

Curriculum Vitae

Education

- B.Sc. Mechanical Engineering, College of Engineering, University of Baghdad (1967).
- M.Sc. Reactor Physics and Technology, Department of Physics, University of Birmingham, UK (1971).
- Ph.D. Mechanical Engineering Group, Department of Thermodynamics and Fluid Mechanics, University of Strathclyde, UK (1976).

Employment History

- Chief scientists the Iraqi Atomic Energy Commission (IAEC) (1976- 2003).
- Manager of the Engineering Physics Center at the Ministry of Sciences and Technology, Baghdad, Iraq. (2003-2006).
- Visiting Professor at the Universities of Baghdad, The University of Technology, and Al-Mustanseria.
- Visiting Professor at the Department of Mechanical and Aerospace Engineering of the University of Florida in Gainesville, Florida from 2006-2009.
- Post Doctoral fellow at the Department of Biomedical Engineering of Georgia Institute of Technology, Atlanta, Georgia, from 2009-2010.
- Currently teaching Nuclear Engineering Technology at Augusta Technical College, Augusta, GA.

Theses Supervised by Dr. Kendoush

I have advised 25 M.S. students and 10 Ph.D. students in the Iraqi Universities. Some of my students are now professors at the US universities.

List of publications in Universities, International Journals and Symposia

1. M.Sc. Thesis entitled “Heat transfer in nuclear reactor channels” Department of Physics, University of Birmingham (UK), 1971.
2. Ph.D. Thesis entitled “Theoretical and experimental investigations into the problem of transient two-phase flow and its application to reactor safety” Department of Thermodynamics and Fluid Mechanics, Mechanical Engineering Group, University of Strathclyde, 1976.
3. “Depressurization effects on Freon-113 circulating loop” with H.C. Simpson, D.H. Rooney and T.M.S. Callander, paper No. A3, European Two-Phase Flow Group Meeting, Erlangen, 31st May-4 June, 1976.

4. "Slip measurement in downward two – phase bubbly flow using cross – correlation technique" In "Multiphase Transport Fundamentals, Reactor Safety, Application", T.N. Veziroglu (Editor), Volume 5 pp. 2695-2707, Hemisphere Publishing Corporation, Washington, 1980.
5. "Performance of platinum self – powered neutron detector in the simulated conditions of a Pressurized Water Reactor" Atomkernenergie – Kerntechnik, Vol. 42, P. 174, 1983.
6. "Transient two – phase flow with heat exchange in a horizontal annular tube" In "Multi phase Flow and Heat Transfer" T.N. Veziroglu and A.E. Bergles (Editors), Elsevier, 1984.
7. "Comment on work of Nishimura and Ishii" Chemical Engineering Science, Vol. 40, P. 539, 1985.
8. "The effects of irradiation and temperature on the growth of Zircaloy – 4 tubes" In the Transactions of the 9th. International Conference on Structural Mechanics in Reactor Technology, Volume C: Fuel Elements and Assemblies, pp. 115-120, A. A. Balkema, Rotterdam 1987.
9. "The release of Iodine – 131 from the reactor pool due to a power ramp" Transactions of the American Nuclear Society, Vol. 56, Supple. 3 (78-80) 1988.
10. "Measurements of neutron induced nucleation" Nuclear Engineering and Design, Vol. 110, P. 439, 1989.
11. "The release of I – 131 from the reactor pool due to a power ramp" Kerntechnik, Vol. 54, P. 62, 1989.
12. "The delay time during depressurization of saturated water" International Journal of Heat and Mass Transfer, Vol. 32, No. 11, P. 2149, 1989.
13. "Discharge of saturated water through safety relief valves" Transaction of the 11th. International Conference on Structural Mechanics in Reactor Technology, Paper No. SD2 03/3, Tokyo, Japan, 1991.
14. "A comparative study of the various nuclear radiations used for void fraction measurement" Nuclear Engineering and Design, Vol. 137, P. 249, 1992.
15. "The elbow as a fluid flowmeter" Al – Muhandis, Vol. 111, P. 3, 1992.
16. "The irradiation of (UO₂ – Zircaloy4) fuel elements with different internal pressurization" Al – Muhanids, Vol. 110, P.3, 1992.
17. "Experiments on flow characterization in vertical downward two – phase flow" Experimental Thermal and Fluid Science, Vol. 9, P. 34, 1994.
18. "Theory of convective heat and mass transfer to spherical-cap bubbles" AIChE Journal, Vol. 40, (1440-1448) 1994.
19. "Letter to the editor" AIChE Journal, Vol. 41, (2341-2342) 1995.
20. "Low Prandtl number heat transfer to fluids flowing past an isothermal spherical particle" International Journal of Heat and Fluid Flow, Vol. 16 (291-297) 1995.
21. "Improving the accuracy of the capacitance method for void fraction measurement" Experimental Thermal and Fluid Science, 1995, Vol. 11, No. 4 (321-326).
22. "Theory of convective heat and mass transfer to fluids flowing normal to a plane" International Communication in Heat and Mass Transfer, 1996, Vol. 23 (249).
23. "An approximate solution of the convective heat transfer from an isothermal rotating cylinder" International Journal of Heat and Fluid Flow, 1996, Vol. 17, No. 4 (439).

