

Curriculum Vita

1.	Name	Maher Moustafa Hamid Abou Al-Sood
2.	Recent Photo	
3.	Current Position	Associate Professor
4.	Department	Mechanical Engineering
5.	General Specialization	Mechanical Power Engineering
6.	Specified Specialization	Heat and Mass Transfer
7.	Website page	None
8.	Google Scholar Address	https://scholar.google.com.eg/citations?user=fl_aEI0AAAAJ&hl=en
9.	E-mail	maher_aboelsood2013@eng.kfs.edu.eg
10.	Tel. no.	01000285381
11.	Scientific Degrees	<ul style="list-style-type: none"> • Ph.D. – Canada, University of Manitoba (2007). • M.Sc. – Egypt, Assiut University (1999) • B.Sc. – Egypt, Mansoura University (1991)
12.	Research Interest	<ul style="list-style-type: none"> • Heat and Mass Transfer • Droplet evaporation • spray combustion • Numerical Simulation of ICE • Turbulence modeling • Pollutions
13.	Recent Publications	<p style="text-align: center;">A. JOURNAL PAPERS</p> <ol style="list-style-type: none"> 1. Marzouk S. A, M. M. Abou Al-Sood, Emad M.S. El-Said, M. K El-Fakharany, "Effect of wired nails circular-rod inserts on tube side performance of shell and tube heat exchanger: Experimental study", Applied Thermal Engineering, 167 (2020) 114696

2. E. A. Elsharkawy, **M. M. Abou Al-Sood**, M. K. El-Fakharany, M. Ahmed, "Enhancing the Impact of Biodiesel Blend on Combustion, Emissions, and Performance of DI Diesel Engine", Arabian Journal for Science and Engineering, 45 (2020) 1109-1123.
3. S. Abdullah, A. Alarjani, **M. M. Abou Al-sood**, ZM Omara, AE Kabeel, FA Essa, "Rotating-wick solar still with mended evaporation technics: Experimental approach", Alexandria Engineering Journal 58 (2019), 1449-1459.
4. Emad M.S. El-Said, **M.M. Abou Al-Sood**, Shell and tube heat exchanger with new segmental baffles configurations: A comparative experimental investigation, Applied Thermal Engineering 150 (2019) 803–810
5. Emad M.S. El-Said, **M.M. Abou Alsood**, Experimental investigation of air injection effect on the performance of horizontal shell and multi-tube heat exchanger with baffles, Applied Thermal Engineering 134 (2018) 238–247
6. A.S. Abdullah, **M.M. Abou Al-sood**, Z.M. Omara, M.A. Bek, A.E. Kabeel, Performance evaluation of a new counter flow double pass solar air heater with turbulators, Solar Energy 173 (2018) 398–406
7. Birouk, M., **Abou Al-Sood, M. M.**, 2010, Droplet evaporation in a turbulent high-pressure freestream- A numerical study, Int. J. of Thermal Science, Vol. 49, No.2, pp.264-271
8. Birouk, M., **Abou Al-Sood, M. M.**, 2010, Droplet evaporation in a turbulent high-pressure freestream- A numerical study, Int. J. of Thermal Science, Vol. 49, No.2, pp.264-271
9. **Abou Al-Sood, M. M**, Birouk, 2009, 3D numerical simulation of the effect of droplet initial conditions on the evaporation process, J. of Comput. Thermal Scien. Vol.1. Issue 2, pp. 159-187, 2009.
10. Birouk, M., **Abou Al-Sood, M. M.**, Gökalp, I., 2008, Droplet evaporation in a turbulent environment at elevated pressure and temperature conditions, Combustion Science and Technology, Vol 180, pp. 1987-2014.
11. **Abou Al-Sood, M. M.**, Birouk, 2008, Droplet heat and mass transfer in a turbulent airstream, International Journal of Heat and Mass Transfer, Vol. 51, pp. 1313-1324.
12. **Abou Al-Sood, M. M.**, Birouk, M., 2008, A Numerical model

- for calculating the vaporization rate of a fuel droplet exposed to a convective turbulent airflow", Int. J. Num. Meth. Heat Fluid Flow, Vol. 18, pp. 146-158.
13. Birouk, M., **Abou Al-Sood, M. M.**, 2007, A Numerical study of drag coefficient of solid sphere in turbulent flow at low Reynolds number, Numerical Heat Transfer A , Vol. 51, pp. 39-57.

