



1. Curriculum Vitae Personal Details

Field	Information
Full Name	Hamza Mohamed Flafel حمزه محمد ميلود فليفل
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Address	Sabratha, Libya
Academic degree	Assistant professor
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2. Research IDs

Google Scholar:

https://scholar.google.com/citations?view_op=search_authors&mauthors=HAMZA+MOHAMED+Flafel&hl=en&oi=ao

Scopus ID: 58983844600

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3. Education and Qualifications

Degree/Level	Institution	Dates	Field/Specialization
Doctor of Philosophy	Universiti Sains Malaysia (USM)	2022–2025	Field: Environmental Technology
Masters of Science	Malaysia University of Science and Technology (MUST), Malaysia	2015–2016	Energy and Environment
Bachelor of Biology (Zoology)	Zawya University, Libya	2006–2009	Biology (Zoology)

4. Professional Experience and Activities

Role/Activity	Organization/Event	Dates	Notes
Research Projects	National Medical Research Center, Zawiyah, Libya	2010	Participated in various research projects
Presenter	IIPC 2016 Conference	27–28 July 2016 in Malaysia	Conference Presenter
Presenter	ICDI 2016 Conference	24–25 September 2016 in Malaysia	Conference Presenter
Presenter	5th Euro- Mediterranean Conference (EMCED), Italy	2–5 Oct 2023 in Italy	Conference Presenter
Research Projects	Biotechnology Research Center	28 Jan 2018 – 30 July 2019	Published one research paper
Participation in Conference Papers	ICDI 2016, Malaysia	2016	Participated in 2 papers
Branch Manager	Studies and Research Center for Environment and Technology	01 Aug 2019 – Present	Managing environmental research projects
Workshop Organizer	Sabratha City Solid Waste Landfills	26 June 2022	Organized workshop
Workshop Organizer	Environmental Pollution on Cultural Heritage of Sabratha	9 August 2022	Organized workshop
Founder	Libyan Center for Environmental Studies and Research		
Participating faculty member	Brak-ALShati University/ Libya	Until now	
Founder	Libyan Center for Research of Water, Soil, & Desertification		
Reviewer	Scientific Reports Journal		
Reviewer	Solar Energy & Sustainable Development Journal		

5. Publications in Scopus and web of sciences

Citation

1. **Flafel, H. M.**, Rafatullah, M., Lalung, J., Kapoor, R. T., Siddiqui, M. R., & Qutob, M. (2024). Removal of 2, 4-dichlorophenoxyacetic acid through nitrogen

doped modified palm kernel shell from aqueous solutions. *Journal of Molecular Liquids*, 401, 124754.