24. "A nonintrusive auto – transformer technique for the measurement of void fraction" *Experimental Thermal and Fluid Science*, 1996, Vol. 13, No. 2 (92-97).
25. "Theory of convective drop evaporation in direct contact with an immiscible liquid" *IDA world Congress on Desalination and Water Reuse*, October 6-9, 1997 – Madrid (Spain). Vol. V, pp. 263-286.
26. "Theory of stagnation region heat and mass transfer to fluid jets impinging normally on solid surfaces" *Chemical Engineering & Processing* Vol. 37 (223-228) 1998.
27. "Thermohydraulic effects of safety relief valves" with Sarkis and Al-Muhammedawi, *Experimental Thermal and Fluid Science* Vol. 19 (131-139) 1999.
28. "Calculation of flow resistance from a spherical particle" *Chemical Engineering and Processing* Vol. 39 (81-86) 2000.
29. "Measurement of void fraction in magnetic two-phase fluids" with Awni and Majeed, *Experimental Thermal and Fluid Science*, Vol. 22 (71-78) 2000.
30. "Hydrodynamic model for bubbles in a swarm" *Chemical Engineering Science* Vol. 56 (235-238) 2001.
31. "Void fraction measurement by X-ray absorption" with Z.A. Sarkis, *Experimental Thermal and Fluid Science* Vol. 25 (615-621) 2002.
32. "The virtual mass of a spherical-cap bubble" *Physics of Fluids* Vol. 15, issue 9 (2782-2785) 2003.
33. "Hydrodynamic and heat convection from a disk facing a uniform flow" ASME paper No. HT-FED 2004-56797, 2004.
34. "Experimental investigation of the hydrodynamic interaction in bubbly two-phase flow" with Mohammed, Abid and Hameed, *Chemical Engineering and Processing*, Vol.43, No.1 (23-35) 2004.
35. "Theory of convective drop evaporation in direct contact with an immiscible liquid" *Desalination*, Vol.169 (33-41) 2004.
36. "Experiments of Fluid flow and heat convection in the wake of a disk facing a uniform stream" with A.W. Izzat, *International Journal of Thermal Sciences*, Vol. 44 (894-902) 2005.
37. "The virtual mass of a rotating sphere in fluids" *Trans. ASME: Journal of Applied Mechanics*, Vol. 72 (801-802) 2005.
38. "Viscous fluid displacement by the growing bubble" *Trans. ASME: Journal of Heat Transfer*, Vol.128 (100-103)2006.
39. "The virtual mass of a growing and collapsing bubble" *AIChE Journal*, Vol. 52 issue 6 (2013-2019) 2006.
40. "The growth rate of gas hydrate from refrigerant R12" *Experimental Thermal and Fluid Science*, Vol. 30, Issue 7(643-651) 2006.
41. "A non-intrusive auto-transformer technique for measuring phase volume ratio in oil-water two-phase stratified flow" *Journal of Petroleum Science and Engineering*, Vol. 54 (25-33) 2006.
42. "Modification of the classical theory of the virtual mass of an accelerating spherical particle" 2006 ASME 2nd Joint U.S. – European Fluids Engineering Summer Meeting, FEDSM 2006: 98051, July 2006 Miami.
43. "Enhancement of Convective Heat and Mass Transfer from Two Bubbles at High Reynolds Number" *ASME: Journal of Heat Transfer*, Vol. 129 (211-219) 2007.

