

# Siamak Hosseinzadeh



₩ebsite: <a href="https://scholar.google.com/citations?user=dxITgAEAAAAJ&hl=en">https://scholar.google.com/citations?user=dxITgAEAAAAJ&hl=en</a>

#### **WORK EXPERIENCE**

#### **Senior Researcher**

Università degli Studi di ROMA "La Sapienza [ 01/04/2021 – Current ]

City: Rome | Country: Italy

# Research assistant professor

**University of Pretoria** [ 03/2019 – 03/2021 ]

City: Pretoria | Country: South Africa

## Higher education assistant researcher

Future Africa at the University of Pretoria, UNICEF funded building programme [ 2020 – 2021 ]

City: Pretoria | Country: South Africa

# **Engineer researcher**

Eskom Power Plant Engineering Institute (EPPEI) [ 2019 – 2021 ]

City: Pretoria | Country: South Africa

## **Assistant professor**

IAU, West Tehran University [ 2017 – 2019 ]

City: Tehran | Country: Iran

## Lecturer in mechanical engineering

Azad Tehran University [ 2011 - 2019 ]

City: Tehran | Country: Iran

Assistant Professor and Supervisor, 2017 – 2019.

Lecturer & Project Supervisor of University, Level 2/3, 2011 – 2019.

## **Educational scholar**

Researcher from Young researchers and elite club [ 2014 – 2019 ]

City: Tehran | Country: Iran

## **Editorial director**

Frontiers in Mechanical Engineering [ 2020 – 2022 ]

City: Lausanne | Country: Switzerland

## Research grants administrator

The National Science Centre of Poland (Narodowe Centrum Nauki) [ 2020 – 2020 ]

Country: Poland

# Research grants administrator

National Fund for Scientific and Technological Development of Chile (Fondecyt) [ 2020 – 2020 ]

Country: Chile

# **Power plant supervisor**

Mechanical Technical adviser for Incineration Plant, Municipality of Say, Mazandaran [ 2015 – 2019 ]

City: Sary | Country: Iran

# **Mechanical engineering consultant**

**Designer and Supervisor of Construction, Engineering Organization of Mazandaran province** [ 2014 – 2019 ]

City: Sary | Country: Iran

# Gas distribution engineering consultant

Home Gas Inspection - Building Engineering System, Engineering Organization of Mazandaran province  $\lceil 2016 - 2019 \rceil$ 

City: Sary | Country: Iran

#### Office coordinator

Head of Engineer, Nogostaran Construction Installation Company [ 2008 – 2019 ]

City: Tehran | Country: Iran

## **Book editor and publisher**

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

## **Manuscripts editorial director**

Lecture Notes in Mechanical Engineering, Springer

## researcher

Università degli Studi di ROMA "La Sapienza

City: Rome | Country: Italy

#### **Editorial intern**

**JOURNALS** 

Smart and Sustainable Built Environment (EMERALD)

Journal of Thermal Engineering

Journal of Combustion (HINDAWI)

Journal of Energy (HINDAWI)

World Journal of Engineering (EMERALD)

SN Applied Sciences (SPRINGER)

International Journal of Renewable Energy Development

International Journal of Nanoelectronics and Materials

Environmental and Earth Sciences Research Journal

Progress in Energy and Environment

South African Journal of Chemical Engineeringt (ELSEVIER)

Measurement: Sensors (ELSEVIER)

Journal of Engineering Research and Reports

Water (MDPI) Energies (MDPI)

Sustainability (MDPI)

#### **EDUCATION AND TRAINING**

# **Postdoctoral Fellowship**

**University of Pretoria** [ 03/2019 – 03/2021 ]

Address: 002 Pretoria (South Africa)

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

**Azad Tehran University** [ 09/2014 – 08/2017 ]

Address: West Tehran Branch, Tehran (Iran)

## **LANGUAGE SKILLS**

Mother tongue(s): Persian

Other language(s):

**English** 

**LISTENING C2 READING C2 WRITING C2** 

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

## **DIGITAL SKILLS**

CFD / Heat transfer / Thermal Engineering / Solar Energy / Renewable Energy / Energy / Smart Composite materials / Nanotechnology / Fluent (Ansys CFD) / ANSYS Mechanical / MATLAB&Simulink / Matalb / Phytoon / Comsol Multyphysics / Solara software capability software / HOMER Energy / Fluid Mechanics / Thermodynamics / XRD, VSM, RF Heating Responce Unit, SEM, FTIR, / Nano / Smart Devices / Electrochemical Analysis

