Faculty Profile

Name: Sanjay Sharma

Designation: Assistant Professor

Department: Mechanical Engineering

Email ID: sanjaysharma@smvdu.ac.in

Contact Number and Extn.: 9906134266, 2247

Qualification: DME, AMIE(I), M tech in Thermal Engineering and Ph.D. (Pursuing)

Experience: 07 years

Teaching:	07	**Research:**	05	**Administration:**	**Total:**	07

Areas of Interest / Specialization:

1, Thermal Engineering and Heat transfer.

2 Solar Energy-Solar thermal energy utilization-performance enhancement of solar air heaters. Performance and stability of Hydrodynamic Journal Bearings using FEM.

Brief Bio-data:

Mr. Sanjay Sharma joined as Assistant Professor in the School of Mechanical Engineering on Sep 14, 2011. He holds an M-Tech degree in Thermal Engineering and pursuing Ph.D. His major area of interest is Renewable Energy system. Solar Energy-Solar thermal energy utilization-performance enhancement of solar air heaters, solar thermal energy Storage-Packed-bed sensible heat storage system, Computational fluid dynamics and hydrodynamic lubrications.

Research Profile

Research Publications:

S. No.	Year	Publication
1	**2017**	"Effect of Aspect Ratio on the Performance of Hydrodynamic Journal Bearing Operating Under Wear" *International Journal of Theoretical and Applied Mechanics.* ISSN 0973-6085 Volume 12, Number 3 pp. 497-522**, (2017).**
2	**2017**	'CFD based transient analysis of hydrodynamic journal bearing ' *Research Journal of Engineering and Technology;*Vol:8No:3:July-September:**2017**
3	**2016**	''Effect of aspect ratio on the performance and stability of Hydrodynamic Journal Bearings *'International Journal of Advance Research and Innovation,* Vol. 4, pp. 96-105, June **2016**.
4	**2016**	"Hybrid Electric Discharge Machining Processes for Hard Materials: A Review",*Materials Focus*, Vol. 5, pp.202-208, June, **2016**.
5	**2016**	"A Review on Photo Voltaic Thermal Systems", *International Journal of Scientific and Technical Advancements*, Vol. 2, pp. 54-57, November, **2016.**
6	**2014**	"Comparative Study of Thermal Efficiency of Artificially roughened Solar Air Heater, *Journal of Energy Research and Environmental Technology*, Vol. 1 (1), pp. 26-32, November **2014**.
7	**2012**	"Computational fluid dynamics based investigation on smooth duct used in solar air heater", *International Journal of computational Engineering Research*, Vol. 2, pp. 223-224, March **2012**.
8	**2011**	"Automatic sun Tracking solar cell array system", *International Journal of Advanced Engineering Research and Studies*, Vol. 2 (4), pp. 162-166, December **2011**.
9	**2011**	'CFD based investigation on effect of roughness element pitch on performances of artificially roughened duct used in solar air heater,*" International Journal of Advanced Engineering Technology*, Vol. 2 (2), pp. 243-241, March **2011**.

Conference Publications:

S. No.	Year	Conference	Publication
1	2017	3rd International conference on Recent Trends and Advancements in Engineering and Technology (ICRTAET, 3-4 November, 2017) organized by Shri Mata Vaishno Devi University, Katra	A review on methodology used in solar air heater for maximum thermohydraulic performance
2	2017	4th National Conference on Recent Trends in Mechanical Engineering (RTME-2017) w.e.f 11-12 November, 2017 at Department of Mechanical Engineering , Beant College of Engineering and Technology Gurdaspur-Pathankot Road, Gurdaspur.	A review on type of Roughness used in solar air heater for maximum thermal performance
3	2017	International conference on new and renewable Energy resources for Sustainable future, Department of mechanical engineering, SKIT, Jaipur, India	CFD based investigation of artificially Roughened Duct used in Solar Air heater
4	2016	National tribology conference, Department of Mechanical Engineering, IIT (BHU), varanasi	To study performance parameters of hydrodynamic journal bearing operating under wear
5	2016	3rd International conference on Recent Trends and Advancements in Engineering and Technology (ICRTAET, 17 – 18 November, 2016) organized by Shri Mata Vaishno Devi University, Katra	CFD based transient analysis of hydrodynamic journal bearing
6	2016	3rd International conference on Recent Trends and Advancements in Engineering and Technology (ICRTAET, 17 – 18 November, 2016) organized by Shri Mata Vaishno Devi University, Katra	Heat Transfer in Nanofluids
7	2014	1st National Conference on Recent Trends in Mechanical Engineering (RTME-2014) w.e.f 21st to 22nd Feb, 2014 at Department of Mechanical Engineering , Beant College of Engineering and Technology Gurdaspur-Pathankot Road, Gurdaspur.	"Comparative study of thermohydraulic performance of artificially roughened solar air heater"

