Name:	Dr. Arvind Kumar
Designation	Assistant Professor (Grade I)
Address	Department of Mechanical Engineering
Phone No.	0755-4051631 (O)
Email Id	arvind05kumar@rediffmail.com, arvind.kumar.manit@ac.in
Subjects Taught	
U.G	Thermodynamics
	Turbo machines
	Basic Mechanical Engineering
P.G	Advance Thermodynamics
	Power Generation System

Teaching Experience

Organization	Start Date	End Date	Designation	Nature of Work
MANIT Bhopal	28 Dec 2018	Till date	Assistant Professor (Grade I)	Teaching and Research
MANIT Bhopal	24 May 2010	27 Dec 2018	Assistant Professor (AGP 6000)	Teaching and Research
SIRT Bhopal	21 Jul 2008	22 May 2010	Assistant Professor/ Professor	Teaching
RKDFIST Bhopal	7 Aug 2002	15 Jan 2005	Lecturer	Teaching

Ph.D Supervised/Ongoing

Name of the Student	Topic	Year of Award	Co-Supervisor (if any)
Bhrant K Dandoutiya	Heat Transfer and Pressure Drop Performance of ZnO-water Nanofluid in DPHE with TT Insert	2023	
Sanjay K Singh	Experimental Study of Heat Transfer and Friction Factor in DPHE using TT with Dimple Inserts	2021	

Shankar Kumar	Dynamic Simulation of Performance of Year Round Air Conditioning System	2016	Dr. S P S Rajput
Manoj K Diwaker	Heat Transfer	Ongoing	
Brajesh K Ahirwar	Heat Transfer	Ongoing	
Neelam Dubey	Heat Transfer	Ongoing	
Ankit Nema	Heat Transfer	Ongoing	Dr. Vilas Warudkar

Sponsored Research Projects (Completed/Ongoing)

Title	Sponsoring Agency	Duration	Amount	Co-PI (if any)
Determination of heat transfer characteristics for air coolers	Fitwell Corporation Govindpura,, Bhopal	One month, 2011	40K	
Determination of heat transfer characteristics for air coolers	Fitwell Corporation Govindpura, Bhopal	One month, 2010	40K	

Major Consultancy Projects

Title	Sponsoring Agency	Duration	Amount	Co-Investigator(if any)

Publication:

Authors	Title	Journal	Vol. No. Page No.	Year	SCI/ Scopus	Impact Factor
Bhrant Kumar Dandoutiya *Arvind Kumar	Study of Thermal Performance of DPHE using W - cut TT	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	VOL. 45, NO. 2, 5221–5238	2023	SCIE	
Manoj Diwaker *Arvind Kumar	Thermohydraulic performance of DPHE affected by triangular and semi-circular cut size on insert: IoT-based experimentation	Case Studies in Thermal Engineering	Vol.43 Mar. 2023,	2023	SCIE	
Bhrant Kumar Dandoutiya *Arvind Kumar	Experimental Analysis of Thermal Performance Factor in DPHE for ZnO-water Nanofluid	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	DOI: 10.1177/ 09544089231 175090, 1-10	2023	SCIE	
Bhrant Kumar Dandoutiya *Arvind Kumar	W-cut twisted tape's effect on the thermal performance of a double pipe heat exchanger: A numerical study	Case Studies in Thermal Engineering	34(1)	2022	SCIE	
Bhrant Kumar Dandoutiya *Arvind Kumar	CFD analysis for the performance improvement of a double pipe heat exchanger with twisted tape having triangular cut	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	https://doi.org /10.1080 /15567036.20 21.1946215	2021	SCIE	
Bhrant Kumar Dandoutiya *Arvind Kumar	Comparison of mathematical models to estimate the thermal conductivity of titanium oxidewater based nanofluid -A review	Thermal Science	26, Issue 1 Part B	2022	SCIE	
Bhrant Kumar Dandoutiya *Arvind Kumar	A review on thermal conductivity of ethylene glycol/water based nanofluid	PalArch's Journal of Archaeology of Egypt/Egyptology	Vol.17(9	2020	SCIE	
Sanjay Singh *Arvind Kumar	Experimental study of heat transfer and friction factor in a double pipe heat exchanger using twisted tape with dimple inserts	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	https://doi.org /10.1080 /15567036.20 21.1927248,1 -31	2021	SCIE	

Sanjay Singh *Arvind Kumar	Advances in heat transfer enhancement using twisted tape inserts with and without nanofluid	International Journal of Mechanical and Production Engineering Research and Development	Vol.10, Issue 1, 157-174	2020	Scopus	
Sanjay Singh *Arvind Kumar	Experimental Study of Heat Transfer Enhancement from Dimpled Twisted Tape in Double Pipe Heat Exchanger	International Journal of Mechanical and Production Engineering Research and Development	Vol.10, Issue 1, 499-512	2020	Scopus	
Sanjay Singh *Arvind Kumar	Effect of twisted tape with nanofluid on performance of double pipe heat exchanger : A comprehensive review	International Journal of Mechanical and Production Engineering Research and Development	Vol.9, Issue 1, 531-540	2019	Scopus	
Sanjay Singh *Arvind Kumar	Effect of dimple diameter on heat transfer enhancement of double pipe heat exchanger using dimpled twisted tape	International Journal of Scientific & Technology Research	Vol.8, Issue 11, 75-81	2019	Scopus	
Ravin Gaur *Arvind Kumar Amit Suhane	Effect of addition of nanoparticles on tribological properties of lubricants – A review	International Research Journal of Engineering and Technology	Vol.5, Issue 5, 4045-4047	2018		
Sudhansu Singh *Arvind Kumar	A Review on Heat Transfer from Combined Conduction and Convection through Perforated Fins	SSRG International Journal of Mechanical Engineering	Volume 3 Issue 2,1-5	2016		
Shankar Kumar S.P.S. Rajput *Arvind Kumar	Thermodynamic Simulation of Year Round Air Conditioning System for Variable rotational speed of desiccant wheel	International Journal of Research in Engineering and Technology	Volume 4, Issue 9, 280-285	2015		
Shankar Kumar S.P.S. Rajput *Arvind Kumar	Thermodynamic Simulation of Year Round Air Conditioning System for Variable Relative Humidity of Atmospheric Air	International Journal of Advanced Research in Engineering & Technology	Volume 4, Issue 9, 112-122	2015		
Shankar Kumar S.P.S. Rajput *Arvind Kumar	Thermodynamic Analysis of Year Round Air Conditioning System for Variable Wet bulb Temperature of Outlet Air of Preheating Coil (Cold and Dry Weather)	International Journal of Mechanical Engineering and Technology	Volume 6, Issue 4, 109-116	2015		
Prashant Tiwari *Arvind Kumar R M. Sarviya	Thermal performance of packed bed solar air heater	Proceedings of IEEE Journal	DOI:10.1109/ICEETS.2013.6533423, 438-442	2013	Scopus	
*Arvind Kumar J.L.Bhagoria R.M.Sarviya	Sustainable Development through Efficient Solar Air Heaters	Journal of Environmental Research and Development	Vol.2, No.4, 796-807	2008		
*Arvind Kumar J.L.Bhagoria R.M.Sarviya	Heat transfer and friction correlations for artificially roughened solar air heater duct with discrete W-shaped ribs	Energy Conversion and Management	Vol.50, Issue 8, 2106-2117	2009	SCI	

Patents

Title	Year	Agency	Co-Investigator(if any)	Published/Granted

Citations

	h-index	i-10 index	Total Citations
Google Scholar	3	2	228
Vidwan Profile	7		246