CURRICULUM VITAE

Dr. Naveen Kumar Gupta
Ph.D. (IIT ISM Dhanbad)
Professor (Training & Placement)
Harcourt Butler Technical University,
(HBTU) Kanpur (U.P.) India.
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Objective: To leverage my expertise in career development, industry connections, and educational excellence to serve as a dynamic Professor of Training and Placement.

Mailing Address:
Professor (Training & Placement)
Harcourt Butler Technical University,
(HBTU) Kanpur (U.P.) India.
Phone: +91-9557705108

Date of Birth & Gender: 21.11.1976, Male

Educational Qualifications :

- Ph.D.in Mechanical Engineering, Indian Institute of Technology (ISM), Dhanbad, India.
  Thesis: Thermal Performance Analysis of Heat Pipe using Nanofluids.

Details of employment : (21 Years Experience)

- Professor (Training & Placement), Harcourt Butler Technical University, (HBTU) Kanpur India (26, Sept 2023 to continue)
- Professor, Department of Mechanical Engineering, G L A University, Mathura India (01, Feb 2023 – 25, Sept 2023).
- Associate Professor, Department of Mechanical Engineering, G L A University, Mathura India (01, June 2019 – 31, Jan 2023).
- Assistant Professor, Department of Mechanical Engineering, G L A University, Mathura India (22,October 2005 – 31, May 2019).

International Journal Publications (SCI/Scopus indexed)

- Number of papers published in SCI indexed journals: 52
- Number of papers published in SCOPUS indexed journals: 10
- Number of papers published in conference proceeding indexed journals: 25

Some SCI/Scopus indexed research papers:

1. **Gupta N.K**., Tiwari A.K., Ghosh S.K; "Heat Transfer Mechanisms in Heat Pipes using Nanofluids-A review" **Experimental Thermal and Fluid Science, (SCI indexed, Q1 Quartile), (Elsevier), (I.F. 3.73)** 90 (2018):84–100**.**

2. **Gupta N.K**., Tiwari A.K., Ghosh S.K, "Experimental Study of the Thermal Performance of Nanofluid-filled and Nanoparticles-coated Mesh Wick Heat Pipes", Journal of Heat Transfer, **(SCI indexed), Transactions of ASME**, **(I.F. 2.02),** 2018; 140(10):102403-102403-7**.**

3. **Gupta N.K**., Tiwari A.K., Ghosh S.K, Experimental Investigation of Thermal Performance of Mesh Wick Heat Pipe, Heat Transfer Research, **(SCI indexed, Q2 Quartile), Begell House, (I.F. 2.44),** 49(18):1793–1811 (2018)**.**

4. **Gupta N.K**., Tiwari A.K., Verma S.K., Rathore P.K.S., Ghosh S.K, "A Comparative Experimental Study of Thermal Performance Uncoated Wick Heat Pipe Using Water, Nanofluid and Nanoparticles Coated Wick Heat Pipe Using Water". Heat Transfer Research, 50(18), pp. 1767-1779, Begell House **(SCI indexed, Q2 Quartile) (I.F. 2.44).**

5. **Gupta N.K.,** Verma S.K., Rathore P.K.S., Sharma A. "Effects of CuO/H_2O nanofluid application on thermal performance of mesh wick heat pipe", Heat Transfer Research 51(9):837–850 (2020) Begell House **(SCI indexed, Q2 Quartile) (I.F. 2.44).**

6. **Gupta N.K.,** Sharma A, Rathore P.K.S., Verma S.K. **"**Thermal performance optimization of Heat pipe using the nanofluid-Response surface methodology". Journal of the Brazilian Society of Mechanical Sciences and Engineering, 42 (11), 590 **Springer, (SCI indexed) (I.F. 2.36).**

7. **Gupta N.K.,** Karmveer, Alam T., Siddique M.I.H., Khargota R., Dobrota D., " A Case Study on thermal performance of solar air heater with down apex position of open trapezoidal ribs with gaps", Case Studies in Thermal Engineering, **51(2023) 103572, Elsevier (SCI indexed, Q1 Quartile) (I.F. 6.4)**

8. Pandey H., **Gupta N.K.,** "A descriptive review of the thermal transport mechanisms in mono and hybrid nanofluid-filled heat pipes and current developments" Thermal Science and Engineering Progress (Elsevier), **(SCI indexed, Q1 Quartile, I.F. 4.56**).

