Mohammad Nazififard

Assistant Professor

College: Faculty of Mechanical Engineering

Department: Mechanical Engineering - Heat and Fluid

Currently my primary focus is on renewable and clean energy systems. With over a decade of experience in the energy industry, I have led research and development efforts in sustainable energy production, energy management, and conservation systems.

At the University of Kashan, I am actively involved in teaching and conducting research, while also establishing close collaborations with the R&D divisions of major international companies. Together, we are advancing technologies in renewable and clean energy for Iran and similar regions. Through these partnerships, I have made significant contributions to the development and implementation of innovative solutions in our country's energy sector.

I strongly believe in taking a holistic approach to address energy challenges. This includes reducing consumption through efficiency improvements and promoting sustainable renewable energy production. By staying up-to-date with the latest advancements in renewable and smart energy systems, I strive to combine theoretical knowledge with practical applications to contribute to the transition towards a more sustainable and efficient energy future.

Areas of Expertise:
- Renewable Energy Systems
- Sustainable Energy Production
- Energy Management
- Smart Energy Systems
- Research and Development in Energy Systems Engineering

Education

Degree	Graduated in	Major	University
MSc	2007	Reactor Engineering	Shiraz University
Ph.D	2012	Reactor Engineering	Shiraz University
Post Doctoral	2013	Energy Systems Engineering	Seoul National University

Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Department of Energy Systems Engineering	Assistant Professor	(not set)	Full Time	8

Work Experience

- Head of Science and Technology Park of Kashan (2018 - 2022)
- Deputy Head, Energy Research Institute, University of Kashan (2012 - 2018)

Subjects Taught

- Energy Systems Engineering
- Renewable Energy
- Thermal Haydraulics of Power Plants
- Energy Storage

Course Topics

- Energy Systems Anlysis
- Renewable Energy Systems and Microgrids
- Thermal-hydraulics and Experimental Heat Transfer
- Energy Storage

Papers in Conferences

1. Ali Sadat ,& Mohammad Nazififard ,Introducing a Novel Hybrid Mobile Energy Storage System for Vulnerable Community Resilience Support ,6th International Conference on Electric Power and Energy Conversion Systems (EPECS'20) ,5 10 2020, استانبول.

Papers in Journals

1. Mehrdad Aslani et al.,Optimal probabilistic reliability-oriented planning of islanded microgrids considering hydrogen-based storage systems, hydrogen vehicles, and electric vehicles under various climatic conditions,Journal of Power Sources,2022 3 10,H-Index-320.
2. Amir Imanloozadeh, Mohammad Nazififard, Seyyed Ali Sadat,A new stochastic optimal smart residential energy hub management system for desert environment,International Journal of Energy Research,Vol. 45,No. 13,pp. 18957-18980,2021 7 12,H-Index 102.
3. Ali Sadat , Mohammad Vakiloroaya , Hamd Hashemi Dezaki , Mohammad Nazififard,Barrier analysis of solar PV energy development in the context of Iran using fuzzy AHP-TOPSIS method,Sustainable Energy Technologies and Assessments,2021 10 2,H-Index 48.
4. Ali Sadat , Jama Faraji , Mohammad Nazififard , Abbas Ketabi،The experimental analysis of dust deposition effect on solar photovoltaic panels in Iran's desert environment،Sustainable Energy Technologies and Assessments،۲۰۲۱ ۱۰ ۱۱.

5. Ghanbarali Sheilhzadeh, Mohammad Nazififard, Reza Madahian, Khadigeh Kazemi،Hydrodynamic-thermal Variations of a Nanofluid in a Tube Equipped with a Twisted Tape،Engineering and Energy Management،۲۰۲۳ ۱ ۱۹.
6. Gh A Sheikhzadeh, M Nazififard, R Maddahian, Kh Kazemi،Numerical Simulation of Nanofluid Heat Transfer in a Tube Equipped with Twisted Tape Using the Eulerian-Lagrangian Two-Phase Model،Modares Mechanical Engineering،۲ ۱۰ ۶۲،۲۰۱۹-۵۳ مجلد ۱۹،شماره ۱،شماره صفحات.
7. Mohammad Nazififard, Mohammadreza Nematollahi, Khosrow Jafarpur, Kune Y Suh,Numerical simulation of water-based alumina nanofluid in subchannel geometry,Science and Technology of Nuclear Installations,2012 5 20.
8. Mohammad Nazififard,Computational fluid dynamic simulation of swirl flow in hexagonal rod bundle geometry by split mixing vane grid spacers,Thermal science,2019 4 15.
9. Mohammadreza nematollahi, Mohammad Nazififard,Enhancement of heat transfer in a typical pressurized water reactor by different mixing vanes on spacer grids,Energy Conversion and Management,2008 5 22,H-Index 210.
10. Mohammadreza Nematollahi, Mohammad Nazififard, Maziar Asmani, Hidetoshi Hashizume,Effect of bend curvature ratio on flow pattern at a mixing tee after a 90 degree bend,International Journal of Engineering (IJE),2009 7 15.
11. Mohammad Nazififard, Kune Y Suh, Afshin Mahmoudieh,Experimental analysis of a novel and low-cost pin photodiode dosimetry system for diagnostic radiology,Review of Scientific Instruments,Vol. 87,No. 7,pp. 073502,2016 7 11.
12. Mohammad Nazififard, Simin Mahdizadeh, Kune Y Suh,Automated dispensing and calibration of diagnostic radiopharmaceuticals,Radiation protection dosimetry,2013 5 1.
13. Mohammad Nazififard, Simin Mahdizadeh, AS Meigooni, M Alavi, Kune Y Suh,A novel device for automatic withdrawal and accurate calibration of 99m-technetium radiopharmaceuticals to minimise radiation exposure to nuclear medicine staff and patient,Radiation protection dosimetry,2012 9 1.