# **RESUME**

1. Name: Prof. Ram Vinoy Sharma

**2. Date of Birth:** 25<sup>th</sup> October, 1962

3. Address for Correspondence: Department of Mechanical Engineering

National Institute of Technology

Jamshedpur-831014

# 4. Academic Qualifications:

| Examinations Passed       | Institution/University    | Year of | % Marks / |
|---------------------------|---------------------------|---------|-----------|
|                           |                           | Passing | CGPA      |
| Matriculation             | B.S. E. B., Patna         | 1978    | 80.3 %    |
| Intermediate of Science   | Ranchi University, Ranchi | 1980    | 69.3 %    |
| B. Tech (Mechanical Eng.) | I.I.T. Delhi              | 1985    | 7.32      |
| M. Tech (Energy Studies)  | I.I.T. Delhi              | 1987    | 9.75      |
| Ph. D. (Heat Transfer)    | I.I.T. Kharagpur          | 1999    |           |

# 5. Employment Records

| Name of Employer                     | Position held                | Period served |
|--------------------------------------|------------------------------|---------------|
| Center for Rural Development and     | Senior Scientific Officer-II | 17-11-1986 to |
| Appropriate Technology, I.I.T. Delhi | (Temporary)                  | 10-04-1989    |
| Department of Mechanical             | Lecturer                     | 12-04-1989 to |
| Engineering, R.I.T. Jamshedpur       |                              | 11-04-1995    |
| Department of Mechanical             | Senior Lecturer              | 12-04-1995 to |
| Engineering, R.I.T. Jamshedpur       |                              | 24-11-1999    |
| Department of Mechanical             | Assistant Professor          | 25-11-1999 to |
| Engineering, N.I.T. Jamshedpur       |                              | 31-12-2007    |
| Department of Mechanical             | Professor                    | 01-01-2008 to |
| Engineering, N.I.T. Jamshedpur       |                              | contd.        |

#### 6. Teaching and Research Experience: 30 years

**Subjects taught at UG level:** Energy Conversion, Thermodynamics, Automobile Engineering, Measurement and Control System, Heat Exchanger Design, Heat and Mass Transfer, Computational Fluid Dynamics

**Subjects taught at PG level:** Programming in High Level Language, Numerical Methods, Artificial Intelligence and Robotics, Advanced Thermodynamics, Advanced Heat and Mass Transfer, Computational Fluid Flow and Heat Transfer, Robotics and Robot Applications, CFD

#### 7. Research Publications in Journals:

- 1. Sangita, M.K. Sinha and R.V. Sharma, Natural Convection in a Spherical Porous Annulus: The Brinkman Extended Darcy Flow Model, Transport in Porous Media, Volume 100, Issue 2, pp.321-335, 2013.
- 2. Sangita, M.K. Sinha and R.V. Sharma, Influence of Property Variation on Natural Convection in a Gas Saturated Spherical Porous Annulus, Transport in Porous Media, Volume 104, pp.521-535, 2014.
- **3.** Sangita, M.K. Sinha and R.V. Sharma, Numerical Studies of Natural Convection in a Spherical Porous Annulus, Journal of Porous Media, Volume 19, Issue 3, pp.277-286, 2016.
- **4.** A.K. Mishra, S. Kumar and Ram Vinoy Sharma, Non-Darcy Effects on Three-Dimensional Natural Convection in a Rectangular Box Containing a Heat Generating Porous Medium, Journal of Porous Media, Volume 19, Issue 12, pp. 1033-1043, 2016.
- Raviranjan Kumar Singh and R.V.Sharma, Mathematical Investigation of Soil Temperature Variation for Geothermal Applications, IJE TRANSACTIONS A; Basics, Volume 30, Number 10, pp.1609-1614, 2017. DOI: 10.5829/ije.2017.30.10a.23.
- 6. Raviranjan Kumar Singh and Ram Vinoy Sharma, Numerical Analysis for Ground Temperature Variation, Geothermal Energy, Volume 22, Number 5, pp.1-10, 2018. DOI:10.1186/s40517-017-0082-z.
- **7.** Chordiya Jayesh Subhash and Ram Vinoy Sharma, Conjugate Natural Convection in a Fluid Saturated Porous Enclosure with a Pair of Solid Vertical