9. Pandey H., **Gupta N.K.,** "Analysis of heat transfer mechanisms in heat pipes: A Review" *Journal of Enhanced Heat Transfer*, 29(8):61–96 (2022), Begell House, **(SCI indexed, Q2 Quartile, I.F. 2.4**).

10. Verma S. K., **Gupta N. K.,** Rakshit D., "A comprehensive analysis on advances in application of solar collectors considering design, process and working fluid parameters for solar to thermal conversion", **Solar Energy**, 208, pp. 1114-1150 **(SCI indexed, Q1 Quartile), (Elsevier), (I.F. 7.18**).

11. Rathore P.K.S, **Gupta N.K**., Yadav D., Shukla S.K., Kaul S., "Thermal performance of the building envelope integrated with phase change material for thermal energy storage: an updated review" **Sustainable Cities and Society,** https://doi.org/10.1016/j.scs.2022.103690. **(SCI indexed, Q1 Quartile) (Elsevier), (I.F 10.7)**.

12. Karmveer, **Gupta N.K**., Alam T., Cozzolino R., Bella G., **"**A Descriptive Review to Access the Most Suitable Rib's Configuration of Roughness for the Maximum Performance of Solar Air Heater" Energies (**SCI indexed, I.F. 3.25**).

13. Karmveer, **Gupta N.K**., Md Irfanul Haque Siddiqui et al **"**The Effect of Roughness in Absorbing Materials on Solar Air Heater Performance" Materials 2022, 15, 7020 (**SCI indexed, Q1 Quartile, I.F. 3.74**).

14. Rathore P.K.S, Shukla S.K., **Gupta N.K**., "Potential of Microencapsulated PCM for Energy Savings in Buildings: A critical review" **Sustainable Cities and Society,** 53,101884 **(2019) (SCI indexed, Q1 Quartile) (Elsevier), (I.F 10.7)**.

15. Verma S K, Sharma K, **Gupta N.K**, Verma P, Upadhyay N, "Performance Comparison of Innovative Spiral Shaped Solar Collector Design with Conventional Flat Plate Solar Collector" (accepted) **Energy,** 194,116853, **(2019), (SCI indexed, Q1 Quartile) (Elsevier), (I.F. 8.85**).

16. Rathore P.K.S, Shukla S.K., **Gupta N.K,** "Synthesis and characterization of the paraffin/expanded perlite loaded with graphene nanoparticles as a thermal energy storage material in buildings" **Journal of Solar Energy Engineering: Including Wind Energy and Building Energy Conservation (SCI indexed, Q2 quartile), Transactions of ASME**, 142(4), e041006, **(I.F. 2.38),**

17. Rathore P.K.S, Shukla S.K., **Gupta N.K,** "Yearly analysis of peak temperature, thermal amplitude, time lag and decrement factor of building envelope in tropical climate" **Journal of Building Engineering,** 31,101459, **(SCI indexed, Q1 Quartile) (Elsevier) (2020)**, **(I.F. 7.14).**

18. Pandey H., Agrawal S., **Gupta N.K.,** "Temporal performance evaluation of hybrid nanofluid in heat pipe: An experimental study" (Accepted), Heat Transfer Research, Begell House **(SCI indexed, Q2 Quartile) (I.F. 2.44).**

19. Singh A.K., Rathore P.K.S., Sharma R.K., **Gupta N.K.,** Kumar R., "Experimental evaluation of composite concrete incorporated with thermal energy storage material for improved thermal behavior of buildings", Energy 263(2023) 125701, **(SCI indexed, Q1 Quartile) (Elsevier), (I.F. 8.85**).

