

Profile Page



Name : Dr Pramod Kumar

Designation : Associate Professor

Department : Mechanical Engineering

Qualification : Ph D Mechanical (Dr B R Ambedkar NIT Jalandhar)
M Tech Mechanical (CIDM) (NIT Jamshedpur)
B Tech Mechanical (NIT Jamshedpur)
12th Science, Math (BIEC Patna)
10th All (BSEB Patna)
Engineering Services Exam Mechanical Engg (UPSC New Delhi)

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Jalandhar, Punjab - 144011

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Research Interests :

Renewable Energy, composite Materials

Journal Publications :

Year	Journal	Publication
2020	Renewable Energy, Volume 147, Part 1, March 2020, Pages 1801-1814	Suraj Choudhary, Anish Sachdeva, Pramod Kumar Investigation of the stability of MgO nanofluid and its effect on the thermal performance of flat plate solar collector
2020	Renewable & Sustainable Energy Reviews Volume 117, January 2020, 109498	Himansh Kumar Anil Kumar Sarma Pramod Kumar A comprehensive review on preparation, characterization, and combustion characteristics of microemulsion based hybrid biofuels
2020	Polymer-Plastics Technology and Materials	Milan Kumar, Pramod Kumar, Shailendra Singh Bhadauria "Interlaminar Fracture Toughness and Fatigue Fracture of Continuous Fiber Reinforced Polymer Composites with Carbon Based Nanoreinforcements: A Review"
2020	Renewable Energy Renewable Energy 152 (2020) 1160-1170	Suraj Choudhary , Anish Sachdeva , Pramod Kumar "Influence of stable zinc oxide nanofluid on thermal characteristics of flat plate solar collector"
2019	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	Sudhansu Sekhar Das, Pramod Kumar Sarbjot Singh Sandhu Hybrid photovoltaic-thermal systems utilizing liquid-gas phase change material
2019	Sustainable Chemistry and Pharmacy 14 (2019) 1001-85	Himansh Kumar Anil Kumar Sarma Pramod Kumar A novel approach to study the effect of cetane improver on performance, combustion and emission characteristics of a CI engine fuelled with E20 (diesel – bioethanol) blend

2019	Journal of Bio- and Tribo-Corrosion December 2019	Surinder Pal Shailendra Singh Bhadauria Pramod Kumar "Pitting Corrosion Behavior of F304 Stainless Steel Under the Exposure of Ferric Chloride Solution"
2019	International Journal of Engineering and Advanced Technology ISSN: 2249 – 8958, Volume-9 Issue-1, October 2019	Guravtar Singh Mann, Lakhwinder Pal Singh, Pramod Kumar "Effect of Volume Fraction and Heating Temperature on Hybrid Natural Fibre Composites Developed Through the Die Moulding Process"
2019	Computational Materials Science	Sharma S., Kumar P., Chandra R., Setia P. (2019) "Prediction of properties of silica nanoparticle/hydroxyapatite fiber reinforced Bis-GMA/TEGDMA composites using molecular dynamics
2018	Soil Environment	Sandeep Kumar Duran, Pramod Kumar and Sarbjot S. Sandhu Prospect of third generation biodiesel as a fuel in engine: A review
2017	Cellulose Chemistry and Technology, 51, 601-608.	Himansu Shekhar Mohapatra, P Dubey, Arobindo Chatterjee and Pramod Kumar, S Ghosh Development of fibrous assembly from orange peel extract: characterization and antibacterial activity
2017	Cellulose Chemistry and Technology, 51, 601-608.	Himansu Shekhar Mohapatra, P Dubey, Arobindo Chatterjee and Pramod Kumar, S Ghosh Development of fibrous assembly from orange peel extract: characterization and antibacterial activity
2016	Journal of Composite Materials	Sharma S., Chandra R., Kumar P., Kumar N., "Molecular dynamics simulation of functionalized SWCNT-polymer composites
2012	Advanced Materials Research Vols. 488-489, pp 654-658	Pramod Kumar, Evaluation of Damping for Glass Fiber Reinforced Composite Materials
2011	Key Engineering Materials Vols. 471-472 , pp 892-897	Pramod Kumar, Ashish kakyal ,Simulation of cracks in fiber reinforced composite plate
2011	Journal of Materials Science and Engineering A	Pramod Kumar, Rakesh Chandra and S P Singh "Measurement of Damping of Fiber Reinforced Composite Material
2010	Composite Interfaces 17, 15–35	Pramod Kumar, Rakesh Chandra and S P Singh "Interphase effect on Fiber Reinforced Polymer Composites

Conference Publications :

Year	Conference	Publication
2019	19th ISME conference. NIT Jalandhar	Munish Kumar, Pramod Kumar, Dinesh K Shukla, Static and dynamic analysis of CNTs polymer composite by high cycle and low cycle fatigue approach: A Review
2019	1st International conference on materials science & engineering ICMSE, 11-12 june, 2019	Millan Kumar, Pramod Kumar And S.S Bhadauria, Finite element modeling of delamination growth in carbon fiber reinforced polymer laminates
2019	7th International Congress on Computational Mechanics and Simulation, 11-13 December 2019 IIT Mandi	Manoj kumar, Soheli Ansari, Jitendra Basrani, Nitin Thakur, Pradeep Kumar, and Pramod Kumar Finite Element Method Analysis of Ballistic Impact on Aluminium Plate
2019	HWWE2019-060	Pramod Kumar, Manoj Kumar, Bharat Anant, Vishal Chaudhary, Ashish Kumar, Dheerendra Naga , S S Das "Design of a vertical axis wind turbine for low energy "
2019	17th International Conference On Humanizing Work And Work Environment	Sarthak Baweja , Ajay Trehan , Pramod Kumar "Experimental investigation for single cylinder engine fuelled with mustard oil biodiesel."

