# Nawaf Salem Alhajeri Professor

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## **EDUCATION**

# **University of Texas at Austin**

Ph.D. – Environmental Engineering, June 2012.

Major field: Environmental and Water Resources Engineering.

Diss. title: Sustainable Energy Systems: The Environmental Footprints of Electricity Generation Systems – Mechanisms for Managing Electricity, Water Resources and Air Quality.

# **University of Texas at Austin**

M.S.E.- Environmental and Water Resources Engineering, May 2010.

Thesis title: Assessing the Sustainability of Transportation Fuels: The Air Quality Impacts of Petroleum, Bio and Electrically Powered Vehicles.

A Grade Point Average (GPA) of 4.0

## **Kuwait University**

M.Ch.E.—Chemical Engineering, January 2008.

#### **Kuwait University**

B.S.E. – Chemical Engineering, August 2005. Distinction with class of honors.

#### PROFESSIONAL EXPERIENCE

- Professor, College of Life Sciences, Kuwait University, March 2025 Present.
- Acting Dean, College of Life Sciences, Kuwait University, December 2022 Feb. 2025.
- Vice Dean for Planning, Consulting and Training, College of Life Sciences, Kuwait University, August 2020 August 2024.
- Associate Professor, Department of Environmental Technology Management (ETM), College of Life Sciences, Kuwait University, July 2020 March 2025.
- Assistant Professor, Department of Environmental Technology Management (ETM), College of Life Sciences, Kuwait University, July 2012 July 2020.
- **Kuwait University Scholarship**, Department of Environmental Technology Management (ETM), (Master's and Ph.D.), Kuwait University, August 2008 June 2012.
- Safety Engineer, Office of Vice Dean for Planning & Career Development, College for Women, Kuwait University, August 2005 – May 2008.

#### **Consultant:**

- United Nations Environment Programme (UNEP). November 2022 present.
- Ministry of Electricity, Water and Renewable Energy. 2020 2022.

#### **Area of Expertise:**

- Green Hydrogen production, Biochar recovery
- Water-energy-food nexus
- Wastewater detoxification
- Environmental biotechnology
- Sustainable water treatment
- Energy and Environmental Engineering
- Environmental Sustainability
- Air Quality Modelling

#### **Technical Interests:**

- Renewable Energy
- Sustainable Energy Systems
- GHG emissions and Climate Change
- Atmospheric Chemistry and Ambient Air Quality Modeling
- Indoor Air Quality
- Human Exposure to toxins in indoor environments

## **PUBLICATIONS (Peer-reviewed articles)**

- 1. Tawfik, A., **Alhajeri, N.S.** and Nasr, M., 2025. Integrated waste-to-energy process for hazardous landfill leachate valorization: economic profits related to sustainability and environmental assessment. *Biochemical Engineering Journal*, p.109797. (Q2, IF=3.7)
- 2. **Alhajeri, N.S.,** Tawfik, A., Al-Fadhli, F.M. and Nasr, M., 2024. Enhancing hydrogen production and biochar recovery from algal biomass: A novel techno-economic synergism with gelatinous digestate. *Journal of Water Process Engineering*, 61, p.105270. (Q1, IF=7.0)
- 3. Al-Fadhli, F.M., **Alhajeri, N.S.,** Ettouney, H., Sholapurmath, R., Holtzapple, M. and El-Halwagi, M.M., 2024. Optimal capacity planning for power cogeneration and desalination plants with renewable energy integration. *Clean Technologies and Environmental Policy*, pp.1-18. **(Q2, IF=4.3)**
- 4. **Alhajeri, N.S.,** Tawfik, A., Elsamadony, M., Al-Fadhli, F.M. and Meng, F., 2024. Synergistic Algal/Bacterial Interaction in Membrane Bioreactor for Detoxification of 1, 2-Dichloroethane-Rich Petroleum Wastewater. *Journal of Hazardous Materials*, p.134125. **(Q1, IF=13.6)**
- 5. **Alhajeri, N. S.,** Al-Fadhli, F. M., Deshpande, A. A., & El-Halwagi, M. M. (2024). Optimization of water-energy-food nexus via an integrated system of solar-assisted desalination and farming. *Journal of Cleaner Production*, 434, 140362. (Q1, IF=11.1)
- 6. **Alhajeri, N. S.,** & Tawfik, A. (2024). Integrating biochar and microbial community for detoxification of wastewater industry containing analgesics. *Journal of Water Process Engineering*, 58, 104767. **(Q1, IF=7.0)**
- 7. Al-Fadhli, F.M., **Alhajeri, N.S.**, Ettouney, H., Sholapurmath, R., Holtzapple, M. and El-Halwagi, M.M., 2024. Optimal capacity planning for power cogeneration and desalination plants with renewable energy integration. *Clean Technologies and Environmental Policy*, pp.1-18. **(Q2, IF=4.2)**
- 8. Tawfik, A., **Alhajeri, N.S.**, Elsamadony, M. and Meng, F., 2024. Mitigation of Pharmaceutical Wastewater Toxicity in Anaerobic Reactors Using Metal-Modified Biochar. *ACS ES&T Engineering*. 2024, 4, 12, 2987–3000. **(Q1, IF=7.5)**
- 9. **Alhajeri, N. S,** Tawfik, A., Nasr, M., Osman, A. (2024). Artificial intelligence-enabled optimization of Fe/Zn biochar photocatalyst for 2,6-dichlorophenol removal from petrochemical wastewater: A techno-economic perspective. *Chemosphere*, 141476. **(Q1, IF=8.8)**