20. Karmveer, **Gupta N.K**., Alam T., Singh H., "An Experimental Study of Thermohydraulic Performance of Solar Air Heater Having Multiple Open Trapezoidal Rib Roughnesses" Experimental Heat Transfer **(SCI Indexed, Q2 Quartile) (Taylor & Francis) (I.F. 3.5).**

21. Saha S., Alam T., **Gupta N.K**., Dobrota D., "Analysis of microchannel heat sink of silicon material with right triangular groove on sidewall of passage" Materials **(SCI Indexed, Q1 Quartile) (I.F. 3.5).**

22. Kumar N, Rathore PKS, Sharma RK, **Gupta NK,** "Integration of Lauric acid/zeolite/graphite as shape stabilized composite phase change material in gypsum for enhanced thermal energy storage in buildings" Applied Thermal Energy, **(SCI indexed, Q1 Quartile, I.F. 6.8) (Elsevier)** https://doi.org/10.1016/j.applthermaleng.2023.120088.

23. Kumar, A.; Maithani, R.; Sharma, S.; Kumar, S.; Sharifpur, M.; Alam, T.; **Gupta, N.K**.; Eldin, S.M. Effect of Dimpled Rib with Arc Pattern on Hydrothermal Characteristics of Al_2O_3-H_2O Nanofluid Flow in a Square Duct. *Sustainability* **2022**, *14*, 14675. https://doi.org/10.3390/su142214675. **(SCI indexed, Q2 Quartile, I.F. 3.25**).

24. Kumar, S.; Sharma, M.; Bala, A.; Kumar, A.; Maithani, R.; Sharma, S.; Alam, T.; **Gupta, N.K**.; Sharifpur, M. Enhanced Heat Transfer Using Oil-Based Nanofluid Flow through Conduits: A Review. *Energies* **2022**, *15*, 8422. https://doi.org/10.3390/en15228422. (**SCI indexed, I.F. 3.25**)

25. Yadav, A.S.; Alam, T.; Gupta, G.; Saxena, R.; **Gupta, N.K**.; Allamraju, K.V.; Kumar, R.; Sharma, N.; Sharma, A.; Pandey, U.; Agrawal, Y. A Numerical Investigation of an Artificially Roughened Solar Air Heater. *Energies* **2022**, *15*, 8045. https://doi.org/10.3390/en15218045. (**SCI indexed, I.F. 3.25**)

26. Dash, A.P.; Alam, T.; Siddiqui, M.I.H.; Blecich, P.; Kumar, M.; **Gupta, N.K**.; Ali, M.A.; Yadav, A.S. Impact on Heat Transfer Rate Due to an Extended Surface on the Passage of Microchannel Using Cylindrical Ribs with Varying Sector Angle. *Energies* **2022**, *15*, 8191. https://doi.org/10.3390/en15218191. (**SCI indexed, I.F. 3.25**)

27. Saha, S.; Alam, T.; Siddiqui, M.I.H.; Kumar, M.; Ali, M.A.; **Gupta, N.K**.; Dobrotă, D. Analysis of Microchannel Heat Sink of Silicon Material with Right Triangular Groove on Sidewall of Passage. *Materials* **2022**, *15*, 7020. https://doi.org/10.3390/ma15197020. (**SCI indexed, Q1 Quartile, I.F. 3.74**).

28. Sharma, A., Pali, H. S., Kumar, M., Singh, N. K., Rahim, E. A., Singh, Y., & **Gupta, N. K**. (2022). Effect of α-aluminium oxide nano additives with Sal biodiesel blend as a potential alternative fuel for existing DI diesel engine. Energy & Environment, 0(0). https://doi.org/10.1177/0958305X221133257. (**SCI indexed, I.F. 3.45**).

29. Gupta, M.K.; Kumar, R.; Banerjee, M.K.; **Gupta, N.K**.; Alam, T.; Eldin, S.M.; Khan, M.Y.A. Assessment of Chambal River Water Quality Parameters: A MATLAB Simulation Analysis. *Water* **2022**, *14*, 4040. https://doi.org/10.3390/w14244040. **(SCI indexed, Q2 Quartile, I.F. 3.25**).

