

UNIVERSITY OF PRETORIA
CURRICULUM VITAE



1. BIOGRAPHICAL SKETCH

1.1 GENERAL INFORMATION

Surname	Hosseinzadeh						
First names	Siamak						
Citizenship	Iranian	Title	Dr.	Female		Male	x
Place of birth	IRAN	Date of birth	1985				
Department	Mechanical and Aeronautical Engineering	Position	Post-Doctoral Fellow and Assistant Supervisor				
Direct Telephone	+27 (0)67 8782330	Direct Telefax	N.A				
E-mail	Hoseinzadeh.siamak@gmail.com , hosseinzadeh.siamak@up.ac.za						
Date of appointment	April 2019	Permanent full-time	x	Temporary full-time			

1.2 ACADEMIC QUALIFICATIONS OBTAINED

Degree/ Diploma	Field of study	Higher education institution	Year	Distinction
Post-doctoral Fellow	Mechanical Engineering	University of Pretoria	2019	
PhD	Mechanical Engineering	IAU of Tehran	2008	
MEng.	Mechanical Engineering	IAU of Tehran	2010	
BSc (Eng.)	Mechanical Engineering	IAU of Sari	2017	

1.3 WORK EXPERIENCE TO DATE

Name of employer	Capacity and/or type of work	Period From mm//yy to mm//yy
University of Pretoria	Post- Doctoral Fellow and Assistant Supervisor	2019-present
UP, Future Africa	Researcher Assistant	2020-present
IAU, West Tehran Branch	Assistant Professor	2017– 2019
Young researchers and elite club	Researcher	2014– 2019
IAU University	Senior Lecturer & Supervisor	2011 - 2019
Engineering Organization of Mazandaran, Iran	Mechanical Engineer Grad II Designer and Supervisor	2014-2019

Engineering Organization of Mazandaran, Iran	Mechanical Engineer Grad II Home Gas Inspection Supervisor	2016-2019
Municipality of Sari (Mazandaran, Iran)	Mechanical Engineer Technical adviser of Power Plant	2015-2018
Mine and Trade Organization of Mazandaran, Iran	Mechanical Engineer Supervisor of factories	2011-2012
Nogostaran Construction Company (Tehran, Iran)	Mechanical Engineer Technical Office Manager	2007-2011

2. TEACHING ACTIVITIES

2.1 Courses presented		
Course	Level (e.g. second year, Masters)	Self-developed
Heat Transfer, Thermal Eng.	BEng (Post-graduate)	N
CFD	BEng (Post-graduate)	Y
Heat Transfer I and II	BEng (3rd year) & BEng (4th year)	N
Fluid Mechanics I and II	BS	N
Thermodynamics I and II	BS	N
Turbomachinery	BEng (4th year)	Y
Heat Exchanger Design	BEng (4th year)	Y
Renewable Energy	BEng (4th year)	Y

3. OTHER CONTRIBUTIONS

<p>3.1 Membership of national and international bodies</p> <ul style="list-style-type: none"> • Member of ASME • Member of ISME (Iranian Society of Mechanical Engineers) • Member of Iran Nanotechnology Initiative Council • Member of Young Researchers and Elite Club, IAU • Member of Iranian Organization for Engineering Order of Building • Member of Mazandaran Engineering Association <p>3.2 Visits to local and overseas universities as guest professor or lecturer in regard to teaching</p> <ul style="list-style-type: none"> • IAU, West Tehran Branch, Tehran, Iran. • IAU, Savadkooh Branch, Zirab, Mazandaran, Iran • IAU, Shirgah Branch, Shirgah, Mazandaran, Iran • IAU, Juybar Branch, Juybar, Mazandaran, Iran • IAU, Behshahr Branch, Behshahr, Mazandaran, Iran • IAU, Neka Branch, Neka, Mazandaran, Iran • Sama Institute, Sari, Mazandaran, Iran • Payame Noor University of Sari, Sari, Mazandaran, Iran • Non-profitable Institute of Roozbahan, Sari, Mazandaran, Iran • Non-profitable Institute of Sarian, Sari, Mazandaran, Iran
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4. RESEARCH ACTIVITIES

5.1 Former supervision or co-supervision (<i>completed</i>)				
Name of student	Degree/Title of dissertation/ thesis and date	Supervisor	Co-supervisor(s)	Duration of studies (years)
Jordaan H	BEng(Hons)	PS Heyns	S. Hosseinzadeh	2019-2020