- Partitions, Heat Transfer-Asian Research, 47(4), 1031-1047,2018. DOI:10.1002/htj.21364
- 8. Chordiya Jayesh Subhash and Ram Vinoy Sharma, Numerical study on the effects of multiple internal diathermal obstructions on natural convection in a fluid-saturated porous enclosure, Archive of Mechanical Engineering, 65(4),553-578.2018. DOI:10.24425/ame.2018.125442.
- **9.** Chordiya Jayesh Subhash and Ram Vinoy Sharma, Study of Natural convection in a fluid saturated porous thermal insulations with multiple inclined diathermal partitions, International Journal of Heat and Technology, 37(1), 123-130, 2019. DOI:10.18280/ijht.370115.
- 10. Chordia, J.S. and Sharma, R.V., Numerical study on effect of corrugated diathermal partition on natural convection in a square porous cavity, Journal of Mechanical Science and Technology, 33(5):2481-2491, 2019. DOI: 10.1007/s12206-019-0445-4.
- **11.** Chordia, J.S. and Sharma, R.V., Natural convection in fluid-saturated porous enclosure with a pair of vertical diathermal partition, International Journal of Thermal Sciences, 144:42-49, 2019. DOI: 10.1016/j.ijthermalsci.2019.05.020.

#### 8. Research Publications in Conference Proceedings

- V.V. Satyamurthy and R.V. Sharma, Influence of Variable Density on Natural Convection in Gas-Filled Rectangular Enclosure, In Proceedings of 3<sup>rd</sup> ISHMT-ASME and 14<sup>th</sup> National Heat and Mass Transfer Conference, pp.463-468, I.I.T. Kanpur, 1997.
- V.V. Satyamurthy and R.V. Sharma, Effect of Non-Darcy Flow on Steady Three-Dimensional Natural Convection in Cubic Porous Enclosure, In Proceedings of 4<sup>th</sup> ISHMT-ASME and 15<sup>th</sup> National Heat and Mass Transfer Conference, pp.545-550, Institute of Armament Technology Pune, 2000.
- R.V. Sharma and Brajesh Tripathi, Influence of Property Variation on Natural Convection in a Gas Filled Rectangular Enclosure, In Proceedings of 5<sup>th</sup> ISHMT-ASME and 16<sup>th</sup> National Heat and Mass Transfer Conference, Science City , Kolkota, 2002.

- R. V. Sharma, R. P. Sharma and M. N. Verma, Numerical Study on Three Dimensional Natural Convection in a Porous Box In Proceedings of International Symposium on Recent Trends in Heat and Mass Transfer, Indian Institute of Technology Guwahati, January 6-8, 2002.
- R.V. Sharma and R.P. Sharma, Numerical Simulation of Three-Dimensional Natural Convection in a Porous Box, In Proceedings of 30<sup>th</sup> National Conference on Fluid Mechanics & Fluid Power, pp. 404-410, National Institute of Technology Karnataka, Surathkal, 2003.
- 6. R. V. Sharma, N. Kumar and R. P. Sharma, Natural Convection in an Inclined Rectangular Layered Porous Cavity, In Proceedings of 7<sup>th</sup> ISHMT-ASME and 18<sup>th</sup> National Heat and Mass Transfer Conference, pp.352-357, Indian Institute of Technology Guwahati, 2006.
- 7. R. V. Sharma and R. P. Sharma, Non-Darcy Effects on Three-Dimensional Natural Convection in a Porous Box, In Proceedings of 13<sup>th</sup> International Heat Transfer Conference, Sydney, Australia, 13-18 August 2006.
- 8. R. V. Sharma and Anil Kumar Mishra, Three-Dimensional Natural Convection in a Porous Box, In Proceedings of National Conference on Advances in Heat Transfer and Fluid Dynamics, AMU, Aligarh, September 16-17, 2006.
- R. V. Sharma and Mohd. Atiq Ansari, Natural Convection in Cylindrical Porous Cavity Heated from Below, Indo Australian Workshop and Symposium on CFD Applications, I.I.T. Roorkee, April 12-14,2007.
- 10. R. V. Sharma and Arunav Gogoi, Effects of Anisotropy on Natural Convection in a Rectangular Cavity, In Proceedings of 8<sup>th</sup> ISHMT-ASME and 19<sup>th</sup> Heat and Mass Transfer Conference, JNTU Hyderabad, 2008.
- 11. R.V.Sharma, A. K. Mishra and Sasmita Saha, Numerical simulation of three dimensional natural convection in a porous box heated from below, In Proceedings of 20<sup>th</sup> National and 9<sup>th</sup> International ISHMT-ASME Heat and Mass Transfer Conference, January 4-6, 2010, Mumbai, India.
- 12. S. Saha and R.V. Sharma, Natural Convection in a Gas Filled Vertical Cylindrical Porous Annuli with Property Variation, In Proceedings of National Conference on