- 10. Tawfik, A., **Alhajeri, N.S.**, Elsamadony, M. and Meng, F., 2024. Mitigation of Pharmaceutical Wastewater Toxicity in Anaerobic Reactors Using Metal-Modified Biochar. *ACS ES&T Engineering*. **(Q1, IF=7.5)**
- 11. Yassin, M.F., Al-Qabandi, O.A. and **Alhajeri**, **N.S.**, 2024. Potential health risks of inhaling hazardous chemical exposures at fuel stations: a pilot study in a hot, arid environment. *Journal of Environmental Science and Health, Part A*, pp.1-11. **(Q3, IF=1.9)**
- 12. **Alhajeri, N. S.,** Alrashidi, A. M., Yassin, M. F., & Al-Awadi, L. (2024). Optimizing Indoor Air Quality: Investigating Particulate Matter Exposure in Household Kitchens and Source Identification. *Environmental Quality Management*, 34, e22198. **(Q3, IF=1.5)**
- 13. Tawfik, A., **Alhajeri, N.S.** and Nasr, M., 2024. Synergistic interaction of biochar, Phragmites australis, and rhizosphere microorganisms for enhanced 1, 4-dioxane biodegradation. *Journal of Water Process Engineering*, 66, p.105964. **(Q1, IF=7.0)**
- 14. Alshawaf, M. and **Alhajeri, N.S.**, 2024. Renewable energy-driven desalination for sustainable water production in the Middle East. *International Journal of Sustainable Engineering*, 17(1), pp.19-29. **(Q3, IF=3.6)**
- 15. **Alhajeri, N.S.,** Al-Fadhli, F.M., Aly, A. and Allen, D.T. (2024). Quantifying the impact of urban road traffic on air quality: activity pre-pandemic and during partial and full lockdowns. *Environmental Monitoring and Assessment*, 196(5), p.418. (Q3, IF=3.0)
- 16. **Alhajeri, N.S.,** Al-Fadhli, F.M. and Aly, A.Z. (2024). Impact of COVID-19 Lockdowns on NOx Emissions: A Sector-Specific Analysis of Transportation and Power Generation. *Journal of Engineering Research*. (Q4, IF=1.0)
- 17. Al-Fadhli, F.M., **Alhajeri, N.S.**, Osman, A.I. and Tawfik, A., 2024. Enhancing hydrogen production from oily sludge: A novel approach using household waste digestate to overcome mono-ethylene glycol inhibition. *International Journal of Hydrogen Energy*. **(Q1, IF=7.2)**
- 18. Alotaibi, M., **Alhajeri, N.S.**, Al-Fadhli, F.M., Al Jabri, S. and Gabr, M., (2023). Impact of climate change on crop irrigation requirements in arid regions. *Water Resources Management*, 37(5), pp.1965-1984. (Q1, IF=4.3)
- 19. Al-Fadhli, F.M., **Alhajeri, N.S.**, Sholapurmath, R., Ettouney, H., Sengupta, D., Holtzapple, M. and El-Halwagi, M.M., (2023). Optimizing cogeneration and desalination plants by incorporating solar energy. *Desalination*, *549*, p.116320. **(Q1, IF=9.9)**
- 20. **Alhajeri, N.S.**, Eraky, M., Qyyum, M.A. and Tawfik, A., (2022). Eco-friendly fermentation module for maximization of hydrogen harvesting from fatty restaurant waste diluted with grey water. *International Journal of Hydrogen Energy*. (Q1, IF=7.2)

- 21. Samy, M., Gar Alalm, M., Ezeldean, E., El-Dissouky, A., Badr, N.B., Al-Muhtaseb, A.A., **Alhajeri, N.S.**, Osman, A.I. and Tawfik, A., (2022). Solar-light-driven ZnO/biochar treatment of pesticides contaminated wastewater: A practical and computational study. *Energy Science & Engineering*, 10(12), pp.4708-4725. (Q3, IF=3.8)
- 22. Tawfik, A., Eraky, M., **Alhajeri, N.S.,** Osman, A.I. and Rooney, D.W., 2022. Cultivation of microalgae on liquid anaerobic digestate for depollution, biofuels and cosmetics: a review. *Environmental Chemistry Letters*, pp.1-26. **(Q1, IF=15.7)**
- 23. Tawfik, A., Mohsen, M., Ismail, S., **Alhajeri, N.S.**, Osman, A.I. and Rooney, D.W., 2022. Methods to alleviate the inhibition of sludge anaerobic digestion by emerging contaminants: a review. *Environmental Chemistry Letters*, pp.1-26. **(Q1, IF=15.7)**
- 24. Sarwer, A., Hamed, S.M., Osman, A.I., Jamil, F., Al-Muhtaseb, A.A.H., **Alhajeri, N.S**. and Rooney, D.W., (2022). Algal biomass valorization for biofuel production and carbon sequestration: a review. *Environmental Chemistry Letters*, pp.1-55. (Q1, IF=15.7)
- 25. Tawfik, A., El-Dissouky, A., **Alhajeri, N.S.,** Pant, D. and Khalil, T.E., (2022). Sulphonated graphene catalyst incorporation with sludge enhanced the microbial activities for biomethanization of crude rice straw. *Bioresource Technology*, p.127614. **(Q1, IF=11.4)**
- 26. Tawfik, A., Al-Sayed, A., Hassan, G.K., Nasr, M., El-Shafai, S.A., **Alhajeri, N.S.**, Hasan, M., Akhtar, M.S., Ahmad, Z., Rojas, P. and Sanz, J.L., (2022). Electron donor addition for stimulating the microbial degradation of 1, 4 dioxane by sequential batch membrane bioreactor: A techno-economic approach. *Chemosphere*, p.135580. (Q1, IF=8.8)
- 27. **Alhajeri, N.S.**, Al-Fadhli, F.M., Alshawaf, M. and Aly, A., (2022). An integrated framework for exploring the tradeoffs between cost-optimized fuel allocation and regional air quality impacts in a water-energy nexus infrastructure. *Environmental Science and Pollution Research*, pp.1-18. **(Q1, IF=5.8)**
- 28. Chaudhry, B., Akhtar, M.S., Ahmad, M., Munir, M., Zafar, M., **Alhajeri, N.S.**, Ala'a, H., Ahmad, Z., Hasan, M. and Bokhari, A., (2022). Membrane based reactors for sustainable treatment of Coronopus didymus L. by developing Iodine doped potassium oxide membrane under Dynamic conditions. *Chemosphere*, p.135138. (Q1, IF=8.8)
- 29. Al-Fadhli, F.M., **Alhajeri, N.,** Ettouney, H., Sengupta, D., Holtzapple, M. and El-Halwagi, M.M., (2022). Simultaneous optimization of power generation and desalination systems: a general approach with applications to Kuwait. *Clean Technologies and Environmental Policy*, pp.1-13. (**Q2**, **IF=4.3**)

