

Publications in International Journals [SCI/SCIE/Other reputed Journals]

- [1] Nitesh K Panday, **S N Singh**, 2022 “Effect of Geometrical Parameters on the Performance of Plate Heat Exchanger using Milk-Water as Medium Fluids in the Channels” **International Journal of Thermal Sciences**, [**SCIE, Q1**] **Web of Science**
- [2] Om Prakash , **S N Singh**, 2022, “Study of Mixed Convection and Surface Radiation in Flush Mounted Vented Cavities” **Journal of Thermo-physics and Heat Transfer(AIAA, ARC)**. [SCIE] **Web of Science** <https://doi.org/10.2514/1.T6605>
- [3] Nitesh K Panday, S N Singh, 2022 “ Performance Evaluation of Plate Heat Exchanger using CuO-DI Water nano Fluid” **ASME Journal of Thermal Science and Engineering Applications**. vol. 14(12) **SCIE, (Q3) Web of Science**.
- [4] Om Prakash, **S N Singh**, 2022, “ Buoyancy Driven Mixed Convection and Radiation Heat Transfer in a Tilted Vented Cavity” **ASME Journal of Thermal Science and Engineering Applications**,, vol.14(11) **SCIE(Q3) Web of Science**.
- [5] N K Panday, **S N Singh**, 2021 “ **Experimental Study of Flow and Thermal Behaviour in Single and Multi-Pass Chevron Type Plate Heat Exchanger**”, **Chemical Engineering and Processing: Process Intensification**, vol.171[Jan 2022] , **SCIE(Q2) Web of Science**
- [6] Om Prakash, **S N Singh**, 2021 “Experimental and Numerical Study of Mixed Convection with Surface Radiation Heat Transfer in an Air-filled Ventilated Cavities” **International Journal of Thermal Sciences**, vol **171**[2022] **107169, SCIE[Q1] web of Science**.
- [7] N K Panday, **S N Singh**, 2021, “Study of Thermo-Hydraulic Performance of Chevron Type Plate Heat Exchanger with Wire Inserts in the Channel”, **International Journal of Thermal Sciences**, vol **173**[2022]**107360SCIE[Q1] web of Science**,, **SCIE(Q1) Web of Science**.
- [8] Nitesh K P, **Singh, S.N**, 2020 “Thermo-hydraulic Performance Analysis of Multi-pass Chevron Type Plate Heat Exchanger” **Thermal Science and Engineering Progress**, vol.16,100478. **Web of Science Journal, SCIE(Q1)**
- [9] Bhupal Kumar, Akhilesh Soni, **Singh, S.N** , 2018 ‘Effect of geometrical parameters on the performance of chevron type plate heat exchanger’, **Experimental Thermal and Fluid Science**, vol (91) pp. 126-133. **[ELSEVIER(SCI)] Web of Science Journal(Q1)**
- [10] Bhupal Kumar, **Singh, S.N.**, 2018 “Hydraulic and Thermal Studies on Chevron Type Plate Heat Exchanger “**Thermal Science: International Scientific Journal**, Vol. 22, No. 6B, pp. 2759-2770 **[SCIE] Web of Science Journal (Q3)**
- [11] Bhupal Kumar, **S.N Singh**, 2017 “Study of pressure drop in single pass U-type plate heat exchanger”, **Experimental Thermal and Fluid Science** vol(87) pp. 40-49. **[ELSEVIER(SCI)](Q1) Web of Science**
- [12] Akhilesh Soni, **Singh S.N**, 2017 “Experimental analysis of geometrical parameters on the performance of an inline jet plate solar air heater’, **Solar energy** vol(148),pp.149-156**[ELSEVIER(SCI)] Web of Science Journal(Q1)**
- [13] R.K Nayak, **Singh, S.N**, 2016 ‘Effect of geometrical aspects on the performance of jet plate solar air heater’, **Solar Energy** 137(2016) 434-440**[ELSEVIER(SCI)] Web of Science Journal(Q1)**
- [14] Dwesh K. Singh, **Singh, S.N**, 2016, “Combined free convection and surface radiation in tilted open cavity” **International Journal of Thermal Sciences**, vol(107), pp.111-120. **[ELSEVIER(SCI)] Web of Science Journal(Q1)**
- [15] D. K. Singh, **Singh, S. N.**, 2015, Conjugate Free Convection with Surface Radiation in Open Top Cavity, **International Journal of Heat and Mass Transfer** vol.89 pp. 444-453**[ELSEVIER(SCI)] Web of Science Journal(Q1)**

