Resume

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Education

2001-2007: Received **Ph.D**. in mechanical engineering, Thermo-Fluid, from **Shahid Bahonar University of Kerman**, Kerman, Iran, May 2007.

1999-2001: Received **M.Sc.** in mechanical engineering, Thermo-Fluid, from **Shahid Bahonar University of Kerman**, Kerman, Iran, August 2001.

1994-1998: Received **B.Sc**. in mechanical engineering, Solid Mechanics, from **Ferdowsi University of Mashhad**, Mashhad, Iran, August 1998.

Work Experience

August 2000 to present: Teaching Radiative Heat Transfer, Advanced Thermodynamics, Advanced Numerical Methods, Heat Transfer, Fluid Mechanics, Thermodynamics, Engineering Mathematics, Control, Internal Combustion Engine, Numerical Methods and Mechanics of Materials to graduate and undergraduate mechanical engineering students.

Research Interests

- Radiative heat transfer
- Inverse heat transfer
- Optimization

Publications

Journal Papers

- 1- A. Bahrami, **A.Safavinejad**, H. Amiri "Spectral radiative entropy generation in a non-gray planar participating medium including H₂O and CO₂", Journal of Quantitative Spectroscopy & Radiative Transfer, Vol. 227, 32-46, 2019.
- 2- M. Shafipour, A.Safavinejad, M. Abbas Zadeh, "Inverse estimation of boundary conditions with forced convection heat transfer in two dimensional channel", Heat and Mass Transfer, 1-8, 2018.
- 3- P. Sadeghi, A.Safavinejad, "Radiative entropy generation in a gray absorbing, emitting,

- and scattering planar medium at radiative equilibrium", Journal of Quantitative Spectroscopy & Radiative Transfer, Vol. 201, 17-29, 2017.
- 4- M. A. Dashti, A. Safavinejad, "Optimal Search of Heat Sources Location in Conjugate Natural Convection with Surface Radiation in a Two-Dimensional Enclosure Utilizing Particle Swarm Optimization Algorithm", Journal of Solid and Fluid Mechanics, Vol. 8, No. 2, 177-191, 2017 (in Persian).
- 5- M. Hoseynipoor, M. Malek Jafarian, A. Safavinejad, "Two-Objective Optimization of Aerodynamic Shapes Using Gravitational Search Algorithm", Modares Mechanical Engineering, Vol. 17, No. 5, 211-220, 2017 (in Persian).
- 6- M. Hedayatizadeh, F. Sarhaddi, A. Safavinejad, F. Ranjbar, H. Chaji, "Exergy loss-based efficiency optimization of a double-pass/glazed v-corrugated plate solar air heater", Energy, Vol. 94, 799-810, 2016.
- 7- M. Aminzadeh, **A. Safavinejad**, A. Zolfaghari, "Performance analysis of single and couple radiant heaters under asymmetric flow field for providing uniform conditions in an industrial environment", Modares Mechanical Engineering, Vol. 16, No. 5, 396-402, 2016 (in Persian).
- 8- H. Hassanzadeh, M.A. Farzad, A. Safavinejad, M.R. Agaebrahimi, "Performance assessment of a SOFC cogeneration system for residential buildings located in eastern Iran", Iranian Journal of Hydrogen & Fuel cell, Vol. 2, 81-97, 2016.
- 9- M. Aminzadeh, A. Safavinejad, A. Zolfaghari, "Analysis the Influence of Air Outlet Opening's Location in an Industrial Environment with High Temperature Radiant Heaters on Uniformity of Thermal Conditions and Distribution of the Contaminant in Presence of Asymmetric Flow Field", Journal of Solid and Fluid Mechanics, Vol. 6, No. 3, 249-260,

- 2015 (in Persian).
- 10-F. Jalili, M. Malek Jafarian, A. Safavinejad, "Introduction of an improved Harmony Search Optimization Algorithm for investigating of Airfoil Parameterization Methods and Aerodynamics optimization", Amirkabir Journal of Science & Research (Mechanical Engineering), Vol. 47, No. 1, 13-31, 2015 (in Persian).
- 11-M.A. Farzad, H. Hassanzadeh, A. Safavinejad, M.R. Agaebrahimi, "Energy and Exergy Analysis and Optimization of a Cogeneration System based on Solid Oxide Fuel Cell for Residential Applications", Journal of Solid and Fluid Mechanics, Vol. 5, No. 4, 213-228, 2015.
- 12- F. Jalili, M. Malek Jafarian, A. Safavinejad, "Introduction of Harmony Search Algorithm for Aerodynamic Shape Optimization Using the Navier-Stokes Equation", Journal of Applied and Computational Sciences in Mechanics, Vol. 24, No. 2, 81-96, 2013 (in Persian).
- 13-M. Hedayatizadeh, Y. Ajabshirchi, F. Sarhaddi, A. Safavinejad, S. Farahat, and H. Chaji, "Thermal and Electrical Assessment of an Integrated Solar Photovoltaic Thermal (PV/T) Water Collector Equipped with a Compound Parabolic Concentrator (CPC) ", International Journal of Green Energy, Vol. 10, 494-522, 2013.
- 14- M. Hedayatizadeh, Y. Ajabshirchi, F. Sarhaddi, S. Farahat, A. Safavinejad, and H. Chaji, "Analysis of Exergy and Parametric Study of a V-Corrugated Solar Air Heater", Heat Mass Transfer, Vol. 48, 1089-1101,2012.
- 15-H. Amiri, S.H. Mansouri, and **A. Safavinejad**, P.J. Coelho, "The Optimal Number and Location of Discrete Radiant Heaters in Enclosures with the Participating Media Using the Micro Genetic Algorithm", Numerical Heat Transfer, Part A, Vol. 60, 461-483,2011.

