j.icheatmasstransfer.2024.108449.
2. Ismail, M. (2025). Advanced Bifurcation Strategies in Microchannel Systems: A Comprehensive Review of Heat Transfer and Flow Optimisation Techniques. Results in Engineering, 103564. https://doi.org/10.1016/j.rineng.2024.103564.
3. Ismail, M., Alkhazaleh, A. H., Sirhan, A., Ali, M., Ali, A. M., & Masri, J. (2024). Development and Characterisation of Myristic Acid-Paraffin Wax, Silica Fume and Zinc Oxide Cementitious Composites for Thermal Control in Buildings. Case Studies in Thermal Engineering, 63, 105283. https://doi.org/10.1016/j.csite.2024.105283.
4. Ismail, M., Manasrah, A., Ali, A. M., & Abedalaziz, M. (2024). Hydrothermal performance of a heat sink using Plate-fins: Experimental and numerical investigations. International Journal of Thermofluids, 23, 100813. https://doi.org/10.1016/j.ijft.2024.100813.
5. Masri, J., Amer, M., Salman, S., Ismail, M., & Elsisi, M. (2024). A survey of modern vehicle noise, vibration, and harshness: A state-of-the-art. Ain Shams Engineering Journal, 15(10), 102957. https://doi.org/10.1016/j.asej.2024.102957.
6. Ismail, M. (2024). Experimental and numerical analysis of heat sink using various patterns of cylindrical pin-fins. International Journal of Thermofluids, 23, 100737. https://doi.org/10.1016/j.ijft.2024.100737.
7. Olimat, A. N., Ismail, M., Shaban, N. A., & Al-Salaymeh, A. (2022). The effectiveness of the heat transfer fluid pipe orientation angle inside a latent heat thermal energy storage system. Case Studies in Thermal Engineering, 36, 102174. https://doi.org/10.1016/j.csite.2022.102174.
8. Alkhazaleh, A. H., Almanaseer, W., Ismail, M., Almashaqbeh, S., & Farid, M. (2022). Thermal and mechanical properties of cement based-composite phase change material

of butyl stearate/isopropyl palmitate/expanded graphite for low temperature solar thermal applications. Journal of Energy Storage, 50, 104547. https://doi.org/10.1016/j.est.2022.104547.

9. Ismail, M., Alkhazaleh, A. H., Masri, J., Ali, A. M., & Ali, M. (2021). Experimental and numerical analysis of paraffin waxes during solidification inside spherical capsules. Thermal Science and Engineering Progress, 26, 101095. https://doi.org/10.1016/j.tsep.2021.101095.
10. Costa, S., Mahkamov, K., Kenisarin, M., Ismail, M., Lynn, K., Halimic, E., & Mullen, D. (2019). Solar Salt Latent Heat Thermal Storage for a Small Solar Organic Rankine Cycle Plant. Journal of Energy Resources Technology, 142(3). https://doi.org/10.1115/1.4044557.
11. Costa, S., Ismail, M., Kenisarin, M., Mahkamov, K., Mullen, D., Halimic, E., & Lynn, K. (2019). COMPARATIVE STUDY OF TWO TYPES OF MEDIUM TEMPERATURE PHASE CHANGE MATERIALS. WIT Transactions on Ecology and the Environment, 1, 37–49. https://doi.org/10.2495/esus190041.

Institutional Professional Development Activities in the last five years

- Improving the thermal energy storage of buildings in Jordan using phase change material composites, Ministry of Higher Education & Scientific ResearchUSD 100,000.
- Improving the thermal energy storage of buildings in Jordan using phase change materials composites, The Ministry of Higher Education and Scientific Research, 2024, 100000 $.
- Preparation and characterization of phase change materials for use as innovative construction materials- Amman Arab university- 2023, 56338$.
- Design and built the latent thermal energy storage system for waste energy-Amman Arab university-2021, 60000$
- Thermal management of power electronics to control their performance using air- Amman Arab university- 2021, 35714$.

Research link (Scopus and Google Scholar)

- https://www.scopus.com/authid/detail.uri?authorId=57224830333
- https://scholar.google.com/citations?user=0ee3tilAAAAJ&hl=en

Languages

- Arabic
- English