FACULTY CURRICULUM VITAE

Name: Dr. Ahmad Sedaghat
Rank: Associate Professor - Mechanical Engineering

Personal Information

Nationality:	British
AU Joining Date:	17 Aug 2014
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Professional Information

Education:	**Qualification:** Doctorate **Major:** Aerospace Engineering **College/University:** University of Manchester **Year:** 1994/1999 **Qualification:** Masters **Major:** Applied Mathematics & Fluid Mechanics **College/University:** University of Manchester **Year:** 1992/1994 **Qualification:** Bachelor **Major:** Mechanical Engineering **College/University:** Isfahan University of Technology **Year:** 1986/1990
Specialization:	Renewable Solar-Wind-Hydrogen Energy Thermo-Hydro/Aerodynamic Drag Reduction Rheology of non-Newtonian Nanofluids Clinical/Bioinspired Optimization
Current Academic Position:	Associate Professor, Mechanical Engineering Department, College of Engineering, Australian University, Kuwait. Adjunct Professor in Research, CQU, Australia.

Current Professional Positions:	Fellow Member of Engineers Australia Charted Engineers Australia in Aerospace and Mechanical Engineering In Editorial board of: - Associate Editor for Natural Resources Conservation and Research. Impact Factor: 0.28. https://systems.enpress-publisher.com/index.php/NRCR/index - Editorial Board for Archives of Petroleum & Environmental Biotechnology. Impact Factor: 0.52. https://www.gavinpublishers.com/journals/journals_details/archives-of-petroleum-environmental-biotechnology-issn-2574-7614 - Editorial Board for International Advance Journal of Engineering Research (IAJER) https://www.iajer.com/ - Editorial Board for American Journal of Multidisciplinary Research and Development https://www.ajmrd.com/ - Editorial Board for SCIREA Journal of Energy https://www.scirea.org/journal/Energy - Editorial Board for European Journal of Applied Science and Technology-Novus (EJAST) https://ejast.novuspublishers.org/ - Guest Editor for Advances in Fuzzy Systems. Impact Factor: 0.52. Special Issue “Applications of Fuzzy Systems in Renewable Energy Sources” https://www.hindawi.com/journals/afs/si/631471/ - Guest Editor for MDPI Wind. Special Issue "Wind Energy Planning by considering Social, Environmental, and Economic Issues" https://www.mdpi.com/journal/wind/special_issues/wind_issues - Guest Editor for International Journal of Rotating Machinery. Impact Factor: 0.3. Special Issue “Rotating Machinery in Renewable Energy Systems” https://www.hindawi.com/journals/ijrm/si/276494/ - Advisory Board for Journal of Renewable Energy and Environment (JREE). https://www.jree.ir/ - Reviewer Editor on the Editorial Board of Micro- and Nano-Scale Heat Transfer (specialty section of Frontiers in Thermal Engineering). www.frontiersin.org - Reviewer of Elsevier Journals: RSER (Renewable & Sustainable Energy Reviews), ECM (Energy Conversion and Management), Energy, Applied Energy, International Journal of Hydrogen Energy, and other International Journals
Previous Administrative Position Held:	Co-editor & head of publishing office of JAFM (Journal of Applied Fluid Mechanics) Industrial Consultant from 2003 to 2014 Organizing committee member of ISME2010 and ISME2012