#### **PUBLICATIONS**

- S. Hoseinzadeh and P. S. Heyns, Advanced Energy, Exergy and Environmental (3E) Analyses and Optimization of a Coal-Fired 400 MW Thermal Power Plant. Journal of Energy Resources Technology.
- H. Azad Gilani, S. Hoseinzadeh, Techno-economic comparison of compound parabolic collector and flat plate collector in solar water heating systems in the northern hemisphere, Applied Thermal Engineering. 116756 (2021).
- A. Sohani, S. Hoseinzadeh, K. Berenjkar, Experimental analysis of innovative designs for solar still desalination technologies; An in-depth technical and economic assessment. Journal of Energy Storage. 33, 101862 (2021).
- S. Hoseinzadeh, P. S. Heyns, A. Sohani, Comprehensive analysis of the effect of air injection on the wake development of an airfoil, Ocean Engineering. 220, (2021).
- H. Jordaan, P.S. Heyns, S. Hoseinzadeh. Numerical Development of a Coupled 1D/3D CFD Method for Thermal Analysis with Flow Maldistribution, Journal of Thermal Science and Engineering Applications. 13(4), 041017 (2021).

- T. Ghanbari Ashrafi, S. Hoseinzadeh, A. Sohani, M. H. Shahverdian, Applying homotopy perturbation method to provide an analytical solution for Newtonian fluid flow on a porous flat plate. Math Meth Appl Sci. (2021).
- 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, 104548 (2020).
- 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. 160, 323-332 (2020).
- 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. 39(5), e13405 (2020).
- 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).
- H. Kariman, S. Hoseinzadeh, P. S. Heyns, A. Sohani, Modeling and Exergy Analysis of Domestic MED Desalination with Brine Tank. Desalination and Water Treatment. 197, 1-13 (2020).
- 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).
- 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).
- H. Ramezani, S. Hoseinzadeh, Zh. Ebrahiminejad M.R. Hantehzadeh, M.Shafiee, Investigation the effect of Nitrogen ion-implantation on mechanical and statistical properties of Tantalum bulk, Optik, 225, 165628 (2021).
- . SA. Rozati, F. Montazerifar, O. Ali Akbari, S. Hoseinzadeh. et al. Natural convection heat transfer of water/Ag nanofluid inside an elliptical enclosure with different attack angles. Math Meth Appl Sci. (2020).
- 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, 101717 (2020).
- S. Hoseinzadeh, A. Sohani, Samiezadeh, M. H. Ghasemi, H. Kariman, Using computational fluid dynamics for different alternatives water flow path in a thermal photovoltaic (PVT) system, International Journal of Numerical Methods for Heat and Fluid Flow (2020).
- M. H. Ghasemi, S. Hoseinzadeh, P. S. Heyns, D. N. Wilke, Numerical analysis of non-fourier heat transfer in a solid cylinder with dual-phaselag phenomenon. CMES Computer Modeling in Engineering and Sciences. 122, 399–414 (2020).
- 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. 31(3), 733-752 (2020).
- H. Ramezani, S. Hoseinzadeh, Zh. Ebrahiminejad, Statistical and fractal analysis of nitrogen ion implanted tantalum thin films. Applied Physics A. 126 (2020).

- 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).
- H. Ramezani, S. Hoseinzadeh, Zh. Ebrahiminejad, Structural and mechanical properties of tantalum thin films ected by nitrogen ion implantation. Modern Physics Letters B. 34(15), 2050163 (2020).
- 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, 015103 (2019).
- 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, 100548 (2019).
- S. Hoseinzadeh, Thermal Performance of Electrochromic Smart Window with Nanocomposite Structure under Different Climates in Iran. Micro and Nanosystems. 11, 154–164 (2019).
- 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).
- 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(3), 1149-1166 (2019).
- 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).
- 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. 30(7), 3721-3735 (2019)
- 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).
- 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).
- 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).
- S. Hoseinzadeh, A. H. Ramezani, Investigation of Ta/NII-WO3/FTO Structures as a Semiconductor for the Future of Nanodevices, Journal of Nanoelectronics and Optoelectronics. 14, 1413-1419 (2019).
- 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).
- S. Hoseinzadeh, R. Ghasemiasl, A. Bahari, A.H. Ramezani, Effect of Postannealing on the Electrochromic Properties of Layer-by-Layer Arrangement FTO-WO3-Ag-WO3-Ag, Journal of Electronic Material. 47, 3552–3559 (2018).
- 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).