- Modeling and Simulation in Heat Transfer and Fluid Flow, July 9-10, 2010, N.I.T. Jamshedpur
- 13. Asghar Mahfooz Alam, M.K. Sinha and R.V. Sharma, Numerical Analysis of Natural Convection in Spherical Porous Annuli, In Proceedings of National Conference on Modeling and Simulation in Heat Transfer and Fluid Flow, July 9-10, 2010, N.I.T. Jamshedpur.
- 14. R.V. Sharma, Influence of Property Variation on Natural Convection in a Cylindrical Porous Annulus, In proceedings of 9<sup>th</sup> International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, July 16-18, 2012, Malta
- 15. Sangita, M.K. Sinha and R.V.Sharma, Numerical Simulation of Natural Convection in a Spherical Porous Annulus, In Proceedings of International Congress on Computational Mechanics and Simulation, December 9-12, 2012, I.I.T. Hyderabad.
- 16. Somenath Gorai, K.D.P. Singh and R.V.Sharma, Numerical Simulation of Natural Convection in an Inclined Porous Cavity with Internal Heat Generation, In Proceedings of 22<sup>nd</sup> National and 11<sup>th</sup> International ISHMT-ASME Heat and Mass Transfer Conference, December 28-31, I.I.T. Kharagpur, 2013.
- 17. A.K.Mishra, S.Kumar and R.V.Sharma, Numerical Simulation of Three-Dimensional Natural Convection in a Cuboid Box Containing Heat Generating Porous Medium, In the Proceedings of 10<sup>th</sup> International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, 14-16 July 2014, Orlando, Florida, USA.
- 18. Sangita, M.K.Sinha and R.V.Sharma, Numerical Simulation of Natural Convection in a Spherical Porous Annulus, In the Proceedings of 10<sup>th</sup> International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, 14-16 July 2014, Orlando, Florida, USA.
- 19. R.V.Sharma, H.N.Singh, Ankita and Somnath Gorai, Numerical Simulation of Natural Convection Heat Transfer in Spherical Annulus, In Proceedings of 5<sup>th</sup> International and 41<sup>st</sup> National Conference on Fluid Mechanics and Fluid Power, I.I.T. Kanpur, December 12-14, 2014.

