

Dr. Abdullah A Faqihi

Academic Rank

Assistant Professor



Education

- Jun 2022 - PhD - Industrial and System Engineering, Newcastle University, Newcastle, UK.
- August 2015 - M.S - Science in Engineering Management & Systems, University of Dayton-Dayton, Ohio USA.
- May 2010 - B.S - Industrial Engineering, Jazan University -Jazan, Kingdom of Saudi Arabia.

Academic Experience

- Assistant Professor (2023 – Till now), Department of Industrial Engineering, College of Engineering and Computer Science, Jazan University, Kingdom of Saudi Arabia – Full-time.
- Lecturer (2015–2023), Department of Industrial Engineering, College of Engineering and Computer Science, Jazan University, Kingdom of Saudi Arabia – Full-time.
- Teaching Assistant (2010–2015), Department of Industrial Engineering, College of Engineering and Computer Science, Jazan University, Kingdom of Saudi Arabia – Full-time.

Certifications or Professional Registrations

- International Conference on Advanced Manufacturing Technology and Processes. London, UK.2020
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- The International Exhibition and Conference on Higher Education, Riyadh, Saudi Arabia, 2017
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- The International Exhibition and Conference on Higher Education, Riyadh, Saudi Arabia,2011.
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- Participated in the African Conference on Industrial and Applied Mathematics, South Africa (ACIAM 2024).

Current Membership in Professional Organizations

- Representative of the Industrial Engineering Department on the Laboratory Committee, College of Engineering and Computer Science. (2023- 2025).

Honors and Awards

- Awarded a full scholarship by Jazan University to pursue a master's degree in the United States (2011).
- Awarded a full scholarship by Jazan University to pursue PhD program in the United Kingdom (2017).

Research Accounts

- 1- Alharbi, S. O., Abbas, M., Elhag, A. B., Faqihi, A. A., & Akgül, A. (2025). Computational analysis of Yamada–Ota and Xue models for surface tension gradient impact on radiative 3D flow of trihybrid nanofluid with Soret–Dufour effects. *Microfluidics and Nanofluidics*, 29(2), 4.
- 2- Mahariq, I., Abbas, M., Fatima, N., Akgül, A., & Faqihi, A. A. (2025). Significance of melting phenomena on Darcy–Forchheimer flow of trihybrid nanofluid over a disk in the presence of thermophoresis particles deposition. *Multiscale and Multidisciplinary Modeling, Experiments and Design*, 8(1), 1-17.
- 3- Al-Shammari, Hammad, Zia Ullah, Y. M. Mahrous, Musaad S. Aldhabani, Mohamed Ahmed Said, Saleh Al Arni, Abdullah A. Faqihi, and Nidhal Ben Khedher. "Arrhenius activation energy and thermal radiation effects on oscillatory heat-mass transfer of Darcy Forchheimer nanofluid along heat generating cone." *Case Studies in Thermal Engineering* 57 (2024): 104294.
- 4- Ahmad, H., Alnahdi, A. S., Bilal, M., Daher Albalwi, M., & Faqihi, A. A. (2024). Energy and mass transmission through hybrid nanofluid flow passing over a spinning sphere with magnetic effect and heat source/sink. *Nanotechnology Reviews*, 13(1), 20230194.
- 5- Galal, A. M., Mabrouk, A., Liaqat, S., Rashid, R. F., Abbas, M., Ching, D. L. C., ... & Khan, I. (2025). Radiation effects on thermo-bioconvection flow of trihybrid nanofluid through an inclined rotating disk with applications of the Cattaneo-Christov flux model. *Journal of Radiation Research and Applied Sciences*, 18(1), 101293.
- 6- Abbas, M., Al-Zubaidi, A., Faqihi, A. A., Khan, I., Aljohani, A. F., Ome, A. S., & Gala, A. M. (2025). Elastic deformation impact on trihybrid nanofluid flow through different geometries with the combine effects of electrophoresis and thermophoresis. *Ain Shams Engineering Journal*, 16(1), 103172.
- 7- Almheidat, M., Ullah, Z., Said, M. A., Hussien, M., Al Arni, S., Alsulami, M. D., ... & Faqihi, A. A. (2024). Turbulent and non-turbulent analysis of thermomagnetic convection and heat transfer of darcian radiative nanofluid flow across inclined stretching surface in microgravity environment. *Case Studies in Thermal Engineering*, 60, 104812.

