



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

Personal Information

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| Nationality: | British |
| ACK Joining Date: | 17 Aug 2014 |
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Professional Information

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| Education: | <p>Qualification: Doctorate Major: Aerospace Engineering College/University: University of Manchester Year: 1994/1999</p> <p>Qualification: Masters Major: Applied Mathematics & Fluid Mechanics College/University: University of Manchester Year: 1992/1994</p> <p>Qualification: Bachelor Major: Mechanical Engineering College/University: Isfahan University of Technology Year: 1986/1990</p> |
| Specialization: | Renewable Energy Aerodynamics Nanofluids |
| Current Academic Position: | Associate Professor |
| Current Professional Positions: | CQU Adjunct Professor in Research Fellow Member of Engineers Australia Chartered Engineers Australia in Aerospace and Mechanical Engineering |
| Previous Administrative Position Held: | Co-editor & head of publishing office of JAFM 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, School of Engineering, Australian College of Kuwait, P.O. Box 1411, Safat 13015, Kuwait. 2013-2014: Associate Professor, Department of Mechanical Engineering, Isfahan University of Technology, Isfahan, Iran. 2003-2013: Assistant Professor, Department of Mechanical |

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| | <p>Engineering, Isfahan University of Technology, Isfahan, Iran. 2008-2009: Lecturer, School of Computing Engineering and Physical Sciences, University of Central Lancashire, Preston, UK.</p> |
| <p>Fellowships And Honors:</p> | <p>Winner of ACK Research Achievement Award in School 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 Co-editor & head of publishing office of JAFM (Journal of Applied Fluid Mechanics) for 8 years In Editorial board of:</p> <ul style="list-style-type: none"> - Journal of Energy and Power Sources - International Journal of Energy and Power Engineering - American Journal of Energy Engineering - International Journal of Sustainable and Green Energy <p>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</p> |
| <p>Teaching Experience:</p> | <p>2014-present: Assistant and Associate Professor in Mechanical Engineering. <u>Taught courses for Diploma students:</u> 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 <u>Taught courses for Degree students:</u> Fluid Mechanics, Fluid & Electrical Drive Systems 2003-2014: Assistant and Associate Professor in Thermofluid subjects in Mechanical Engineering. <u>Taught courses for MSc and PhD students:</u> 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)</p> |

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| <p>Industrial And Technical Experience:</p> | <p>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)</p> <p>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)</p> <p>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)</p> <p>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.</p> <p>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)</p> <p>2003-2004: Researcher for Foad 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)</p> <p>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)</p> <p>2001-2003: Post-doctoral (Research Fellow) in School of Mechanical Engineering, Leeds University, Leeds, UK. Project: EPSRC project in combustion instabilities.</p> <p>1998-2001: Postdoctoral in School of Engineering, The University of Manchester, Manchester, UK. EPSRC Project: Aeroelasticity instabilities with nonlinear aerodynamics.</p> <p>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.</p> |
| <p>Research Interest:</p> | <p>Renewable Energy Wind Turbine Aero elasticity Rheology Nano fluids</p> |
| <p>Research Grants:</p> | <p>PI on KFAS Research Grant (7000 KWD) on “Office Building Energy Savings by Solar Window Films for Reducing Cooling Loads in Summer of Kuwait”</p> <p>Co-PI on KFAS Research Grant (7700 KWD) on “Autonomous and Portable Measuring System for Rheological Properties of Newtonian and Non-Newtonian Fluids”</p> <p>PI on ACK-CQU Research Grant (5000 KWD) on “Review and Simulation of Crack Detection Methodologies for Industrial Applications”</p> <p>Co-PI on ACK-CQU Research Grant of 5000 KWD on “Energy-smart materials and technologies for buildings: Development of a novel low-energy building”</p> |