5. RESEARCH OUTPUTS

5.1 Publications in peer-reviewed or refereed journals

2020

- [1]. S. Hoseinzadeh, M. H. Ghasemi and P. S. Heyns, Application of hybrid systems in solution of low power generation at hot seasons for micro hydro systems. *Renewable Energy*. (2020) <https://doi.org/10.1016/j.renene.2020.06.149>
- [2]. S. Hoseinzadeh, P. S. Heyns, Thermo-structural fatigue and lifetime analysis of a heat exchanger as a feedwater heater in power plant. *Engineering Failure Analysis*. **113** (2020). <https://doi.org/10.1016/j.engfailanal.2020.104548>
- [3]. S. Hoseinzadeh, A. Bahrami, S. M. Mirhosseini, A. Sohani, S. Heyns, A detailed experimental airfoil performance investigation using an equipped wind tunnel. *Flow Measurement and Instrumentation*. **72** (2020). <https://doi.org/10.1016/j.flowmeasinst.2020.101717>
- [4]. S. Hoseinzadeh, R. Ghasemiasl, M. A. Javadi, P. S. Heyns, Performance evaluation and economic assessment of a gas power plant with solar and desalination integrated systems. *Desalination and Water Treatment*. **174**, 11–25 (2020). <https://doi.org/10.5004/dwt.2020.24850>
- [5]. S. Hoseinzadeh, R. Yargholi, H. Kariman, P. S. Heyns, Exergoeconomic analysis and optimization of reverse osmosis desalination integrated with geothermal energy. *Environmental Progress & Sustainable Energy*. (2020). <https://doi.org/10.1002/ep.13405>
- [6]. H. Kariman, S. Hoseinzadeh, A. Shirkhani, P. S. Heyns, J. Wannenburg, Energy and economic analysis of evaporative vacuum easy desalination system with brine tank. *Journal of Thermal Analysis and Calorimetry*. **140**, 1935–1944 (2020). <https://doi.org/10.1007/s10973-019-08945-8>
- [7]. M. H. Ghasemi, S. Hoseinzadeh, P. S. Heyns, D. N. Wilke, Numerical analysis of non-fourier heat transfer in a solid cylinder with dual-phase-lag phenomenon. *CMES - Computer Modeling in Engineering and Sciences*. **122**, 399–414 (2020). <https://doi.org/10.32604/cmes.2020.07827>
- [8]. R. Yargholi, H. Kariman, S. Hoseinzadeh, M. Bidi, A. Naseri, Modeling and advanced exergy analysis of integrated reverse osmosis desalination with geothermal energy. *Water Supply*. **20**, 984-996 (2020). <https://doi.org/10.2166/ws.2020.021>

- [9]. A. Javadi, S. Hoseinzadeh, R. Ghasemiasl, P. S. Heyns, A. J. Chamkha, Sensitivity Analysis of Combined Cycle Parameters on Exergy, Economic, and Environmental of a Power Plant, *Journal of Thermal Analysis and Calorimetry*. **139**, 519–525 (2020). <https://doi.org/10.1007/s10973-019-08399-y>
- [10]. Salehi, M., Pourmahmoud, N., Hassanzadeh, A., Hoseinzadeh, S. and Heyns, P.S. Computational fluid dynamics analysis of the effect of throat diameter on the fluid flow and performance of ejector. *International Journal of Numerical Methods for Heat & Fluid Flow*. (2020). <https://doi.org/10.1108/HFF-12-2019-0871>
- [11]. A. H. Ramezani, S. Hoseinzadeh, Zh. Ebrahiminejad, Statistical and fractal analysis of nitrogen ion implanted tantalum thin films. *Applied Physics A*. 126 (2020). <https://doi.org/10.1007/s00339-020-03671-7>
- [12]. A. H. Ramezani, S. Hoseinzadeh, Zh. Ebrahiminejad, S. F. Masoudi, A. Hashemizadeh, Spin-Polarized Electron Transfer in Multilayers with Different Types of Rough Interfaces. *Journal of Superconductivity and Novel Magnetism*. 33, 1513–1519 (2020). <https://doi.org/10.1007/s10948-019-05335-x>
- [13]. A. H. Ramezani, S. Hoseinzadeh, Zh. Ebrahiminejad, Structural and mechanical properties of tantalum thin films etched by nitrogen ion implantation. *Modern Physics Letters B*. (2020). <https://doi.org/10.1142/S0217984920501638>

2019

- [14]. S. Hoseinzadeh, M. H. Zakeri, A. Shirkhani, A. J. Chamkha, Analysis of energy consumption improvements of a zero-energy building in a humid mountainous area. *Journal of Renewable Sustainable Energy*. **11** (2019). <https://doi.org/10.1063/1.5046512>
- [15]. S. Hoseinzadeh, P. S. Heyns, A. J. Chamkha, A. Shirkhani, Thermal analysis of porous fins enclosure with the comparison of analytical and numerical methods. *Journal of Thermal Analysis and Calorimetry*. **138**, 727–735 (2019). <https://doi.org/10.1007/s10973-019-08203-x>
- [16]. S. Hoseinzadeh, H. Kariman, P. S. Heyns, Numerical investigation of heat transfer of laminar and turbulent pulsating Al₂O₃/water nanofluid flow. *International Journal of Numerical Methods for Heat and Fluid Flow*. **30**, 1149-1166 (2019). <https://doi.org/10.1108/HFF-06-2019-0485>
- [17]. S. Hoseinzadeh, A. Moafi, A. Shirkhani, A. J. Chamkha, Numerical Validation Heat Transfer of Rectangular Cross-Section Porous Fins. *Journal of Thermophysics and Heat Transfer*. **33** (2019). <https://doi.org/10.2514/1.T5583>
- [18]. S. Hoseinzadeh, S. M. T. Otaghsara, M. H. Z. Khatir, P. S. Heyns, Numerical investigation of thermal pulsating alumina/water nanofluid flow over three different cross-sectional channel. *International Journal of Numerical Methods for Heat and Fluid Flow* (2019). <https://doi.org/10.1108/HFF-09-2019-0671>
- [19]. S. Hoseinzadeh, Thermal Performance of Electrochromic Smart Window with Nanocomposite Structure under Different Climates in Iran. *Micro and Nanosystems*.