- 30. Al-Fadhli, F.M., **Alhajeri, N.S.**, Aly, A.Z. and Alsulaili, A., (2022). Modeling the impact of reducing sulfur content of liquid fuels consumed by power plants on the air quality of Kuwait using AERMOD. *Journal of Engg. Research.* 10.36909/jer.17637. (Q4, IF=1.0)
- 31. Yassin, M.F., **Alhajeri, N.S.,** Elmi, A.A., Malek, M.J. and Shalash, M., (2021). Numerical simulation of gas dispersion from rooftop stacks on buildings in urban environments under changes in atmospheric thermal stability. *Environmental Monitoring and Assessment*, 193(1), pp.1-19. (Q3, IF=3.0)
- 32. Alshawaf, M., Poudineh, R. and **Alhajeri, N.S.**, (2020). Solar PV in Kuwait: The effect of ambient temperature and sandstorms on output variability and uncertainty. *Renewable and Sustainable Energy Reviews*, 134, p.110346. (Q1, IF=15.9)
- 33. **Alhajeri, N. S.**, Dannoun, M., Alrashed, A., & Aly, A. Z. (2019). Environmental and Economic Impacts of Increased Utilization of Natural Gas in the Electric Power Generation Sector: Evaluating the Benefits and Trade-offs of Fuel Switching. *Journal of Natural Gas Science and Engineering*, (71), 102969. **(O2, IF=3.8)**
- 34. Al-Fadhli, F. M., **Alhajeri, N. S.**, Aly, A. Z., & Allen, D. T. (2019). The impact of power plant emission variability and fuel switching on the air quality of Kuwait. *Science of The Total Environment*, 672, 593-603. (Q1, IF=6.5)
- 35. **Alhajeri, N. S.**, Al-Fadhli, F. M., Aly, A. Z., Reimers, A., & Webber, M. E. (2018). Electric Power System Profile in Kuwait: Electricity and Water Generation, Fuel Consumption and Cost Estimation. *ACS Sustainable Chemistry & Engineering*. 2018 6 (8), 10323-10334 DOI: 10.1021/acssuschemeng.8b01672. (Q1, IF=7.6)
- 36. **Alhajeri, N.S.**; Al-Fadhli, F.M.; Aly, A.Z. (2019) Unit-Based Emissions Inventory for Electric Power Systems in Kuwait: Current Status and Future Predictions. *Sustainability* 2019, 11, 5758. (Q2, IF=2.6)
- 37. **Alhajeri, N. S.**, Al-Fadhli, F. M., & Alrukaibi, D. S. (2019). In-vehicle exposure of carbon monoxide, nitrogen dioxide and total volatile organic compounds from ethanol versus gasoline fuel. *International Journal of Environmental Science and Technology*, 16(6), 2707-2720. (Q3, IF=2.5)
- 38. Al-Rashidi, M. S., Yassin, M. F., **Alhajeri, N. S.**, & Malek, M. J. (2018). Gaseous air pollution background estimation in urban, suburban, and rural environments. *Arabian Journal of Geosciences*, 11(3), 59. (Q4, IF=1.4)
- 39. Yassin, M.F., Almutairi, H., **Alhajeri, N. S.** et al. (2016). Assessment of noise exposure and associated health risk in school environment, *Int. J. Environ. Sci. Technol. August 2016, Volume 13, Issue 8, pp 2011–2024.* (Q2, IF=2.0)

- 40. Mohamed F. Yassin, **Nawaf S. Alhajeri** and Mohamed A. Kassem (2016). Polycyclic aromatic hydrocarbons collected from indoor built environments on heating, ventilation and air conditioning dust filters. *Indoor and Built Environment, Vol. 25(1) 137–150.* (Q3, IF=1.2)
- 41. Adam P Pacsi, **Nawaf S Alhajeri**, Mort D Webster, Michael E Webber and David T Allen (2013). Changing the spatial location of electricity generation to increase water availability in areas with drought: a feasibility study and quantification of air quality impacts in Texas. *Environmental Research Letters*, 8, 035029. (Q1, IF=3.9)
- 42. Pacsi, A.P., **Alhajeri, N.S.**, Zavala-Araiza, D., Webster, M.D., Allen, D.T. (2013). Regional air quality impacts of increased natural gas production and use in Texas. *Environmental Science and Technology* 47 (7). (Q1, IF=3.2)
- 43. **Alhajeri, N.S.**, McDonald-Buller, E.C., & Allen, D.T. (2011). Comparisons of air quality impacts of fleet electrification and increased use of biofuels. *Environmental Research Letters*, 6, 024011. **(Q1, IF=3.6)**
- 44. **Alhajeri, N.S.**, Donohoo, P., Stillwell, A.S., King, C.W., Webster, M.D., Webber, M.E., & Allen, D.T. (2011). Using market-based dispatching with environmental price signals to reduce emissions and water use at power plants in the Texas grid. *Environmental Research Letters*, 6, 044018. (Q1, IF=3.6)

## **PUBLICATIONS (Peer-reviewed Book Chapters)**

- 1. Ala'a Al-Muhtaseb; Farrukh Jamil; Ahmad Osman and **Nawaf Alhajeri**. (2023). Converting Agricultural Waste Biomass Into Value-added Fuels via Thermochemical Processes. Book Title: Agri-food Waste Valorisation. Edited by Pankaj Chowdhary; Abhay Raj. Volume 78. DOI: <a href="https://doi.org/10.1039/9781837670093">https://doi.org/10.1039/9781837670093</a>.
- 2. **Nawaf S. Alhajeri**, Zahrah Taqi, Yaqoub Almatouq and Khadeja Ashknani. (2024). Air Quality and Climate Change. Book Title: Kuwait's First State of the Environment Report. Kuwait Environment Public authority (KEPA) and Unted Nation Environment Program (UNEP). In Press.
- 3. **Nawaf S. Alhajeri**, Ahmed Tawfik, Mohamed Elsamadony and Fahad M. Al-Fadhli. (2024). Chapter Title: Moving Bed Biofilm. Book Title: Advanced Technologies in Wastewater Treatment: Municipal Wastewater Treatment. Editors: A. Basile, A. Cassano, and K. Ghasemzadeh. ISBN: 978-0-443-24826-9. Elsevier.
- 4. Ahmed Tawfik, **Nawaf S. Alhajeri**, Fahad M. Al-Fadhli, and Mohamed Elsamadony. (2024). Chapter Title: Membrane Aerated Biofilm Reactors. Book Title: Advanced Technologies in Wastewater Treatment: Municipal Wastewater Treatment. Editors: A. Basile, A. Cassano, and K. Ghasemzadeh. ISBN: 978-0-443-24826-9. Elsevier.

#### **CONFERENCE PAPERS**

- 1. Ahmed Tawfik and **Nawaf S. Alhajeri**. (2024). Tween 80@hydroxyapatite/graphene (T80@Hap/G)-nanosheets nexus for hydrogen maximization from fermentation of sewage sludge. Kuwait University's Scientific Research Conference 2024. 19-20 Feb. 2024.
- 2. **Nawaf S. Alhajeri** and Ahmed Tawfik. (2024). Enhancing Hydrogen Production from Chicken Manure Fermentation Using Fe-Ni-Graphene Nanocomposite: Boosting Circular Economy. Kuwait University's Scientific Research Conference 2024. 19-20 Feb. 2024.
- 3. **Nawaf S. Alhajeri** and Fahad M. Al-Fadhli. (2023). Integration of Solar Energy for Enhanced Efficiency of Cogeneration and Desalination Plants. 6<sup>th</sup> International Conference on Desalination using Membrane Technology. 19-22 November 2023 | Melia Sitges, Spain.
- 4. Fahad M. Al-Fadhli and **Nawaf S. Alhajeri** (2023). Simultaneous optimization of power generation and desalination systems: A comprehensive method with case study from Kuwait. 6<sup>th</sup> International Conference on Desalination using Membrane Technology. 19-22 November 2023 | Melia Sitges, Spain.
- 5. **Nawaf S. Alhajeri,** Fahad M. Al-Fadhli, Salem Al Jabri, Mohamed Elsayed Gabr. (2023). Management and treatment of brine solutions: A review. 4<sup>th</sup> International Conference for Membrane Technology & Its Applications. 28-29 August 2023, Egypt.
- 6. Mohamed Gabr, **Nawaf S. Alhajeri**, Fahad M. Al-Fadhli and Salem Al Jabri. (2023). Technologies for wastewater treatment in aquaponics and their sustainability: A review. 4<sup>th</sup> International Conference for Membrane Technology & Its Applications. 28-29 August 2023, Egypt.
- 7. **Nawaf S. Alhajeri,** Fahad M. Al-Fadhli and Mohamed E. Gabr. (2023). Approaches to Assess the Water–Energy-Food Nexus in Arid Regions: Trade-offs, and Co-benefits. Kuwait University Scientific Research Conference 2023 "Brining Sciences Together: Innovation & Sustainability. Kuwait University. 14-15 March 2023.
- 8. Maha Y. Alotaibi, **Nawaf S. Alhajeri** and Mohamed E. Gabr. (2023). Impact of climate change on crop irrigation requirements in arid regions. Kuwait University Scientific Research Conference 2023 "Brining Sciences Together: Innovation & Sustainability. Kuwait University. 14-15 March 2023.
- 9. Mohamed ELSayed Gabr, **Nawaf S. Alhajeri**, Salem Ali Al Jabri, Fahad M. Al-Fadhli. (2023) Water, Food, And Energy: A Nexus For Advancing Food Security And Sustainable Agriculture. Twenty-third International Water Technology Conference, IWTC23, Port Said, 9-11 March 2023, Egypt.

