



DR. SHAILENDRA NARAYAN SINGH
Associate Professor

Ph.D(Mechanical Engineering) Area: Numerical/Computational Heat Transfer, M.Sc(Mechanical Engg)
Spl: Heat Power Engg, B.Sc(Mechanical Engg), M.Tech(Industrial Engg), IIT(ISM) Dhanbad

Department of Mechanical Engineering

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Educational Qualifications:

Degree: **Ph.D**

Year: 2004

University: **IIT Madras**

Specialization: Heat Transfer (Convection and Radiation Heat Transfer)

Thesis Title: **Numerical Investigation of Natural Convection with Surface Radiation in Open Top, Side Vented Cavities.**

Guide: Prof. S.P.Venkateshan, IITM

ABSTRACT OF MY Ph.D THESIS

This work presents a numerical study of steady combined laminar natural convection and surface radiation and conjugate convection with surface radiation heat transfer in a 2-D side vented open cavities for different Rayleigh number, aspect ratios, side vent ratios, and surface emissivities using air as fluid medium. The analysis has been carried out with electronic equipment cooling as one of the possible applications. The present analysis has also been carried out for a constant property fluid with the Boussinesq approximation assumed to be valid. The Full N-S equations are considered in the vorticity-stream function ($\omega - \psi$) form, and solved using a Finite Volume Method. For surface radiation calculations, the radiosity-irradiation formulation has been used, while the view factor or shape factors required therein are evaluated using Hottel's Crossed String Method. The present study also focuses on the velocity boundary condition used by earlier researchers at the partial opening and concludes that those boundary conditions are not suitable in the present problem because of radiation heating of the side vent wall. So, a derivative boundary condition of vertical velocity, U and horizontal velocity, V in X and Y

directions $\left(\frac{\partial U}{\partial X} = \frac{\partial V}{\partial Y} = 0 \text{ or } \frac{\partial^2 \psi}{\partial X \partial Y} = 0 \right)$ are found to be appropriate for the open portion above or below

the side vent. An important contribution from the present work is the study of the effects of vent, aspect ratio and emissivity on the volume flows across the openings in the cavity. The effects of magnitude of heat source, the material and surface properties of the left wall on the both heat transfer and fluid flow have been studied. Comparison of the present numerical results with the available experimental results shows

good agreement. Based on a set of numerical data correlations have been developed for average Nusselt number and maximum non-dimensional left wall temperatures.

Degree: M.Sc(Engg) Mechanical (Heat Power Engg)

Year: 1992

University: BIT Sindri, Ranchi University

Specialization: Heat Power

Thesis: On the Studies of Wind Energy Systems

Degree: M.Tech

University: IIT(ISM) Dhanbad

Degree: B.Sc(Engg.) Mechanical Engineering

Year: 1987

University: BIT Sindri, Ranchi University

Specialization: Mechanical Engineering

Project: Design, Development and Experimental studies on Heat Transfer in a Composite Wall.

Degree: Intermediate of Science (Mathematics)

University: Science College, Patna (Patna University)

Year: 1981

Degree: Matriculation, Science (Mathematics)

School: M.L.ACADEMY, LAHERIASARAI (DARBHANGA)

Year : 1979

Professional Experience:

Aug 1987- 1990: Lecturer, BIT Sindri

1990 – 1991: Research Associates, BIT Sindri

1993 – 2000: Lecturer & Senior Lecturer, Pune University

July 2000 – Dec 2003: Research Scholar, IIT Madras

Feb 2004 –Oct 2004: Assistant Professor, MIT Pune

Oct 2004 – June 2006 : Senior Lecturer, ISM Dhanbad

June 2006- June 2009 : Assistant Professor, ISM Dhanbad

July 2009 – contd.: **Associate Professor at ISM Dhanbad**

Areas of expertise:

- Computational Fluid Flow and Heat Transfer
- Computational Fluid Dynamics
- Plate Heat Exchanger
- Solar Energy

Different courses taught at IIT(ISM) Dhanbad and elsewhere:

- Heat and Mass Transfer(UG)
- Convection and 2-Phase Flow(UG,PG and PhD)
- Advanced Fluid Mechanics (PG)
- Advanced Heat Transfer(PG)
- Computational Fluid Dynamics (PG)
- Engineering Thermodynamics(UG)
- Heat Exchanger Design(PG)
- Solar Energy (UG /PhD)
- Numerical Methods(PG/JRF)
- Internal Combustion Engines(UG)
- Energy Conversion (UG)
- Waste Heat Utilization(UG)

- Applied Thermodynamics(UG)
- Engineering Mechanics(UG)
- Engineering Graphics(UG)
- Operation Research(UG)
- Elements of Mechanical Engineering(UG)
- Mechanical Engineering –I(UG)
- Mechanical Engineering-II(UG)