11, 154–164 (2019). <https://doi.org/10.2174/1876402911666190218145433>

- [20]. Bahrami, S. Hoseinzadeh, P. S. Heyns, S. M. Mirhosseini, Experimental investigation of co-flow jet's airfoil flow control by hot wire anemometer. *Review of Scientific Instruments*. **90** (2019). <https://doi.org/10.1063/1.5113592>
- [21]. T. Barbaryan, S. Hoseinzadeh, P. S. Heyns, M. S. Barbaryan, Developing a low-fluid pressure safety valve design through a numerical analysis approach. *International Journal of Numerical Methods for Heat and Fluid Flow*. **30**, 1427–1440 (2019). <https://doi.org/10.1108/HFF-06-2019-0508>
- [22]. H. Kariman, S. Hoseinzadeh, P. S. Heyns, Energetic and exergetic analysis of evaporation desalination system integrated with mechanical vapor recompression circulation. *Case Studies in Thermal Engineering*. **16** (2019). <https://doi.org/10.1016/j.csite.2019.100548>
- [23]. M. A. Javadi, S. Hoseinzadeh, M. Khalaji, R. Ghasemiasl, Optimization and analysis of exergy, economic, and environmental of a combined cycle power plant. *Sādhanā*. **44** (2019). <https://doi.org/10.1007/s12046-019-1102-4>
- [24]. S. Hoseinzadeh, A. H. Ramezani, Investigation of Ta/Ni-WO₃/FTO Structures as a Semiconductor for the Future of Nanodevices, *Journal of Nanoelectronics and Optoelectronics*. **14**, 1413-1419 (2019). <https://doi.org/10.1166/jno.2019.2564>
- [25]. S. Hoseinzadeh, A. H. Ramezani, Tantalum/ Nitrogen and n-type WO₃ Semiconductor/FTO Structures as a Cathode for the Future of Nanodevices. *Journal of Nanostructures*. **9**, 276-286 (2019). <https://doi.org/10.22052/JNS.2019.02.010>
- [26]. A. Sohani, M. Zamani Pedram, S. Hoseinzadeh, Determination of Hildebrand solubility parameter of pure 1-alkanols up to high pressures. *Journal of Molecular Liquids*. **297** (2019). <https://doi.org/10.1016/j.molliq.2019.111847>
- [27]. A. H. Ramezani, S. Hoseinzadeh, Experimental Investigation of Corrosion Improvement Implanted Ta by Ar–Ni Ions, *Journal of Nanoelectronics and Optoelectronics*. **14**, 425-430 (2019). <https://doi.org/10.1166/jno.2019.2527>

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- [28]. S. Hoseinzadeh, R. Ghasemiasl, D. Havaei, A.J. Chamkha, Numerical investigation of rectangular thermal energy storage units with multiple phase change materials, *Journal of Molecular Liquids*. **271**, 655-660 (2018). <https://doi.org/10.1016/j.molliq.2018.08.128>
- [29]. S. Hoseinzadeh, R. Ghasemiasl, A. Bahari, A.H. Ramezani, Effect of Post-annealing on the Electrochromic Properties of Layer-by-Layer Arrangement FTO-WO₃-Ag-WO₃-Ag, *Journal of Electronic Material*. **47**, 3552–3559 (2018). <https://doi.org/10.1007/s11664-018-6199-4>
- [30]. A.H. Ramezani, S. Hoseinzadeh, A. Bahari, The Effects of Nitrogen on Structure, Morphology and Electrical Resistance of Tantalum by Ion Implantation Method, *Journal of Inorganic and Organometallic Polymers and Materials*. **28**, 847–853 (2018). <https://doi.org/10.1007/s10904-017-0769-4>

- [31]. R. Ghasemiasl, S. Hoseinzadeh, M. A. Javadi, Numerical Analysis of Energy Storage Systems Using Two Phase-Change Materials with Nanoparticles. *Journal of Thermophysics and Heat Transfer*. **32**, 440–448 (2018). <https://doi.org/10.2514/1.T5252>
- [32]. R. Ghasemiasl, R. Ostadhosein, M. A. Javadi, S. Hoseinzadeh. Blood flow Simulation in an Aorta with a mild coarctation by means of Magnetic Resonance Angiography and Finite Volume Method. *IJE TRANSACTIONS A: Basics*. **31** (2018). <http://www.ije.ir/Vol31/No4/A/20-2737.pdf>
- [33]. H. Kohzadi, A. Shadaram, S. Hoseinzadeh, Improvement of the Centrifugal Pump Performance by Restricting the Cavitation Phenomenon, *CHEMICAL ENGINEERING TRANSACTIONS*. **71** (2018). <https://doi.org/10.3303/CET1871229>
- [34]. H. Najafi-Ashtiani, A. Bahari, S. Gholipour, S. Hoseinzadeh, Structural, optical and electrical properties of WO₃–Ag nanocomposites for the electro-optical devices, *Applied Physics A*. **124** (2018). <https://doi.org/10.1007/s00339-017-1412-5>
- [35]. S. Hoseinzadeh, S., A. H. Ramezani, Corrosion Performance of Ta/Ni Ions Implanted with WO₃ /FTO. 民國一百零七年) *Journal of the Chinese Society of Mechanical Engineers*. **39** (2018).

