

# Mr. Shambhu Kumar

Assistant Professor Ph. D. (Appearing), M.E. (Heat Power), B.E. (Mechanical Engineering) •9730199404(M) shambhusaw.tae@kjei.edu.in shambhu.keshari@gmail.com **Experience: 10.5** years

### **Research Interest**

Refrigeration & Air Conditioning, Heat Transfer Enhancement, Alternative fuels.

#### **Research Publications and Citations**

International Journal :05 International Conferences :01 National Conferences :07

#### Workshop/Seminar Attended/Courses

- NPTEL (08 Weeks) certification Examination Course IIT Roorkee for 'Refrigeration and Air Conditioning.' In 2019.
- NPTEL (04 Weeks) certification Examination Course IIT Roorkee for 'Convective heat transfer.' In 2018.
- > Attended 1 week program for topic of 'Leapfrogging to future ready higher education ', in Jan. 2019 Organized by MIT Kothrud, Pune.
- Attended 7 days FDP program for topic of 'Data Science', in August 2019 Organized by Shivaji University under MHRD initiated PMMMNMIT scheme.
- Attended 7 days FDP program for topic of 'Cyber Security', in May 2019 Organized by Shivaji University under MHRD initiated PMMMNMIT scheme.
- > One week short term training programme on "Fluid Mechanics" during 11<sup>th</sup> Dec. 15<sup>th</sup> Dec. 2017 in ZEAL College of Engineering & Research, Narhe Pune.
- Two-week ISTE Workshop on "Engineering Thermodynamics" Conducted by IIT Bombay under the National Mission on Education through ICT (MHRD, Govt. of India), 11<sup>th</sup> Dec.- 21<sup>st</sup> Dec. 2012.
- One week short term training programme on "Recent Trends in Automotive Engineering" during 27 Dec. 31 Dec. 2011 in Rajendra Mane College of Engineering & Technology, Ratnagiri.

## UG Project guided/ PG Project guided

- Solar Power Solid Adsorption Water-Cooler.
- Material Handling Car with Automatic Retuning.
- Pneumatic Vehicle •
- Waste Cooking Oil Biodiesel Blends Fuelled In Single Cylinder 4 Stroke CI Engine with Additives as an Alternative Fuel. •
- Heat Transfer Intensification in Flat Plate Solar Collector by Using Nano Fluid ٠
- Implementation of Maglev Turbine & Solar Panel for Street Light. •
- Semi-Auto Pneumatic Gear Box & Lubrication System.
- Design & Manufacturing of Thermo-syphon Heat Pipe to Improve Heat Transfer rate.
- Air conditioning of car by thermoelectric effect.

#### **Subjects Taught**

- Applied Mechanics
- Basic Mechanical Engineering
- Engineering Graphics
- Thermodynamics
- Applied Thermodynamics ٠
- Metallurgy

- Tool Engineering
- Hydraulics & Pneumatics
- Fluid Mechanics
- Heat Transfer
- Refrigeration & Air Conditioning
- Manufacturing Process

## **Publications**

- 1. Design & Manufacturing of thermo syphon heat pipe to improve heat transfer, International Journal mechanical Robotics & Production Engineering, Vol-8, issue-6, oct-2018.
- 2. "Semi-Automatic Pneumatic Gear box & Lubrication system", International Advanced Research Journal in Science, Engineering & Technology, Vol.5, issue 12, ISSN:2394-1588.
- 3. Automatic Gear Shifter for Two Wheelers", International Journal for Scientific Research & Development, Vol.6, issue 11, ISSN:2321-0713.
- 4. Enhancement of forced convection heat transfer over dimple surface, International Journal of Electronics, Communication & Soft Computing Science and Engineering (IJECSCSE), Volume I, Issue I- 2012.
- 5. Enhancement of forced convection heat transfer over dimple surface, International Conference on Recent Trends in Engineering & Technology 'ICRTET-2012' March 23<sup>rd</sup> to 25<sup>th</sup>, 2012
- 6. Enhancement of forced convection heat transfer over dimple surface, International Multidisciplinary e Journal ISSN 2277 4262, Volume I Issue II Feb 2012.
- 7. Performance and emission emissions of WCO Biodiesel & additives fuelled in CI Engine, National Conference on Renewable energy technologies & Energy Efficient Systems NCRETEES-2016, Oct. 27 & 28 2016, 229-231
- 8. Performance and emission analysis of WCO Biodiesel & the effect of adding oxygenate DEE as additives with EGR technique, National Conference on Renewable energy technologies & Energy Efficient Systems NCRETEES-2016, Oct. 27 & 28 2016, 229-231
- 9. Enhancement of heat in tube through twisted tape, National Conference on 'Advances in Chemical & Mechanical Engineering' "NCACME-2012" organized by Gharada Institute of Technology on January 27-28 2012.
- 10. Enhancement of forced convection heat transfer over dimple surface-Review, National Conference on 'Advances in Chemical & Mechanical Engineering' "NCACME-2012" organized by Gharada Institute of Technology on January 27-28 2012.
- 11. Heat transfer enhancement of laminar flow through the round tube by passive techniques, National Conference on Science & Technology "SCITECH 2012. 6th & 7th January 2012. 103
- 12. Enhancement of forced convection heat transfer coefficient using modified protrusions dimples, National Conference on Science & Technology "SCITECH 2012. 6th & 7th January 2012. 101
- 13. Planning for Renewable energy & Vision-2020, National Conference on Emerging Trends In Engineering & Technology NCETET, Sep. 30, 2011, 229-231.