Previous Academic Positions Held:	2014-2016: Assistant Professor, Department of Mechanical Engineering, College of Engineering, Australian University, P.O. Box 1411, Safat 13015, Kuwait. 2013-2014: Associate Professor, Department of Mechanical Engineering, Isfahan University of Technology, Isfahan, Iran. 2008-2009: Lecturer & Research Fellow, School of Computing Engineering and Physical Sciences, University of Central Lancashire, Preston, UK. 2003-2013: Assistant Professor, Department of Mechanical Engineering, Isfahan University of Technology, Isfahan, Iran. 2001-2003: Post-doctoral research fellow, Department of Mechanical Engineering, Leeds University, Leeds, UK. 1998-2001: Post-doctoral research fellow, Department of Aerospace Engineering, The University of Manchester, Manchester, UK. 1997-1998: Free researcher, Department of Computing and Mathematics, Leuven University, Leuven, Belgium.
Fellowships And Honors:	Winner of AU Research Achievement Award in College of Engineering, 2018/2019. Fellow Member of British Combustion Institute (BCI), 2001-2003 Member of American Institute of Aeronautics & Astronautics (AIAA), 2000 Fellow Member of UK Royal Aeronautical Society (RAeS), 1998-2001 Associate member of Iranian Society of Mechanical Engineers (ISME), 2003-present Associate member of Iranian Aerospace Society (IAS), 2003-present Associate member of Iranian Physical Sciences (IPS), 2003-present Associate member of Iranian Wind Energy (IWE), 2013-present Associate member of Iranian Combustion Institute (ICI), 2014-present
Teaching Experience:	2014-present: Assistant and Associate Professor in Mechanical Engineering. Taught courses for Diploma students: Pumps and Valves, Fluid Mechanics, Apply Engineering Mechanic Principles, Interact with Computing Technology, Manage Project Quality, Use Basic Preventative Maintenance Technology, Workshop Practical Project S3, Workshop Arc-Welding S2, Basic Hydraulics & Pneumatic Circuits Taught courses for Degree students: Fluid Mechanics, Fluid & Electrical Drive Systems 2003-2014: Assistant and Associate Professor in Thermofluid subjects in Mechanical Engineering. Taught courses for MSc and PhD students: Advanced Hydro-Aerodynamics, Advanced Fluid Mechanics, Hydrodynamics, Hydrodynamics Stability, Wind Energy. Taught courses for BSc students:

	Energy Conversion, Fuel and Combustion, Thermodynamics I, Thermodynamics II, Fluid Mechanics I, Fluid Mechanics 2, Heat Transfer I, Turbomachines, Hydro-Aerodynamics. 2008-2009: Lecturer in Innovative wind turbines. Taught courses for BSc students: Experimental open jet wind tunnel, Computational Fluid Dynamics (CFD)
Industrial And Technical Experience:	2013-2014: Consultant & Researcher for Ministry of Iranian Gas and Fuel and Energy Saving Co., Project: Iranian National Gas Heater Platform (received 250,000 KD fund) 2012-2014: Consultant & Researcher for Iranian National Marine Organization and Isfahan Subsea Research Institute, Project: Iranian Water Waves Assimilation and Forecasting (received 250,000 KD fund) 2008-2012: Consultant & Researcher for Isfahan County of Electrical Power Co., Project: The First National Helical Vertical Axis 7.5 kW Wind Turbine (received 50,000 KD fund) 2008-2009: Research Associate (& Lecturer) in School of Computing Engineering and Physical Sciences, University of Central Lancashire, Preston, UK. EPSRC Project: Development of Innovative Small-Scale Wind Turbines. 2004-2008: Consultant & Researcher for Iranian Aerospace Society and Isfahan Subsea Research Institute, Project: Manufacturing and Renovation of Isfahan University of Technology 90 cm X 90 cm Wind Tunnel (received 30,000 KD fund) 2003-2004: Researcher for Folad Mobarake Steel Industries, Project: CFD Simulation & optimization of Argon gas injection into containers with 100 tons of liquid melt of steel (received 10,000 KD fund) 2003-2004: Consultant & Researcher for Shahed Helicopters, Project: Satisfying JAR standards on Aerodynamics & Aeroelasticity of Shahed Helicopters for Civil Applications (received 10,000 KD fund) 2001-2003: Post-doctoral (Research Fellow) in School of Mechanical Engineering, Leeds University, Leeds, UK. Project: EPSRC project in combustion instabilities. 1998-2001: Postdoctoral in School of Engineering, The University of Manchester, Manchester, UK. EPSRC Project: Aeroelasticity instabilities with nonlinear aerodynamics. 1997-1998: Free Researcher, Department of Computer Sciences, University of Leuven, Belgium. MMARIE Project: The European project on Application of Sparse Iterative Solvers in Sediment Turbulent Flows.

