Dr. Rohan R. Pande

Assistant Professor Department of Mechanical Engineering S. V. National Institute of Technology, Surat-395007, India



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Education

- Ph.D. (Mechanical Engineering)
 - ✓ Visvesvaraya National Institute of Technology, Nagpur, India
 - ✓ Supervisor: Dr. V. R. Kalamkar (Professor)
 - ✓ Thesis title: Improving traditional multipot biomass cookstove: An Experimental and Numerical Approach.
- M. Tech. (Thermal Power Engineering)
 - ✓ 2014, CGPA: **8.51**/10
 - ✓ National Institute of Technology, Tiruchirappalli- India
 - ✓ **Thesis title:** Experimental studies on the enhancement of critical heat flux in pool boiling heat transfer with reduced graphene oxide colloids.

• B. Tech. (Mechanical Engineering)

- ✓ 2012, Score:**8.31**/10
- ✓ Vishwakarma Institute of Technology, Pune- India
- ✓ Thesis title: Design, Manufacturing and Experimentation of EGR system for Diesel Engine.
- HSC (12^{th})
 - ✓ 2008, Score: **83.67**%
 - ✓ Maharashtra State Board
- SSC (10th)
 - ✓ 2006, Score **84.00**%
 - ✓ Maharashtra State Board

Awards and Honours

- PhD Scholar Fellowship, Ministry of HRD, Government of India, 2014-2018.
- Delivered a guest lecture on CFD in Government College of Engineering, Nagpur (2017).
- Delivered hands-on session in Government College of Engineering, Amravati on CFD (2018).
- M.Tech Fellowship, Ministry of HRD, Government of India, 2012-2014.
- Qualified Graduate Aptitude Test in Engineering (GATE), 2012.
- Secured distinction throughout academic career.

Teaching Experience

Sr.no. 1.	Post Assistant Professor	College S. V. National Institute of Technology,	Duration 26 th September 2019-
2.	Assistant Professor	Surat G. H. Raisoni college of engineering, Nagpur	till date 26 th December 2018- 31 st April 2019
3.	Teaching Assistant	Visvesvaraya National Institute of Technology, Nagpur	01^{st} July 2014-25 th December 218

Research Experience

- **PhD Research work**, July 2014 –December 2018, Mechanical Engineering Department, Visvesvaraya National Institute of Technology, Nagpur, India
 - Analysis of multipot biomass cookstove (Involves Survey (All divisions of Maharashtra), Mathematical modelling using MATLAB, Experimentation and Computational method (ANSYS-Fluent).
 - Conducted Laboratory courses for B. Tech. and M. Tech. Students , (Fluid Machinery, Energy Conversion Lab, CFD Lab)
- M.Tech Research Work, 2012-2014, Mechanical Engineering Department, National Institute of Technology, Tiruchirappalli, India
 - Title: Experimental studies on the enhancement of critical heat flux in pool boiling heat transfer with reduced graphene oxide colloids.

Journal Publications (SCI)

- 1. **Rohan Pande** et al. (2018).Making the Popular Clean- Improving the traditional multipot biomass cookstove in Maharashtra, India. Environment, Development and Sustainability, Springer.
- 2. **Rohan Pande** et al. (2018). Experimental and CFD analysis to study the effect of inlet area ratio in a natural draft biomass cookstoves. Environment, Development and Sustainability, Springer.
- 3. **Rohan Pande** et al. (2018). Experimental and Numerical analysis for designing two-pot biomass cookstove. BMSE, Springer.
- 4. **Rohan Pande** et al. (2019). The effect of inlet area ratio on the performance of multi pot natural draft biomass cookstove. Proceedings of the National Academy of Sciences, India Section A: Physical Sciences, Springer.

Conference Publications

- Rohan Pande et al. CFD analysis of natural convection rocket type biomass cookstove. Proceedings of the 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power, December 15-17, 2016, MNNITA, Allahabad, U.P., India.
- Rohan Pande et al. Effect of forced convection cooling on performance of solar photovoltaic module in rooftop application. 6th International Conference on Advances in Energy Research (ICAER 2017) IIT Bombay.

- 3. **Rohan Pande et al.** A field survey on multipot (two- pot) biomass cookstove over entire division of Maharashtra, India. XII IPRoMM National Workshop on Industrial Problems on Machines & Mechanisms 2016 VNIT, Nagpur.
- Rohan Pande et al. Numerical analysis of Tandem Air foils for subsonic Axial flow compressor Blades.XII IPRoMM National Workshop on Industrial Problems on Machines & Mechanisms 2016 VNIT, Nagpur.
- 5. **Rohan Pande et al.** Heat Transfer performance of chamfered ribs roughened solar air heater.XII IPRoMM National Workshop on Industrial Problems on Machines & Mechanisms 2016 VNIT, Nagpur.
- 6. **Rohan Pande et al.** A mathematical modelling of two-pot biomass cookstove. International Conference on Recent Advances in Fluid and Thermal Sciences 2018, December 5-7, 2018.Dubai, U.A.E. Journal of physics: Conference series 1276 (1), 012046
- 7. **Rohan Pande et al.** Pool Boiling Heat Transfer Studies of Al₂O₃–Water Nanofluid with Sand Blasted Surface. ICBDM-2014.

Copyright

1. Computer software work titled "A systematic design of two-pot cookstove", under the provisions of the Copyrights Act, 1957

Patent

1. A two-pot natural draft biomass cookstove for domestic use (Filed).

Events Organised/conducted

- 1. One week self-financed Workshop on "Computational Fluid Dynamics (CFD) and Software Training" at department of Mechanical Engineering VNIT, Nagpur. Role: Conducted Lab Sessions. During 21-25 June 2016.
- One week self-financed Workshop on "Computational Fluid Dynamics (CFD) and Software Training" at department of Mechanical Engineering VNIT, Nagpur. Role: Conducted Lab Sessions. During 13-17 July 2015.

Training, Workshop, STTP, CEP Courses Attended

- One week "TEQIP-III Sponsored Workshop on Engineering Design Optimization including Multi-disciplinary Optimization" organized by mechanical engineering department of VNIT, Nagpur during June 4 – June 8, 2018.
- 2. **Two days'** workshop on "**CFD Applications in Energy Efficiency and Safety**" organized by department of Mechanical **VNIT Nagpur** during Oct 21-22, 2016.
- 3. One week Workshop on "Importance of Statistics & Design of Experiments in Engineering" organized by department of Mechanical VNIT Nagpur during Jan 18-22, 2016.

Software Skills

- CFD Analysis : Ansys ICEM and FLUENT
- MATLAB
- Auto CAD 2008

Languages

- Marathi (mother tongue)
- Hindi
- English

Personal Details

- Date of birth : 18th April 1991
 Nationality : Indian
- Marital Status : Single