2017

- [36]. S. Hoseinzadeh, R. Azadi, Simulation and optimization of a solar-assisted heating and cooling system for a house in Northern of Iran. *Journal of Renewable Sustainable Energy*. **9** (2017). <https://doi.org/10.1063/1.5000288>
- [37]. M. E. Yousef Nezhad, S. Hoseinzadeh, Mathematical Simulation and Optimization of a Solar Water Heater for an Aviculture Unit Using MATLAB/SIMULINK, *Journal of Renewable Sustainable Energy*. **9** (2017). <https://doi.org/10.1063/1.5010828>
- [38]. S. Hoseinzadeh, R. Ghasemiasl, A. Bahari, A. H. Ramezani, The injection of Ag nanoparticles on surface of WO₃ thin film: Enhanced electrochromic coloration efficiency and switching response, *Journal of Materials Science: Materials in Electronics*. **28**, 14855–14863 (2017). <https://doi.org/10.1007/s10854-017-7306-7>
- [39]. S. Hoseinzadeh, R. Ghasemiasl, A. Bahari, A. H. Ramezani, n-type WO₃ semiconductor as a cathode electrochromic material for ECD devices, *Journal of Materials Science: Materials in Electronics*. **28**, 14446–14452 (2017). <https://doi.org/10.1007/s10854-017-7357-9>
- [40]. S. Hoseinzadeh, S. A. R. Sahebi, R. Ghasemiasl, A. R. Majidian, Experimental analysis to improving thermosyphon (TPCT) thermal efficiency using nanoparticles/based fluids (water). *European Physical Journal Plus*. **132** (2017). <https://doi.org/10.1140/epjp/i2017-11455-3>
- [41]. S. Hosseinzadeh, R. Ostadhossein, H. R. Mirshahvalad, J. Seraj, USING SIMPLER ALGORITHM FOR CAVITY FLOW PROBLEM. *Mechatronics and Applications: An International Journal*, **1** (2017).

2016

- [42]. Hesamedin habibi, Ali Yari, S. Hosseinzadeh. Numerical study of fluid flow around a Diver helper, *International Journal of Recent advances in Mechanical Engineering*. **5** (2016) <https://doi.org/10.14810/ijmech.2016.5105>

2015

- [43]. A. Yari, S. Hosseinzadeh, A. A. Golneshan, R. Ghasemiasl, Numerical simulation for thermal design of a gas water heater with turbulent combined convection, *Proceedings of the ASME/JSME/KSME 2015 Joint Fluids Engineering Conference. Volume 1: Symposia. Seoul, South Korea. ASME.* (2015). <https://doi.org/10.1115/AJKFluids2015-3305>
- [44]. A. Bahrami, S. Hosseinzadeh, R. Ghasemiasl, M. Radmanesh, Solution of Non-Fourier Temperature Field in a Hollow Sphere under Harmonic Boundary Condition. *Applied Mechanics and Materials*. **772**, 197–203 (2016). <https://doi.org/10.4028/www.scientific.net/AMM.772.197>
- [45]. H. Habibi, S. Hosseinzadeh, R. Ghasemiasl, R. Galogahi, Study of form and structure in an injection molding process for polyethylene/polycarbonate and polyethylene/polyethylene terephthalate blended parts. *Journal of Applied Environmental and Biological Sciences*. **5**, 284–289 (2015).

2014

- [46]. S. Hosseinzadeh, A. Yari, E. Abbasi, F. Absalan. The Numerical Study of Channel Flow in Turbulent Free Convection with Radiation and Blowing. *International Journal of Recent advances in Mechanical Engineering*. **3**, 11-26 (2014). <https://doi.org/10.14810/ijmech.2014.3202>
- [47]. S. Hosseinzadeh, R. Ghasemiasl, A. Bahrami. Performance Predictions of a Turboshaft Engine Through the Use of Losses Models. *International Journal of Recent advances in Mechanical Engineering*. **3**, 35-45 (2014). <https://doi.org/10.14810/ijmech.2014.3204>
- [48]. A. Yari, S. Hosseinzadeh, M. R. Galogahi, Two-Dimensional Numerical Simulation of the Combined Heat Transfer in Channel Flow. *International Journal of Recent advances in Mechanical Engineering*. **3**, 55–67 (2014). <https://doi.org/10.14810/ijmech.2014.3305>
- [49]. S. Hosseinzadeh, M. R. Galogahi, A. Bahrami, Performance Prediction of A Turboshaft Engine by Using of One Dimensional Analysis. *International Journal of Recent advances in Mechanical Engineering*. **3**, 99–108 (2014). <https://doi.org/10.14810/ijmech.2014.3309>
- [50]. A. Yari, S. Hosseinzadeh, A. Bahrami, M. Radmanesh, The Study of the Effects of Radiation And Blowing from the Wall of a Vertical Channel on the Turbulent Free Convection Heat Transfer. *International Journal of Recent advances in Mechanical Engineering*. **3**, 35–50 (2014). <https://doi.org/10.14810/ijmech.2014.3405>

5.2 Published full-length conference papers/keynote addresses

- [51]. Yari, S. Hosseinzadeh, A. A. Golneshan, R. Ghasemiasl, Numerical Simulation

for Thermal Design of a Gas Water Heater with Turbulent Combined Convection. ASME/JSME/KSME. (AJK 2015)

6. OTHER SCHOLARLY RESEARCH-BASED CONTRIBUTIONS

6.1 Teamwork and collaboration with others:

Prof.