30. Kumari, N.; Alam, T.; Ali, M.A.; Yadav, A.S.; **Gupta, N.K**.; Siddiqui, M.I.H.; Dobrotă, D.; Rotaru, I.M.; Sharma, A. A Numerical Investigation on Hydrothermal Performance of Micro Channel Heat Sink with Periodic Spatial Modification on

Sidewalls. *Micromachines* **2022**, *13*, 1986. https://doi.org/10.3390/mi13111986. **(SCI indexed, Q2 Quartile, I.F. 3.25**).

31. Ajit, **Gupta N.K,** "Effect of Different Al_2O_3 nanofluid Concentrations on the Efficiency of Solar Water Desalination system" Journal of Thermal Engineering, **(ESCI & Scopus) (Accepted).**

32. Karmveer., **Gupta N.K**, Alam T., Singh H., "Exergetic efficiency prediction of roughened solar air heater" Journal of Thermal Engineering **(ESCI & Scopus) (Accepted).**

33. Sigh U., **Gupta N.K**, "Thermal performance analysis of heat pipe using response surface methodology" Journal of Thermal Engineering **(ESCI & Scopus) (Accepted).**

34. Ajit, Pandey H., **Gupta N.K., "**Analysis of solar water desalination using hybrid nanofluids: An experimental study**"** (Accepted), Journal of Thermal Engineering **(ESCI & Scopus) (Accepted).**

35. Sigh U., Pandey H., **Gupta N.K**, "An exploratory review on heat transfer mechanisms in nanofluid based heat pipe" Journal of Thermal Engineering **(ESCI & Scopus) (Accepted).**

36. Pandey H., Agrawal S., **Gupta N.K., "**An experimental investigation of the performance characteristics of heat pipe using aqueous hybrid nanofluid**"** (Accepted), Journal of Thermal Engineering **(ESCI & Scopus) (Accepted).**

37. Kumar, R., Verma, S. K., **Gupta, N. K**., & Singh, S. K. (2022). "Performance Enhancement of TSAH using Graphene and Graphene/CeO_2-Black Paint Coating on Absorber: A Comparative Study" Transdisciplinary Research and Education Center for Green Technologies, Kyushu University (Evergreen), https://doi.org/10.5109/4843098. **(ESCI & Scopus).**

International Conference Proceedings (WOS/Scopus)

1. **Gupta N.K.**, Rathore P.K.S., Sinha S. "Biodiesel Production from Waste Cooking Oil Using Ultrasonic cavitation & its characteristics" **Proceedings of IEEE Explorer** (**Scopus**).
2. **Gupta N.K**., Barua A, Tiwari A.K., Ghosh S.K., "Numerical study of CeO_2 /H_2O nanofluid application on thermal performance of heat pipe", **Materials Today Proceedings** (**Elsevier)** (**Scopus**).
3. **Gupta N.K**., Mishra S. Tiwari A.K., Ghosh S.K., "A review of thermo physical properties of nanofluids", **Materials Today Proceedings** (**Elsevier)** (**Scopus**).
4. **Gupta N.K.,** "Effects of hybrid nanofluids on the thermal performance of heat pipe: An experimental investigation" (Accepted), proceedings "Lecture Notes in Mechanical Engineering" **(Scopus indexed), Springer**.