B. CONFERENCE PAPERS

1. **Abou Al-Sood, M. M.** E. A. Elsharkawy, M. K. El-Fakharany, M. Ahmed, "Assessing and comparing the characteristics of CI engine fueled with biodiesel-diesel and biodiesel-kerosene blends", 2nd International Engineering Conference and Exhibition, ELRYAD, KSA March 2-5, 2020.
2. **Abou Al-Sood, M. M.**, Abdel-Rahim, Y.M., Ahmed, Zero-Dimensional Model for a 4-stroke, direct injection, variable compression ratio for maximum torque, 9th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, 16 – 18 July, 2012, Malta
3. **Abou Al-Sood, M. M.**, Birouk, Effects of droplet initial diameter and temperature on vaporization regimes of fuel droplet immersed in turbulent flows", Proceedings of CHT-08 ICHMT International Symposium on Advances in Computational Heat Transfer, May 11-16, 2008, Marrakech, Morocco
4. **Abou Al-Sood, M. M.**, Birouk, M. and Gökalp, I., , "A droplet evaporation model for spray combustion", 21th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), ENSMA, July 21-27, 2007, Futuroscope, Poitiers, France
5. **Abou Al-Sood, M. M.**, Birouk, M. and Gökalp, I., 2007, A droplet transfer rates in a turbulent hot airflow, 21th Annual Conference of Liquid Atomization and Spray Systems (ILASS2007), Sept. 10-12., Muğla, Turkey
6. **Abou Al-Sood, M. M.**, Birouk, M., Numerical simulation of a droplet evaporating in hot convective turbulent environments" Combustion Institute / Canadian Section, Spring Technical Meeting, May 14-16, 2006, Kingston, Ontario, Canada
7. **Abou Al-Sood, M. M.**, Birouk , M., A Three-dimensional numerical model for calculating the rate of mass transfer

		<p>from liquid droplets in turbulent flow" 4th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, Sept. 18- 22, 2005, Egypt</p> <p>8. Abou Al-Sood, M. M., Birouk, M., Computational Study of Turbulent Flow around a Sphere using Finite Volume Blocked-off Treatment", 20th Canadian Congress of Applied Mechanics CANCAM May 30th to June 2nd, 2005, McGill University, Montreal, Canada</p> <p>9. Abou Al-Sood. M. M., Birouk, M., Computational study of turbulent flow around a sphere using finite-volume blocked-off technique", 20th Canadian Congress of Applied Mechanics CANCAM, May 30th to June 2nd, 2005, McGill University, Montreal, Canada</p> <p>10. Abou Al-Sood, M.M., and Birouk, M., Effects of moderate turbulent forced convective flows on the vaporization of an isolated fuel droplet, Combustion Institute/Canadian Section, Spring Technical Meeting, May 9-12. 2004, Kingston, Ontario, Canada</p> <p>11. Abou Al-Sood, M. M., Abdel-Rahim, Y. M., Abdel-Moniem, A. M., and Abdel-Latif, A. A., Optimum Compression Ratio variation of 4-Stroke, Direct-Injection Diesel Engine for Minimum BSFC", SAE (Society of Automotive Engineering) Paper 1999-01-2519</p> <p>12. Abou Al-Sood, M. M., Abdel-Rahim, Y. M., Abdel-Moniem, A. M., and Abdel-Latif, A. A., Optimum Compression Ratio variation of 4-Stroke, Direct-Injection Diesel Engine for Maximum Brake power and Torque and Minimum Soot and NOx Emissions", SAE (Society of Automotive Engineering) Paper 1999-01-2827</p> <p>13. Abou Al-Sood, M. M., Abdel-Rahim, Y. M., Abdel-Moniem, A. M., and Abdel-Latif, A. A., Thermodynamic Simulation Analysis of a 4-Stroke, variable Compression, Direct-Injection Diesel Engine", 10th International Conference of Mechanical Power Engineering, 1998, Assiut, Egypt.</p>
14.	Conferences (last 3 yrs.)	2 nd International Engineering Conference and Exhibition, ELRYAD, KSA March 2-5, 2020.
15.	Administrative Positions	Vice Dean for Learning and Students' Affairs
16.	Tools and devices	

17.	Current Department Head	Associt Prof. Fawzy A. Shaban
18.	Contact us	
19.	Taught Courses	<p>Undergraduate Level</p> <ul style="list-style-type: none"> • Thermodynamics I • Thermodynamics II • Fluid Mechanics • Refrigeration • Fault Diagnosis for Mechanical Power Systems • Engineering Mechanics I, II • English Language <p>Graduate Level</p> <ul style="list-style-type: none"> • Numerical Methods of Heat and Fluids • Heat Exchangers • Computational Fluid Dynamics