- 20. Sangita, M.K.Sinha and R.V.Sharma, Effect of a diathermal partition wall on natural convection in a spherical porous annulus, In Proceedings of 6<sup>th</sup> International Symposium on Advances in Computational Heat Transfer, May 25-29, 2015, Rutgers University, Piscataway, USA.
- 21. A.K.Mishra, S. Kumar and R.V.Sharma, Non-Darcy Effects on Steady Three-Dimensional Natural Convection in a Rectangular Box Containing Heat Generating Porous Medium, In Proceedings of 6<sup>th</sup> International Symposium on Advances in Computational Heat Transfer, May 25-29, 2015, Rutgers University, Piscataway, USA.
- 22. R.V.Sharma and Raviranjan Kumar Singh, Numerical Simulation of Pyrolysis of a Cylindrical Wooden Dowel, In Proceedings of the 23<sup>rd</sup> National and 1<sup>st</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference, 17-20 December, 2015, Thiruvananthapuram, India.
- 23. Raviranjan Kumar Singh and R.V.Sharma, CFD Simulation of Earth Air Tube Heat Exchanger with Longitudinal Fins, In Proceedings of Global Conference on Renewable Energy, 4-6 March, 2016, NIT Patna, India.
- 24. Gajendra Kumar, R.V.Sharma and R.K.Prasad, Design and CFD Analysis of an Earth Air Heat Exchanger, In proceedings of National Conference on Nonconventional Energy for Sustainable Growth, RVS College of Engineering and Technology, Jamshedpur, July 29-30, 2016.
- 25. Anil Kumar Mishra, Shalendra Kumar and Ram Vinoy Sharma, Influence of Property Variation on Natural Convection in a Cubic Box Filled with Heat Generating Porous Medium, In Proceedings of 7<sup>th</sup> International Symposium on Advances in Computational Heat Transfer, May 28-June 1, 2017, Napoli, Italy.
- 26. Raviranjan Kumar Singh and Ram Vinoy Sharma, Numerical Simulation of Ground Temperature Variation for Time Variant Boundary Condition, In Proceedings of 7<sup>th</sup> International Symposium on Advances in Computational Heat Transfer, May 28-June 1, 2017, Napoli, Italy.
- 27. Gajendra Kumar, R.V.Sharma and R.K.Prasad, CFD Analysis of an Earth Air Heat Exchanger, In Proceedings of the 24<sup>th</sup> National and 2<sup>nd</sup> International

- ISHMT-ASTFE Heat and Mass Transfer Conference, December 27-30, 2017, BITS Pilani, Hyderabad, India.
- 28. Chordia Jayesh Subhash and R.V.Sharma, Natural convection in inclined rectangular porous enclosure with a vertical diathermal partition wall, In proceedings of National Conference on Renewable Energy and Environmental Challenges, February 26-28, 20018, N.I.T. Jamshedpur.
- 29. Chordia Jayesh Subhash and R.V.Sharma, Natural convection in square porous enclosure with diathermal partition wall, In proceedings of 5<sup>th</sup> International Conference on Computational Methods for Thermal Problems, July 9-11, 20018, IISc, Bangalore.
- 30. Chordia Jayesh Subhash and R.V.Sharma, Unsteady Natural convection in a fluid saturated square porous enclosure with a pair of L-shaped diathermal partition, In proceedings of International Conference on Mathematical Modelling and Scientific Computing, July 19-21, 20018, I.I.T. Indore.

### 9. (a) Conferences/Symposium Attended Abroad

| S. No. | Name of the Conference/Symposium                    | Place           | Period       |
|--------|---|-----------------|--------------|
| 1.     | 13 <sup>th</sup> International Heat Transfer        | Sydney,         | 13-18        |
|        | Conference  | Australia       | August, 2006 |
| 2.     | 9 <sup>th</sup> International Conference on Heat    | Malta           | 16-18 July,  |
|        | Transfer, Fluid Mechanics and                       |                 | 2012         |
|        | Thermodynamics                                      |                 |              |
| 3.     | 6 <sup>th</sup> International Symposium on Advances | Rutgers         | 25-29 May,   |
|        | in Computational Heat Transfer                      | University, NJ, | 2015         |
|        |   | USA.            |              |
| 4.     | 7 <sup>th</sup> International Symposium on Advances | Universita      | May 28- June |
|        | in Computational Heat Transfer                      | Degli di        | 1, 2017      |
|        |   | Napoli, Italy   |              |