- 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).
- H. Najafi-Ashtiani, A. Bahari, S. Gholipour, S. Hoseinzadeh, Structural, optical and electrical properties of W03-Ag nanocomposites for the electro-optical devices, Applied Physics A. 124(24), (2018).
- H. Kohzadi, A. Shadaram, S. Hoseinzadeh, Improvement of the Centrifugal Pump Performance by Restricting the Cavitation Phenomenon, CHEMICAL ENGINEERING TRANSACTIONS. 71 (2018).
- 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, 063702 (2017).
- S. Hoseinzadeh, R. Azadi, Simulation and optimization of a solarassisted heating and cooling system for a house in Northern of Iran. Journal of Renewable Sustainable Energy. 9, 045101 (2017).
- 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(197), (2017).
- 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).
- 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).
- 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).
- 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).

[2022]

Exploring the penetration of renewable energy at increasing the boundaries of the urban energy system – The PRISMI plus toolkit application to Monachil, Spain Write here the description...

S. Hoseinzadeh, B. Nastasi, D. Groppi, D. A. Garcia,

[2023]

Thermo-economic analysis, energy modeling and reconstructing of components of a single effect solar-absorption lithium bromide chiller for energy performance enhancement

Y. FathiAlm, H. Ghadamian, M. Aminy, M. Moghadasi, H. Amirian, S. Hoseinzadeh, D. Astiaso Garcia,

[2023]

<u>Thermoeconomic assessment and optimization of a multigeneration system powered by geothermal and solar energy</u>

M. Mohammadi, A. Mahmoudan, P. Nojedehi, S. Hoseinzadeh, M. Fathali, D. Astiaso Garcia,

[2023]

# Thermography and machine learning combination for comprehensive analysis of transient response of a photovoltaic module to water cooling

A. Sohani, C. Cornaro, S. Hoseinzadeh, D. Moser d, B. Nastasi, H. Sayyaadi, D. Astiaso Garcia,

[2023]

# Carbon footprint of low-energy buildings in the United Kingdom: Effects of mitigating technological pathways and decarbonization strategies

M. Norouzi, A.N. Haddad, L. iménez, S. Hoseinzadeh, D. Boer,

[2023]

### Grid-connected renewable energy systems flexibility in Norway islands' Decarbonization

S. Hoseinzadeh, D. Astiaso Garcia, Lizhen Huang

[2024]

Thermodynamic analysis of heat storage of ocean thermal energy conversion integrated with a two-stage turbine by thermal power plant condenser output water

Siamak HoseinzadehMehdi Asadi PaeinlamoukiDavide Astiaso Garcia

[2024]

Innovative continuous heating-enhance solar still farm- A case study for irrigation in a pistachio orchard

Sustainable hydrogen production through water splitting: a comprehensive review

[2024]

Designing high-share 50% and 100% renewable energy scenarios for Ragusa by sustainable energy toolkit application

https://linkinghub.elsevier.com/retrieve/pii/S2213138824000419

[2024]

Application of PCM in a Zero-Energy Building and Using a CCHP System Based on Geothermal Energy in Canada and the UAE

[2024]

Proposal of a Reflector-Enhanced Solar Still Concept and Its Comparison with Conventional Solar Stills

<u>Developing particle-based models to predict solar energy attenuation using long-term daily remote and local measurements</u>

[2024]

The impact of facade geometry on visual comfort and energy consumption in an office building in different climates

[2023]

<u>Developing computational methods of heat flow using bioheat equation enhancing skin thermal</u> modeling efficiency

[2023]

Enhancing solar thermal collector systems for hot water production through machine learning-driven multi-objective optimization with phase change material (PCM)

[2023]

Thermodynamic feasibility and multiobjective optimization of a closed Brayton cycle-based clean cogeneration system

[2023]

<u>3D-CFD</u> analysing of tidal Hunter turbine to enhance the power coefficient by changing the stroke angle of blades and incorporation of winglets

[2023]

Ocean thermal energy conversion (OTEC) system driven with solar-wind energy and thermoelectric based on thermo-economic analysis using multi-objective optimization technique

[2023]