Prof. Stephan Heyns, Professor of Mechanical Engineering, University of Pretoria, South Africa

Prof. Mahmood Shafiee, Reader in Mechanical Engineering, Head of Mechanical Engineering Group, University of Kent, UK

Prof. Ali Bahari, Professor of Nanotechnology, University of Mazandaran, Iran

Prof. Ali Chamkha, Professor of Mechanical and Aeronautical Engineering, Prince Mohammad Bin Fahd University, Saudi Arabia

Ph.D.

Dr. Sohani, Faculty of Mechanical Engineering, Khaje Nasir Toosi University of Technology, Tehran, Iran.

Dr, Ebrahimnezhad, Department of Physic, IAU, West Tehran Branch, Tehran, Iran.

Dr. Ramezani, Department of Physic, IAU, West Tehran Branch, Tehran, Iran.

M. Eng.

Mr. Jordan, Faculty of Engineering, Built Environment and Information Technology, University of Pretoria, Pretoria, South Africa.

Mr. Shirkhani, Faculty of Engineering, Built Environment and Information Technology, University of Pretoria, Pretoria, South Africa.

Ms. Barbaryan, School of Mechanical Engineering, University of Birmingham, Birmingham, UK.

Mr. Kariman, Faculty of Mechanical and Energy Engineering, Shahid Beheshti University, A.C., Tehran, Iran.

Miss. Yargholi, Faculty of Mechanical and Energy Engineering, Shahid Beheshti University, A.C., Tehran, Iran.

Mr. Bahrami, School of Mechanical Engineering, Iran University of Science and Technology, Tehran, Iran.

Mr. Javadi, Department of Mechanical Engineering, IAU, West Tehran Branch, Tehran, Iran.

Mr. Ghasemi, Department of Mechanical Engineering, IAU, West Tehran Branch, Tehran, Iran.

Mr. Ostadhosein, Department of Mechanical Engineering, IAU, West Tehran Branch, Tehran, Iran.

Mr. Kohzadi, Department of Mechanical Engineering, IAU, West Tehran Branch, Tehran, Iran.

Mr. Yousef Nezhad, Department of Mechanical Engineering, IAU, Najafabad Branch, Isfahan, Iran.

Mr. Zakeri Khatir, Department of Mechanical Engineering, IAU, Amol Branch, Amol, Iran.

Mr. Taheri Otaghsara, Department of Mechanical Engineering, IAU, Amol Branch, Amol, Iran.

Mr. Moafi, Department of Mechanical Engineering, IAU, Sari Branch, Sari, Iran.

B. Eng.

Mr. Habibi, Department of Mechanical Engineering, University College of Rouzbahan, Sari, Iran.

6.2 Visits to local and overseas universities or research institutes as guest professor or researcher

Department of Mechanical and Aeronautical Engineering, University of Pretoria, South Africa

- Funded UP Postdoctoral Fellowship, Centre for Asset Integrity Management
- Funded by Eskom Power Plant Engineering Institute (EPPEI) chair funding
- Funded by Future Africa at the University of Pretoria.

7. COMMUNITY SERVICE OR PROFESSIONAL SKILLS

7.1 Outreach projects

Fluid-Thermal-Structural Modeling of Heat Exchangers and Piping Systems of Power Plant, supervised by Prof. P. S. Heyns, Funded by University of Pretoria, Pretoria, South Africa.

Manufacturing Smart Glass & Window (Electrochromic), supervised by Prof. A. Bahari, Funded by Nano-physics and electronic lab, University of Mazandaran, Iran, 2016-17.

Manufacturing Heat-Pipe Thermosyphon Device, Funded by IAU, Funded by IAU, West Tehran Branch, Tehran, Iran. 2015.

Manufacturing Horizontal Heat Exchanger Device, Funded by IAU, Funded by IAU, West

Tehran Branch, Tehran, Iran, 2014.

Manufacturing Gas Refueling System (LPG), equipping the Ingot Workshop, Funded by IAU, Savadkooch Branch, Iran, 2013.

Designing Thermal laser to destroy tumor tissue with Analytical Solution Non-Fourier Heat Conduction around a Hollow Sphere, supervised by Prof. C. Aghanajafi, K. N. Toosi University of Technology, 2010.

Research and Analysis of Greenhouses with Solar Roof, supervised by Prof. C. Aghanajafi, K. N. Toosi University of Technology, 2009.

Designing Respiratory System with Portable Heaters, supervised by Prof. C. Aghanajafi, K. N. Toosi University of Technology, 2008.

Design of a Water Supply Plant for Amol City, Mazandaran, Iran, Funded by IAU, Sari Branch, Iran, 2007.