- 16-H. Amiri, S.H. Mansouri, and **A. Safavinejad,** "Combined Conductive and Radiative Heat Transfer in an Anisotropic Scattering Participating Medium With Irregular Geometries", International Journal of Thermal Sciences, Vol. 49, 492-503, 2010.
- 17-A. Safavinejad, S. H. Mansouri, A. Sakurai, and S. Maruyama, "Optimal Number and Location of Heaters in 2-D Radiant Enclosures Composed of Specular and Diffuse Surfaces Using Micro-Genetic Algorithm", Applied Thermal Engineering, Vol. 29, 1075-1085, 2009.
- 18-**A. Safavinejad**, S. Maruyama, S. H. Mansouri, and A. Sakurai, "Optimal Boundary Design of Radiant Enclosures Using Micro-Genetic Algorithm", Journal of Thermal Science And Technology, Vol. 3, 179-194, 2008.
- 19- A. Safavinejad, S. H. Mansouri, and S. M. Hosseini Sarvari, "Inverse Boundary Design of Two-Dimensional Radiant Enclosures with Absorbing-Emitting Media Using Micro-Genetic Algorithm", Proc. IMechE, Part C, J. Mechanical Engineering Science, Vol. 221, 945-948, 2007.

Conference Papers

- 1- M. Shafipour, A.Safavinejad, M. Abbas Zadeh, "Inverse estimation of boundary conditions with combined convection and radiation heat transfer in two dimensional channel", 3rd Iranian Conference on Heat and Mass Transfer, November 2017, Babol Noshirvani University Of Technology, Babol, Iran (in Persian).
- **2-** M. Shafipour, **A.Safavinejad**, M. Abbas Zadeh, "Inverse estimation of boundary conditions in two dimensional channel with forced convection", 3rd Iranian

- Conference on Heat and Mass Transfer, November 2017, Babol Noshirvani University Of Technology, Babol, Iran (in Persian).
- **3-** M. Abbas Zadeh, **A.Safavinejad**, M. Shafipour, "Optimal Number and Location of Heaters in Radiative Enclosures Using Heuristic Algorithms", 23th Annual Conference on Mechanical Engineering, May 2015, University of Tehran, Iran (in Persian).
- **4-** M. Abbas Zadeh, **A.Safavinejad**, M. Shafipour, "Optimal Location of Heaters in Radiative Enclosures Using Particle Swarm Optimization", 23th Annual Conference on Mechanical Engineering, May 2015, University of Tehran, Iran (in Persian).
- 5- M. Aminzadeh, A. Safavinejad, A. Zolfaghari, "Analysis the Influence of Inlet Air Flow on Performance of High Temperature Radiant Heaters in an industrial environment", 16th Fluid Dynamics Conference, November 2015, University of Razi, Kermanshah, Iran (in Persian).
- 6- M. Abbas Zadeh, A.Safavinejad, M. Shafipour, "Optimal Number and Location of Heaters in Radiative Enclosures Using Particle Swarm Optimization", 2nd Iranian Conference on Heat and Mass Transfer, November 2014, Semnan University, Semnan, Iran (in Persian).
- 7- K. Nadimi, A. Safavinejad, S.A. Mirbozorgi, "Analysis of Combined Conductive and Radiative Heat Transfer in Semi-Transparent Media with variable Refractive Index", 19th Annual Conference on Mechanical Engineering, May 2011, University of Birjand, Birjand, Iran (in Persian).
- 8- N. Toofani, A. Safavinejad, "Optimal Number and Location of Heaters in

