

Prof. Haitham M.S. Lababidi

1. Name & Contact Information

Name: **Haitham M.S. Lababidi**
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2. Education

Degree	Discipline	Institution	Year
Ph.D.	Chemical Engineering	The University of Leeds, UK	1991
M.Sc.	Chemical Engineering	The University of Leeds, UK	1986
B.Sc.	Chemical Engineering	King Saud University, Saudi Arabia	1985

3. Academic Experience

Institution	Designation	Year/Period
Kuwait University	Professor	2005-present
Kuwait University	Associate Professor	1998-2005
Kuwait University	Assistant Professor	1993-1998
Edinburgh University, Scotland, UK	Postdoc Research Fellow	1991-1993

4. Non-Academic Experience

Organization	Designation	Year/Period	FT/PT
Kuwait University	Acting Assistant Vice President for Strategic Planning	March 2023-Present	FT
Kuwait University	Acting Assistant Vice President for Institutional Development	March 2023-Present	FT
Kuwait University	Director, Research Office, College of Eng. & Petroleum	2016-2018	PT
Kuwait University	Assistant Vice President for Research	2007-2015	FT
Kuwait University	Director, Research Implementation & Finance	2007-2015	PT

5. Membership in Professional Organizations:

- Member of Lebanese Society of Engineers
- Member of American Institute of Chemical Engineers (AIChE)
- Affiliate Member of the Institution of Chemical Engineers (IChemE)
- Member of American Chemical Society (ACS)
- Member of Kuwait University Faculty Association (KUFA)
- Member of Kuwait University Social Security Fund (KUSSF)

6. Service Activities (within and outside of the institution) (Most recent):

- Chairman, Academic Journals Accreditation Committee, KU, 2016-2021.
- Chairman, Industrial Advisory Board, American University of Kuwait, 2017-present.
- Member, College Promotion & Appointment Committee, CEP, 2019-2022.
- Chairman, Undergraduate Program Committee, Chem. Eng. Dept., 2020-2023.
- Chairman, Systems and Process Control Engineering Graduate Program, College of Engineering & Petroleum, KU (2016/2017-present).
- Director, Chemical Engineering Graduate Program, KU, 2016-2020.
- Member, Downstream R&D/TM Strategic Portfolio Management Committee, Kuwait National Petroleum (KNPC), 2015 – 2017.

7. Publications

- Fawaz S. Al-Anzi, Haitham M. S. Lababidi, Ghanima Al-Sharrah, Suad A. Al-Radwan, Ho Joon Seo, Plant health index as an anomaly detection tool for oil refinery processes, *Scientific Reports*, 12:14477 (2022) <https://doi.org/10.1038/s41598-022-18824-2>.
- Mustapha Nourelfath, Haitham M.S. Lababidi, and Tariq Aldowaisan, Socio-economic impacts of strategic oil and gas megaprojects: A case study in Kuwait, *Int. J. Production Economics* 246 (2022) 108416.
- AlHumaidan, F. S., M.S. Rana, H.M.S. Lababidi, and A. Hauser, (2020) Pyrolysis of Asphaltenes Derived from Residual Oils and Their Thermally Treated Pitch, *ACS Omega*, 5, 38, 24412-24421.
- AlHumaidan, F.S., M.S. Rana, N.J. Tanoli, H.M.S. Lababidi, and N.A. Al-Najdi, (2020) Changes in asphaltene surface topography with thermal treatment, *Arabian Journal of Chemistry*, 13(5), 5377-5389.
- Chow, A.C., W. Verbruggen, R. Morelissen, Y. Al-Osairi, P. Ponnumani, H.M.S. Lababidi, B. Al-Anzi, and E.E. Adams, (2019) Numerical Prediction of Background Buildup of Salinity Due to Desalination Brine Discharges into the Northern Arabian Gulf, *Water*, 11, 2284.
- H. Sojoudi, S.K. Nemani, K.M. Mullin, M.G. Wilson, H. Aladwani, H. Lababidi, K.K. Gleason, (2019) Micro-/Nanoscale Approach for Studying Scale Formation and Developing Scale-Resistant Surfaces, *ACS Applied Materials & Interfaces*, 11, 7330-7337.
- Zhao, J., M. Wang, H.M.S. Lababidi, H. Al-Adwani, K.K. Gleason, (2018) A review of heterogeneous nucleation of calcium carbonate and control strategies for scale formation in multi-stage flash (MSF) desalination plants, *Desalination*, 442, 75-88.
- AlHumaidan, F.S., A. Hauser, M.S. Rana, H.M.S. Lababidi, (2017) NMR Characterization of Asphaltene Derived from Residual Oils and their Thermal Decomposition, *Energy & Fuels*, 31 (4), 3812–3820.
- Al-Sharrah, G., H.M.S. Lababidi, Y. I. Ali, (2016) Planning a Supply Chain with Risk and Environmental Objectives, *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 10 (8), 2661-2665.
- Al-Sharrah, G., H.M.S. Lababidi, B. Al-Anzi, (2016) Environmental ranking of desalination plants: the case of the Arabian Gulf, *Toxicological & Environmental Chemistry*, 1-17, 2016, Published online: 09. 2016.
- Ebrahim, A.S., A.A. Garrouch, H.M.S. Lababidi, (2016) A Structured Approach to the Diagnosis of Formation Damage Caused by Organic Scale Deposits and Surface-Active

Agents, Part I: Development of a Diagnostic Process, *Journal of Petroleum Science and Engineering*, 138, 234-244.