2. **Flafel, H. M.**, Rafatullah, M., Lalung, J., Kapoor, R. T., Siddiqui, M. R., & Qutob, M. (2024). Enhancing the efficiency of phytoremediation using water hyacinth (*Eichhornia crassipes*) for 2, 4-dichlorophenoxyacetic acid removal with modified biochar as an assisted agent. *Chemosphere*, 367, 143591.
3. **Flafel, H. M.**, Rafatullah, M., Lalung, J., Al-Sodies, S., Alshubramy, M. A., & Hussein, M. A. (2024). Unveiling the hazards: comprehensive assessment of paraquat herbicide's toxicity and health effects. *Euro-Mediterranean Journal for Environmental Integration*, 1-21.
4. **Flafel, H. M.**, Rafatullah, M., Lalung, J., Kapoor, R. T., Siddiqui, M. R., Alam, M., & Qutob, M. (2024). Melamine-nitrogenated mesoporous biochar derived from palm kernel shells for diuron adsorption in contaminated water. *Water, Air, & Soil Pollution*, 235(6), 358.
5. **Flafel, H. M.**, Rafatullah, M., Lalung, J., Kapoor, R. T., Alam, M., Siddiqui, M. R., & Qutob, M. (2025). Melamine-assisted synthesis of mesoporous biochar from palm kernel shells for enhanced paraquat removal from aqueous solutions. *Journal of Environmental Chemical Engineering*, 13(1), 115285.
6. **Flafel, H. M.**, Rafatullah, M., Lalung, J., Kapoor, R. T., Siddiqui, M. R., & Qutob, M. (2024). A novel combination of wetland plants (*Eichhornia crassipes*) and biochar derived from palm kernel shells modified with melamine for the removal of paraquat from aqueous medium: A green and sustainable approach. *International Journal of Phytoremediation*, 26(14), 2378-2391.
7. **Flafel, H. M.**, Rafatullah, M., Lalung, J., Kapoor, R. T., Siddiqui, M. R., Khan, M. A., & Qutob, M. (2024). Production of Biochar from Marine Algae and Its Use in the Treatment of Industrial Effluent. In *Multidisciplinary Applications of Marine Resources: A Step towards Green and Sustainable Future* (pp. 321-336). Singapore: Springer Nature Singapore.
8. Akhtar, N., **Flafel, H. M.**, Ezhani, A. A. A., Giurma, A. A., Ismail, A. F., Febriana, A., ... & Ahmed, S. (2024). Evaluation of toxic heavy metal concentration in aquifer system for groundwater system development using multivariate statistical techniques. *GLOBAL NEST JOURNAL*, 26(3).
9. **Flafel, H. M.**, Kaebah, A., Fadel, M., & Annejjar, A. T. (2020). Drinking water quality of some commercial water purification systems at sabratha area, Libya. *Libyan Journal of Ecological, Environmental Science and Technology*, 2, 1-5.
10. **Flafel, H. M.**, Kaebah, A., Fadel, M., & Annejjar, A. T. (2020). Drinking water quality of some commercial water purification systems at sabratha area, Libya. *Libyan Journal of Ecological, Environmental Science and Technology*, 2, 1-5.
11. Qutob, M., Rafatullah, M., & **Flafel, H. M.** (2025). Advancement into the integration of chemical oxidation and bioremediation for the removal of hydrocarbon-contaminated soil. *Journal of Environmental Chemical Engineering*, 116846.
12. Akhtar, N., Azamzam, A. A., Tweib, S. A., **Flafel, H. M.**, Wijaya, D., Bouida, L., ... & Abbas, M. (2025). A framework for addressing water-rock interaction (WRI) for sustainable water resources development using various simulation models. *Environment, Development and Sustainability*, 1-71.
13. **Flafel, H. M.**, Rafatullah, M., Lalung, J., Kapoor, R. T., Siddiqui, M. R., Alam, M., &

- Qutob, M. (2025). Enhanced phytoremediation of diuron in aqueous solutions using melamine-modified palm kernel shell biochar and water hyacinth (*Eichhornia crassipes*). *Journal of Water Process Engineering*, 80, 109133.
14. Akhtar, N., Ismail, A. F., Hanafiah, M. M., Fadzil, S. B. M., Muhammad, S. A., Ahmed, T., & Flafel, H. M. (2025). Bridging Malaysian thorium processing and sustainable environmental policy with life cycle assessment. *Discover Sustainability*, 6(1), 1241.
 15. Akhtar, N., Ismail, A. F., Hanafiah, M. M., Fadzil, S. B. M., Muhammad, S. A., Ahmed, T., & Flafel, H. M. (2025). Bridging Malaysian thorium processing and sustainable environmental policy with life cycle assessment. *Discover Sustainability*, 6(1), 1241.
 16. Akhtar, N., Muhammad, S. A., Syakir, M. I., Flafel, H. M., Husain, P., Park, S., ... & Alam, S. (2025). Water-Energy Nexus: Integrating Hydrochemical Characterization and Life Cycle Assessment for a Holistic Profile of Agricultural Groundwater Sustainability. *Energy Nexus*, 100616.
 17. Akhtar, N., Azamzam, A. A., Tweib, S. A., Flafel, H. M., Wijaya, D., Boudia, L., ... & Abbas, M. (2025). A framework for addressing water-rock interaction (WRI) for sustainable water resources development using various simulation models: Review: N. Akhtar et al. *Environment, Development and Sustainability*, 1-71.

References

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