- Radiative Furnaces Using Ant Colony Algorithm", 19th Annual Conference on Mechanical Engineering, May 2011, University of Birjand, Birjand, Iran (in Persian).
- 9- A. Amedi, A. Safavinejad, S. Y. Ahmadi, "Geometric Design Optimization of Radiative Enclosures Using Differential Evolution Algorithm", 19th Annual Conference on Mechanical Engineering, May 2011, University of Birjand, Birjand, Iran (in Persian).
- 10-S. Roozi, A. Safavinejad, "Inverse Analysis of Radiative Heat Transfer in A Cylinderical Enclosure Using Gravitational Search Algorithm", 19th Annual Conference on Mechanical Engineering, May 2011, University of Birjand, Birjand, Iran (in Persian).
- 11-F. Jalili, A. Safavinejad, "Optimization of Fin Geometry With convection and Radiation Using Harmony Search Algorithm", 19th Annual Conference on Mechanical Engineering, May 2011, University of Birjand, Birjand, Iran (in Persian).
- **12-**G. R. Zeinaddini and **A. Safavinejad,** "Optimal Number and Location of Heaters in Radiative Furnaces Using Particle Swarm Optimization", 18th Annual (International) Conference on Mechanical Engineering, May 2010, Sharif University of Technology, Tehran, Iran (in Persian).
- 13-H. Amiri, S.H. Mansouri, and A. Safavinejad, "Optimal Number and Location of Heaters in an Enclosure With Absorbing, Emitting and Linear Anisotropic Scattering Participating Media Using Micro-Genetic Algorithm", 17th Annual (International)

- Conference on Mechanical Engineering, May 2009, University of Tehran, Iran (in Persian).
- **14-**H. Amiri, S.H. Mansouri, and **A. Safavinejad,** "Combined Conduction and Radiation Heat Transfer in Absorbing, Emitting and Scattering Medium with Complex Geometries using blocked-off Region Method", 17th Annual (International) Conference on Mechanical Engineering, May 2009, University of Tehran, Iran.
- **15-A. Safavinejad**, S. H. Mansouri, S. Maruyama,, A. Sakurai, "Inverse Boundary Design of Radiant Enclosures Using Conjugate Gradient Method", 15th Annual (International) Conference on Mechanical Engineering, May 2007, Amirkabir University of Technology, Tehran, Iran.
- **16-A. Safavinejad**, S. Maruyama, S. H. Mansouri, S. M. Hosseini Sarvari, A. Sakurai, "Inverse Boundary Design of Radiant Enclosures Using Conjugate Gradient Method", Third International Conference on Flow Dynamics, November 7-9, 2006, Hotel Taikanso, Matsushima, Miyagi, Japan.
- 17-Z. Sarcheshmehpour, S. Suyama, K. Suto, C. Inoue, A. Safavinejad and A.Lakzian, "Comparison of Cell Growth and Ferrous Iron Oxidation in Two Kinds of Culture Media", Third International Conference on Flow Dynamics, November 7-9, 2006, Hotel Taikanso, Matsushima, Miyagi, Japan.
- **18-A. Safavinejad**, S. H. Mansouri and S. M. Hosseini Sarvari, "Inverse Boundary Design of 2-D Radiant Enclosures with Absorbing-Emitting Media", 14th Annual (International) Mechanical Engineering Conference, May 2006, Isfahan University of Technology, Isfahan, Iran.
- 19- A. Safavinejad, S. H. Mansouri and S. M. Hosseini Sarvari, "Inverse Boundary

- Design of 2-D Radiant Enclosures with Absorbing-Emitting Media Using Micro-Genetic Algorithm", IASME TRANSACTIONS, Issue 8, Vol. 2, October, 2005.
- **20-A. Safavinejad**, S. H. Mansouri and S. M. Hosseini Sarvari, "Inverse Boundary Design of Two-Dimensional Irregular Enclosures Using Micro-Genetic Algorithm", 3rd IASME / WSEAS International Conference on Heat transfer, thermal engineering and environment, August 2005, Corfu Island, Greece.
- **21-A. Safavinejad**, Z. Sarcheshmehpour, A. Fotovat, S. A. Seyed Baghery, "Particle Size Effects in Bioleaching of Low Grade Copper Ore", Proceedings of the 4th National Biotechnology of Islamic Republic of Iran, August 2005.
- **22-** A- G. A. Sheikhzadeh, M. A. Mehrabian, S. H. Mansouri, **A. Safavinejad**, A. Sarrafi and E. Ein Alian, "Simulation of Heap Leaching of a Solid Reactant Particle in Ore Bed", Proceedings of The 6th Iranian Metallurgical Engineers Association Annual Congress, October 2002 (in Persian).
- 23-G. A. Sheikhzadeh, M. A. Mehrabian, S. H. Mansouri, A. Safavinejad and A. Sarrafi, "Modeling of Acid Diffusion, Reaction with Ore and Diffusion of Reaction Products into a Porous Ore Particle", Proceedings of The 7th National Iranian Chemical Engineering Congress, October 2002 (in Persian).