#### (b) Conferences/Symposium Attended in India

| Sr. | Name of the Conference/Symposium                                   | Place            | Period       |
|-----|--|------------------|--------------|
| No. |  |                  |              |
| 1.  | 5 <sup>th</sup> ISHMT-ASME and 16 <sup>th</sup> National Heat      | Science City     | January 3-5, |
|     | and Mass Transfer Conference                                       | Kolkota          | 2002         |
| 2.  | 7 <sup>th</sup> ISHMT-ASME and 18 <sup>th</sup> National Heat      | I.I. T. Guwahati | January 4-6, |
|     | and Mass Transfer Conference                                       |                  | 2006         |
| 3.  | Indo Australian Workshop and Symposium                             | I.I.T. Roorkee   | April 12-14, |
|     | on CFD Applications  |                  | 2007         |
| 4.  | 8 <sup>th</sup> ISHMT-ASME and 19 <sup>th</sup> Heat and Mass      | JNTU             | January 3-5, |
|     | Transfer Conference  | Hyderabad        | 2008         |
| 5.  | 20 <sup>th</sup> National and 9 <sup>th</sup> International ISHMT- | BARC, Mumbai     | January 4-6, |
|     | ASME Heat and Mass Transfer Conference                             |                  | 2010         |
| 6.  | 22 <sup>nd</sup> National and 11 <sup>th</sup> International       | I.I.T. Kharagpur | December     |
|     | ISHMT-ASME Heat and Mass Transfer                                  |                  | 28-31, 2013  |
|     | Conference   |                  |              |

#### 10. (a) Ph. D Guidance (Awarded)

- Rabindra Prasad Sharma, Computer Aided Analysis of Three Dimensional Natural Convection in Porous Media, Department of Mechanical Engineering, B.I.T. Mesra, 2003.
- Sangita, Numerical Studies on Natural Convection in a Spherical Porous Annulus,
  Department of Mechanical Engineering, N.I.T. Jamshedpur, 2016.
- 3. A.K.Mishra, Studies on Influence of Non-Darcy Flow and Property Variation on Three-Dimensional Natural Convection in a Confined Porous Medium with Internal Heat Generation, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2017.
- 4. Raviranjan Kumar Singh, Studies on Thermal Performance of a Vertical Coaxial Earth Air Heat Exchanger, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2018.

#### (b)Ph. D Guidance (Submitted)

 Chordiya Jayesh Subhash, Influence of Partition Wall on Natural Convection in a Rectangular Porous Enclosure, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2019.

#### 11. M. Tech Thesis Guidance

- Prakash Chandra, Computer Aided Thermal Analysis of Natural Convection in Anisotropic Porous Media, Department of Mechanical Engineering, N.I.T. Jamshedpur, 1999.
- 2. Karamvir, Geometric Modeling and Fuzzy Regression Analysis for Laser Based Tundish Level Measuring System, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2001.
- Brajesh Tripathi, Numerical Analysis of Variable Property Effects on Natural Convection in an Inclined Rectangular Enclosure, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2001.
- G. Rambabu, Numerical Analysis of Variable Property Effects on Natural Convection in an Inclined Rectangular Porous Enclosure, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2002.
- 5. Sridhara Rao Jami, Numerical Simulation of Natural Convection in an Inclined Porous Cavity, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2003.
- Rajan Kumar Mishra, Unsteady Conjugated Heat Conduction Based Sensible Heat Storage in a Finite Storage System, Department of Mechanical Engineering, N.I.T. Jamshedpur, Ranchi University, 2003.
- 7. Neeraj Kumar, Numerical Simulation of Natural Convection in an Inclined Layered Porous Medium, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2004.
- 8. Arunav Gogoi, Numerical Study on Natural Convection in Anisotropic Porous Media, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2006.
- 9. Anil Kumar Mishra, Numerical Simulation of Three-Dimensional Natural Convection in a Porous Box Heated from Below, Department of Mechanical Engineering, M.I.T. Muzaffarpur, B.R.A. Bihar University Muzaffarpur, 2006.