- 10. Mohamed ELSayed Gabr, **Nawaf S. Alhajeri**, Salem Ali Al Jabri, Fahad M. Al-Fadhli. (2023) Prospective and Challenges of Sustainable Water Resources for Irrigation in Kuwait. Twenty-third International Water Technology Conference, IWTC23, Port Said, 9-11 March 2023, Egypt.
- 11. **Nawaf S. Alhajeri,** Fahad M. Al-Fadhli, Ahmed Z. Aly. (2022). The Impact of Partial and Full Lockdowns of COVID-19 on Vehicular Traffic Flow, Transportation-Related Emissions and Concentrations in Kuwait. First Scientific Research Conference. Research Sector, Kuwait University. 8-9 March 2022.
- 12. **Nawaf S. Alhajeri**, Fahad M. Al-Fadhli, Ahmed Z. Aly. (2021). COVID19 Impact on Vehicular Emissions of Carbon Dioxide. Climate Change 2021 Conference: The Push to Carbon Neutrality, Adaptation, and Resiliency. Air and Waste Management Association Conference (AWMA). 1-2 December 2021.
- 13. **Nawaf Alhajeri**, Ahmed Alazemi, Ahmed Aly. (2021). The Transition to A Sustainable Energy System in Kuwait By 2040. 6<sup>th</sup> Green & Sustainable Chemistry Conference. 16-18 November 2021.
- 14. Alshawaf, M., Poudineh, R., & **Alhajeri, N. S.** (2018). Estimating the power output of photovoltaics in Kuwait using a Monte Carlo approach [Abstract]. 20th International Conference on Advanced Data Analytics for Energy, Environment, and Water, Istanbul, Turkey. <a href="https://publications.waset.org/abstracts/99078">https://publications.waset.org/abstracts/99078</a>
- 15. **Nawaf S. Alhajeri** and Ahmed Z. Aly. (2018). Optimizing the fuel mix to reduce NOx emissions from electric power systems. WEENTECH Proceedings in Energy 4 (2018) 227-235 (ICEEE10218). 3<sup>rd</sup> International conference on Energy, Environment and Economics (ICEEE2018), 14-16 August 2018. Heriot-Watt University. United Kingdom.
- 16. **Nawaf S. Alhajeri**, Ahmed Z. Aly, Fahad M. Al-Fadhli. (2018). Assessing the Impact of Adopting Electrically Powered Vehicles on Kuwait's Air Quality. (CITI2018\_0335). Urban Transitions 2018 Conference Integrating Urban and Transport Planning, Environment and Health for Healthier Urban Living. 25 27 November 2018 | Sitges, Barcelona Spain.
- 17. **Nawaf S. Alhajeri**, Fahad M. Al-Fadhli, Ahmed Z. Aly, Andrew Reimers, and Michael E. Webber. (2018). A Quantitative Assessment of Electric Power System Contributions to Atmospheric Pollutants In Kuwait. 11<sup>th</sup> International Conference On Sustainable Energy & Environmental Protection (SEEP100465) 8-11 May 2018. University of West Scotland. United Kingdom.
- 18. Ahmed Z. Aly, Fahad M. Al-Fadhli, **Nawaf S. Alhajeri**, Andrew Reimers, and Michael E. Webber. (2018). Impact of Power plants on the Ambient Air Quality of Kuwait. 11<sup>th</sup>

- International Conference On Sustainable Energy & Environmental Protection (SEEP) 8-11 May 2018. University of West Scotland. United Kingdom.
- 19. A. MohammedAli and **N.S. Alhajeri**. (2017). The Temporal and Spatial Variations of Atmospheric Pollutants in the Southern Region of Kuwait. Scientific Poster Day. Research Sector, Kuwait University. March 22, 2017.
- 20. B. Kh. Almutairi and and **N.S. Alhajeri**. (2017). Using Atmospheric Dispersion Modeling System to Assess the Environmental Impact of Az-Zour Power Station. Scientific Poster Day. Research Sector, Kuwait University. March 22, 2017.
- 21. Mohannad Dannoun, Abdallah Alrashed and N.S. Alhajeri. (2017). Emissions Assessment and Cost Analysis of Using Different Types of Fossil Fuels at Power Plants in Kuwait. Scientific Poster Day. Research Sector, Kuwait University. March 22, 2017.
- 22. O. Alqabandi, N. S. Alhajeri, M. F. Yassin, F. Al-Fadhli. (2016). Assessment of the Exposure to Volatile Organic Compounds (VOCs) in Service Stations in Kuwait. Second Kuwait International Conference on Life Sciences. April 4-6, 2016, Kuwait University, Kuwait.
- 23. B. Al-Khaldi, F. Al-Fadhli, N. S. Alhajeri, M. F.Yassin. (2016). Investigation of Volatile Organic Compounds Exposure and Health Hazard Risk Assessment in Beauty Salons in Kuwait. Second Kuwait International Conference on Life Sciences. April 4-6, 2016, Kuwait University, Kuwait.
- 24. A.Mahmoud, N. S. Alhajeri, M. F. Yassin, F. Al-Fadhli. (2016). Assessment of Air Quality and Pollution Sources in the Southern Region of Kuwait using Open Air R Model. Second Kuwait International Conference on Life Sciences. April 4-6, 2016, Kuwait University, Kuwait.
- 25. **Alhajeri, N.S.**, McDonald-Buller, E.C., & Allen, D.T. (2012). Impacts of Replacement of Gasoline and Diesel with Biofuels on Ozone Concentrations: A Central Texas Case Study. Air and Waste Management Association Conference (AWMA). Extended Abstract 2012-A-292-AWMA.
- 26. **Alhajeri, N.S.**, Donohoo, P., Webster, M.D., Webber, M.E., & Allen, D.T. (2012). The Effects of Market-Oriented Price Signals for NOx and CO<sub>2</sub> on Emissions at Power Generation System in the Texas Grid. Air and Waste Management Association Conference (AWMA). Extended Abstract 2012-A-317-AWMA.
- 27. Adam P Pacsi, **Nawaf S Alhajeri**, Elena C McDonald-Buller, Mort D Webster and David T Allen. (2012). The Impact of Market-Based Environmental Prices for Power Plant NOx Emissions on PM Formation in Texas. Air and Waste Management Association Conference (AWMA). Extended Abstract 2012-A-319-AWMA.