Research Interests:

- Numerical and Experimental Fluid Flow and Heat Transfer(CFD)
- Natural, forced and mixed convection
- Combined natural convection, conduction and surface radiation in cavities.
- Cooling of Electronic component
- Convective Heat Transfer
- Heat Transfer Enhancement in Heat Exchangers
- Solar Energy

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

[1] **M.K.Mahato, S N Singh, 2024** “Effect of the Partial Blockage in the Exit of the Mixing Channel on Thermo-hydraulic Performance of Jet Plate Solar Air Heater” **Renewable Energy Journal**, vol 222(2024), 119942, Web of science(Q1)

[2] Nitesh K Panday, **S N Singh, 2023** “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**, vol(185) 108022 [**SCIE, Q1**] **Web of Science**

[3] 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>

[4] 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**.

[5] 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**.

[6] 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**

[7] 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**.

[8] 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]107360**SCIE[Q1] web of Science**., **SCIE(Q1) Web of Science**.

- [9] 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)**
- [10] 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)**
- [11] 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)**
- [12] 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**
- [13] 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)**
- [14] 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)**
- [15] 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)**
- [16] 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)**
- [17] **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)**
- [18] 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]**
- [19] 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]**
- [20] **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]**.
- [21] **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**
- [22] **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**

[23] **Singh, S.N**, Venkateshan, S.P., 2004, “Natural convection with surface radiation in partially open cavities,” **International Journal of Heat and Technology**, **22(2)**, pp. **57 – 64** [ISSN:0392-8764] **Web of Science Journal**

[24] A K Goel, S N Singh, 2021, “ Experimental performance evaluation of an impinging jet with fin type solar air heater” *Environmental Science and Pollution Research*, Springer, **SCIE(Q1)**. ISSN **16147499**

[25] A K Goel and S N Singh, 2020, “ Influence of fin density on the performance of an impinging jet with fin type solar air heater” *Environment Development and Sustainability*, Springer, vol. 22(6), web of science, **SCIE, Q2**, ISSN **1387585X**.

[26] 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, Q2**], ISSN **1387585X**.

[27] 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**

[28] **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.

[29] **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**..

[30] **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)

31. 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.

32. 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, 2024 “Experimental investigation of thermo-hydraulic performance of a jet impingement solar air heater with plane reflectors” *International Journal of Energy Production and Management* (Under review)

2. M.K.Mahato and S N Singh (2024), “Experimental study of thermal and hydraulic performance of multi - pass jet impingement solar air heater” *Journal of Thermal Analysis and Calorimetry* (Under review)

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. - HMTc1300423.

[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 proceedings of 10th International Conference on HEFAT 2014 held at **Orlando(Florida), USA.during July 14-16, 2014**.

[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.

[18] Singh, S.N. and Bhupal Kumar, “EFFECT OF CORRUGATION PITCH ON FLOW MALDISTRIBUTION AND PRESSURE DROP IN PLATE HEAT EXCHANGER” National Conference on Advances in Thermal Engineering, **December 19-20, 2014, ISM Dhanbad, 212-218.**

[19] Singh, S. N. and D. K. Singh, Study of Conjugate Free Convection with Surface Radiation from Left Volumetric Heat Generating Vertical Wall in Closed Cavities, Proceedings National conference on Advances in Thermal Engineering, **ISM Dhanbad, Dec 19-20th (2014),** pp-64-73.

Ph.D. theses guidance:

Sr. no	Name of scholars	Title of PhD theses	Registration no	Status	Present employment
1.	Mr. D.K.Singh	Numerical Simulation of Combined Free Convection and Surface Radiation in Cavities	2012DR0160	Degree awarded in 2016	Asstt Professor NIT Jaladhar
2.	Mr. Rajan K Nayak	Experimental Study of the Effects of Flow and Geometric Parameters on the Performance of Jet Plate Solar Air Heater	2012DR1033	Degree awarded in 2017	Asstt Professor BIT Sindri ,Dhanbad
3.	Mr. Bhupal Kumar	Thermal and Hydraulic Performance Analysis of a Chevron Type Gasketed Plate Heat Exchanger	2013DR0018	Degree awarded in 2018	Asstt Professor In Govt Engg College, Bihar
4	Mr. Ravi Shankar Prasad	Numerical Investigation of Natural Convection and Surface Radiation in Cavities	2011DR0136	Degree awarded in 2020	Assistant Professor, BIT Sindri
5.	Mr. Amit K Bhakta	Thermo-hydraulic Performance Analysis of Parabolic Concentrating Solar Water Heater with Twisted Tape Insert in the Absorber Tube.	2013DR0020	Degree awarded in 2020	Faculty in W B Engineering college
6	Mr. Abhishek K Goel	Performance Evaluation of Jet Plate Solar Air Heater provided with Continuous Longitudinal Fins	2013DR1046	Degree awarded in 2022	Faculty in Engineering college
7.	Mr. Om Prakash	Numerical Study of Laminar Mixed Convection and Surface Radiation in Cavities	2014DR0170	Degree awarded in 2022	Faculty in Mech Engg, Govt Engg College, Bihar
. 8	Mr. Nitesh K.Panday	Experimental and Numerical Studies on Thermo-Hydraulic Performance Plate Heat Exchanger	17DR000298	Degree awarded in 2022	Lovely University, Jalandhar