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| | <p>PI on ACK 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”</p> <p>Co-PI on ACK research fund (1200 KWD) “Development of novel composable polymeric composites with GraphAne nanofillers using nanoIndentation-3D-Printing (i3D) method for smart biomedical devices and water treatment networks”</p> <p>Co-PI on ACK 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”</p> <p>Co-PI on ACK research fund (1200 KWD) “Design and development of an aeroelastic energy harvester by simulation and wind tunnel testing”</p> <p>Co-PI on ACK research fund (1200 KWD) “Developing a testing apparatus for wheelchair falls”</p> |
| <p>Research and Publications including Journal s and Books:</p> | <p>❖ Books and Book Chapters</p> <ol style="list-style-type: none"> 1. Ahmad Sedaghat, Comparative Study of High-Resolution TVD Schemes, MSc Thesis, University of Manchester, UK, 1994. 2. Ahmad Sedaghat, A Finite Volume TVD Approach to Transonic Flow Computations, PhD Thesis, University of Manchester, UK, 1997. 3. Ahmad Sedaghat, Progress in Magnus Type Wind Turbine Theories, Energy Vol. 8: Wind Energy, Chapter 808, Studium Press LLC, 2014. <p>❖ Patents</p> <ol style="list-style-type: none"> 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. <p>❖ JOURNALS</p> <ul style="list-style-type: none"> ○ 2020 <ol style="list-style-type: none"> 1. 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. 2. 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. 3. 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, |