#### **GOVERNMENT REPORTS**

- 1. **Nawaf S. Alhajeri** and Fahad M. Al-Fadhli Sustainable Agriculture Using Solar Desalination: A Pathway to Food Security in the State of Kuwait. Kuwait Foundation for the Advancement of Science (KFAS) and Kuwait University (Project Code: CN19-35EM-05). Prepared for Kuwait Foundation for Advancement of Sciences (KFAS).
- 2. Fahad M Al-Fadhli, **Nawaf S. Alhjeri**, Hisham M. Ettouney, Mark Holtzapple and Mahmoud M. El-Halwagi. (2023). Optimization of Water-Energy-Food Nexus in Kuwait via an Integrated System of Solar-Assisted Desalination and Farming. Project Code: CN19-35EM-01 Prepared for Kuwait Foundation for Advancement of Sciences (KFAS).
- 3. **Nawaf S. Alhajeri**, Fahad M. Al-Fadhli, Ahmed Z. Aly. (2022). Modelling and Assessing the Impact of Kuwait's Lockdowns due to COVID-19 on Air Pollution. Kuwait Foundation for the Advancement of Science (KFAS)/Kuwait University (Project Code: PN20-15EV-01).
- 4. **Nawaf S. Alhajeri**, Fahad M. Al-Fadhli, Ahmed Z. Aly, Andrew Reimers, and Michael E. Webber. (2018). Approaches to Enhance the Sustainability of Energy Systems in Kuwait: Environmental Impact and Cost Estimation of Changing Fuels in Kuwait's Electricity Grid". Kuwait Foundation for the Advancement of Science (KFAS)/Kuwait University (Project Code: P214-42WE-02).
- 5. Murphy, CF, O'Donnell, M., **Alhajeri**, N., McDonald-Buller, E., Strank, S., Liu, MHP, Webber, M., Allen, D., Hebner, R. (2010). Analysis of Innovative Feedstock Sources and Production Technologies for Renewable Fuels. *EPA Project Number XA-83379501-0, Final Report, US Environmental Protection Agency: Austin, TX.*

#### REFEREE IN INTERNATIONAL JOURNALS:

- Environmental Science and Technology
- Water Resources Management
- International journal of Environmental Science and Technology
- ACS Sustainable Chemistry & Engineering
- International journal of Energy and Water Resources
- Journal of Engineering Research (JER)
- The Journal of the Air & Waste Management Association

#### **RESEARCH AND PROJECTS**

- September, 2025, Principal Investigator (PI). Transforming Organic Waste into Hydrogen and Biofertilizers: A Path to Sustainable Resource Recovery. Research Sector, Kuwait University, (Project Code: RF02/24), \$135,000
- September, 2025, Principal Investigator (PI). Bio-Desalination for Sustainable Water and Food Security in Kuwait. Research Sector, Kuwait University, (Project Code: RF04/24), \$186,000
- September, 2024, Co- Principal Investigator (Co-PI). Sustainable Technologies For Remediation Of landfill Leachate Containing Polychlorinated Biphenyls (PCBS). Research Sector, Kuwait University, (Project Code: FE03/24), \$12,000
- November, 2023, Principal Investigator (PI). Innovative approaches for Implementation of Minamata agreement in Kuwait state: Release, Recovery and Recycling of mercury (3R-Hg) from wastes. Under review, Submitted to Kuwait Environment Public Authority (KEPA), \$240,000
- October, 2023, Co- Principal Investigator. Potential Health Risks Associated with the Inhalation Ultrafine Particles in Indoor Environment. Kuwait Foundation for the Advancement of Science (KFAS) and Kuwait Institute for Scientific Research (KISR). (Project Code: PN22-43SE-1574), \$38,000
- June, 2023, Co- Principal Investigator. Health Risk of Highway Roads in the State of Kuwait: Noise and Air Pollutants. Kuwait Foundation for the Advancement of Science (KFAS) and Kuwait Institute for Scientific Research (KISR). (Project Code: PN22-44SE-1569), \$33,000
- February, 2021, Principal Investigator (PI). Sustainable Agriculture Using Solar Desalination: A Pathway to Food Security in the State of Kuwait. Kuwait Foundation for the Advancement of Science (KFAS) and Kuwait University (Project Code: CN19-35EM-05), \$107,000
- February, 2021, Principal Investigator (PI). Modelling and Assessing the Impact of Kuwait's Partial Lockdown Due to COVID-19 on Air Pollution. Kuwait Foundation for the Advancement of Science (KFAS) and Kuwait University (Project Code: PN20-15EV-01), \$25,000
- November, 2020, Co- Principal Investigator. Optimization of Water-Energy-Food Nexus in Kuwait Via an Integrated System of Solar-Assisted Desalination and Farming. Kuwait Foundation for the Advancement of Science (KFAS)/Kuwait University (Project Code: CN19-35EM-01), \$97,230
- August, 2018, "Air Quality Monitoring Citizens Sciences Project". Kuwait Foundation for the Advancement of Science (KFAS)/Kuwait University (Project Code: XK41-18).

- September, 2015: Principal Investigator (PI). "Approaches to Enhance the Sustainability of Energy Systems in Kuwait: Environmental Impact and Cost Estimation of Changing Fuels in Kuwait's Electricity Grid". Kuwait Foundation for the Advancement of Science (KFAS)/Kuwait University (Project Code: P214-42WE-02), \$390,000.
- April, 2014: Principal Investigator (PI). Research Initiation Grant (RIG), "Modelling the Air Quality impact of Az-Zour Power Station". Kuwait University, Project No. ZW05/14, \$6,500.
- September, 2009: Research Team, "Analysis of Innovative Feedstock Sources and Production Technologies for Renewable Fuels: Life Cycle Assessment (LCA) of Alternative Feedstocks for Production of Biodiesel and Ethanol Transportation Fuels, EPA Cooperative Agreement XA-83379501-0, \$600,000.
- September, 2008: Research Team, "The Interface of Infrastructures, Markets, and Natural Cycles—Innovative modeling and control mechanisms for managing electricity, water and air quality in Texas," U.S. National Science Foundation, Emerging Frontiers in Research and Innovation (EFRI), \$4,000,000.