Research Interest:	Renewable Energy Nano-technology Aerodynamics Applied Mathematics Mathematical Modelling
Research Grants:	Co-PI on KFAS Research Grant (14,700 KWD) jointly AU-CQU Research project on "Energy-smart materials and technologies for buildings: Development of a novel low-energy building" (Ongoing) PI on KFAS Research Grant (7000 KWD) on "Office Building Energy Savings by Solar Window Films for Reducing Cooling Loads in Summer of Kuwait" (Completed 2019) Co-PI on KFAS Research Grant (4700 KWD) on "Autonomous and Portable Measuring System for Rheological Properties of Newtonian and Non-Newtonian Fluids" (Completed 2021) Co-PI on KFAS Research Grant (4700 KWD) on "Developing a Taylor-Couette Stand-Alone Viscometer for Testing Drilling Fluids with turbulent Nano fluid flow and Testing Stability of Different Shale Materials" (Completed 2020) PI on AU-CQU Research Grant (5000 KWD) on "Review and Simulation of Crack Detection Methodologies for Industrial Applications" Co-PI on AU-CQU Research Grant of 5000 KWD on "Energy-smart materials and technologies for buildings: Development of a novel low-energy building" PI on AU research fund (1200 KWD) "Design and manufacturing a miniature Reynolds apparatus for measuring skin friction reduction of nanofluids and testing and modelling precipitation and deposition of nanoparticles on pipe surfaces" Co-PI on AU research fund (1200 KWD) "Development of novel compostable polymeric composites with GraphAne nanofillers using nanoIndentation-3D-Printing (i3D) method for smart biomedical devices and water treatment networks" Co-PI on AU research fund (1200 KWD) "Design and assembly of an automated marsh funnel for rapid measurement of apparent viscosity, plastic viscosity, and yield point of fluid" Co-PI on AU research fund (1200 KWD) "Design and development of an aeroelastic energy harvester by simulation and wind tunnel testing" Co-PI on AU research fund (1200 KWD) "Developing a testing apparatus for wheelchair falls"
Research and Publications including Journal and Books:	1. **Ahmad Sedaghat**, Iman Samani (2013), Circulating Aerofoils as Propulsion System in Wind Engineering Application, Iranian Patent Centre, Tehran, Iran. 2. **Ahmad Sedaghat** et al. (2006), DNA Stream Type Hydro Turbines, Iranian Patent Centre, Tehran, Iran. 3. **Ahmad Sedaghat,** Progress in Magnus Type Wind Turbine Theories, Energy Vol. 8: Wind Energy, Chapter 808, Studium Press LLC, 2014. ❖ ***PATENTS***

1. **Ahmad Sedaghat**, Iman Samani (2013), Circulating Aerofoils as Propulsion System in Wind Engineering Application, Iranian Patent Centre, Tehran, Iran.
2. **Ahmad Sedaghat** et al. (2006), DNA Stream Type Hydro Turbines, Iranian Patent Centre, Tehran, Iran.

❖ ***JOURNALS***

- 2022

1. Misbah, B., **Sedaghat, A.,** Rashidi, M., Sabati, M., Vaidyan, K., Ali, N., Omar, M.A.A. and Dehshiri, S.S.H., 2022. Friction reduction of Al2O3, SiO2, and TiO2 nanoparticles added to non-Newtonian water-based mud in a rotating medium. ***Journal of Petroleum Science and Engineering,*** 217, p.110927.
2. Zakani, B., Salem, H., Entezami, S., **Sedaghat, A.,** & Grecov, D. (2022). Effect of particle concentration on lubrication performance of cellulose nanocrystalline (CNC) water-based lubricants: mixed lubrication regime. ***Cellulose***, 29(7), 3963-3984.
3. Zakani, B., Entezami, S., Grecov, D., Salem, H., & **Sedaghat, A.** (2022). Effect of ultrasonication on lubrication performance of cellulose nano-crystalline (CNC) suspensions as green lubricants. ***Carbohydrate Polymers***, 119084.