- 10. Mohd Atiq Ansari, Numerical Simulation of Natural Convection in a Cylindrical Enclosure Filled with Anisotropic Porous Medium, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2007.
- 11. Naveen Bhatnagar, Heat Balance of a Blast Furnace- A Case Study, Department of Mechanical Engineering, Ranchi University, N.I.T. Jamshedpur, 2007.
- 12. Chandra Bhushan Jha, Heat Balance of Coke Making Batteries –A Case Study, Department of Mechanical Engineering, N.I.T. Jamshedpur, Ranchi University, 2008.
- 13. Vachanendra Kumar Deepam, Optimal Policy for Integrated Rural Energy Requirements of a Village- A Case Study, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2008.
- 14. Subash Chandra Dash, Numerical Analysis of Natural Convection in a Porous Cylindrical Annuli, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2008.
- 15. Sasmita Saha, Numerical Simulation of Natural Convection in a Vertical Porous Annuli with Property Variation, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2009.
- 16. Asghar Mahfooz Alam, Numerical Analysis of Natural Convection in Spherical Porous Annuli, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2010.
- 17. Sangita, The Effect of Strain path on Deformation Behaviour of Cold Rolled and Annealed Steel Using Experiments and Simulations, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2011.
- 18. Somenath Gorai, Numerical Simulation of Natural Convection in an Inclined Cylindrical Porous Cavity with Internal Heat Generation, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2013.
- 19. Ankita Maity, Numerical Simulation of Natural Convection in Spherical Annulus, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2013.
- 20. Nitin Kumar M, CFD Analysis of a Solar Air Heater with Artificial Roughened Absorber Plate, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2014.

- 21. Sudeep Lekurwale, Numerical Simulation of Pyrolysis of a Cylindrical Wooden Dowel, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2014.
- 22. Chirag Gupta, CFD and Numerical Analysis of Natural Convection in an Inclined Rectangular Enclosure, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2015.
- 23. Gajendra Kumar, Design and CFD Analysis of Earth Air Heat Exchanger, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2015.
- 24. Hegde Omkar Ramchandra, CFD Analysis of Natural Convection in Evacuated Tube Solar Water Heater, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2016.
- 25. T. Ravindra, Influence of Property Variation on Natural Convection in a Rectangular Porous Cavity with Internal Heat Generation, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2016.
- 26. Harshwardhan Sahasi, CFD Analysis of Natural and Mechanical Ventilation Systems, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2017.
- 27. Arpit Yadav, Analysis of Layer Formation of Granular Materials in Blast Furnace, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2017.
- 28. Gaurav Goyal, Design and Analysis of Coherent Imaging System using Holographic Lenses for Speckle Metrology, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2017.
- 29. Sannapareddy Anil Kumar, Thermal Performance of a Vertical Coaxial Earth Air Heat Exchanger, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2018.
- 30. Paramveer Singh Rathor, CFD Analysis of Natural Convection in an Inclined Rectangular Enclosure with Partition Wall, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2018.
- 31. Sawant Omkar Deepak, CFD Analysis of Transient Natural Convection within Right Angled Triangular Enclosure, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2019.

- 32. Sahil Doda, Passenger Compartment Heating System based on Waste Exhaust Heat for Cold Conditions, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2019.
- 33. Rishikesh Kumar, Thermal Performance Analysis of Ground Coupled U-Tube Heat Exchanger, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2019.

#### 12.B.Tech Project Guidance

- Manish Mishra, Saurav Kumar and Rohit Kumar Singh, Optimum Mechanical Attribution in Stone Mill for better Efficiency and Performance in terms of Nutrition Value, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2019.
- Rahman Ansari, Abhik Sural and Akash Biswas, Design and Fabrication of a Parabolic Solar Water Heater, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2019.
- Sunny Dayal, Rahul Kumar Pandey and Nagumalle Akhil, Performance Analysis of Earth Air Heat Exchanger, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2018.
- Richa Thacker and Pranav Meshram, Optimal Tilt Angle of a Solar Collector, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2018.
- Prasun Choudhary, Rajeev Kumar Singh and Aman Anand, Design of Solar Tracking System, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2017.
- Ankit Kumar, Sumit Kumar Jha and MD Mehtab Ansari, Design of Scheffler Solar Cooker, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2017.
- Rohit Kaushik and Rahul Mehta, Compressed Biogas-Generation, Purification and Bottling, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2016.
- 8. Saket Kumar, Akshay Kumar Thakur and Pupul Tiwary, Analysis of Heat Transfer in Fins of Circular and Rectangular Cross-section By Numerical