- [16] **Singh, S.N.**, Venkateshan, S.P., 2004, “Numerical study of natural convection with surface radiation in side-vented open cavities,” **International Journal of Thermal Sciences**, **43**, pp. 865-876 [Elsevier(SCI) DOI:10.1016/j.ijthermalsci.2004.01.002] **Web of Science Journal(Q1)**
- [17] Prashil D.Vinod, **S.N. Singh**, 2017 ‘Thermo-hydraulic performance analysis of jet plate solar air heater under cross flow condition’, *International Journal of Heat and Technology* 35(.3) 603-610[**Web of Science Journal**]
- [18] Bhupal Kumar, **S.N. Singh**, 2015 “Analytical studies on hydraulic performance of a Chevron Type Plate Heat Exchanger”, **International Journal of Heat and Technology**, vol.33(1) [**Web of Science Journal**]
- [19] **S.N. Singh**, Dwesh Kumar Singh, 2015 “Study of Combined free Convection with Surface Radiation in Closed Cavity Partially Heated from Below” **International Journal of Heat and Technology**, vol.33(2) [**Web of Science Journal**].
- [20] **Singh, S.N**, 2013 “Flow and Heat Transfer Studies in a Double – Pass Counter Flow Solar Air Heater” **Heat and Technology**, vol.31(2), pp 37-42[ISSN: 0392-8764] **Web of Science Journal**
- [21] **Singh, S.N.**, 2008., “Numerical Study of Combined Natural Convection, Conduction and Surface Radiation Heat Transfer in Open Top, Side Vented Cavities” **Heat and Technology**, **26(2)**, pp. 101 -109[ISSN: 0392-8764] **Web of Science Journal**
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- [25] A K Goel and S N Singh, 2019, “ Experimental study of heat transfer characteristics of an impinging jet solar air heater with fins” *Environment Development and Sustainability*, Springer, vol. 22(4), [**web of science, SCIE, Q3, ISSN 1387585X**.
- [26] Kumar B, Rajen K Nayak and S N Singh, 2018, “Experimental Analysis of the Thermo-Hydraulic Performance on a Cylindrical Parabolic Concentrating Solar Water Heater with Twisted Tape Inserts in an Absorber Tube” *Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences*, **vol. 73**, p. 431-439 [[DOI:10.1515/zna-2018-0023](https://doi.org/10.1515/zna-2018-0023)] **SCIE Q3**.
- [27] **Ravi Shankar Prasad , S N Singh**, 2018, COUPLED LAMINAR NATURAL CONVECTION AND SURFACE RADIATION IN PARTIALLY RIGHT SIDE OPEN CAVITIES, *Frontiers in Heat and Mass Transfer*. 11(28), ISSN: 2151-8629.
- [28] **Ravi Shankar Prasad , S N Singh**, A SYSTEMATIC APPROACH FOR OPTIMAL POSITIONING OF HEATED SIDE WALLS IN A SIDE VENTED OPEN CAVITY UNDER NATURAL CONVECTION AND SURFACE RADIATION, *Frontiers in Heat and Mass Transfer* , ISSN: **2151-8629**..
- [29] **Singh, S.N**, Rajen K Nayak, 2015 “Experimental Investigation of Flow and Heat Transfer in Cross and Non–Cross Flow Inline Hole Jet Plate Solar Air Heater” *International Journal of Power and Renewable Energy Systems (IJPRES)*. (American Society of Science and Engineering)
- 30. B Kumar, R K Nayak and S N Singh**, 2018 “Experimental Analysis of the Thermo-Hydraulic Performance on a Cylindrical Parabolic Concentrating Solar Water Heater with Twisted Tape Inserts in an Absorber Tube” *Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences*, vol **7**, p.431-439.
- 31. Bhakta A K, N K Panday and S N Singh**, 2018” Performance study of a cylindrical parabolic concentrating solar water heater with nail type twisted tape inserts in the copper absorber tube” *Energies*, vol. 11, [DOI:10.3390/en11010204](https://doi.org/10.3390/en11010204)

Following papers are under review:

1. M K Mahato and S N Singh, 2023, "Effect of the Partial Blockage in the Exit of the Mixing Channel on Thermo –Hydraulic Performance of the Multi –Pass Jet Plate Solar Air Heater" Renewable Energy Journal(SCIE, Q1).
2. M K Mahato and S N Singh, 2023 "Experimental analysis of effect of the geometrical parameter of the jet plate on thermos-hydraulic performance of two-pass flat plate solar air heater" Thermal Science and Engineering Progress Journal(SCIE, Q1).