- 8- Alameer, A., Eladeb, A., Ameen, H. F. M., Fatima, N., Abbas, M., Khan, Y., ... & Galal, A. M. (2025). Estimation of induction effects on electrophoresis and thermophoresis particles deposition in radiative flow of trihybrid nanofluid across cylinder. *Journal of Radiation Research and Applied Sciences*, 18(1), 101222.
- 9- Galal, A. M., Mabrouk, A., Ameen, H. F. M., Abbas, M., Ching, D. L. C., Sajjad, M. S., ... & Khan, I. (2025). Optimizing flow and heat transfer in industrial processes: The potential of trihybrid nanofluid and thermal-radiation using Hamilton-Crosser and Xue models. *Journal of Radiation Research and Applied Sciences*, 18(1), 101322.
- 10- Faiz, Z., Rahman, A., Abbas, M., Fatima, N., Gómez-Aguilar, J. F., Muhammad, T., & Faqihi, A. A. (2024). Computational analysis to explore the significance of magnetic field on hybrid nanofluid in a circular cavity with embedded heated fin. *Physica Scripta*, 100(1), 015039.
- 11- Khedher, N. B., Ullah, Z., Mahrous, Y. M., Dhahbi, S., Ahmad, S., Abu-Zinadah, H., & Faqihi, A. A. (2024). Viscous dissipation effect on amplitude and oscillating frequency of heat transfer and electromagnetic waves of magnetic driven fluid flow along the horizontal circular cylinder. *Case Studies in Thermal Engineering*, 55, 104142.
- 12- Mirza, Cyrus Raza, Munawar Abbas, Sahar Ahmed Idris, Y. Khan, A. Alameer, Adnan Burhan Rajab, Saidjon Ismailov, Abdullah A. Faqihi, Ansar Abbas, and Nidhal Ben Khedher. "Intelligent computing technique to analyze the two-phase flow of dusty trihybrid nanofluid with Cattaneo-Christov heat flux model using Levenberg-Marquardt Neural-Networks." *Case Studies in Thermal Engineering* 68 (2025): 105891.
- 13- Abbas, M., Alotaibi, H., Muhammad, T., Gómez-Aguilar, J. F., Faqihi, A. A., Jari, H. A., & Altherwi, A. A. (2024). Significance of Marangoni convection and heat generation on Darcy Forchheimer 3D flow of Maxwell (AA 7072+ AA 7075-CH 3 OH) hybrid nanofluid over a rotating disk. *Journal of Thermal Analysis and Calorimetry*, 1-15.
- 14- Boukholda, Ismail, Zia Ullah, Y. M. Mahrous, Ahmed Alamer, Mouldi Ben Amara, M. D. Alsulami, Abdullah A. Faqihi, and Nidhal Ben Khedher. "Analysis of thermal density and heat sink on dissipative nanofluid along magnetized sheet and applications in microelectronic cooling systems." *Case Studies in Thermal Engineering* 55 (2024): 104185.
- 15- Ullah, Z., Alam, M. M., Younis, J., Haider, I., Alqurashi, M. S., Abu-Zinadah, H., ... & Faqihi, A. A. (2024). Entropy optimization of MHD second-grade nanofluid thermal transmission along stretched sheet with variable density and thermal-concentration slip effects. *Case Studies in Thermal Engineering*, 63, 105288.
- 16- Ullah, Z., Alam, M. M., Tariq, U., Mahrous, Y. M., Merga, F. E., Albouchi, F., ... & Faqihi, A. A. (2024). Variable density and heat generation impact on chemically reactive carreau nanofluid heat-mass transfer over stretching sheet with convective heat condition. *Case Studies in Thermal Engineering*, 63, 105260.

- 17- Abbas, M., Faqihi, A. A., Khan, I., Salah, F., Abushaega, M. M., Altherwi, A. A., & Shafique, M. (2025). Three-dimensional radiative flow of tetra-hybrid nanofluid via oil rig solar panel sheet with catalysis reaction using Yamad-Ota and Hamilton-Crosser models. *Journal of Radiation Research and Applied Sciences*, 18(1), 101279.
- 18- Mirza, Cyrus Raza, Zia Ullah, A. Dahshan, Md Mahbub Alam, Khadijah M. Abualnaja, Hanaa Abu-Zinadah, Abdullah A. Faqihi, and Nidhal Ben Khedher. "Steady and periodical heat-mass transfer behavior of mixed convection nanofluid with reduced gravity, radiation and activation energy effects." *Case Studies in Thermal Engineering* 63 (2024): 105376.
- 19- Ishaq, M., Ashraf, M. B., Ashraf, M. U., Alshehery, S., Faqihi, A. A., & Hadidi, H. M. (2025). Artificial neural network-based study of entropy optimization in Johnson-Segalman nanofluids through a peristaltic channel. *Physics of Fluids*, 37(3).
- 20- Galal, Ahmed M., Ali Akgül, Sahar Ahmed Idris, Shaira Formanova, Talib K. Ibrahim, Murad Khan Hassani, Abdullah A. Faqihi, Munawar Abbas, and Ibrahim Mahariq. "The performance evolution of Xue and Yamada-Ota models for local thermal non equilibrium effects on 3D radiative casson trihybrid nanofluid." *Scientific Reports* 15, no. 1 (2025): 7325.
- 21- Ben Khedher, N., Ullah, Z., Boujelbene, M., Makinde, O. D., Faqihi, A. A., Aljohani, A. F., ... & Khan, I. (2024). Variable viscosity and activation energy aspects in convection heat transfer over gravity driven solar collector plate for thermal energy storage. *Scientific Reports*, 14(1), 27239.
- 22- Shewakh, W. M., Faqihi, A. A., & Ibrahim, R. A. (2024). NATURAL OILS AS AN ECO-FRIENDLY LUBRICANT FOR MACHINING OPERATIONS, A REVIEW. *Journal of the Egyptian Society of Tribology*, 21(1), 78-90.
- 23- Faqihi, A. A., Keegan, N., Šiller, L., & Hedley, J. (2023). Effect of Ambient Environment on Laser Reduction of Graphene Oxide for Applications in Electrochemical Sensing. *Sensors*, 23(18), 8002.
- 24- Faqihi, A., & Hedley, J. (2021). Developing Manufacturing Process for the Graphene Sensors. *International Journal of Industrial and Manufacturing Engineering*, 15(172), 172.
- 25- Ullah, Z., Alam, M. M., Ilyas, A., Said, M. A., Abu-Zinadah, H., Alsulami, M. D., ... & Faqihi, A. A. (2025). Slip temperature oscillation, turbulent magnetic-radiation and heat frequency effects on unsteady nanofluid along horizontal stretching circular cylinder: Darcy-Forchheimer nonlinear model. *Chaos, Solitons & Fractals*, 196, 116432.
- 26- Mellouli, S., Alqahtani, T., Algarni, S., Faqihi, A. A., Alshammari, B. M., & Kolsi, L. (2025). Optimal configuration of a solar-powered Organic Rankine Cycle power plant utilizing thermochemical energy storage. *Case Studies in Thermal Engineering*, 65, 105632.