2019	HWWE2019-140 NIT jalandhar	Guravtar Singh Mann, Lakhwinder Pal Singh, Pramod Kumar Effect of process parameters on water absorption behavior of biodegradable green composites
2018	19th ISME conference. NIT Jalandhar	Sumit Sharma, Pramod Kumar & Rakesh Chandra Experimental and molecular dynamics study of multi-walled carbon nanotube reinforced cement composites
2018	19th ISME conference. NIT Jalandhar	N. Thakur, P. Kumar and R. S. Bharj , “ On the Sensitivity of Johnson- Cook constitutive model
2018	19th ISME conference. NIT Jalandhar, 2018	Jitendra Basrani, Pramod Kumar and Manoj Kumar, Energy recovered from bicycle with the help of flywheel,
2018	19th ISME conference. NIT Jalandhar, 2018	Dhirendra Kumar, Sudhansu Das & Pramod Kumar, Experimental modeling of photovoltaic cooling system with combined active and passive water cooling
2018	19th ISME conference. NIT Jalandhar, 2018	Guravtar Singh Mann, Dr Lakhwinder Pal Singh & Dr Pramod Kumar, A peer review of the processing technologies and applications of green composites in a biomedical area

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Book chapter	Introduction to Molecular Dynamics	Elsevier	Sumit Sharma Pramod Kumar Rakesh Chandra	978-0-12-816954-4	2019

Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
coordinator	FIST	FIST program of DST [119] in level-1 of Engineering Science area	Department of Science & Technology (DST),	15-11-2012	14-11-2017	112 lacs	continue	
COPI	Thrust area	Study of Dynamic Behavior of Composite Materials Rs 25 Lacs	MHRD New Delhi	2003	2006	Rs 25 Lacs	Completed	Dr R Chandra
COPI	Thrust area	Damping Evaluation of Fiber Reinforced Composite	MHRD New Delhi	2003	2006	Rs 20 Lacs	Completed	Dr R Chandra

PI	Thrust area	Modernization of CAD Lab 1999-2002	MHRD New Delhi	1999	2002	Rs 10 Lacs	Completed	
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Events Organized :

Category	Type	Title	Venue	From	To	Designation
Conference	National	19 ISME conference in Dec 2018	NIT Jalandhar	20-12-2018	22-12-2018	Organising Secretary
Conference	International	1st International conference on materials Science and Engineering	NIT jalandhar	11-06-2019	12-06-2019	Chairman

Professional Affiliations :

Designation	Organization
Member	Indian Society of Mechanical Engineers
Member LM/2131/2015	Solar Energy Society of India

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Mr Millan Kumar	FATIGUE CHARACTERIZATION OF CARBON FIBRE REINFORCED POLYMER LAMINATES	Submitted for pre-submission viva	2022	Dr. Shailendra Singh Bhadauria
Mr. Sandeep Kumar	STUDY OF THE POTENTIAL OF ALGAE OIL FOR BIODIESEL PRODUCTION AND ENGINE APPLICATIONS	Completed	2021	Dr S S Sandhu
Mr Nitin Thakur	BALLISTIC IMPACT ANALYSIS OF COMPOSITE LAMINATES	Completed	2021	Dr R S Bharj
Mr Sudhansu Sekhar Das	DESIGN AND EXPERIMENTATION OF HYBRID PHOTOVOLTAIC AND SOLAR THERMAL SYSTEMS	Completed	2021	Dr S S Sandhu
Mr Himansh Kumar	EXPERIMENTAL INVESTIGATIONS OF HYBRID MICROEMULSION BIOFUEL ON CI ENGINE	Completed	2021	Dr Anil Sarma
Mr SURINDER PAL	STRESS CORROSION CRACKING OF F304 STAINLESS STEEL IN CHLORIDE ENVIRONMENT	Submitted	2021	Dr. S S Bhadauria
Mr Suraj Choudhary	TO STUDY THE EFFECTS AND STABILITY OF NANOFLUIDS IN FLAT PLATE SOLAR COLLECTOR	Completed	2020	Dr Anish Sachdeva
Mr Guravtar Singh Mann	DEVELOPMENT AND ANALYSIS OF MECHANICAL CHARACTERIZATION OF HYBRID NATURAL FIBER USING JUTE AND SISAL AS MATRIX COMPOSITE	Completed	2020	Dr. Lakhwinder Pal Singh
Himansu Shekhar Mohapatra,	Development and Characterization of Fibrous Assembly	Completed	2017	Arobindo Chatterjee

Sumit Kumar Sharma	SIMULATION & MODELING of CARBON NANOTUBE/ CARBON FIBER REINFORCED POLYMER NANOCOMPOSITES	completed	2016	Dr Rakesh Chandra
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Admin. Responsibilities :

Position Held	Organization	From	To
Associate Dean (R&C)	NIT Jalandhar	Jan 2020	
Co-Cordinator	1 MW Roof top Solar PV power plant in NIT Jalandhar	Jan 2018	
Coordinator of tinkering lab	NIT Jalandhar	June 2019	
Faculty Adviser	TechNITi213	2013	2014

Award and Honours :

Title	Activity	Given by	Year
INTERNATIONAL RESEARCH AWARDS 2019 - 20	RESEARCH EXCELLENCE	RULA	2020