8	**2014**	5th International conference On "Innovative Trends in Mechanical, Material, Manufacturing, Automobile, Aeronautical Engineering and Applied Physics" (ITMAEAP-2014) Organized by "Krishi Sanskriti" On 23rd and 24th August**, 2014** Venue: Jawaharlal Nehru University, New Delhi.	"Comparative Study of Thermal Efficiency of Artificially Roughened Solar Air Heater"
9	**2011**	National Conference on Engineering Applications (NCEA-**2011**) organized by St. Soldier's Institute of Engineering, Technology & Management, Jalandhar.	Green building technologies: cure to global warming"
10	**2011**	National Conference on Engineering Applications (NCEA-**2011**) organized by St. Soldier's Institute of Engineering, Technology & Management, Jalandhar.	"Analysis of clean energy market in india and to identify opportunities"

Research Supervised:

S. No.	Year	Role	Research Topic	Status
1	**2016**	**Supervisor, M-tech Dissertation**	**Investigation of thermal performance of solar air heater duct artificially roughened with combination of V shape and Transverse broken rib.**	**Completed**
2	**2016**	**Supervisor, M-tech Dissertation**	**Thermal performance of U shape Roughened solar air heater**	**Completed**
3	**2017**	**Supervisor, M-tech Dissertation**	**Heat transfer and friction factor correlation for inclined broken T-shaped artificial roughness used in solar air heater.**	**In Progress**
4	**2017**	**Supervisor, B-tech Project**	**Fabrication and testing of domestic refrigerator based on evaporative coling**	**In Progress**

5	**2017**	**Supervisor, B-tech Project**	**Silica based dehumidifier**	**Completed**
6	**2016**	**Supervisor, B-tech Project**	**Performance analysis of artificially roughened solar air heater**	**Completed**
7	**2015**	**Supervisor, B-tech Project**	**Stability analysis of journal bearing**	**Completed**
8	**2014**	**Supervisor, B-tech Project**	**Evaluation and comparison of engine performance using diesel and bio diesel blends as fuel**	**Completed**
9	**2013**	**Supervisor, B-tech Project**	**Thermal performance enhancement of flat plate solar air heater using artificial surface roughness**	**Completed**

- **Attended Workshops/seminars/Conferences/Orientation/Refresher recognized by National /International Professional bodies:**
    - Short Term Course on Finite Element Method for Engineering Applications at IIT Mandi on Finite Element Method for Engineering application w.e.f !6th July,2013 to 20th July,2012
    - Two day ISTE Workshop on Aakash for Educaton conducted by IIT Bombay at Smvdu on 10th and 11th November, 2012.
    - Two week ISTE Workshop on Engineering Mechanics under national Mission on Education through (MHRD Govt. of India) organized by IIT Bombay at SMVDU w.e.f. 26th Nov,2013 to 6th Dec,2013.
    - UGC-sponsored General Orientation Course at UGC-ASC, University of Jammu w.e.f 17th June,2014 to 14th July,2014
    - Refresher Course in Gender Studies (ID) at UGC_HRDC, University of Kashmir w.e.f 25th May,2015 to 16th June,2015
    - Five days Faculty development programme on New and Renewable Energy Technologies held at Beant college of Engineering and Technology Gurdaspur,(Punjab) from 6th july 2015, to 10th july 2015.

Administrative Contribution to the University:

- Department Purchase Committee member
- Department Library Committee In charge
- Academic affairs Committee member
- Student faculty Committee member
- Member Board of study of school
- Member of department infrastructure committee
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