

RESEARCH CONTRIBUTION, BOOKS, ARTICLE ETC PUBLISHED

International Journal

1. **R S Maurya**, T Sundararajan and S K Das, Development of a PLIC-VOF method for the dynamic simulation of entry region flow in a laminar falling film, *International Journal of computational fluid dynamics* Vol. 23, No. 5. 391-400, 2009.
2. **R S Maurya**, S V Diwakar, T Sundararajan and Sarit K Das, Numerical investigation of evaporation in the developing region of laminar falling film flow under constant wall heat flux conditions', *Numerical Heat Transfer, Part A: Applications*, Vol. 58, No. 1. 41-64, 2010.
3. Nityanand Pawar and **R S Maurya**, Flow Maldistribution in a Simplified Plate Heat Exchanger Model-A Numerical Study, *Applied Mechanics and Materials*, Vols. 110-116 (2012) pp 2529-2536.
4. Sachin B. Ingle and **R S Maurya**, Experimental Investigation of Manifold Induced Flow Maldistribution in U- and Z-Turn Flow Configurations, *Applied Mechanics and Materials*, Vols. 110-116 (2012) pp 4677-4683
5. Nilesh S. Varkute and **R S Maurya**, CFD Simulation in Township Planning – A Case Study, *International Journal of Computational Engineering Research*, Vol.3 No. 3, pp 65-72, 2013
6. **R S Maurya** and Kunal Y Bhavsar, Energy and Flow Separation in the Vortex Tube: A Numerical Investigation, *International Journal on Theoretical and Applied Research in Mechanical Engineering*, Volume-2, No.3, pp 2319 – 3182 2013.
7. M S Tawade and **R S Maurya**, Numerical study of flow structure developing around double suction pipe of a pumping system, *Procedia Engineering*, 127(2015) 809-815.
8. Mukund R Valse and **R S Maurya**, Numerical Investigation of heat transfer and flow characteristic of air jet impingement over heated tube, *International Journal of Mechanical and Industrial Technology*, Volume 3, No. 2, pp 7-15, 2015.
9. H Epte and R S Maurya, Pipe network analysis of a complex flow system using PIPENET – a case study, *International Journal of Mechanical Engineering and Technology*, Vol. 6, no. 9, pp 51-60, 2015.
10. Omkar Patil, **R. S. Maurya**, 'Film Condensation Behaviour of Steam on Isothermal Walls in Presence of Non-Condensable Gases -A Numerical Investigation'. *International Journal of Computational Engineering Research*, Volume 06, Issue 05 (May 2016)
11. **R. S. Maurya**, Satinderpal Singh, , 'Numerical Investigation of Isothermal Flow Around Impingement Plates in a Shell and Tube Exchanger' *Journal of Thermal Engineering* (accepted for publication, 1-3 January 2017)
12. Appasaheb Raul, B Bhasme and **R. S. Maurya**, "A numerical investigation of flow maldistribution in inlet header configuration of plate fin heat exchanger. *Energy Procedia* 90(2016), 267-275.
13. Mohammad Rafiq B. Agrewale and **R. S. Maurya** , Numerical study of flow structure developing around Ahmed body with roof top solar panel of different geometric configurations, *International Journal of Automobile Engineering Research and Development (IJAuERD)* ISSN(P): 2277-4785; ISSN(E): 2278-9413,Jan 2017, 127-136.
14. Mohammad Rafiq B. Agrewale and **R.S. Maurya** 2019, 'Investigation of Flow Induced Structural and Acoustic Behaviour of a Flat Solar Panel Mounted on a Mini Bus Roof Top', *Int. J. Vehicle Structures & Systems*, 11(1), 39-46.doi:10.4273/ijvss.11.1.09.
15. Shrinivas Hulsure, **R.S.Maurya**, 'Numerical Investigation of Wind Driven Natural Ventilation in a Mega Warehouse Building', *International Journal of Fluids Engineering*. ISSN 0974-3138 Volume 11, Number 1 (2019), pp. 1-23