- 27- Galal, A. M., Salah, F., Eladeb, A., Ameen, H. F. M., Abbas, M., Faqihi, A. A., ... & Ghazi, H. M. (2025). The influence of thermal radiation on two-phase flow of ternary hybrid nanofluid with thermophoretic particle deposition and Stephen blowing effect. *Journal of Radiation Research and Applied Sciences*, 18(2), 101440.
- 28- Galal, A. M., Khan, I., Abbas, M., Faqihi, A. A., & Sajjad, M. S. (2025). Thermal radiation and local thermal non-equilibrium effects on MHD chemical reactive flow of tetra hybrid nanofluid with velocity slip conditions. *Journal of Radiation Research and Applied Sciences*, 18(2), 101405.
- 29- Mahariq, Ibrahim, Riadh Marzouki, Hawzhen Fateh M. Ameen, Munawar Abbas, Barno Abdullaeva, Maawiya Ould Sidi, Abdullah A. Faqihi, Ali Akgül, and Ahmed M. Galal. "Thermophoretic particle deposition in thermo-bioconvection flow of diamond-SiC-Co₃O₄/water-based trihybrid nanofluid with oxytactic and gyrotactic microorganisms: biotechnological applications." *Journal of Thermal Analysis and Calorimetry* (2025): 1-15.
- 30- Galal, Ahmed M., Munawar Abbas, Rifaqat Ali, Shaxnoza Saydaxmetova, Talib K. Ibrahim, Zeshan Faiz, Abdullah A. Faqihi, and Abdulhadi A. Altherwi. "Thermal and solutal convective flow of propylene glycol-based tetra-hybrid nanofluid with elastic deformation and Stefan blowing impacts: application to thermal energy." *Journal of Thermal Analysis and Calorimetry* (2025): 1-15.
- 31- Benaissa, Mhamed, Zia Ullah, A. Dahshan, Md Mahbub Alam, Khadijah M. Abualnaja, Hanaa Abu-Zinadah, Abdullah A. Faqihi, and Nidhal Ben Khedher. "Heat and mass transfer performance of power-law nanofluid flow with thermal radiation and joule heating aspects: Surface heat flux analysis." *Case Studies in Thermal Engineering* 67 (2025): 105843.
- 32- Bouzgarrou, F., Mellouli, S., & Faqihi, A. A. (2024). Analytical Modeling of Filling Times for Metal Hydride–Hydrogen Storage Tanks With and Without Heat Reaction Recovery. *Energies*, 18(1), 54.
- 33- Khan, S. U., Altanji, M., Jari, H. A., & Faqihi, A. A. (2024). Stability analysis of the stochastic Grey-Scott model using spectral method. *Mathematical Methods in the Applied Sciences*, 47(18), 13601-13620.
- 34- Mirza, Cyrus Raza, Zia Ullah, A. Dahshan, Md Mahbub Alam, Khadijah M. Abualnaja, Hanaa Abu-Zinadah, Abdullah A. Faqihi, and Nidhal Ben Khedher. "Steady and periodical heat-mass transfer behavior of mixed convection nanofluid with reduced gravity, radiation and activation energy effects." *Case Studies in Thermal Engineering* 63 (2024): 105376.
- 35- Qahiti, R., Alsafri, N. M. A., Zogan, H., & Faqihi, A. A. (2024). Kink soliton solution of integrable Kairat-X equation via two integration algorithms. *AIMS Mathematics*, 9(11), 30153-30173.
- 36- Elmarud, S. E., Khamaj, A., Faqihi, A. A., & Samy, A. M. Enhancing Safety and Slip Resistance of Epoxy Flooring Materials through the Reuse of Aluminum Machining Chips.

- **Google Scholar:** <https://scholar.google.com/citations?user=RBFtc-sAAAAJ&hl=en>
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Recent Development Activities