- **2021**

1. Najafi F, **Sedaghat A**, Mostafaeipour A, Issakhov A. Location assessment for producing biodiesel fuel from Jatropha Curcas in Iran***. Energy***. 2021 Dec 1; 236:121446.
2. Rashidi M, **Sedaghat A,** Misbah B, Sabati M, Vaidyan K, Mostafaeipour A, Dehshiri SS, Almutairi K, Issakhov A. Introducing a Rheology Model for Non-Newtonian Drilling Fluids. ***Geofluids***. 2021 Aug 26;2021.
3. Mostafaeipour A, Goudarzi H, Khanmohammadi M, Jahangiri M, **Sedaghat A,** Norouzianpour H, Chowdhury S, Techato K, Issakhov A, Almutairi K, Hosseini Dehshiri SJ. Techno-economic analysis and energy performance of a geothermal earth-to-air heat exchanger (EAHE) system in residential buildings: A case study. ***Energy Science & Engineering.*** 2021 Aug 5.
4. Rashidi M, **Sedaghat A**, Misbah B, Sabati M, Vaidyan K, Mostafaeipour A, Dehshiri SS, Almutairi K, Issakhov A, Oloomi SA, Malayer MA. Simulation of Wellbore Drilling Energy Saving of Nanofluids Using an Experimental Taylor–Couette Flow System. ***Journal of Petroleum Exploration and Production Technology***. 2021 Jul 8:1-7.
5. **Sedaghat A,** Abbas Oloomi SA, Malayer MA, Alkhatib F, Sabri F, Sabati M, Salem H, Zafar WJ, Mostafaeipour A, Issakhov A, Jahangiri M. Effects of Window Films in Thermo-Solar Properties of Office Buildings in Hot-Arid Climates. ***Frontiers in Energy Research***. 2021 May 20;9:173.
6. **Sedaghat A,** Sabati M, Alkhatib F, Oloomi SA, Sabri F, Salem H, Zafar WJ, Malayer MA. Climate change and thermo-solar patterns of office

buildings with/without window films in extreme hot-arid climate of Kuwait. ***Solar Energy***. 2021 Mar 15; 217:354-74.

7. Rashidi M, **Sedaghat A,** Misbah B, Sabati M, Vaidyan K. Use of SiO2 Nanoparticles in Water-Based Drilling Fluids for Improved Energy Consumption and Rheology: A Laboratory Study. ***SPE Journal***. 2021 Mar 1:1-5.
8. Rashidi M, **Sedaghat A,** Misbah B, Sabati M, Vaidyan K. Experimental study on energy saving and friction reduction of Al2O3-WBM nanofluids in a high-speed Taylor-Couette flow system. ***Tribology International***. 2021 Feb 1; 154:106728.
9. El HA, Bani HE, Al-Sawafta I, **Sedaghat A,** Alshabi M, Rahman S. Thermal analysis of end pumped fiber lasers subjected to jacket fluid cooling. ***Thermal Science***. 2021;25(2 Part A):1023-31.

- **2020**

10. **Ahmad Sedaghat**, Ali Mostafaeipour, Mostafa Rezaei, Mehdi Jahangiri, Amirreza Mehrabi, A new semi-empirical wind turbine capacity factor for maximizing annual electricity and hydrogen production, ***International Journal of Hydrogen Energy***, 2020.
11. **Ahmad Sedaghat**, Fadi Alkhatib, Seyed Amir Abbas Oloomi, Farhad Sabri, Hayder Salem, Mohammad Sabati, Waqar Jan Zafar, Mahdi Ashtian Malayer, Amirhossein Negahi, Experimental study on the performance of solar window films in office buildings in Kuwait, ***Journal of Nanoparticle Research*** 22 (4), 2020.
12. **Ahmad Sedaghat**, Fadi Alkhatib, Armin Eilaghi, Arash Mehdizadeh, Leila Borvayeh, Ali Mostafaeipour, Arash Hassanzadeh, Mehdi Jahangiri, Optimization of capacity factors based on rated wind speeds of wind turbines, ***Energy Sources, Part A: Recovery, Utilization, and Environmental Effects***, 2020.
13. Ali Mostafaeipour, **Ahmad Sedaghat**, Mohammad Hedayatpour, Mehdi Jahangiri, Location planning for production of bioethanol fuel from agricultural residues in the south of Caspian Sea, Environmental ***Development,*** 100500, 2020.
14. Y Ma, MA Fazilati, **A Sedaghat,** D Toghraie, P Talebizadehsardari, Natural convection energy recovery loop analysis, part I: energy and exergy studies by varying inlet air flow rate, ***Heat and Mass Transfer***, 1-11, 2020.
15. Mostafa Rezaei, Ali Mostafaeipour, Mohammad Saidi-Mehrabad, Mojtaba Qolipour, **Ahmad Sedaghat,** Hamid Reza Arabnia, Mozhgan Momeni, Sensitivity analysis of criteria to optimize wind farm localizing: a case study, ***Wind Engineering*** 44 (3), 2020, 294-312.
16. **Sedaghat A,** Alkhatib F, Mostafaeipour N, Abbas Oloomi SA. Prediction of COVID-19 Dynamics in Kuwait using SIRD Model. ***Integr J Med Sci*** [Internet]. 2020Aug.3 [cited 2020Aug.23];7. Available from: https://www.mbmj.org/index.php/ijms/article/view/170.
17. E Bani-Hani, F Alkhatib, **A Sedaghat**, A Alkhazzam, F Al-Dousari, O Al-Saad, An Experimental Study on Producing a Sustainable Diesel-like Fuel from Waste Engine Oil, ***Renewable Energy Research and Application*** 1 (2), 2020, 143-150.