44. "The Virtual Mass of an Oblate-Ellipsoidal Bubble" Physics Letters A, Vol. 366 (253-255) 2007.
45. "The flow of flash evaporated water in convergent and divergent conduits" with A.W. Iazzat and A.N.S. Kassim, The 12th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-12) Log Number: 164 Sheraton Station Square, Pittsburgh, Pennsylvania, U.S.A. September 30-October 4, 2007.
46. "Heat, mass and momentum transfer to a rising ellipsoidal bubble" Industrial and Engineering Chemistry Research, Vol. 46 (9232-9237) 2007.
47. "Hydrodynamic solution of the virtual mass coefficient of a vortex ring moving in a fluid" Industrial and Engineering Chemistry Research, Vol. 47(1081-1084) 2008.
48. "The drag force on a collapsing bubble" Mechanical Engineering Science, Vol. 222 (1225-1235)2008.
49. "A comparative study between the various methods of measuring void fraction in air-water two-phase flow" with B.N. Yaqob, ASME Fluids Engineering Division Summer Conference, August 10-14, 2008, Jacksonville, Florida, USA Paper No. FEDSM2008-55031.
50. The internal report entitled "SOLIDS COMPOSITION MEASUREMENTS OF PHOSPHATE SLURRY USING IMPEDANCE SPECTROSCOPY, PHASE I: FEASIBILITY STUDY" with J.F. Klausner, Rick Grove, and Winxing Ye, Department of Mechanical and Aerospace Engineering, University of Florida, 2008.
[http://www1.fipr.state.fl.us/fipr/fipr1.nsf/129fc2ac92d337ca85256c5b00481502/fb7012ca17bcfc06852575ac006c856a/\\$FILE/04-072-228Final.pdf](http://www1.fipr.state.fl.us/fipr/fipr1.nsf/129fc2ac92d337ca85256c5b00481502/fb7012ca17bcfc06852575ac006c856a/$FILE/04-072-228Final.pdf)
51. . "Theoretical analysis of heat and mass transfer to fluids flowing across a flat plate" International Journal of Thermal Sciences, Vol. 48(188-194)2009.
52. "Effects of the electric field on the virtual mass of a flowing fluid sphere" Canadian Journal of Physics, Vol. 87, Issue 10, pp1095-1098 (2009).
53. "The Inertia of the Anterior Leaflet of the Heart's Mitral Valve" with M.Padala, D. Icenogle, and A. P. Yoganathan
Proceedings of the ASME 2010 Summer Bioengineering Conference (SBC2010) June 16-19, Grande Beach Resort, Naples Florida, USA
54. Patent entitled "Longer-Lasting Heart Valve Without Need for Anticoagulant Therapy" With Dr. Faris Al-Mousily & Dr. Hitomi Greenslet
<http://apps.research.ufl.edu/otl/pdf/marketing/13172.pdf>
55. "Similarity Solution for Heat Convection From a Porous Rotating Disk in a Flow Field" ASME Journal of Heat Transfer, Vol. 135, pp(084505-1 - 084505-3) 2013.
56. "Theory and Indirect Measurements of the Drag Force Acting On a Rising Ellipsoidal Bubble", has been published in the following link:
<http://www.jffhmt.avestia.com/2016/011.html>