7.2 Referee duties

Book:



Lecture Notes in Mechanical Engineering, Springer

- Advances in Design, Simulation and Manufacturing I
- Advances in Design, Simulation and Manufacturing II
- Advances in Design, Simulation and Manufacturing III

Editor:

- Journal of Thermal Engineering
- Smart and Sustainable Built Environment
- Journal of Combustion
- Journal of Energy
- World Journal of Engineering
- Journal of Sustainable Development
- SN Applied Sciences
- international journal of solar thermal vacuum engineering
- Journal of Mechanical Engineering Research and Developments
- International Journal of Nanoelectronics and Materials
- Engineering Reports
- Walailak Journal of Science and Technologyopen,
- Environmental and Earth Sciences Research Journal
- Journal of Engineering Sciences
- Progress in Energy and Environment
- Journal of Engineering and Applied Sciences
- Current Smart Materials
- Environmental Research Journal
- The Open Mechanical Engineering Journal
- SCIREA Journal of Energy

- SCIREA Journal of Materials
- Singapore Journal of Scientific Research
- Scientific Journal of Mechanical and Industrial Engineering
- SCIREA Journal of Mechanical Engineering
- International Journal of Electromagnetics
- International Journal of Recent Advances in Mechanical Engineering
- Journal of Mechanical Engineering and Technology
- International Journal of Engineering Studies
- International Journal of Advances in Materials Science and Engineering
- International Journal of Modern Studies in Mechanical Engineering
- Journal of Architectural Science and Civil Engineering
- Journal of Aeronautics & Aerospace Engineering
- International Journal of Advanced Engineering, Management and Science

Reviewer



ELSEVIER

- Renewable and Sustainable Energy Reviews, IF= 10.56
- Energy Conversion and Management, Elsevier, IF= 7.87
- International Journal of Heat and Mass Transfer, Elsevier, IF= 4.9
- Fuel Processing Technology, Elsevier, IF= 4.88
- Journal of Molecular Liquids, Elsevier, IF= 4.85
- International Communications in Heat and Mass Transfer, Elsevier, IF= 4.65
- Journal of Physics and Chemistry of Solids, Elsevier, IF= 2.87



Springer

- Journal of Thermal Analysis and Calorimetry, Springer, IF= 2.61
- Applied Nanoscience, Springer, IF= 3.2
- Clean Technologies and Environmental Policy, Springer, IF= 2.40
- Journal of Materials Science: Materials in Electronics, Springer, IF= 2.21
- International Journal of Thermophysics, Springer, IF= 0.92
- Applied Solar Energy, Springer, IF= 0.88



WILEY

- International Journal of Energy Research, Wiley Online Library IF= 3.3
- Mathematical Methods in the Applied Sciences, John Wiley & Sons Inc., IF= 1.77
- Environmental Progress and Sustainable Energy, John Wiley & Sons Inc., IF= 1.73
- Engineering Reports, Wiley Online Library



- International Journal of Numerical Methods for Heat & Fluid Flow, Emerald Group, 2.41
- Smart and Sustainable Built Environment, Emerald Group Publishing Ltd., IF= 1.1



- Heat Transfer Engineering, Taylor & Francis, IF= 1.87
- Cogent Engineering, Taylor & Francis, IF= 1.35



- Modern Physics Letters B, World Scientific Publishing Co, IF= 1
- International Journal of Modern Physics B, World Scientific Publishing, IF= 0.83



- Journal of Building Physics, SAGE Journals, IF= 1.12

Other Publisher

- International Journal of Heat and Technology, ISI: Edizioni ETS, IF= 1.9
- Periodica Polytechnica: Chemical Engineering, ISI, Budapest University, IF= 1.45
- Journal of Mechanical Engineering and Sciences, Universiti Malaysia Pahang, IF= 1.35
- International Journal of Renewable Energy Research, Gazi University, IF= 1.35
- Micro & Nano Letters, Institution of Engineering and Technology, IF= 0.99
- Journal of Engineering Science and Technology, Taylor's University College, IF= 0.92
- International Review of Electrical Engineering, Praise Worthy Priz, IF= 0.91
- Jordan journal of mechanical and industrial engineering, Hashemite, IF= 0.83
- AIMS Energy, AIMS Press, IF= 0.73
- Acta Polytechnica, ISI, Czech Technical University, Publishing House, IF= 0.68
- Oriental Journal of Chemistry, Scientific Publishers, IF= 0.68
- Progress in Computational Fluid Dynamics, Inderscience Publishers, IF= 0.62
- Journal of Engineering Science and Technology Review, Kavala, IF=0.62
- Iranian Journal of Chemistry and Chemical Engineering, ISI, IF= 0.60
- International Review of Mechanical Engineering, Praise Worthy Priz, IF= 0.6
- Journal of Thermal Engineering, Yildiz Technical University, IF= 0.53
- International Journal of Multiphysics, Multiphysics, IF= 0.29
- The International Journal of Renewable Energy Development, Scopus
- Journal of Sustainable Development, Canadian Center of Science and Education
- The International Journal of Nanoelectronics and Materials, Universiti Malaysia Pahang
- Sigma Journal of Engineering and Natural Sciences, Yildiz Technical University
- International Review on Modeling and Simulations, Elsevier Scopus: Praise Worthy
- Journal of Renewable Energy and Environment. Iranian Association of Chemical
- The Open Construction & Building Technology Journal, Scopus: BENTHAM
- Science international : a new era in publishing, Scopus
- Journal of Advance Research in Electrical & Electronics Engineering, Scopus: JIAATS
- World Academy of Science, Engineering and Technology, Scopus
- World Journal of Nano Science and Engineering, Scientific Research Publishing
- Progress in Energy and Environment, Akademia Baru
- Scholarly Research Publisher, ISC &Google Scholar