#### **HONORS AND AWARDS**

- March 2025. Khalifa International Award for Date Palm and Agricultural Innovation. Pioneering Development and Productive Project. Abu Dhabi, United Arab Emirates.
- February 2024. Unfunded Research Incentive Reward (2024). Research: Alhajeri, N.S. and Tawfik, A., 2024. Integrating biochar and microbial community for detoxification of wastewater industry containing analgesics. Journal of Water Process Engineering. Research Sector, Kuwait University (KU).
- May 2023, Funded Research Incentive Reward (2023). Productivity Reward, Research: Sustainable Agriculture Using Solar Desalination: A Pathway to Food Security in the State of Kuwait. (Project Code: CN19-35EM-05). Kuwait Foundation for the Advancement of Science (KFAS) and Kuwait University (KU).
- March, 2023, 2<sup>nd</sup> Place award-winning poster
   – Faculty members, Kuwait University Scientific Research Conference 2023 "Brining Sciences Together: Innovation & Sustainability. Kuwait University. 14-15 March 2023.
- Funded Research Incentive Reward, Final Report Reward, (2019), Kuwait Foundation for the Advancement of Science (KFAS) and Kuwait University (KU).
- Funded Research Incentive Reward (2018), Productivity Reward, Kuwait Foundation for the Advancement of Science (KFAS) and Kuwait University (KU).
- Kuwait University incentive award for early completion of Master's and Ph.D. degrees, 2012.

- Kuwait University scholarship for Master's and Ph.D., 2008-2012.
- Distinguished Students List (2002, 2003, 2004 and 2005), Kuwait University.
- Certificate of Field Training (Honors Program 2005).
- Dean's List of Academic Distinction (2002, 2003, 2004 and 2005), Kuwait University.
- Most Outstanding Students List (2005), Kuwait University.
- Certificate of Academic Excellence (2004). Kuwait University.

#### **PROFESSIONAL PARTICIPATION**

- 1. August 2024, The International Conference on Environment and Sustainable Development (ESDCONF). University of London, London, **United Kingdom.**
- 2. February 2024. Kuwait University's Scientific Research Conference 2024. Kuwait Vision 2035: Technology, Creativity and Innovation. 19-20 Feb. 2024. Cultural Cenetr. **Kuwait**.
- 3. November 2023. The 6<sup>th</sup> International Conference on Desalination using Membrane Technology: Membrane Desalination. 19-22 November 2023 | Melia Sitges, **Spain**.
- 4. November 2022. The 39<sup>th</sup> International Conference under the theme "Climate and Environmental Changes and their Impact on Human and Social Security: Implications and Confrontation". 6-8 November 2022, **Kuwait**.
- 5. March 2023, Kuwait University Scientific Research Conference 2023 "Brining Sciences Together: Innovation & Sustainability. Kuwait University. 14-15 March 2023, **Kuwait**.
- 6. Febraury 2023, ESF Europe Energy & Sustainability Forum-Decaborbonising the Downstream Industry Conference, 19-23 Febraury 2023, **Netherlands**.
- 7. March 2022. 1<sup>st</sup> Scientific Research Conference. Research Sector, Kuwait University. 8-9 March 2022, **Kuwait**
- 8. December 2021. Climate Change 2021 Conference: The Push to Carbon Neutrality, Adaptation, and Resiliency. Air and Waste Management Association Conference (AWMA). 1-2 December 2021.
- 9. November 2021. 6<sup>th</sup> Green & Sustainable Chemistry Conference. 16-18 November 2021.
- 10. June 2021, ACM SIGCAS Conference on Computing and Sustainable Societies, ACM COMPASS 2021. Environment, Climate Change & Sustainability, June 28 to July 2, 2021. Virtual.
- 11. June 2021, Webinar: Modern Solutions Toward Sustainable Cities, Organized by Arab Union for Sustainable Development and Environment, **Virtual**.
- 12. March 2021, Air Quality Impact of Transportation Fleet in Kuwait: Gasoline vs. Electric Vehicles. Abdullah B. Aleidan and Nawaf S. Alhajeri. Scientific Posters Day, Kuwait University, **Kuwait**.

- 13. March 2021, Comprehensive Exam Committee, Environmental Sciences Joint Program, College of Graduate Studies, Kuwait University, **Kuwait**.
- 14. August 2020, Execution Committee for Examining Candidates for Supervisory Positions, Ministry of Electricity and Water (MEW), **Kuwait**.
- 15. December 2019, Judge, Engineering Design Exhibition 37, Engineering Training and Alumni Center (ETAC), College of Engineering and Petroluem, Kuwait University, **Kuwait.**
- 16. June 2019, Judge, Engineering Design Exhibition, Engineering Training and Alumni Center (ETAC), College of Engineering and Petroluem, Kuwait University, **Kuwait**.
- 17. April 2019, "Challenges in Developing Sustainable Infrastrecture, First International Conference", Kuwait, 23 25 April 2019, **Kuwait**.
- 18. April 2019, Working Group Workshop, Kuwait Municiplity and World Bank, Municipal Soild Waste Management Program, 22 23 April 2019, **Kuwait**.
- 19. March 2019, Working Group Workshop "Security Roadmap for West Asia and the Arabian Peninsula Environmental Issues and Climate Change" The Center for Applied Research in Partnership with the Orient (CARPO), and the Gulf Research Center Foundation (GRCF), 18 19 March 2019, Bonn, **Germany**.
- 20. November 2018, Urban Transitions 2018 Conference Integrating Urban and Transport Planning, Environment and Health for Healthier Urban Living. 25 27 November 2018 | Sitges, Barcelona **Spain**.
- 21. August 2018, 3<sup>rd</sup> International conference on Energy, Environment and Economics (ICEEE2018), 14-16 August 2018. Heriot-Watt University. **United Kingdom**.
- 22. May 2018, 11<sup>th</sup> International Conference on Sustainable Energy & Environmental Protection (SEEP) 8-11 May 2018. University of West Scotland. **United Kingdom**.
- 23. March 2018, Air Quality Impact of Petrochemical Systems in Kuwait. Fatemah M. Ajeel and Nawaf S. Alhajeri. Scientific Posters Day, **Kuwait University**.
- 24. Febraury 2018, GLOBAL HSE 2018: 6<sup>th</sup> International Conference and Exhibition on Health, Safety & Environment 2018, **Kuwait**
- 25. January 2018, Jury, 10<sup>th</sup> International Invention Fair in the Middle East (IIFME). Kuwait Science Club in collaboration with the International Exhibition of Inventions of Geneva, **Kuwait**.
- 26. April 2017, Judge, Fifth Kuwait Science and Engineering Competition (KSEC). Kuwait Science Club. Kuwait Foundation for the Advancement of Science (KFAS). **Kuwait**.
- 27. March 2017, Emissions Assessment and Cost Analysis of Using Different Types of Fossil Fuels at Power Plants in Kuwait. Mohannad Dannoun, Abdallah Alrashed and Nawaf S. Alhajeri. Scientific Posters Day, **Kuwait University**.
- 28. March 2017, The Temporal and Spatial Variations of Atmospheric Pollutants in the Southern Region of Kuwait. Anwar M. MohammedAli and Nawaf S. Alhajeri. Scientific Posters Day, **Kuwait University**.
- 29. March 2017, Using Atmospheric Dispersion Modeling System to Assess the Environmental Impact of Az-Zour Power Station. Bedour Kh. Almutairi and Nawaf S. Alhajeri. Scientific Posters Day, **Kuwait University**.

