



RESUME: Eeman Assadeg AIHAMMADI

Address: Tripoli University, Faculty of Agriculture, Tripoli, Libya.

P.O.B.: 13404 Tripoli University, Libya

Tel. No.: Mob: (218) -0923212654 ; 0920655711

Email: emanbensaeed@gmail.com

Education: 1994 / 1995 **B.Sc.** Soil and water. Faculty of Agriculture,
Tripoli University.

1998/2003 postgraduate student and teaching assistant

2003/2017 MA in Soil Science and Water; Assistant Lecturer.

2023/ PH.d. Environmental Technology, Environmental Pollution Control Technology .
Faculty of Forestry and Environment, Universiti Putra Malaysia

Teaching Experience: 2015–2023 Assistant professor

2007-2015 Lecturer

2003-2007 Assistant Lecturer

Courses Taught: Soil Microbiology.

Aquatic Microbiology

Basics of Soil Science.

General Microbiology.

Activities :

2003–present: Participation in microbiological studies and analyses of drinking water, groundwater and surface water for students, individuals and public institutions.

Teaching courses in the field of microbiological analysis of water for employees and engineers in sanitation sewage plants at the Academy of Graduate Studies, Janzoor, and public institutions.

Participating in the 4th Forum for Women in Research " QUWA: Sustaining Women's Empowerment in Research and Innovation" 30-31 August 2023.

Research interests:

Study of environmental pollutants, their effects and behavior in different environments, focusing on green technology to combat environmental pollution, including biological control, bioremediation of pollutants, and the study of extremophile microorganisms and their activities in natural environments, and potential applications to counteract pollution.

Shared Research:

July 2005: Study quality organic fertilizer produced from municipal solid waste plants (Swani) (compost).

2006: Study the effect of sewage on the chemical and biological properties of seawater.

July 2007: Studying the effect of increasing additions of organic fertilizer on nitrogen mineralization and soil microbial biomass.

2013: Trace mineral nitrogen rate and biomass in a mixture of soil and organic fertilizer (poultry waste).

Published Papers :

E, Alhammadi. (2014). Identification the impact of growth of different plants on the microbial community in both soil and rhizosphere. *Assiut Journal of Agricultural Sciences*, 45(5), 90-102. doi: 10.21608/ajas.2015.3524

E, Alhammadi. (2014). Isolation and identification of bacteria prevailing in contaminated soils with oil and its derivatives and usability for the consumption of hydrocarbons. (2014).

Annals of Agricultural Science, Moshtohor, 52(3), 433-450. doi: 10.21608/assjm.2014.111882.

E, Alhammadi. (2014). Biodegradation, ability of bacterial isolates prevailing in contaminated soils with oil derivatives. (2014). *Annals of Agricultural Science, Moshtohor*, 52(3), 407-418. doi: 10.21608/assjm.2014.111879

E, Alhammadi. (2014). Factors influencing biodegradation of oil hydrocarbons by bacterial isolates prevailing in contaminated soils. (2014). *Annals of Agricultural Science, Moshtohor*, 52(3), 419-432. doi: 10.21608/assjm.2014.111880

E, Alhammadi. (2015). Study the effect of insecticides commonly used locally on the bacteria of economic importance in the soil. *Assiut University Bulletin for Environmental Researches*, 18.1(18.1), 29-42. doi: 10.21608/auber.2015.146110

E, Alhammadi. (2015). Study the effect of pesticides commonly used locally on the biomass and activity in the soil. *Assiut University Bulletin for Environmental Researches*, 18.1(18.1), 43-54. doi: 10.21608/auber.2015.146111

Alhammadi, E., Halimoon, N., Zulkeflee, Z., Lutfi Wan Johari, W.L., (2023). Study of respiratory metabolism for multimetal tolerant bacteria under metallic stress, *Journal of Wildlife and Biodiversity*, 7 (Special Issue), 547-575. DOI: <https://doi.org/10.5281/zenodo.10268356>

Alhammadi, E., Halimoon, N., Johari, W.L.W. *et al.* Potentially applicable bioremediation mechanisms for metal-tolerant bacteria from industrial waste electroplating. *Int. J. Environ. Sci. Technol.* (2023). <https://doi.org/10.1007/s13762-023-05313-w>

E., Alhammadi, N. . Halimoon, Z. . Zulkeflee, and W. L. W. . Johari, “Study of Some Physiological Activities for Multimetal Tolerant Bacteria Under Metallic Stress”, *ijmst*, vol. 10, no. 2, pp. 3976-3993, Jul. 2023. DOI: <https://doi.org/10.15379/ijmst.v10i2.3296>

Alhammadi, E., Halimoon, N., Zulkeflee, Z., Lutfi Wan Johari, W.L., (2023). Evaluation of metal resistance, uptake capacity, and metal toxicity reduction by multimetal- resistant bacteria as bioremediation agent for heavy metals. *Atomic spectroscopy*, 2024,45(1): 48-59.

Elhamrouni ,I., Yusoff Ishak, M., Kadhum, S.A., W.L.W., Halimoon, N., Jaber, S.M, Alhammadi, E. (2025). Optimization and modeling of used engine oil hydrocarbons degradation by *Ochrobacterium intermedium* LMG 3301 using response surface methodology. *Total Environment Advances*, 13(12):200121. <https://doi.org/10.1016/j.teadva.2025.200121>.

Alhammadi, E.; Halimoon, N.; Zulkeflee, Z.; Johari, W. L. W. The Co-Biosorption Possibility of Single and Quaternary Heavy Metals by Multi-Metal-Tolerant Bacteria Isolated from Electroplating Effluents. *Fine Chemical Engineering* **2025**, 6(2), 211-249. <https://doi.org/10.37256/fce.6220256530>

Elhamrouni, I., Alhammadi, E. & Ishak, M.Y. Study on biodegradation of used engine oil in a stirred batch bioreactor by *ochrobactrum intermedium* and *Bacillus paramycoides* isolates. *Sci Rep* 15, 36707 (2025). <https://doi.org/10.1038/s41598-025-20748-6>

Elhamrouni, Ei. A., Alhammadi, E. A., Ishak, M. Y., Wan Johari, W. L., & Halimoon, N. (2026). Comparison study of used engine oil (UEO) biodegradation by free cell and immobilized cells of *Ochrobacterium intermedium* LMG 3301 and *Ochrobacterium intermedium* LMG 3301 plus *Bacillus paramycoides* MCCC1A04098 in shake flask. *Bioremediation Journal*, 1–26. <https://doi.org/10.1080/10889868.2026.2636104>

The submitted papers for publication:

Alhammadi, E., Halimoon, N., Zulkeflee, Z., Lutfi Wan Johari, W.L., (2025). A review of the effect of metallic stress on the functional activities of bacteria and the extent of their possible physiological responses.

Elhamrouni, I., Alhammadi, E., Ishak, M. (2025). Ex-situ bioremediation study of used engine oil (UEO) by freeze dried *Ochrobacterium intermedium* LMG 3301 and *Ochrobacterium intermedium* LMG 3301 plus *Bacillus paramycoides* MCCC1A04098 in soil microcosm.

Elhamrouni, I., Alhammadi, E., Ishak, M. (2026). Designed Bio-Interface for Sustainable Cleanup: Enhanced Biokinetics and Factorial Design of AAC-Immobilized *Ochrobactrum intermedium* and *Bacillus paramycoides* Consortium for Used Engine Oil Remediation