- Fluid Mechanics Research International Journal, MedCrave Group
- Current Smart Materials, BENTHAM
- Journal of Material Sciences & Engineering, OMICS Publishing

Conference Committee Member

- Global Congress and Expo on Solid State Devices and Materials (Solid State Devices and Materials, Miami, USA, (2020).
- 3rd International Conference on Sustainable Development of Water and Environment, Environmental Science and Engineering, Incheon, South Korea, (2020).
- 2nd World Congress on Chemistry (Chemistry Congress), Rome, Italy, (2020).
- 6th International Conference on Mechanical Structures and Smart Materials, Materials Science Forum (Scopus), Ho Chi Minh City, Vietnam, (2020).
- International Conference on Energy and Power Engineering, Conference Series: Earth and Environmental Science, Shanghai, China (2020).
- The 2nd International Conference on Wastewater Technologies and Environmental Treatment, Kuala Lumpur, Springer Conference Series Environmental Science and Engineering, Malaysia, (2020).
- 4th Thermal and Fluids Engineering Conference, American Society of Thermal and Fluids Engineers (ASTFE), Las Vegas, NV, USA, (2019).
- The 4th International Conference on Power and Renewable Energy, (IEEE Xplore and Scopus), Chengdu, China, (2019).
- 3rd International Conference on Renewable & Non Renewable Energy Sources, The Scientific Federation, Kuala Lumpur, Malaysia, (2019).
- International Conference on Nanofluids (ICNf) and the 2nd European Symposium on Nanofluids, series of international conferences under the auspices of the European Cooperation in Science and Technology, Castello, Spain, (2019).
- International Conference on Computational Modeling, Simulation and Optimization, DEStech Transactions, Beijing, China, (2019).
- 4th International Conference on Green Energy Technology, Thomson Reuters (WoS), Rome, Italy, (2019).
- 3rd International Conference on Mechanical Engineering and Applied Composite Materials, IOP Conference Series: Materials Science and Engineering, Singapore, (2019).
- International Conference on Metals and Alloys), IOP Conference Series: Materials Science and Engineering, Beijing, China, (2019).
- The 7th International Conference on Control, Mechatronics and Automation, Machines and IEEE Xplore, TU Delft, Netherlands, (2019).
- International Conference on Energy, Environmental and Civil Engineering, Journal of DEStech Transactions on Environment, Energy and Earth Sciences, Wuhan, China, (2019).
- 10th International Conference on Environmental Engineering and Applications, International Journal of Environmental Science and Development, Prague, Czech Republic, (2019).
- International Conference on Wastewater Technologies and Environmental Treatment, Kuala Lumpur, Malaysia, (2019).
- 8th International Conference on Advanced Materials and Engineering Materials, by X-academy, Key Engineering Materials, Hong Kong, China, (2019).
- 3rd International Conference on Mechatronics Systems and Control Engineering, Conference Proceedings Series by (Scopus), Nice, France, (2019).

- 2nd International Conference on Sustainable Development of Water and Environment, Journal of Water and Climate Change, Hongkong, (2019).
- The 2nd International Symposium on Water Resource and Environmental Management, Environmental Science and Pollution Research, Sanya, China, (2019).
- 2nd International Conference on Robotics and Intelligent System, Conference Proceedings Series by (Scopus), Warsaw, Poland, (2019).
- 7th International Conference on Metallurgy Technology and Materials, Xiamen, China, (2019).
- International conference focused on clean and renewable energy, Sustainability (ISI Impact Factor: 1.789), Quebec, Canada, (2018).
- International Conference on Renewable Energy Research and Application, IEEE Xplore, SCOPUS and Web of Science, Paris, France, (2018).
- International Conference on Mechanical Engineering and Applied Composite Materials, IOP Conference Series: Materials Science and Engineering, Harbin, China, (2018).
- 7th International Conference on Energy, Power and Materials Engineering, Journal of DEStech Transactions on Environment, Energy and Earth Sciences, Beijing, China, (2018).
- 9th International Conference on Environmental Engineering and Applications, International Journal of Environmental Science and Development, Amsterdam, Netherlands, (2018).
- 2nd International Conference on Mechanical Engineering and Applied Composite Materials, IOP Conference Series: Materials Science and Engineering, Harbin, China, (2018).
- 3rd International Conference on Power and Renewable Energy, (IEEE Xplore and Scopus), Berlin, Germany, (2018).
- International Conference on Advanced Functional Materials and Composites, Materials Express, Barcelona, Spain, (2018).
- International Conference on Energy, Power and Environmental System Engineering, DEStech Transactions on Environment, Energy and Earth Sciences, Xiamen, China, (2018).
- International Symposium on Material Science and Engineering, AIP Conference Proceedings (Scopus), Seoul, South Korea, (2018).
- 20th International Conference on Energy and Heat Transfer Engineering, Special Journal Issue on Energy and Heat Transfer Engineering (ISI), Mumbai, India, (2018).
- International Conference on Green Materials and Environmental Engineering, DEStech Transactions on Environment, Energy and Earth Sciences, Beijing, China, (2018).
- 3rd International Conference on Control and Robotics Engineering, (IEEE Xplore and Scopus), Nagoya Institute of Technology, Nagoya, Japan, (2018).
- 9th International Conference on Environmental Engineering and Applications, Journal of Environmental Science and Development, Amsterdam, Netherlands, (2018).
- International Conference on Computer, Electronic and Mechanical Engineering, DEStech Transactions on Computer Science and Engineering, Shanghai, China, (2018).
- International Conference on Robotics and Intelligent System, Conference Proceedings Series by ACM, (Scopus), Amsterdam, Netherlands, (2018).
- 6th International Conference on Metallurgy Technology and Materials, Solid State Phenomena, Xian, China, (2018).
- 2nd International Conference on Automation and Mechatronics Engineering, International Journal of Mechanical Engineering and Robotics Research. Singapore, (2018).

