

## Profile Page



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Designation : Assistant Professor  
Department : Mechanical Engineering  
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### **Research Interests :**

Heat transfer, Fluid Mechanics, Nanofluid, Computational Fluid Dynamics, Numerical fluid flow, Refrigeration

### **Other Profile Links :**

#### **Google Scholar Link :**

Dr. Dwesh K. Singh [Click Here](#)

### **Journal Publications :**

Year	Journal	Publication
2021	International Journal of Mechanical Sciences, 191,106085	Durgesh Kushawaha, Sushil Yadav, Dwesh K. Singh, Magnetic field effect on double-diffusion with magnetic and non-magnetic nanofluids
2020	International J. Mechanical Sciences, 178, 105626	Dwesh K. Singh, Free convection with MWCNT/water nanofluid having varying aspect ratio of MWCNT nanoparticle in thermally undulated enclosures
2020	Int. J. Thermal Sciences, 148, 106160	Durgesh Kushawaha, Sushil Yadav, Dwesh K. Singh, Thermo-solute natural convection with heat and mass lines in a uniformlyheated and soluted rectangular enclosure for low Prandtl number fluids
2020	Heat and Mass Transfer,56, 2303-2311	Ravinder Kumar, Dwesh K. Singh, Subhash Chander, An experimental approach to study thermal and tribology behavior of LPG refrigerant and MO lubricant appended with ZnO nanoparticles in domestic refrigeration cycle
2017	International Journal of Advance Research and Innovation, 5 Issue 4, 456-458	A. Singh, Dwesh K. Singh, A Review on Design and Flow Simulation in an Axial Flow Hydro Turbine
2016	Int. J. Thermal Sciences, 107 (2016) 111-120	Dwesh K. Singh, S.N. Singh, Combined free convection and surface radiation in tilted open cavity
2015	Int. J. Heat and Mass Transfer 89, 444-453	Dwesh K. Singh, S.N. Singh, Conjugate free convection with surface radiation in open top cavity

2015	Int. J. Heat and Technology 33 (2015) 1-8	S. N. Singh, Dwesh K. Singh, Study of combined free convection and surface radiation in closed cavities partially heated from below
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### Conference Publications :

Year	Conference	Publication
2020	4 th International Conference on Recent Advances in Mathematical Sciences and its Applications, JIIT, Noida, U.P, India	Durgesh Kushawaha, Sushil Yadav, Dwesh K. Singh, Heat and Mass Flows Visualization in Double-Diffusive Natural Convection in the Influence of Magnetic Field using Heat and Mass Lines Techniques
2019	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering	Durgesh Kushawaha, Sushil Yadav, Dwesh K. Singh; Visualization of heat and mass lines in thermosolute natural convection in Cu-water nanofluid
2018	19th ISME Conference	Dwesh K. Singh, Ravinder Kumar, Subash Chander, Mechanism to enhance thermal performance of refrigeration cycle using nanorefrigerants and nanolubricants – A review
2018	19th ISME Conference	Isha Srivastava, Sanjay Jagga, Ankit Kotia, Dwesh Kumar Singh, and Subrata Kumar Ghosh, Analyze and Correlate the rheological properties of MWCNT+CuO/engine and MWCNT+Al <sub>2</sub> O <sub>3</sub> /engine oil nanolubricant
2016	Int. Conf. of Adv. Research and Innovation, Institution of Engineers, New Delhi	Ajay Singh, Dwesh K. Singh and Pranay Tanwar, A review on design and flow simulation in an axial flow hydro turbine
2014	5th International and 41st National Conference on Fluid Mechanics and Fluid Power, IIT Kanpur	Dwesh K. Singh, S.N. Singh, Investigation of Fluid Flow in Cavities Partially Heated from Below
2014	National conference on Advances in Thermal Engineering, IIT(ISM) Dhanbad	Dwesh K. Singh, S.N. Singh, Study of Conjugate Free Convection with Surface Radiation from Left Volumetric Heat Generating Vertical Wall in Closed Cavities
2013	2nd CAE International Conference, IIT Madras	Dwesh K. Singh, S.N. Singh, Numerical Study of Combined Free convection and Surface Radiation in Closed Cavities Partially Heated from Bottom
2013	11th International and 22nd National ISHMT-ASME Heat and Mass Transfer Conference, IIT Kharagpur	Dwesh K. Singh, S.N. Singh, Numerical Investigation of Coupled Heat Transfer by Natural Convection and Surface Radiation in Closed Cavities Partially Heated From Bottom Wall

### Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Investigator	TEQIP-III	Performance analysis of vapour compression refrigeration system with MWCNT nanorefrigerants	TEQIP-III	01-02-2019	10-07-2019	44550	Completed	

Co-PI	ISRO	Improving the Conductive Heat Transfer Efficiency of Thermal Base Plate inside a Thermal Vacuum Chamber	ISRO	04-03-2020	Continue	30 Lakh	Ongoing	Subhash Chander, Satyender Singh
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### Events Organized :

Category	Type	Title	Venue	From	To	Designation
Seminar	National	Industrial Motivational Campaign for Youth / Prospective Entrepreneurs	Dr. B R Ambedkar National Institute of Technology Jalandhar	01-02-2020	02-02-2020	Coordinator

### Professional Affiliations :

Designation	Organization
Member (2017-18)	Society of Automotive Engineers India
Reviewer	Heat transfer Engineering, Taylor and Francis
Reviewer	Journal Of Brazilian Society Of Mechanical Sciences and Engineering, Springer
Reviewer	Mathematical Modelling of Engineering Problems, IIETA
Reviewer	Journal of Thermal Science, Springer
Member	Indian Society of Mechanical Engineers
Reviewer	International Journal of Fluid Machinery and Systems

### PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Waqar Ahmad	Numerical Simulation of Condensation in pipe	Ongoing	2019	
Ravinder Kumar	Condensation Study with Nanorefrigerant	Ongoing	2018	Prof. Subhash Chander
Satish Kumar Singh	Performance analysis of vapour compression refrigeration system with MWCNT nanorefrigerants	Completed	2018	

### Admin. Responsibilities :

Position Held	Organization	From	To
2017 Batch Co-ordinator	Mechanical Engineering Department, Dr. B R Ambedkar National institute of Technology	30-08-2018	continue
Convener	Students grievance cell, Mechanical Engineering Department, Dr. B R Ambedkar National institute of Technology	30-03-2018	continue
Convener, M.Tech Project Seminar	Mechanical Engineering Department, Dr. B R Ambedkar National institute of Technology	29/03/2019	continue
Member, Time Table Committee	Mechanical Engineering Department, Dr. B R Ambedkar National institute of Technology	29/03/2019	continue