National / International Conference Proceedings:

- [1] Singh, S.N.. and Venkateshan, S.P., 2004, "Interaction of natural convection and surface radiation in a cavity with open top and partial opening on one side" Proc. **6th ISHMT-ASME Heat and Mass Transfer conference, Jan 2-5, 2004 held at IGCAR, Kalpakkam**, pp. 54 – 61 (in CD).
- [2] Singh, S.N, 2006, "Performance studies on continuous longitudinal fins solar airheater," Proc. 1st National conference on Advances in Energy Research, **Dec 4-5, 2006, held at IIT Bombay**, pp 205-210.
- [3] Singh, S.N, 2007 " Numerical Study of Laminar Natural Convection in Closed Cavity Partially Heated from Below". **Proc. of the International Conference on Computer Aided Engineering, Dec 13-15,2007, held at IIT Madras**,pp.636-645.
- [4] Singh, S.N, 2008 "Combined Effect of Natural Convection and Surface Radiation on Flow and Heat Transfer Studies in Side vented, Open Cavities" **Proceedings of 8th ISHMT/ASME Heat and Mass Transfer Conference held at JNTU Hyderabad during 03-05 Jan 08**, pp.240.
- [5] Singh, S.N., 2010 "Numerical Study of Laminar Mixed Convection and Surface Radiation in Open Top, Side Vented Cavities". **Proceedings of 9th International ISHMT/ASME Heat and Mass Transfer Conference held at NPCL, Bombay, Jan 4-6,2010**, pp.5.
- [6] Singh, S.N, 2006, "Monitoring of the influence of the turbulators on heat transfer enhancement in the heat exchanger," **Proc. of National Seminar on COMOAT at ISM Dhanbad , Sept 4-5, 2006**,pp. 293-300.
- [7] Singh, S.N, 2008, "CFD Study of Laminar Natural Convection in a side Open Cavity Heated from Liner Side in a Jaw Crusher". Proc. of National Seminar on Crushing, Screening &Conveying (CS&C-2008) held at ISM Dhanbad , Sept 11-12, 2008, pp.181-192.
- [8] Singh, S.N, 2010 "**Flow and Heat Transfer Studies in a 2-Pass Solar Air Heater**". Proceedings of 37th National **4th International Conference on Fluid Mechanics and Fluid Power (FMFP)**, held **at IIT Madras during 16-18 Dec 2010**.
- [9] Singh, S.N, 2011. "Numerical Investigation of Flow and Heat Transfer in Closed Cavities Partially Heated From Below". Proceedings of 8th International Conference on Heat Transfer, Thermodynamics and Fluid Mechanics(HEFAT 2011) held at **Ponte Aux Piments, Mauritius** during 11-13 July 2011.
- [10] Singh, S.N and D.K.Singh,2013."Numerical Investigation of Coupled Heat Transfer by Natural Convection and Surface Radiation in Closed Cavities Partially Heated From Bottom Wall" Proceeding 11th International and 22nd National ISHMT-ASME Heat and Mass Transfer Conference, **IIT Kharagpur, Dec 28-31st (2013)**, Paper no. - HMT1300423.
- [11] Singh, S.N. and Rajen K Nayak, 2013 " Performance Studies on Jet Plate Solar Air Heater" Proceedings of 11th **ISHMT-ASME Conference held at IIT Kharagpur, during 27-30 Dec 2013**.
- [12] Singh, S.N. and D.K.Singh, 2013 " Numerical Study of Combined Free convection and Surface Radiation in Closed Cavities Partially Heated from Bottom" proceedings of 2nd CAE International Conference held at **IIT Madras, Dec 19-21, 2013**.
- [13] Singh, S.N, Numerical Investigation of Conjugate Free Convection with Surface Radiation From a Left Vertical Wall of Closed/Open Cavities with Uniform Volumetric Heat Generating Source" accepted for

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[14] Singh, S.N and Nayak, R.K. “Analytical Study of Flow and Heat Transfer in Cross and Non Cross Flow Jet Plate Solar Air Heater” accepted for proceedings of 10th International Conference on HEFAT 2014 to be held in **Orlando(Florida), USA during July 14-16, 2014.**

[15] Singh, S.N. and Bhupal Kumar, “HYDRAULIC PERFORMANCE STUDY OF A CHEVRON TYPE PLATE HEAT EXCHANGER” 5th international and 41st national conference on fluid mechanics and fluid power, **December 12-14, IIT Kanpur, FMFP14 – A - 671.**

[16] Singh, S.N. and Bhupal Kumar, “EXPERIMENTAL STUDIES ON FLOW AND HEAT TRANSFER IN A PLANE SURFACE PLATE TYPE HEAT EXCHANGER” 5th international and 41st national conference on fluid mechanics and fluid power, December 12-14, **IIT Kanpur, FMFP14 – B - 695.**

[17] Singh, S. N. and D. K. Singh, Investigation of Fluid Flow in Cavities Partially Heated from Below, Proceeding 5th International and 41st National Conference on Fluid Mechanics and Fluid Power, **IIT Kanpur, Dec 12-14th (2014),** Paper no. - FMFP14-C-672.

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