- 30. August 2016, 7 8<sup>th</sup>, 2016 IIER 84th International Conference on Natural Science and Environment (ICNSE), Zurich, **Switzerland**.
- 31. April 2016, Judge, Fourth Kuwait Science and Engineering Competition (KSEC). Kuwait Science Club. Kuwait Foundation for the Advancement of Science (KFAS). **Kuwait**.
- 32. April 2016, 4 6<sup>th</sup>, Second Kuwait International Conference on Life Sciences. Life Sciences for the Social Good. Kuwait University, **Kuwait**.
- 33. March 2016, Effects of Market-Oriented Price Signals for NOx and CO<sub>2</sub> on Emissions from the Power Generation System. Alhajeri N. and Allen D. Scientific Posters Day, **Kuwait University**.
- 34. March 2016, Energy and Environmental Discharges of Plastic, Recycled and Bio-Degradable Bags: An Environmental Perspective for the State of Kuwait. Althafeery E., Almunifi Sh. and Alhajeri N. Scientific Posters Day, **Kuwait University**.
- 35. February 2015, 24<sup>th</sup> Global Conference on Energy and Sustainable Development. Coventry University. **United Kingdom**.
- 36. April 2014, Session Chair. 1<sup>st</sup> Kuwait International Conference on Life Sciences. Towards Sustainable Society: Exploring connections of life sciences to society, **Kuwait**.
- 37. March 2014, 9<sup>th</sup> International Conference on Air Quality Science and Application. Garmisch-Partenkirchen, **Germany**.
- 38. September 2013, Member, College Council of 2013/2014, College for Women, Kuwait University.
- 39. June 2012, Speaker, "Session Title: Atmospheric Chemistry and Measurements Session". Air and Waste Management Association Conference, 2012, **United States of America (USA).**
- 40. June 2012, Speaker, "AIRM-FriAM1, Session Title: GHG emissions estimation". Air and Waste Management Association Conference, 2012, **United States of America (USA).**
- 41. January 2012, Intensive Course at Massachusetts Institute of Technology (MIT), Engineering Systems Division, "Electric Power System Model: PowerWorld Simulator", Boston, United States of America (USA).
- 42. March 2011, "Workshop on Policy Relevant Background Ozone Concentrations in the United States." The Center for Energy and Environmental Resources (CEER). Austin, TX, United States of America (USA).
- 43. February 2010, "EFRI RESIN: Infrastructures, Markets, and Natural Cycles: Managing Electricity, Water and Air Quality in Texas; Transformative Research in Resilient and Sustainable Infrastructures," National Science Foundation, Team Workshop, United States of America (USA).
- 44. December 2009, "The Interface of Infrastructures, Markets, and Natural Cycles: Innovative Modeling and Control Mechanisms for Managing Electricity, Water and Air Quality in Texas," National Science Foundation Team Presentations and Workshop, United States of America (USA).
- 45. January 2008, "Safety Team: Investigating Safety Systems at Kuwait University" Kuwait University, Team Meeting, Khaldeya Campus, **Kuwait**.

46. June 2005, Engineering Training Course, Veg. Oil Refining plant, Kuwait Flour Mills & Bakeries Company, **Kuwait**.

#### **INVITED LECTURES**

- June 2023, Speaker, "Air Quality and Climate Change", United Nation Environment Program (UNEP). Kingdom of Bahrain.
- March 2019, Speaker, "Environmental Issues and Climate Change in West Asia and the Arabian Peninsula". Center for Applied Research in Partnership with the Orient (CARPO). Bonn, Germany.
- December 2016, Speaker, "Protecting Costal Areas and Fish Resources", Ministry of Social Affairs and Labor, Kuwait.
- January 2015, Speaker, "Work Environment", Management Training and Development Sector, Kuwait University, Kuwait.
- May 2014, Speaker, "Exposure to Indoor Air Pollution", Civil Engineering Department, College of Engineering and Petroleum, Kuwait University.
- January 2013, Speaker, "Global Warming and Its Impact on the Environment", Ministry of Education, Kuwait.
- December 2012, Speaker, "Introduction to Indoor Air Quality", Green Camp., Kuwait Society of Engineering, Kuwait.
- November 2012, Speaker, "Indoor Air Quality Physics and Chemistry", Chemical Engineering Department, College of Engineering and Petroleum, Kuwait University.

#### **TEACHING RECORD**

## **Graduate Courses:**

- Foundations of Environmental Sciences, College of Graduate Studies, CGS 500
- Energy Conservation, College of Graduate Studies, CGS 520.
- Environmental Problems Solving with Computers, College of Graduate Studies, CGS 565.
- Human Exposure to Indoor Air Pollution, College of Graduate Studies, CGS 569.

# **Undergraduate Courses:**

- Introduction to Environmental Engineering, ChE 304
- Introduction to Environmental Sciences, CLS 101.
- Chemistry, CLS 105.
- Statistics, CLS 109.
- Humans and their Environment, CLS 120.
- Global Change and Environmental Sustainability, ETM 341.
- Introduction to Quantitative Environmental Analysis, ETM 202.
- Industrial Pollution Control, ETM 421.
- Environmental Statistics, ETM 432.
- Capstone, ETM 499.
- Portfolio Review, ETM 088.
- Internship, ETM 495.
- Application of Information Systems in ETM, ETM 450