- **2019**

18. M. Hassanaliana,V. Pelleritoa, **A. Sedaghat**, F. Sabri, L. Borvayeh, S. Sadeghi, Aerodynamics loads variations of wings with novel heating of top surface: Bioinspiration and experimental study, ***Experimental Thermal and Fluid Science*****,** Volume 109, December 2019, 109884.
19. N. Ali, J.A. Teixeira, A. Addali, M. Saeed, F. Al-Zubi, **A. Sedaghat**, H. Bahzad, Deposition of Stainless-Steel Thin Films: An Electron Beam Physical Vapour Deposition Approach, ***Materials*** 12 (4), 571, 2019.
20. M. Rezaei, A. Mostafaeipour, M. Saidi-Mehrabad, M. Qolipour, **A. Sedaghat**, H.R. Arabnia, M. Momeni, Sensitivity analysis of criteria to optimize wind farm localizing: A case study, ***Wind Engineering***, 0309524X19849848, 2019.
21. O. Nematollahi, P. Alamdari, M. Jahangiri, **A. Sedaghat**, A.A. Alemrajabi, A techno-economical assessment of solar/wind resources and hydrogen production: A case study with GIS maps, ***Energy***, 2019.
22. **A. Sedaghat**, F. Alkhatib, A. Eilaghi, M. Sabati, L. Borvayeh, A. Mostafaeipour, A New Strategy for Wind Turbine Selection Using Optimization Based on Rated Wind Speed, ***Energy Procedia*** (60), 582-589, 2019.
23. A. Mostafaeipour, H. Goudarzi, **A. Sedaghat**, M. Jahangiri, H. Hadian, M. Rezaei, A.M. Golmohammadi, P. Karimi, Energy efficiency for cooling buildings in hot and dry regions using sol-air temperature and ground temperature effects, ***Journal of Engineering, Design and Technology***, 2019.
24. O. Nematollahi, P. Alamdari, A.A. Alemrajabi,and **A. Sedaghat**, New Modelling of Solar Clearness Index and GIS Mapping of Iran**,** ***International Journal of Energy Management***, Volume 1, Number 2, 2019.
25. E. Bani-Hani, **A. Sedaghat**, A. Saleh, A. Ghulom, H. Al-Rahmani, S. Al-Zamel, J. Lopez, Evaluating Performance of Horizontal Axis Double Rotor Wind Turbines, ***Energy Engineering*** 78 (1), 3, 2019.
26. E. Bani-Hani, ME HajAssad, M Tawalbeh, B Yousef, **A Sedaghat,** Enhancing Cooling System of a Combustion Engine by Integrating with a Stirling Cycle, ***Energy Engineering*** 116 (3), 41-53, 2019.
27. E. Bani-Hani, **A Sedaghat**, ZN Ashrafi, Heat Recovery from the Incineration of Polychlorinated Biphenyls Waste in Rotary Kilns, ***Energy Engineering*** 116 (2), 22-40, 2019.