5. **Gupta N.K.,** "Thermal performance optimization of heat pipe using nanofluids" (Accepted), proceedings "Lecture Notes in Mechanical Engineering" **(Scopus indexed), Springer.**
6. Alam P., **Gupta N.K.,** Nizam A.R., "Characterization of nanoparticles embedded phase change materials" Materials Today Proceedings (**Scopus indexed) (Elsevier)**.
7. **Naveen Kr. Gupta**, Manika Singh, Monalisa Gloria James" Solar Powered Air Conditioner :An Approach to Utilise the Solar Energy", Proceedings of National Conference on "Emerging Vistas of Mechanical Engineering in 21st Century, 04-05 April 2011, AEC, Agra.
8. **Naveen Kr. Gupta**, Shailendra Sinha "Biodiesel Production from waste cooking oil and its characterization" Proceedings of 4th International Conference on Production and Industrial Engineering held at **Dr. B R Ambedkar NIT Jalandhar** during December 19-21, 2016.
9. **Gupta N. K**., Tiwari A. K., Ghosh S. K., Application of hybrid nanofluids in heat pipe – An experimental study, First International Conference on Energy & Environment: Global Challenges-ICEE-2018, 09-10 March 2018, **NIT, Calicut**.
10. **Gupta N. K**., Agrawal S., Tiwari A. K., Ghosh S. K., Effects of CeO_2/H_2O Nanofluid application on thermal performance of mesh wick heat pipe, First International Conference on Energy & Environment: Global Challenges-ICEE-2018, 09-10 March 2018, **NIT, Calicut.**
11. **Gupta N.K**., Tiwari A.K., Ghosh S.K., "Effects of TiO_2/H_2O Nano fluid application on thermal performance of mesh wick heat pipe" International Conference on Nanotechnology: Ideas, Innovation & Initiatives - 2017, Paper Id- Div. Appl._319-ICN3I, **IIT, Roorkee**, Dec. 06-08, 2017.
12. **Gupta N.K**., Tiwari A.K., Ghosh S.K, Progress in the application of nanofluids in heat pipes-A review, International Conference on Frontiers in Engineering, Applied Sciences and Technology, 31st March & 1stApril 2017, **NIT Trichi**, Tiruchirappalli-620015.
13. **Gupta N.K**.,Tiwari A.K., Ghosh S.K, Experimental Investigation of thermal efficiency of the thermosyphon heat pipe, International Conference on Frontiers in Engineering, Applied Sciences and Technology,31st March & 1stApril 2017, **NIT Trichi**, Tiruchirappalli-620015

Patents:

1. **Patent Granted:**
   Title: "Distillation based water purification system"
   Application Number: 201911052368,
   Date of Filling 17/12/2019
   Request for Examination 27/12/2019
   Publication Date (U/S 11A): 03.01.2020
   Date of certificate issue: 11/12/2020
   Post Grant Journal Date: 18/12/2020

2. **Patent Granted:**
   Title: "Thermally efficient light weight brick"
   Application Number: 202211066060
   Date of Filling 17/11/2022
   Publication Date (U/S 11A): 25.11.2022
   Date of Grant: 26/02/2024

3. **Patent Published:**
   Title: "Foldable Cross-Flow Laptop Cooling Pad"
   Application Number: 202011047438,
   Date of Filling 30/10/2020
   Publication Date (U/S 11A): 11.12.2020
4. **Patent Published:**
   Title: "Design and analysis of micro wind turbine for electricity generation in four wheelers"
   Application Number: 202011045685
   Date of Filling 22/10/2020
   Publication Date (U/S 11A): 06.11.2020

Research Project & Consultancy work:

- Project completed on "**Design and Fabrication of Water Purification System**" (Rs.1, 50, 000) by NSTEDB, DST, Govt. of India, New Delhi. Working on technology transfer.
- Consultancy of Rs 1,85,000 received from Prakash Diesel Pvt Ltd Agra (Project Title: Biodiesel generator development).
- Consultancy of Rs 47,200 received from Gaurav Transformers & Electrical Agra (Project Title: Reduction in burning rate of Transformers).
- Working on Consultancy work of Rs 30,000 for Aditya Clean energy (P) Ltd. (Titled "Development of protype of solar thermal energy system")
- Project Proposal submitted to SERB of Rs 29 Lakhs (Title: IOT enabled solar driven air conditioning system for rural application".