# THESIS SUPERVSION:

Student ID	Title of the Thesis	Student name	
212124909	Assessment of Air Quality Trends and Pollution Sources in the Southern Region of Kuwait using Openair	Anwar Mahmoud	Completed
208221844	Assessment of the Exposure to Volatile Organic Compounds (VOCs) in Service Stations in Kuwait	Omar Al-Qabandi	Completed
214127359	Simulating the air quality impact of petrochemical systems in the Southern region of Kuwait	Fatemah Mater	Completed
215128438	Optimization of operational processes at cogeneration plants in Kuwait	Fajer AlAjmi	Completed
215122471	Analyzing the operational processes in Kuwait power plant to control the energy consumption of cogeneration plants	Asma Alsalal	Completed
216129681	Assessing the Impact of Adopting Electrically Powered Vehicles on Kuwait 's Air Quality	Ahmed Aly	Completed
216129666	Assessment of the most environmental feasible fuel mix for the fuel used in power plants in Kuwait	Abdullah Alrashed	Completed
216122646	Emissions of Greenhouse Gases (GHGs) from Point Sources in Kuwait: Temporal Analysis of CO <sub>2</sub> , CH <sub>4</sub> , and N <sub>2</sub> O	Latifa AlOmairi	Completed
216122658	Monitoring of Indoor Concentrations of Particulate Matters in Kitchens	Alanood Alrashidi	Completed
217222695	Renewable Energy Opportunity in Kuwait	Manar Alfadgham	Completed
217121552	Optimum Clean Electricity Generation Mix for Kuwait's Power System by 2050	Ahmad Alazemi	Completed
220126042	Food Security and sustainable management of water-energy-food nexus in Kuwait	Maha Alotaibi	Completed
216129531	Assessing the performance of CALPUFF vs. AERMOD to evaluate the Air Quality Impact of Power Plants in Kuwait	Mohamed M. Al- Shammari	Completed
218122611	Indoor Air Quality of Beauty Salons in the State of Kuwait: Assessment and Analysis of PM <sub>2.5</sub> Exposure	Haya Al-Saleem	Completed
219123483	Assessment and Analysis of the Air Quality impact in Northern region of Kuwait	Ahmed Abdulrahman	On-going
220125358	Comprehensive Indoor Particulate Matter Analysis in Kuwait	Noura AlTannak	On-going

# **PROJECT SUPERVSION:**

Student ID	Student name	Status
213122267	Bedoor Alqanoor	Completed
213126185	Fatma Albahrani	Completed
212125375	Fatema E. Alyaqoub	Completed
213122310	Fedhah J. Alsuliman	Completed
215127985	Mohammad S. Al-Ali	Completed
215128429	Saoud Aziz Wadi	Completed

# COMMITTEES Departmental Level

Committee Name	Designation	Times	Last Time
Scientific Affairs	Member/ Coordinator	6	2022
Scholarship	Member	5	2023
Promotion	Member	1	2021
Students Affairs & Course Schedule	Member/ Coordinator	6	2020
Accreditation & Academic Assessment	Member	4	2019
College Plan & Departmental Activities	Member/ Coordinator	9	2021
Laboratory & Instrumentation	Member/ Coordinator	6	2019
Recruitment & Employment	Member/ Coordinator	5	2023
Research & Graduate Studies	Member	4	2018
Portfolio Committee	Member/ Coordinator	3	2018
Library Committee	Member	4	2021

# College Level

Committee Name	Designation	Times	Last Time
Scientific Affairs	Member	2	2121
Steering Committee of Course Schedule	Member	5	2019
College Strategic Plan	Member/ Coordinator	4	2023
Annual Report	Member/ Coordinator	4	2023
New Campus Follow-up	Member	3	2019
Research & Graduate Studies	Member	2	2018
Students Affairs & Course Schedule	Member	1	2017
College Council	Member/Chair	3	2023
Kuwait International Conference on Life Sciences	Member	3	2018

# **University Level**

Committee Name	Designation	Times	Last Time
University Council	Member	2	2023
KU-KPC Memorandum of Agreement	Coordinator	1	2024
Scientific affairs committee	Member	2	2024
Higher Committee for Institutional Academic	Member	1	2024
Accreditation			
The Supporting Academic Staff Affairs Regulations	Member	1	2024
Summer salaries for academic and academic support	Member	1	2024
staff regulations			
The General Scholarship committee	Member	2	2024
College of Life Sciences Graduate Program	Member	2	2022
Environmental Sciences Program	Member	1	2023

Comprehensive Exam Committee, Environmental	Member	1	2021
Sciences Joint Program, College of Graduate Studies,			
Environmental Sciences Team – Research Sector	Member	1	2020
Food Safety Graduate Program	Member	1	2019
Environmental and Food Toxicology Graduate Program	Member	2	2019
New Campus Follow-up Team	Member	3	2019
Safety Team	Member	1	2008

#### **COMMUNITY SERVICES**

- May 2023, Chair, Kuwait Second Competition for Life Sciences "Partnership in Education and Development" 2022/2023, Kuwait.
- May 2022, Coordinator, Kuwait First Competition for Life Sciences "Partnership in Education and Development" 2021/2022, Kuwait.
- August 2020, Execution Committee for Examining Candidates for Supervisory Positions, Ministry of Electricity and Water (MEW), Kuwait.
- December 2019, Judge, Engineering Design Exhibition 37, Engineering Training and Alumni Center (ETAC), College of Engineering and Petroluem, Kuwait University, Kuwait.
- June 2019, Judge, Engineering Design Exhibition, Engineering Training and Alumni Center (ETAC), College of Engineering and Petroluem, Kuwait University, Kuwait.
- April 2019, Working Group Workshop, Kuwait Municiplity and World Bank, Municipal Soild Waste Management Program, 22 – 23 April 2019, Kuwait.
- January 2018, Jury, 10<sup>th</sup> International Invention Fair in the Middle East (IIFME). Kuwait Science Club in collaboration with the International Exhibition of Inventions of Geneva.
- April 2017, Judge, Fifth Kuwait Science and Engineering Competition (KSEC). Kuwait Science Club. Kuwait Foundation for the Advancement of Science (KFAS). Kuwait.
- December 2016, Speaker, "Protecting Costal Areas and Fish Resources", Ministry of Social Affairs and Labor, Kuwait.
- April 2016, Judge, Fourth Kuwait Science and Engineering Competition (KSEC). Kuwait Science Club. Kuwait Foundation for the Advancement of Science (KFAS). Kuwait.
- April 2016, 4 6<sup>th</sup>, Second Kuwait International Conference on Life Sciences. Life Sciences for the Social Good. Kuwait University, Kuwait.
- April 2014, Session Chair. 1<sup>st</sup> Kuwait International Conference on Life Sciences. Towards Sustainable Society: Exploring connections of life sciences to society, Kuwait.
- May 2014, Speaker, "Exposure to Indoor Air Pollution", Civil Engineering Department, College of Engineering and Petroleum, Kuwait University.

- January 2013, Speaker, "Global Warming and Its Impact on the Environment", Ministry of Education, Kuwait.
- December 2012, Speaker, "Introduction to Indoor Air Quality", Green Camp., Kuwait Society of Engineering, Kuwait.
- November 2012, Speaker, "Indoor Air Quality Physics and Chemistry", Chemical Engineering Department, College of Engineering and Petroleum, Kuwait University.
- Preparing Qualification Exams in Chemical Engineering for Kuwait National Guards.
- Member in many department, college, and university committees.

## **PROFESSIONAL AFFILIATIONS**

- Kuwait Society of Engineers (KSE), Chemical Engineering, Kuwait, 2012-present
- Kuwait University Faculty Association, Kuwait University, 2012-Present.