- **2018**

28. Omid Alavi, Ali Mostafaeipour, **Ahmad Sedaghat**, Mojtaba Qolipour, Feasibility of a Wind-Hydrogen Energy System Based on Wind Characteristics for Chabahar, Iran, ***Energy Harvesting and Systems*** 4 (4), 143-163, 2018.
29. ZN Ashrafi, M Ghasemian, MI Shahrestani, E Khodabandeh, **A Sedaghat,** Evaluation of hydrogen production from harvesting wind energy at high altitudes in Iran by three extrapolating Weibull methods, ***International Journal of Hydrogen Energy***, 2018.

30. GHR Faghani, ZN Ashrafi, **A Sedaghat**, Extrapolating wind data at high altitudes with high precision methods for accurate evaluation of wind power density, case study: Center of Iran, ***Energy Conversion and Management*** 157, (2018) 317-338.
31. Ehab Hussein Bani-Hani, **Ahmad Sedaghat**, Mashael AL-Shemmary, Adelah Hussain, Abdulmalek Alshaieb, Hamad Kakoli, Feasibility of Highway Energy Harvesting Using a Vertical Axis Wind Turbine, ***Energy Engineering***, 115 (2), 61-74, 2018.
32. Mohammad Ali Fazilati, Ali Akbar Alemrajabi, **Ahmad Sedaghat**, Natural convection liquid desiccant loop as an auxiliary air conditioning system: investigating the operational parameters, ***Heat and Mass Transfer*** 54(3), 903-913, 2018.
33. **Ahmad Sedaghat**, Ehab Hussein Bani Hani, Salim Ali, Fahad Ali, Areaj Al-Mesbah, Manal Malallah, Experimental and Theoretical Analysis of a Solar Desalination System Improved by Thermoelectric Cooler and Applying Sun Tracking System, ***Energy Engineering*** 115 (6), 62-76, 2018.
34. Ehab Hussein Bani-Hani, **Ahmad Sedaghat**, Abdulrahman Faisal, Abdullatif Al-Methen, Ahmad Al-Bannaw, Reyadh Al-Mosabeeh, Hamad Al-Otaibi, Photovoltaic System as Source of Power In Residential Buildings: Technical and Economical Study, ***Energy Engineering*** 115 (3), 6-22, 2018.
35. Mamdouh El Haj Assad1, Ehab Hussein Bani-Hani, Bashria Yousef, **Ahmad Sedaghat** and Mohammad Tawalbeh, Simplified model for thermo- and diffusiophoretic deposition in a heat exchanger, ***JP Journal of Heat and Mass Transfer***, Volume 15, Number 1, 2018, Pages 1-13.
36. Ehab Bani-Hani, Ammar Al Shalabi, Fadi Alkhatib, Armin Eilaghi, **Ahmad Sedaghat**, Factors Affecting the Team Formation and Work in Project Based Learning (PBL) for Multidisciplinary Engineering Subjects, ***Journal of Problem Based Learning in Higher Education*** 6 (2), 2018.
37. Mostafaeipour, A., Khademi Zare, H., Aliheidari, T., **Sedaghat, A.** (2018). Implementing Bounded Linear Programming and Analytical Network Process Fuzzy models to Motivate Employees: a case study, ***Journal of Optimization in Industrial Engineering,*** doi: 10.22094/joie.2018.507.18.
38. **Ahmad Sedaghat**, Ammar Al Shalabi, Armin Eilaghi, M. El Haj Assad, LAPTOP RISER, A USEFUL PBL PROJECT FOR DIPLOMA STUDENTS IN ENGINEERING DESIGN, ***Journal of Problem Based Learning in Higher Education***, Aalborg University, Vol. 6, No. 1, 2018.