International Conference

1. **Maurya R. S.**, Sarit K. Das., T. Sundararajan, Numerical simulation of a laminar falling film in hydrodynamic entrance region using PLIC-VOF method, Third International conference on fluid mechanics and fluid power, December 7-9, 2006, IIT Bombay, Mumbai, India.
2. **Maurya R. S.**, Sarit K. Das., T. Sundararajan, Simulation of laminar falling film's hydrodynamic developing region under the influence of surface tension, Third International Conference on Thermal Engineering: Theory and applications, May 21-23, 2007, Amman, Jordan.
3. Nityanand Pawar, **R S Maurya**, Vijay Mali, Numerical Investigation Of Multi-Channel Flow Maldistribution, 4th International Conference on Fluid Mechanics and Fluid Power, December 16-18, 2010, IIT Madras, Chennai, India.
4. Sambare Amogh Anil and **R S Maurya**, Development of Experimental Setup for Measuring Thermal Conductivity of Fluids by Transient Method, Proceedings of International Conference on Advances in Materials and Product Design, 10-11 January 2015, SVNIT Surat.
5. Akshay R. Panhale and **R S Maurya**, Study of Heat Transfer in Grinding Based on Variation in Key Parameters, Proceedings of International Conference on Computational Methods in Engineering and Health Sciences, December 17-19, 2014, Manipal.
6. Radha Krishnan Rajaram and **R S Maurya**, The Effect of Biodiesel Injection Pressure on Vibration and Emission Characteristics of a Diesel Engine- An Experimental Investigation, Proceeding of International Conference on Environment and Energy, December 15-17, 2014, JNTUH, Hyderabad.
7. Rohit K. Yadav and **R S Maurya**, Numerical Investigation of Solar Chimney Induced Natural Convection in Space, Proceeding of International Conference on Environment and Energy, December 15-17, 2014, JNTUH, Hyderabad.
8. Abdulla Shaikh and **R S Maurya**, Numerical investigation of manifold induced flow maldistribution in multi-channel heat exchanger. Proceeding of International Conference on Environment and Energy, December 15-17, 2014, JNTUH, Hyderabad.
9. Appasaheb Raul, B Bhasme and **R S Maurya**, A numerical investigation of flow maldistribution in inlet header configuration of plate fin heat exchanger. Proceeding of International Conference on advances in energy research, December 15-17, 2015, IIT Mumbai.
10. Rushikesh Kekare and **R S Maurya**, Development of heat transfer and pressure drop characteristics for a plate type offset fin compact heat exchanger using numerical investigation methodology. Proceeding of International Conference on advances in energy research, December 15-17, 2015, IIT Mumbai.
11. Maradkar Rohit R. and **Maurya R. S.**, Design and development of energy efficient cold storage interior using computational techniques, 6th International Congress on Computational Mechanics and Simulation (ICCMS 2016), IIT Bombay, Mumbai, India, June 27-July 1, 2016
12. Mohammad Rafiq B. Agrewale and **Maurya R. S.**, Numerical investigation of evolving flow structure around Ahmed body mounted with solar panel of different configuration, 6th International Congress on Computational Mechanics and Simulation (ICCMS 2016), IIT Bombay, Mumbai, India, June 27-July 1, 2016.
13. Kane A. A., **Maurya R. S.**, Tiwari I., and Lobo S., Characterization of flow and thermal behaviour of product gas constituents in the throat-less downdraft gasifier, 6th International Congress on Computational Mechanics and Simulation (ICCMS 2016), IIT Bombay, Mumbai, India, June 27-July 1, 2016.
14. Jaswantsingh Kumpwant, **R S Maurya**, Investigation of smoke propagation in atria fire with various pool fire locations using computational tools, Proceedings of International

Conference of NAFEM -2016, Bangalore, India, August 29-31, 2016.

- 15 **R S Maurya**, Ansari Zaid A J, Effect of Flow and Geometry Parameters on Performance of Solar Air Heater, THERMINIC 2016 – 22nd International Workshop, 21 – 23 September, 2016, Budapest / Hungary
- 16 Mohammad Rafiq B. Agrewale and **Maurya R. S.**, Numerical study of flow structure developing around Ahmed body with roof top solar panel of different geometrical configuration, International Conference on “Innovations And Future Trends In Electric And Hybrid Vehicles” PSG college of Technology, Coimbatore, India, 06th and 07th JAN 2017
- 17 Ajinkya S Gaikwad and **R S Maurya**, **Investigation of airborne contamination spread and indoor air quality in operation theater by numerical approach**, International Conference On Thermal And Fluid Engineering: ICTF2017, 3 – 5 July 2017, Thailand
- 18 Digvijay D Ronge and **R S Maurya**, **Experimental and numerical investigation of soil under different constant heat flux conditions**, International Conference On Thermal And Fluid Engineering: ICTF2017, 3 – 5 July 2017, Thailand
- 19 Gaurav P Mahajan, **R S Maurya** and Kaustubh S. Mujumdar, **Numerical investigation and performance evaluation of T-type industrial strainer**, International Conference On Thermal And Fluid Engineering: ICTF2017, 3 – 5 July 2017, Thailand
- 20 Sameer A Birajdar, **R S Maurya** and Kaustubh S. Mujumdar, Numerical investigation of plunging water jet on free surface of water, International Conference On Thermal And Fluid Engineering: ICTF2017, 3 – 5 July 2017, Thailand
- 21 Sumeet D Nalawade, and **R S Maurya**, **Numerical investigation of the characteristics of metal solidification in a cast under different imposed boundary conditions**, International Conference On Thermal And Fluid Engineering: ICTF2017, 3 – 5 July 2017, Thailand
- 22 Mohammad Rafiq B. Agrewale and **Maurya R. S.**, Aerodynamic Analysis of Flat Solar Panel Mounted Mini Bus Model with Different Yaw Angles, International conference on Advances in Thermal Systems, Materials and Design Engineering (ATSMDE2017)
- 23 Mohammad Rafiq B. Agrewale and **Maurya R. S.**, Numerical investigation of evolving flow structure around Ahmed body mounted with solar panel of different configurations, ICCMS2016, June 27-July 1, 2016, IIT Mumbai, India.

National Conference

- 1 **R S Maurya** and Kunal Y Bhavsar, Energy and flow separation in the Vortex Tube: A Numerical Investigation, Proceedings of the 38th National Conference on Fluid Mechanics and Fluid Power, December 15-17, 2011, MANIT, Bhopal

Research Article

- 1 **R S Maurya**, Vortex Tube: A device for local cooling, Cooling India, Nov-Dec 2010, pp.106-112.
- 2 **R. S. Maurya**, Design of Outdoor and Indoor Environment of Buildings: CFD as a Promising Tool of Investigation, Accepted for publication in March-April issue of ISHRAE Journal. (Article not attached)