

Hussein Razzaq Al-Bugharbee

حسين رزاق صباح مشحوت البوغربي

Assistant Professor

CONTACT

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EDUCATION

(26-10-2016) دكتوراه
Applied Mechanics
Strathclyde University

RESEARCH METRICS

h-index (Scopus)	13
h-index (GS)	13
Citations (Scopus)	1006
Citations (GS)	1429
Documents (Scopus)	49
Documents (GS)	56

RESEARCH INTERESTS

- Condition Monitoring
- Fault Diagnosis
- Machine Learning

ACADEMIC TITLES

2020-04-20 Assistant Professor

TEACHING EXPERIENCE

Assistant Professor
Wasit University-Mechanical Engineering Department
2006-08 - Present

COURSES

- Strength of Materials
- Data analytics and Machine Learning
- Research Methodology

GRADUATE SUPERVISION

Employing an Intelligent Vibration-Based Methodology for Rolling Bearing Faults Diagnosis
Mohammed Muter Thijeel (2026)

ADMINISTRATIVE POSITIONS

2018-07-18 - 2025-02-10 Dean Assistant of Scientific Affairs

PUBLICATIONS (26)

1. Streamflow Simulation Based on Pre-Processing-Based Hybrid Model: SSA-AR Model
   Water Resources Management 40, 314, 2026 | 2026
2. Predicting Temperatures in an Extreme Climatic Environment Using Hybrid Neural Networks: Evaluating Noise Robustness
   Civil Engineering Journal | 2026
3. Bearing condition monitroing: A review of feature extraction in temporal and spectral, and joint temporal-spectraldomain
   Diagnostyka, 1-17, 2026 | 2026
4. Experimental Investigation of the Passive Way Performance on Portable Home Generator Noise
   Journal of Engineering and Sustainable Development 30 (1), 75-82, 2026 | 2026
5. Numerical Investigation on the Performance of Shell and Tube Heat Exchanger With Different Porous Baffles Configurations
   Heat Transfer, 2026 | 2026
6. A computational fluid dynamics based study of the thermal hydraulic performance of shell and tube heat exchanger integrated with metal foam
   Advances in Science and Technology. Research Journal 20 (6), 2026 | 2026 | Cited: 1

7. **Intelligent Diagnosis of Bearing Faults Using Feature Selection Based on Minimum Redundancy Maximum Relevance and Neural Network Optimization with Particle Swarm Method**
Wasit Journal of Engineering Sciences | 2026

8. **Studying the influence of using metal foam baffles on the performance of double-pipe heat exchanger**
Journal of Thermal Engineering 11 (1), 196-214, 2025 | 2025 | Cited: 5

9. **A Numerical Investigation of the Thermal Performance of a Double Pipe Heat Exchanger with Copper Foam Baffles**
International Journal of Renewable Energy Research (IJRER) 15 (3), 461-469, 2025 | 2025 | Cited: 2

10. **Forecasting urban water demand using different hybrid-based metaheuristic algorithms' inspire for extracting artificial neural network hyperparameters**
Scientific Reports 14 (1), 24042, 2024 | 2024 | Cited: 15

11. **Metaheuristic algorithms applied in ANN salinity modelling**
Results in Engineering 23, 102541, 2024 | 2024 | Cited: 8

12. **Assessing the benefits of nature-inspired algorithms for the parameterization of ANN in the prediction of water demand**
Journal of Water Resources Planning and Management 149 (1), 04022075, 2023 | 2023 | Cited: 30

13. **Diagnosis of air compressor condition using minimum redundancy maximum relevance (MRMR) algorithm and distance metric based classification**
Diagnostyka 22 (4), 25-32, 2021 | 2021 | Cited: 6

14. **A new audio signal-based methodology for fault detection in gears**
Journal of Mechanical Engineering Research and Developments | 2020 | Cited: 1

15. **Short-term water demand prediction in residential complexes: Case study in Columbia city, USA**
Proceedings - International Conference on Developments in eSystems Engineering, DeSE | 2019 | Cited: 44

16. **The prediction of municipal water demand in Iraq: a case study of Baghdad governorate**
2019 12th International Conference on Developments in eSystems Engineering ..., 2019 | 2019 | Cited: 99

17. **Transient response of rotor system under different startup speed profiles**
Journal of Mechanical Engineering Research and Developments | 2019 | Cited: 5

18. **A Novel approach for predicting monthly water demand by combining singular spectrum analysis with neural networks**
Journal of hydrology 561, 136-145, 2018 | 2018 | Cited: 126

19. **An experimental investigation of free convection heat transfer rate enhancement of rectangular fins with circular perforations**
International Conference on Advances in Sustainable Engineering and Applications, ICASEA 2018 - Proceedings | 2018

20. **Data-driven methods for vibration-based monitoring based on singular spectrum analysis**
Vibration-Based Techniques for Damage Detection and Localization in ..., 2018 | 2018 | Cited: 5

21. **Vibration-based damage detection of structural joints in presence of uncertainty**
MATEC Web of Conferences | 2018

22. **A cointegration-based monitoring method for rolling bearings working in time-varying operational conditions**
Meccanica 52 (4), 1201-1217, 2017 | 2017 | Cited: 42

23. **A fault diagnosis methodology for rolling element bearings based on advanced signal pretreatment and autoregressive modelling**
Journal of Sound and Vibration 369, 246-265, 2016 | 2016 | Cited: 115

24. **Autoregressive modelling for rolling element bearing fault diagnosis**
Journal of Physics: Conference Series 628 (1), 012088, 2015 | 2015 | Cited: 12

25. **Fault diagnosis in roller element bearings by using a linear autoregressive model**
the 26th International Conference on Noise and Vibration Engineering, 2765-76, 2014 | 2014 | Cited: 3

26. **Vibration-based health monitoring approach for composite structures using multivariate statistical analysis**
Proceedings of EWSHM-7th European workshop on structural health monitoring ..., 2014 | 2014 | Cited: 5