Dr. Osama A. A. Hassin

2026



21 Janzour, Tripoli, **Libya** | +218924909304 |
osama.hassin@academy.edu.ly

| EDUCATION

PhD, University of Huddersfield | UK (2013-2018)

- Computing and Engineering school
- Topic ‘‘Condition Monitoring of Journal Bearings for Predictive Maintenance Management based on High Frequency Vibration Analysis’’.

MSc, University Kebangsaan Malaysia (UKM) | Malaysia (2005-2007)

- Mechanical and Material department
- Topic ‘‘Simulation of Crack Paths in Linear Elastic Fracture Models’’.

BEng.Sc, Faculty of Engineering | University of Tripoli | Tripoli-Libya (1995-2000)

- Mechanical and Industrial department
- Topic ‘‘Planning and Designing the Maintenance Program of Agriculture Tracks Factory’’.

| PERSONAL STATEMENT

Self-motivated, enthusiastic and committed industry, mechanical, material and industrial experience engineer, project supervision, consultancy, evaluation, researching and proficient in quickly learning and excelling in new technologies as required. I am a researcher to develop on-line and off-line condition-based-maintenance. My experience in research in condition monitoring, fault diagnostic, crack and fracture material, mechanical applied problems, signal processing engineering, machine learning (AI), and maintenance strategies. Addition of research experience, I have held full time lectureship position and reviewed, lectured and tutored a wide range of courses and programing. thus, I’d like to share my enthusiasm and training with the users in this foundation. Able of developing and writing computing programmers in Word, excel, power point, Solidworks, Fortran, Matlab, AutoCAD, ANSYS, SPSS, Minitab, Project Professional Management and experience in learning and excelling at new technologies as needed.

| EDUCATIONAL EXPERIENCE

- Associate Professor | Mechanical and Energies Department | School of Applied Sciences and Engineering | Libyan Academy for Paostgraduated studies, Libya | Jun, 1st 2021– Present
- Lecture & Researcher | Libyan Academy for Paostgraduated studies, Libya | Jun, 1st 2021– Present
- Lecturer & Researcher | Mechanical and Industrial Engineering Department | engineering collage | Ghryan University, Libya | Sep. 2009 – May 31st, 2021

| MANAGEMENT EXPERIENCE

- Director of International Cooperation Office (ICO) at Libyan Academy for Paostgraduated studies since 2025.
- Director of Entrepreneurship and Innovation Center at Libyan Academy since 2021-2025.

- Director of Planning and Development Department at Libyan Academy since 1/2023-3/2024.
- Serving on faculty and other committees at Libyan Academy since 2021.

| PROFESSIONAL ACHIEVEMENTS

- TOT American Board ID 2491AEL, 2023.
- SMB Entrepreneurship certificate, 2022.
- Professional project management diploma from Nottingham Global Academy, 2022, No 1870.
- Project management certificate from course at University of Huddersfield, 2015.
- TAPP certificate from University of Huddersfield, 2016.
- Methods of evaluating projects certificate from course at University of Huddersfield, 2016.

| RESEARCH INTEREST

Investigating advanced techniques for **condition monitoring** in industrial systems, **renewable systems** and exploring **machine learning** algorithms to enhance **predictive maintenance**. Studying the root causes of vibration and its impact on system reliability and developing strategies to mitigate vibration in Industrial field. Evaluating our current maintenance processes and identifying areas for improvement and proposing enhancements to optimize maintenance efficiency. Investigating material **fractures** and **fatigue** failure mechanisms and analyzing data to improve component durability. Also supervised Co_2 caputure and storage management thesis's.

| SELECTED PUBLICATION

- A Review of Generalized Demodulation for Fault Diagnosis in Rotating Machinery. In The Unified International Conference on Emerging Technologies in Cyber-Physical Systems and Industrial AI, pp. 775-786. Cham: Springer Nature Switzerland, 2025.
- Study on the Spatiotemporal Vibration Transmission in Planetary Gearboxes Based on Rigid-Flexible Coupling Simulation. In The Unified International Conference on Emerging Technologies in Cyber-Physical Systems and Industrial AI, pp. 1163-1175. Cham: Springer Nature Switzerland, 2025.
- Mitigating Resonant Vibration via Compressor Base Frame redesign at Souq Al-Khamis Cement Factory, Libya (Part II). Academy journal for Basic and Applied Sciences (AJBAS). Volume 7, issue 1,2025.
- Diagnosis of High Vibration Causes at the Screw Air Compressor Base Frame in Souq Al-Khamis Cement Factory (Part I). LICASE II, ISTJ, 29-30 October 2024, Libya.
- Aerodynamic Analysis of HAWT using Blade Element Method and Q-Blade Software. Sebha University Conference, 16-17 October 2024, Libya.

| CAPABILITIES

- Motivate personnel to high performance standards and excellence.
- Team management inspiring trust, fostering collaboration and boosting entrepreneur morale to improve creativity and productivity rates.
- Active person in some civil society organizations and volunteer work.

- Have experience in learning and excelling at new technologies and computing program as needed.

| FINAL STATEMENT

I am a dedicated and passionate academic professional with over 15 years of experience in mechanical, industrial and management engineering. My commitment to fostering innovation, enhancing educational experiences, artificial intelligence implementations, and bridging the gap between academia and industry. I am eager to contribute my expertise and collaborate with like-minded professionals to advance research initiatives and support the development of future engineers and entrepreneurs.

Dr. Osama Hassin _ 2026