MTech. Thesis Supervised

- Awarded- 03

Ph.D. Thesis Supervised

- PhD awarded- 04, Thesis submitted-01
- Working- 02

Administrative Responsibility

- Working as Professor, Training & Placement, at HBTU Kanpur.
- Worked as Professor, Mechanical Engineering Department, GLA University Mathura.
- Worked as Associate Head of the Mechanical Engineering Department
- Worked as NAAC Criteria-1 Head
- Worked as NBA coordinator of the Mechanical Engineering Department
- Worked as Lab-In charge of Refrigeration and Air Conditioning Lab.
- Worked as member of the Board of Studies of the Department.
- Worked as Program coordinator of the Department.
- Worked as Project In-charge of B.Tech. Program
- Worked as Lab- In charge of Heat and Mass Transfer Lab
- Worked as Year coordinator of B. Tech IV year
- Worked as member of the Disciplinary committee of the Department.

Award/Recognition:

- Enlisted in Top 2% scientist's list of the year 2025 (List is released by Stanford University USA).
- Enlisted in Top 2% scientist's list of the year 2024 (List is released by Stanford University USA).
- Certificate of Appreciation for **teaching and research** for the Academic Session 2018-19, GLA University, Mathura.
- Certificate of Appreciation for **significant research contribution** for the Academic Session 2018-19, GLA University, Mathura.
- Certificate of Appreciation for **significant research contribution** for the Academic Session 2019-20, GLA University, Mathura.
- Editor of special issue "Advancement in heat exchangers" released by international journal "Energies" (MDPI publication) (**SCI indexed, Impact Factor: 3.25**)
- Examiner of Research project submitted to National Research and Development Agency (ANIP) of the Ministry of Science, Technology, Knowledge and Innovation of **Chile**

Reviewer

- Renewable and Sustainable Energy Reviews (Elsevier)
- Applied Thermal Engineering (Elsevier)
- Energy (Elsevier)
- Case Studies in Thermal Engineering (Elsevier)
- Experimental Thermal and Fluid Science (Elsevier)
- Thermal Science and Engineering Progress (Elsevier)
- Engineering Science and Technology, an International Journal (Elsevier)
- Microelectronics Reliability (Elsevier)
- Energy Reports (Elsevier)
- Environmental Science and Pollution Research (Springer-Nature)
- International Journal of Energy Research (Wiley)

- Journal of the Brazilian Society of Mechanical Sciences and Engineering (Springer-Nature)
- Journal of Thermal engineering (Yildiz publications)
- International Journal of Ambient Energy (Tayler & Francis)

Conference/Workshop/Training Organized

- Organized 5 days workshop on Employability upskilling of the students.
- Convener of International conference on "Futuristic and Sustainable Aspects in Engineering and Technology (FSAET-2020)" held on 18-19 December, 2020.
- Organized 5 days' workshop on "Solar Energy and it's Applications" (11-15 October' 2019).
- Organized training program on Computational Fluid Dynamics (CFD) in Collaboration with Techno Soft Educational and Research Consultancy (TSERC) running by alumni of IIT Delhi, India.

Design of new curricula

- Designed "Advanced Heat Transfer Processes" course for PG students.
- Designed "Advanced Instruments in Material Research" course for PG students.

Center of Excellence/ MOU

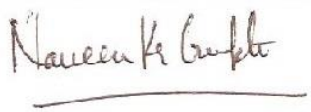
- Established the Center of Excellence in Collaboration with Daikin Air conditioning India Pvt. Ltd.
- Cordinated (SPOC also) of MOU with "National Institute of Solar Energy" (NISE) Faridabad (Haryana).

Workshop Attended

- Attended three-day workshop on "X- Ray Diffraction" at **MNIT Jaipur**, during 13-15 April 2017.
- Attended six days faculty development program on "Nanofluid and its Engineering Applications" at **IIT (BHU), Varanasi** during 06-11 November 2017.

References

- Dr. Subrata Kumar Ghosh (Ph: 9430187029, Email: subratarec@yahoo.co.in) Department of Mechanical Engineering, Indian Institute of Technology (ISM), Dhanbad, 221005 India.
- Dr Dibakar Rakshit, Associate Professor, (Email: dibakar@iitd.ac.in) Centre of Energy, Indian Institute of Technology Delhi, India.



Date. 14-06-2026
Place: HBTU, Kanpur

(**Naveen Kumar Gupta)**