- International Conference on Metal Material Processes and Manufacturing, Jeju National University, Jeju Island, South Korea, (2018).
- 20th International Conference on Electric Power and Energy Conversion Systems, Electric Power and Energy Conversion Systems (WASET), Tokyo, Japan, (2018).
- 4th International Conference on Advances in Mechanical Engineering, International Journal of Recent advances in Mechanical Engineering, Geneva, Switzerland, (2018).
- International Conference on Energy, Power and Materials Engineering, Journal of DEStech Transactions on Environment, Energy and Earth Sciences, Beijing, China, (2018).
- 20th International Conference on Advanced Mechanical Engineering and Spacecraft Technologies, (WASET), London, United Kingdom, (2018).
- 2nd International Conference on Mechatronics Systems and Control Engineering, Conference Proceedings Series by ACM, (Scopus), Amsterdam, Netherlands, (2018).
- International Conference on Material Engineering Research, Applied Mechanics and Materials, AMM, (Scopus), Incheon, South Korea, (2018).
- International Conference on Mechanical, Automation and Applied Mechanics, the Journal of DEStech Transactions on Engineering and Technology Research, Wuhan, China, (2018).
- 20th International Conference on Applied Thermal Engineering, World Academy of Science, Engineering and Technology (WASET), London, United Kingdom, (2018).
- The 1st International Symposium on Water Resource and Environmental Management, Kunming, China, (2018).
- International Conference on Design, Simulation, Manufacturing: The Innovation Exchange, Journal of Engineering Sciences, Sumy State University, Ukraine, (2018).
- International Conference on Energy, Environment and Power Engineering, DEStech Transactions on Environment, Energy and Earth Sciences, Sanya, China, (2018).
- 2nd International Conference on Aerospace Engineering, Journal of Automation and Control Engineering, Seoul, South Korea, (2018).
- 5th International Conference on Robotics, Mechanics and Mechatronics, International Journal of Mechanical Engineering and Robotics Research, (Scopus), Dubai, UAE, (2018).
- 3rd International Conference on Control and Robotics Engineering, (IEEE Xplore and Scopus), Nagoya Institute of Technology, Japan, (2018).
- International Conference on Sustainable Development of Water and Environment, Water Science and Technology, (IOP conference series), ShenYang, China, (2018).
- 5th International Conference on Artificial Intelligence and Applications, International Journal of Fuzzy Logic Systems, Zurich, Switzerland, (2018).
- International Conference on Modeling, Simulation and Optimization, DEStech Transactions on Computer Science and Engineering, (Web of Science), Shenzhen, China, (2018).
- 5th International Conference on Mechanical Engineering, International Journal of Recent Advances in Mechanical Engineering, Dubai, UAE, (2018).
- International Conference on Mathematics, Modeling and Simulation Technologies and Application, DEStech Transactions on Computer Science and Engineering, (Thomson Reuters Web of Science), Xiamen, China, (2017).
- 2nd International Symposium on Mechanical Engineering and Material Science Advances in Engineering Research, (Advances in Engineering Research), Suzhou, China, (2017).
- The 2nd International Conference on Power and Renewable Energy, (IEEE Xplore and Scopus), University of Electronic Science and Technology of China, (2017).

- 2nd International Conference on Mechanical Engineering, International Journal of Recent advances in Mechanical Engineering, Vienna, Austria, (2017).
- Second International Conference on Data Mining, Computer Science & Information Technology, Chennai, India, (2016.).
- Second International Conference on Artificial Intelligence and Applications, Computer Science & Information Technology, Vienna, Austria,(2015).
- Third International Conference on Database and Data Mining, Computer Science & Information Technology, Dubai, UAE, (2015).
- Second International Conference on Data Mining and Database, Second International Conference on Data Mining and Database, Vienna, Austria, (2015).
- Fourth International Conference on Information Theory, Second International Conference on Data Mining and Database, Vienna, Austria,(2015).
- International Conference on Recent advances in Physics, Chennai, India, (2014).
- Second International Conference on Computational Science & Engineering, UAE, (2014).

8. AWARDS AND SCIENTIFIC/SCHOLARLY RECOGNITION

8.1 Evaluation status as scientist/scholar

Postdoctoral Fellowship (2019-Present)

- <https://www.up.ac.za/mechanical-and-aeronautical-engineering/article/48434/staff>

8.2 Research awards and prizes

Top Researcher of University (2018)

- <http://www.ana.ir/news/293847>

8.3 Artistic awards and prizes

Top graduate (Ph.D.) of the University (2017)

- <http://www.ana.ir/news/287302>