- Ebrahim, A.S., A.A. Garrouch, H.M.S. Lababidi, (2016) A Structured Approach for the Diagnosis of Formation Damage Caused by Organic Scale Deposits and Surface-Active Agents, Part II: Expert System Development, *Journal of Petroleum Science and Engineering*, 138, 245-252.
- AlHumaidan, F.S., A. Hauser, M.S. Rana, H.M.S. Lababidi, (2016) Impact of Thermal Treatment on Asphaltene Functional Groups, *Energy & Fuels*, 30 (4), 2892–2903.
- AlHumaidan, F.S., A. Hauser, M.S. Rana, H.M.S. Lababidi, M. Behbehani, (2015) Changes in asphaltene structure during thermal cracking of residual oils: XRD study, *Fuel*, 150, 558-564.

Conference Papers/Presentations

- Elghool, A., Al-Sharrah, G., Lababidi, H.M.S., “Multi-Objective Sustainable Supply Chain Optimization of the Petroleum Industry in Kuwait”, 8th International Congress on Sustainability Science & Engineering, ICOSSE '19, July 1-3, 2019, Kuala Lumpur, Malaysia.
- Al-Sharrah, G., Lababidi, H.M.S. (Presenter), “Sustainability in Desalination Plants: Indicators and Weight Evaluation”, IChemE: International Sustainable Production and Consumption Conference, 4-5 October 2018, Manchester UK.
- Al-Sharrah, G., Lababidi, H.M.S., “Dependent Indicators for Environmental Evaluation of Desalination Plants”, 12th International Conference on Partial Orders in Applied Sciences, Towards an Understanding of Complex Phenomenon: Applying Partial Order Theory to Multi-Indicator Systems, 26-28 October 2018, Neuchatel, Switzerland.
- Thomas, J. Fernandes, B. Al-Anzi, H. M.S. Lababidi, " Application of PRO for assessing power generation from wastewater treatment plant in the state of Kuwait" The 2nd Kuwait International Conference on Life Sciences (KICLS 2016).
- Garrouch, A.A., A. Ebrahim, H.M.S. Lababidi, Automating sandstone acidizing using a rule-based system, Oral presentation at the World Congress on Petrochemistry and Chemical Engineering, Atlanta, Georgia, USA, November 30-December 2, 2015.
- Lababidi, H.M.S., M.A. Halabi, O. Al-Sayegh, Energy Efficiency Opportunities in Oil and Gas industries, 10th Conference on Sustainable Development of Energy, Water and Environment Systems, sedewes-2015, Dubrovnik, Croatia, 27th Sept. – 2nd Oct. 2015.

8. Funded Research

- Lab Evaluation of Polymer Flooding. Feasibility Study of Mass Production of HPAM Polymers in Kuwait, Co-Investigator, Project # KOC01/21, KD 189,815 (USD 625,180), KOC MRA, 2022, Ongoing.
- Characterization and Mobility Modeling as a Means of Stimulation Treatment Design for the Complex Makhul Carbonate Reservoir, Co-Investigator, Project # KOC03/23, KD 161,250 (USD 532,125), KOC MRA, 2023, Ongoing
- Addressing the socio-economic impacts of the COVID-19 pandemic on Kuwait State, Co-Investigator, Project # CORONA PROP. 37, KD 6,300 (USD 20,750), KFAS, 2020.
- Next Generation Brine Desalination and Management for Efficiency, Reliability and Sustainability, Co-Investigator, Project # P31475EC01, KD 386,128 (USD 1,375,000), External Signature Project, MIT-Center, KFAS, 2015-2017.

9. Supervised Thesis

- Sultan K. Dwier, “A New Dimensionally Consistent Model for Polymer Viscosity Based on Deep Learning”, MSc Thesis, Co-Supervisor, June 2023.
- Abdulwahab Bin Naser, “Assessment of Refinery capabilities for Meeting Ultra Low Sulfur Diesel Specification”, MSc Thesis, Supervisor, May 2023.
- Ruqayyah H. Hussain, “Accelerated testing for iCVD coated surfaces”, MSc Thesis, Supervisor, 2021.
- Fatma Adnan Al-Hussain, “Artificial Intelligence Model for Predicting the Fouling in SWRO Plant”, MSc Thesis, Co-Supervisor, 2023.
- Wadhha Alhajri, “Numerical simulation for the influence of surface geometry modification on efficiency of ED/ICP desalination systems”, Thesis, Supervisor, On Hold.
- Abdelrahman A. Refaie, “A Hybrid Framework Combining Data-Driven and Physics-Based Model for Prediction of Electrolyte Transport Properties for Lithium-Ion Batteries”, MSc Thesis, Co-Supervisor, April 2021.
- Safiah B. Al-Muqhawi, "Testing Nanofiltration Membranes for Pretreatment", MSc Thesis, Supervisor, March 2021.
- Abdulmohsen H.A. Hasan, “Modelling the Liquid Rate for Wells Completed with An Electrical Submersible Pump Using Machine Learning Techniques”, MSc Thesis, Co-Supervisor, March 2021.
- Maryam F. Al-Dousari, “Characterization of Microcrystalline Wax in Heavy Residues”. MSc Thesis, Supervisor, Sept. 2020.
- Abdulaziz Al-Rashidi, “Decision-Making of Laboratory's Problems in DEPS”, MSc Project, Dec. 2020.
- Aya M.H. Elghool, “Multi-objective Sustainable Supply Chain Optimization of the Petroleum Industry in Kuwait”, MSc Thesis, Supervisor, Nov. 2019.
- Ali M. Alostath, “Economic Impacts of Plastic Waste”, MSc Project, Dec. 2018.

10. Consultations

- Team Member, Feasibility of Establishing a National Digital Library in Kuwait, KFAS, June 2021, Ongoing.
- Team Member, Impact of KNPC Mega Projects Locally and Internationally – Clean Fuel Project (CFP) & Al-Zour Refinery (ZOR), Kuwait National Petroleum Company (KNPC), 2015-2017.