- Method, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2016.
- Tapan Kumar and Nishant Kumar, Air conditioning of a Room using Earth Tube Heat Exchanger, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2015.
- 10. Ravi Shankar Burnwal, Deepak Kumar Singh and Harshit Barnwal, Design and Development of Scheffler Solar Concentrator, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2015.
- 11. Inderpal Singh and K. Deepu, Design of Earth Air Heat Exchanger, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2014.
- 12. Gopal Kumar, M Ravi Varma and Sourabh Prakash, Design of Scheffler Solar Cooker, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2014.
- 13. Rajdeep Mishra and Sandeep Kumar, Air conditioning Load Calculation and Load Calculator Development, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2013.
- 14. Neelam Nath, Saurav Kshore and Soumyadeep Biswas, Design of Earth Air Heat Exchanger, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2013.
- 15. Abhay Kumar, Harshraj Kunal, Jiwesh Anand, Kalpanu Kishore and Pawan Kumar, Design and Analysis of Wood Burning Cookstove, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2012.
- 16. Shammi Ranjan, Shivanand Kumar, Vivek Kumar Dutta and Vivek Kumar Sharma, Numerical Analysis of Natural Convection in Cylindrical Porous Cavity with Internal Heat Generation, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2011.
- 17. Ramesh Majhi, Randhir Kumar, Ratan Lal Hansda and Ravi Kumar, Analsis and Design of Box Type Solar Cooker, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2009.
- 18. Arunava Banerjee, An Experimental Investigation for Measurement of Surface Roughness of Machined Components by Laser Speckle

- Metrology, Department of Production and Industrial Engineering, N.I.T. Jamshedpur, 2008.
- 19. N. Harish, Raj Alakshendra, Abhijeet Kumar, Rudrashankar Chakravorty and Nikhil Sood, Design of Optimum Parameters for Solar Hot Water System, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2007.
- 20. Rajneesh Kumar Baranwal, Rakesh Kumar Jha, Sajib Lochan Baruah, S. Manoj Kumar and Swapnil Bajpai, Design of Solar Tracking System, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2006.
- 21. Atanu Nath, Sumit Srivastava, Saurabh Maheshwari, Shakha Shuvra Misra and Sachidanand Sharma, Numerical Analysis of Heat Transfer in a Fin of Circular and Rectangular Cross section, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2005.
- 22. Anshul Garg, Anand Singh Barniya, Bhaskar Gogoi, Dev Dutt and Surya Prakash Vimal, Design of Mechanism to Link Hand Pump with Merry-Go-Round, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2004.
- 23. Manish Bahl, Vimala Rani V., Navin Malhotra, Nitin Lehri and Piyush Prabhakar, Numerical Analysis of Unsteady Heat Conduction in a Rectangular Annulus, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2001.
- 24. B. Manikandan, R. Muthuramalingam, T.M. Prem Mohan, A. Senthil Kumar and C.V. Manjesh, Design, Fabrication and Calibration of Cantilever Type Load Cell, Department of Mechanical Engineering, N.I.T. Jamshedpur, 2000.
- 25. Vinay Agrawal, Shalendra Choudhary, S. Satyajit, Sangita and Sunil Agarwal, Numerical Analysis of Unsteady Heat Conduction in a Wall, Department of Mechanical Engineering, N.I.T. Jamshedpur, 1999.

## 13. Additional Responsibilities:

- (i) Dean (Research and Consultancy), N.I.T. Jamshedpur from 14 May 2018 contd.
- (ii) Head of Mechanical Engineering Department, N.I.T. Jamshedpur during 15<sup>th</sup> January 2009 to 12<sup>th</sup> April 2013.