A numerical study of the nanofluid mixtures inside a Buoyancy-driven cavity in the presence of a variable magnetic field

[2023]

Thermo-economic assessment and optimization of a multigeneration system powered by geothermal and solar energy

[2023]

A new analysis for a Concentrated solar power-based Cogeneration System with Molten Salt Energy Storage and Heat Recovery Steam Generator - Case study - (USA, France, Canada)

[2023]

Optimal techno-economic and thermo-electrical design for a phase change material enhanced renewable energy driven polygeneration unit using a machine learning assisted lattice Boltzmann method

[2023]

An in-depth thermo-electrical evaluation of a rooftop PV technology for a residential building using advanced infrared thermography

[2023]

Experimental and Computational Fluid Dynamic Study of Water Flow and Submerged Depth Effects on a Tidal Turbine Performance

[2023]

Benefits of an innovative polygeneration system integrated with salinity gradient solar pond and desalination unit

[2023]

A Transient simulation for a novel solar-geothermal cogeneration system with a selection of heat transfer fluids using Thermodynamics analysis and ANN intelligent (AI) modeling

[2023]

Study of the physicochemical and transport performance of neat Matrimid 5218 membrane with nanoparticles: A molecular dynamics simulation

[2023]

<u>Application of Machine Learning and Artificial Intelligence in Design, Optimization, and Control of VRF Systems</u>

[2023]

Numerical simulation of fluid dynamic performance of turbulent flow over Hunter turbine with variable angle of blades

[2023]

Thermal energy storage systems

[2022]

Waste chicken feathers integrated with phase change materials as new inner insulation envelope for buildings

[2022]

The PRISMI Plus Toolkit Application to a Grid-Connected Mediterranean Island

[2022]

<u>Using Building Integrated Photovoltaic Thermal (BIPV/T) Systems to Achieve Net Zero Goal: Current Trends and Future Perspectives</u>

[2022]

A review on evaporation improvement of solar still desalination using porous material

[2022]

Energy, exergy, exergoeconomic, exergoenvironmental, and transient analysis of a gas-fired power plantdriven proposed system with combined Rankine cycle: thermoelectric for power production under different weather conditions

[2022]

<u>Performance evaluation of using evacuated tubes solar collector, perforated fins, and pebbles in a solar still – experimental study and CO2 mitigation analysis</u>

[2022]

A conceptual optimum design for a high-efficiency solar-assisted desalination system based on economic, exergy, energy, and environmental (4E) criteria

[2022]

Bibliometric Analysis of Solar Desalination Systems Powered by Solar Energy and CFD Modelled

[2022]

<u>Deep Q-Value Neural Network (DQN) Reinforcement Learning for the Techno-Economic Optimization of a Solar-Driven Nanofluid-Assisted Desalination Technology</u>

[2022]

The solution of Pennes' bio-heat equation with a convection term and nonlinear specific heat capacity using Adomian decomposition

[2022]

A solar thermal driven ORC-VFR system employed in subtropical Mediterranean climatic building

[2022.

<u>Techno-economic assessment of hybrid energy flexibility systems for islands' decarbonization: A case study in Italy</u>

[2022]

A super-efficient method for hydrogen production from seawater

[2022]

<u>Development of a Model Efficiency Improvement for the Designing of Feedwater Heaters Network in</u> **Thermal Power Plants** 

[2022]

An experimental investigation on using heat pipe heat exchanger to pre-heating natural gas and improving energy performance in city gate station

[2022]

Application of Porous-Embedded Shell and Tube Heat Exchangers for The Waste Heat Recovery Systems

[2022]

<u>Thermal Analysis of Steady Simulation of Free Convection from Concentric Elliptical Annuli of a Horizontal Arrangement</u>

[2022]

A dual-phase-lag (DPL) transient non-Fourier heat transfer analysis of functional graded cylindrical material under axial heat flux

[2022]

**Environmental and Economic Assessments of Hydrogen Utilization in the Transportation Sector of Iran** 

[2022]

A geothermal and solar-based multigeneration system integrated with a TEG unit: Development, 3E analyses, and multi-objective optimization

[2022]

Multi-objective 4E analysis for a building integrated photovoltaic thermal double skin Façade system

[2022]

The real-time dynamic multi-objective optimization of a building integrated photovoltaic thermal (BIPV/T) system enhanced by phase change materials

[2022]

Geographical Preference for Installation of Solar Still Water Desalination Technologies in Iran: An Analytical Hierarchy Process (AHP)-Based Answer