- **2017**

39. **A Sedaghat**, A Hassanzadeh, J Jamali, A Mostafaeipour, WH Chen, Determination of rated wind speed for maximum annual energy production of variable speed wind turbines, ***Applied Energy*** 205, (2017) 781-789.
40. M Ghasemian, ZN Ashrafi, **A Sedaghat**, A review on computational fluid dynamic simulation techniques for Darrieus vertical axis wind turbines, ***Energy Conversion and Management*** 149, (2017) 87-100.
41. Ali Minaeian, **Ahmad Sedaghat**, Ali Mostafaeipour, Ali Akbar Alemrajabi, Exploring economy of small communities and households

by investing on harnessing wind energy in the province of Sistan-Baluchestan in Iran, ***Renewable and Sustainable Energy Reviews*** 74, (2017) 835–847.

42. A Razavieh, **A Sedaghat**, R Ayodele, A Mostafaeipour, Worldwide wind energy status and the characteristics of wind energy in Iran, case study: the province of Sistan and Baluchestan, ***International Journal of Sustainable Energy*** 36 (2), (2017) 103-123.
43. **Ahmad Sedaghat**, Rafat Al Waked, M El Haj Assad, Khalil Khanafer, and Muath NA Bani Salim, Analysis of Accelerating Devices for Enclosure Wind Turbines, ***Int J Astronaut Aeronautical Eng*** 2:009, 2017.
44. **A Sedaghat**, A novel and robust model for determining rheological properties of Newtonian and non-Newtonian fluids in a marsh funnel, ***Journal of Petroleum Science and Engineering*** 156, (2017) 896-916.
45. **A Sedaghat**, MAA Omar, S Damrah, M Gaith, Mathematical Modelling of the Flow Rate in a Marsh Funnel, ***Journal of Energy Technology Research*** 1 (1), (2017) 1-12.
46. Mohammad Ali Fazilati, **Ahmad Sedaghat**, Ali-Akbar Alemrajabi, Transient performance and temperature field of a natural convection air dehumidifier loop, ***Heat Mass Transfer***, DOI 10.1007/s00231-017-1984-9, January 2017.
47. MA Fazilati, AA Alemrajabi, **A Sedaghat**, Liquid desiccant air conditioning system with natural convection, ***Applied Thermal Engineering*** 115, (2017) 305-314.
48. A Ahmadzadeh, MR Salimpour, **A Sedaghat**, Thermal and exergoeconomic analysis of a novel solar driven combined power and ejector refrigeration (CPER) system, ***International Journal of Refrigeration*** 83, (2017) 143–156.
49. Ehab Bani-Hani, Hussain Qassem, Mohammad Al Kandari, Salem Al Azmi, Musaed Khalid, Hadi Bu-Mijdad, Khalil Khanafer, **Ahmad Sedaghat,** Experimental Analysis of an Improved Solar Still System with Cooling Fan and Preheating Oil, ***Energy Engineering*** 114 (5), (2017) 55-71.
50. **A Sedaghat**, M AlJundub, A Eilaghi, E Bani-Hani, F Sabri, R Mbarki, M El Haj Assad, Application of pbl in the course fluid and electrical drive systems, case study: Manufacturing an automated punch machine, ***Journal of Problem Based Learning in Higher Education*** 5 (2), 2017.
51. **Ahmad Sedaghat**, Mohammad Al Jundub, Armin Eilaghi, Ehab Bani-Hani, Farhad Sabri, Raouf Mbarki, M. El Haj Assad, APPLICATION OF PBL IN THE COURSE FLUID AND ELECTRICAL DRIVE SYSTEMS, CASE STUDY: MANUFACTURING AN AUTOMATED PUNCH MACHINE, ***Journal of Problem Based Learning in Higher Education***, Aalborg University, 2017.

- **2016**

52. Omid Alavi, **Ahmad Sedaghat**, Ali Mostafaeipour, Sensitivity analysis of different wind speed distribution models with actual and truncated wind data: A case study for Kerman, Iran, ***Energy Conversion and Management***, 120(1):51-61, April 2016.
53. Ali Mostafaeipour, Mohammad Khayyami, **Ahmad Sedaghat**, Kasra Mohammadi, Shahaboddin Shamshirband, Mohammad-Ali Sehati,

Ehsan Gorakifard, Evaluating the wind energy potential for hydrogen production: A case study, ***International Journal of Hydrogen Energy***, Volume 41, Issue 15, 27 April 2016, Pages 6200-6210.