9.	Mr. Birendra Kumar	Analysis of Thermo-hydraulic Performance of CPC with Twisted Tape inserts in the Absorber Tube	2013DR0236	Degree awarded in 2023	Faculty in Govt Engg college, Motihari
10	Mr. Mintu K Mahato	Thermo-hydraulic Performance Study of Multi-pass Jet Plate Solar Air Heater	18DR0082	Provisional Degree awarded in 2024	-----
11	Mr. Saligram Mandal	-----	24DR0160	-----	-----

Sponsored R&D Projects:

Project Topic: Performance Studies on Heat Transfer Enhancement in a Jet Plate and Longitudinal Fins Solar Air Heater.

Project cost: Rs. 7 lacs (approx)

PI: Dr. S.N.Singh

Details of Major Research Project running: SUPRA DST (SERB) , New Delhi

Topic: Control of Sprays and Thermo-acoustic Oscillations through an acoustic driven fuel injector: Passive and active control strategy

Sanctioned in year: 2021

Sanctioned Amount: Rs. 1.75 Crores (approx)

PI and other Co-investigators: Dr. R. N Hota, Dr. S.N.Singh, Dr. S Narayanan, Dr. D K Mandal

Details of Major Research Project Proposal Submitted to DST, SERB(CRG) , New Delhi

Topic: AUGMENTATION OF RESEARCH FACILITY IN THE DEPARTMENT OF MECHANICAL ENGINEERING

DST(FIST)(229)/2019-2020/643/MECH.ENG.G.

Sanctioned Amount: Rs. 1.75 Crores (approx)

PI : Dr. S.N.Singh

Memberships in professional societies:

Life member: **Indian Society for Heat and Mass transfer (LM -505)**

Life Member: **National Society of Fluid Mechanics and Fluid Power (LM -505)**

Life Member : **Indian Society for Technical Education.**

National Level Responsibility:

Team Member of National Board of Accreditation (NBA), New Delhi

REVIEWER OF JOURNALS:

1. **International Journal of Heat and Mass Transfer**
2. **International Journal of Thermal Sciences**
3. **ASME Journal of Solar Engineering**
4. **Sadhana**
5. **Thermal Science: International Scientific Journal**
6. **Thermal Science and Engineering Progress**

Short term courses attended:

* Attended 2 weeks Winters School on Modeling, Computing and Simulation in Engineering organised by Dept. of Industrial Mathematics, IIT Madras and Frounhofer Inst. of Industrial Math. Germany.

* Attended 3 day International Workshop on Compact Heat Exchanger at IIT Delhi during Jan 7-9, 2010.

Invited Lectures Delivered:

Lecture delivered on Steam Power Plant (Boiler and Steam Turbine) to the TISCO Trainees.

Outreach programmes:

1. National Conference on Advances in Thermal Engineering (AITE 2014)
Duration: 19-20 Dec 2014
2. Workshop on Advanced Thermal and Solar Energy Equipment: Experimentation and its Statistical Analysis
Duration: 28-29 April 2024

Administrative responsibilities:

BOG Member/ISM Dhanbad

HOD/Mech Engg: 2018 - 2020

Warden: Emerald Hostel, ISM Dhanbad (2007-2011)

Warden: Sapphire Hostel (April 2011-2013)

Rector: Boys' Hostel, MIT Pune (1996- June 2000)

Tabulator: Nov 2004- Jan 2010.

Teacher I/C : 3rd Year (Mech. Engg.& Mining Mach. Engg.) for 2 years

ATTENTION: Interested PhD/ M.Tech/B.Tech students (Mech Engg) having good background in Heat Transfer (Conduction, Convection and Radiation Heat Transfer) and code writing ability may contact for Post-Doc/PhD/other research works by the following e-mail.

snsingh@iitism.ac.in

Mob no. 9471191153

Referees:

1. Prof. S.P.Venkateshan, Retired Professor and my PhD Supervisor, HTTP Lab., Dept. of Mech. Engg., IIT Madras
2. Prof. C.Balaji, HTTP Lab., Dept. of Mech. Engg., IIT Madras
3. Prof. K Srinivash Reddy, Dept. of Mech. Engg., IIT Madras

Dr. S.N.Singh