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| | <p>Utilization, and Environmental Effects, 2020.</p> <p>4. 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.</p> <p>5. 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.</p> <p>6. Mostafa Rezaei, Ali Mostafaeipour, Mohammad Saidi-Mehrabad, Mojtaba Qolipour, Ahmad Sedaghat, Hamid Reza Arabnia, Mozghan Momeni, Sensitivity analysis of criteria to optimize wind farm localizing: a case study, Wind Engineering 44 (3), 2020, 294-312.</p> <p>7. 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.</p> <p>8. 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.</p> <p>○ 2019</p> <p>9. 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.</p> <p>10. 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.</p> <p>11. 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.</p> <p>12. 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.</p> <p>13. 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.</p> <p>14. 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</p> |
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| | <p>Engineering, Design and Technology, 2019.</p> <p>15. 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.</p> <p>16. 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.</p> <p>17. 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.</p> <p>18. 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.</p> <p>○ 2018</p> <p>19. 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.</p> <p>20. 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.</p> <p>21. 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.</p> <p>22. 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.</p> <p>23. 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.</p> <p>24. 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.</p> <p>25. 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.</p> <p>26. 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</p> |
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| | <p>exchanger, JP Journal of Heat and Mass Transfer, Volume 15, Number 1, 2018, Pages 1-13.</p> <p>27. 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.</p> <p>28. 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.</p> <p>29. 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.</p> <p style="padding-left: 40px;">○ 2017</p> <p>30. 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.</p> <p>31. 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.</p> <p>32. 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.</p> <p>33. 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.</p> <p>34. 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.</p> <p>35. 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.</p> <p>36. 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.</p> <p>37. Mohammad Ali Fazilati, Ahmad Sedaghat, Ali-Akbar Alemrajabi, Transient performance and temperature field of a natural convection air dehumidifier loop, Heat Mass Transfer, DOI</p> |
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| | <p>10.1007/s00231-017-1984-9, January 2017.</p> <p>38. MA Fazilati, AA Alemrajabi, A Sedaghat, Liquid desiccant air conditioning system with natural convection, Applied Thermal Engineering 115, (2017) 305-314.</p> <p>39. 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.</p> <p>40. 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.</p> <p>41. 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, <i>Journal of Problem Based Learning in Higher Education</i> 5 (2), 2017.</p> <p>42. 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, <i>Journal of Problem Based Learning in Higher Education</i>, Aalborg University, 2017.</p> <p>○ 2016</p> <p>43. 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.</p> <p>44. 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.</p> <p>45. 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.</p> <p>46. 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.</p> <p>47. 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.</p> <p>48. Mohammad Ali Fazilati, Ahmad Sedaghat, Ali Akbar Alemrajabi,</p> |
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| | <p>Natural Induced Flow due to Concentration Gradient in a Liquid Desiccant Air Dehumidifier, Applied Thermal Engineering, Volume 105, 25 July 2016, Pages 105–117.</p> <p>49. 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.</p> <p>50. 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).</p> <p>51. 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.</p> <p>52. 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.</p> <p>53. 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.</p> <p>54. 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.</p> <p>55. 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.</p> <p>○ 2015</p> <p>56. 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).</p> <p>57. 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.</p> <p>58. Ahmad Sedaghat, Iman Samani, Mojtaba Ahmadi-Baloutaki, M. El Haj Assad, Mohamed Gaith, Computational study on novel circulating aerofoils for use in Magnus wind turbine blades, Energy</p> |
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| | <p>91 (2015), 393-403.</p> <p>59. Z. Najafian, M. Ghaderi, A. Sedaghat, Parametric study on off-design aerodynamic performance of a horizontal axis wind turbine blade and proposed pitch control, Energy Conversion Management 93, 2015, 349-356.</p> <p>60. Mohammad Reza Salimpour, Kia Golmohammadi, Ahmad Sedaghat and Antonio Campo, Experimental Study of Turbulent Convective Heat Transfer of Titanium Oxide Nanofluid Flowing inside Helically Corrugated Tubes, Journal of Mechanical Science and Technology, September 2015, Volume 29, Issue 9, pp 4011-4016.</p> <p>61. A. Houshmand, A. Sedaghat, M.R. Salimpour, A. Zargoushi and I. Mohseni, Experimental study on heat transfer of water/TiO₂ nanofluid in a straight tube with twisted tapes at constant wall temperature, Mechanics of Structures and Fluids 5(3), (2015) 151-158 (In Persian).</p> <p>62. M. El Haj Assad, M. Alsarheed, A. Sedaghat and K. Khanafer, Performance Evaluation of MHD Power Plant at Optimal Operating Conditions, International Journal of Energy, Environment and Economics, Volume 23, Number 2, Pages 169-180, 2015.</p> <p>63. Ehab Hussein Bani-Han, Mahmoud Hammad, Ali Matar, Ahmad Sedaghat, Khalil Khanafer, Analysis of Polychlorinated Biphenyl Wastes Incineration in Rotary Kilns, Part I: Model Development and Validation, Int J Mech Syst Eng, (2015) 1-103.</p> <p>64. M. Molavi, A. Sedaghat, M.R. Salimpour, Estimation of Heat Shocks in Inverse Heat Transfer Problems using Kalman Filtering, Mashhad Journal of Applied & Numerical Science in Mechanics, Vol. 12, 2015(In Persian).</p> <p>65. S. A. Kazemi, M. Nili-Ahmadabadi, M. Saghafian, A. Sedaghat, Numerical investigation of magnus wind turbine new blade section performance, Modares Mechanical Engineering, Vol.15, No.1, pp. 163-172, 2015(In Persian).</p> <p>66. Mohamed Gaith, M. El Haj Assad, Ahmad Sedaghat, Structural Crack Detection in Composite Materials using Neural Networks, International Journal of Civil and Structural Engineering 2(1), 2015, 16-22.</p> <p>○ 2014</p> <p>67. Amin Razavieh, Ahmad Sedaghat, Raphael Ayodele and Ali 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, 2014 (http://dx.doi.org/10.1080/14786451.2014.977288).</p> <p>68. Ali Mostafaeipour, Behnoosh Bardel, Kasra Mohammadi, Ahmad Sedaghat, Yagob Dinpashoh, Economic evaluation for cooling and ventilation of medicine storage warehouses utilizing wind catchers, Renewable and Sustainable Energy Reviews 38 (2014), 12–19.</p> <p>69. Ali Mostafaeipour, Mohsen Jadidi, Kasra Mohammadi, Ahmad Sedaghat, An analysis of wind energy potential and economic evaluation in Zahedan, Iran, Renewable and Sustainable Energy</p> |
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| College Service including committee Membership: | <p>Member of ACK Smoking Campaign and Competition, 2014 2014-present:</p> <p>Member of PBL committee in Mechanical Engineering</p> <p>Member of Research committee in Mechanical Engineering</p> <p>Member & Head of Curriculum committee in Mechanical Engineering</p> |
| National Service: | <p>Collaborations with KFAS, KISR, Kuwait University, and AUM</p> |
| School Committees: | <p>ACK Research Council</p> |