54. Kasra Mohammadi, Ali Mostafaeipour, **Ahmad Sedaghat**, Shahaboddin Shamshirband, Dalibor Petković, Application and Economic Viability of Wind Turbine Installation in Lutak, Iran, ***Environmental Earth Sciences*****,** (2016) 75-248.
55. Omid Nematollahi, Hadi Hoghooghi, Mehdi Rasti, **Ahmad Sedaghat**, Energy demands and renewable energy resources in the Middle East, ***Renewable and Sustainable Energy Reviews*** 54, (2016) 1172–1181.
56. M. Alsarheed, **A. Sedaghat**, Computational Study of Ailerons in Cross Flows Ground Effects and Biplanes Configurations, ***Journal of Aeronautics & Aerospace Engineering*****,** 5:161. doi:10.4172/2168-9792.1000161, 2016.
57. Mohammad Ali Fazilati, **Ahmad Sedaghat**, Ali Akbar Alemrajabi, Natural Induced Flow due to Concentration Gradient in a Liquid Desiccant Air Dehumidifier, ***Applied Thermal Engineering***, Volume 105, 25 July 2016, Pages 105–117.
58. Mohammad Azaditalab, Amir Houshmand, **Ahmad Sedaghat**, Numerical Study on Skin Friction Reduction of Nanofluid Flows in Taylor-Couette System, ***Tribology International*****,** Volume 94, February 2016, Pages 329–335.
59. Hadi Kian, **Ahmad Sedaghat**, Multi-Criteria Optimization of a solar cooling system assisted ground source Heat Pump system, ***MODARES MECHANICAL ENGINEERING***, Volume 16 , Number 1, APRIL 2016, Pages 51 - 62 (In Persian).
60. Seyed Navid Roohani Isfahani, **Ahmad Sedaghat**, A Hybrid Micro Gas Turbine and Solid-State Fuel Cell Power Plant with Hydrogen Production and CO2 Capture, ***International Journal of Hydrogen Energy***, Volume 41, Issue 22, 15 June 2016, Pages 9490–9499.
61. Ehab Hussein Bani-Hani, Mahmoud Hammad, Ali Matar, **Ahmad Sedaghat**, Khalil Khanafer, Numerical Analysis of the Incineration of Polychlorinated Biphenyl Wastes in Rotary Kilns, ***Journal of Environmental Chemical Engineering***, Volume 4, Issue 1, March 2016, Pages 624-632.
62. Pooriya Shahali, Mehdi Rahmati, Seyed Rashid Alavi, **Ahmad Sedaghat**, Experimental study on improving operating conditions of wet cooling towers using various rib numbers of packing, ***International Journal of Refrigeration***, Volume 65, May 2016, Pages 80-91.
63. S. A. Kazemi, M. Nili-Ahmadabadi, **A. Sedaghat,** M. Saghafian, Aerodynamic performance of a circulating airfoil section for Magnus systems via numerical simulation and flow visualization, ***Energy***, Volume 104, 1 June 2016, Pages 1-15.
64. Mamdouh El Haj Assad, Ehab Bani-Hani, **Ahmad Sedaghat**, Ali Al-Muhaiteeb, Khalil Khanafer, Malathe Khalil, New Pneumatic System for Tidal Energy Conversion, ***Journal of Power and Energy Engineering***, 2016, 4, 20-27, http://www.scirp.org/journal/jpee.

- **2015**

65. Shahaboddin Shamshirband, Kasra Mohammadi, Chong Wen Tong, Dalibor Petkovic´, Emilio Porcu, Ali Mostafaeipour, CH Sudheer, **Ahmad Sedaghat,** Application of extreme learning machine for estimation of wind speed distribution, ***Climate Dynamics***, 2015 (DOI 10.1007/s00382-015-2682-2).
66. Mehdi Jahangiri,Omid Nematollahi, **Ahmad Sedaghat**, Mohsen Saghafian, Techno-economical assessment of renewable energies integrated with fuel cell for off grid electrification: A case study for developing countries, ***Journal of Renewable and Sustainable Energy*** 7, 023123, 2015.
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