[2022]

Integration of heat extraction from abandoned wells with renewables

## **NETWORKS AND MEMBERSHIPS**

Iran

Member of ISME (Iranian Society of Mechanical Engineers)

Mazandaran, Sary, Iran

Member of Iranian Organization for Engineering Order of Building

Tehran, Iran

**Member of Young Researchers and Elite Club** 

Iran

**Member of Iran Nanotechnology Initiative Council** 

#### **CONFERENCES AND SEMINARS**

[ 2015 ] ASME. AJKFluids2015

Yari, S. Hosseinzadeh, A. A. Golneshan, R. Ghasemiasl, Numerical simulation for thermal design of a gas water heater with turbulent combined convection, ASME. AJKFluids2015-3305, V001T03A007 (2015).

**Link:** https://doi.org/10.1115/AJKFluids2015-3305

#### **PROJECTS**

[ 17/04/2023 - 16/04/2024 ]

**BE-FOR-European Research Council (ERC)** 

**SAPIEXCELLENCE 2022 - BANDO BE-FOR-ERC** 

[2020 - 2021]

**6E Analysis of Thermal Power Plant in South Africa** 

[2019 - 2021]

Fluid-Thermal-Structural Modeling of FWH Heat EX

[2020 - 2021]

**Climate Change (UNICEF Building Programme)** 

[2019 - 2020]

**CFD Development of Coupled 1D/3D Thermal Flow** 

[2018 - 2020]

**Experimental Airfoil in an Equipped Wind Tunnel** 

[2018 - 2019]

Modeling and Optimizing MED Desalination Sys.

[2018 - 2019]

**Thermal Analysis of Porous Fins Enclosure** 

[2017 - 2018]

**Analyze of Thermal Energy Storage in Multiple PCM** 

[2017 - 2018]

**Sensitivity Analysis of Combined Solar Power Plant** 

[2016 - 2019]

**Manufacturing Smart Window (Elechtrochromic)** 

[2017 - 2019]

Simulation of Solar Water Heater for an Aviculture

 $\Gamma 2017 - 2019 1$ 

**Designing-Modeling Solar System for ZEBs in Iran** 

[2017 - 2018]

**Analysis Non-Fourier Heat Transfer in Solid Cylinder** 

[2014 - 2015]

#### **Designing and Manufacturing a Diver Helper**

[2013 - 2014]

**Designing and Manufacturing of a Gas Water Heater** 

[2012 - 2013]

Manufacturing Gas Refueling System (LPG)

[2009 - 2011]

**Designing Thermal Laser to Destroy Tumor Tissue** 

[2008 - 2010]

**Analysis Non-Fourier Temp. Field in Hollow Sphere** 

[2008 - 2009]

**Analysis of Greenhouses with Solar Roof** 

[2007 - 2008]

**Designing Respiratory System with Portable Heaters** 

[2006 - 2007]

**Design of a Water Supply Plant for Amol City, Iran** 

## **HONOURS AND AWARDS**

[ 03/2019 ] University of Pretoria

**Postdoctoral Fellowship** 

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

[2020]

Top and Excellent reviewer

**Link:** https://publons.com/researcher/1719575/siamak-hoseinzadeh/

[ 2017 ] Azad Tehran University

Top graduate (Ph.D.) of the University

Link: https://www.ana.press/news/214629

# **VOLUNTEERING**

**REVIEWER** · Renewable and Sustainable Energy Reviews

- Energy Conversion and Management
- International Journal of Heat and Mass Transfer
- Sustainable Cities and Society
- Fuel Processing Technology
- Journal of Molecular Liquids
- International Communications in Heat and Mass Transfer
- Journal of Physics and Chemistry of Solids
- Journal of Thermal Analysis and Calorimetry
- Applied Nanoscience
- · Clean Technologies and Environmental Policy
- Journal of Materials Science: Materials in Electronics

- · International Journal of Thermophysics
- Applied Solar Energy
- · International Journal of Energy Research
- · Mathematical Methods in the Applied Sciences
- · Environmental Progress and Sustainable Energy
- Engineering Reports
- Journal of Thermal Science and Engineering Applications
- · International Journal of Numerical Methods for Heat & Fluid
- Smart and Sustainable Built Environment
- Heat Transfer Engineering
- · Modern Physics Letters B
- Journal of Building Physics