

## Profile Page



Name : Dr Nitin Sharma

Designation : Assistant Professor

Department : Mechanical Engineering

Qualification : PhD Design and Tribology (National Institute of Technology-Hamirpur)  
M. Tech. CAD/CAM (National Institute of Technology-Hamirpur)  
B. Tech. Mechanical Engineering (Punjab Technical University-Jalandhar)

Address : Department of Mechanical Engineering  
Dr. B.R. Ambedkar National Institute of Technology  
Jalandhar  
Jalandhar, Punjab - 144011

Email : sharman@nitj.ac.in

Phone : 9418573982

### Research Interests :

Design and Tribology of Bearings, Porous Journal Bearings, Hydrodynamic Lubrication, Surface Texturing, Non-Newtonian Fluid Rheology, Tribology of Materials.

### Other Profile Links :

#### Google Scholar Link :

Google Scholar Nitin [Click Here](#)

#### Personal Web Link :

Nitin Sharma [Click Here](#)

Nitin Sharma [Click Here](#)

### Journal Publications :

Year	Journal	Publication
2023	Materialstoday Communications, Vol. 34, 105184	Veerendra Kumar, S. K. Tiwari and Nitin Sharma, "Effect of corrosion on IF-Steel in simulated-marine environment via its mechanical properties",
2022	Surface Topography: Metrology and Properties, Vol. 10, 045017	Jitendra Satyarathi, Vijay Kumar, Saurabh Kango, Rajeev Verma, Nitin Sharma and Rajeev Gupta, "Comparative study of fabricated superhydrophobic surfaces via LST with carbon soot, chemical etching and auto-oxidation"

2022	International Journal of Surface Engineering and Interdisciplinary Materials Science, Vol. 10, pp. 1-13	Singh, S., Kumar, V., Kango, S., Verma, R., Sharma, N., Fabrication and evaluation of superhydrophobic surfaces using carbon soot and different adhesives
2022	Physica Scripta, 97, 2022, 085704	Bagha AK, Tiwari S, Kumari S, Samyal R, Bedi R, Sharma N and Bahl S., Finite element model updating of microwave welded lap joint with direct updating algorithm
2022	Tribology in Industry, Vol. 44, pp. 508-517	Kango, S., Sharma, N., Sharma R.K., Pandey R.K. "Experimental investigations on temperature and frictional behaviour of textured journal bearing"
2021	European Polymer Journal, Vol. 147, 110295	S. Verma, N. Sharma, S. Kango, S. Sharma, 'Developments of PEEK (Polyetheretherketone) as a biomedical material: A focused review' ?
2021	Surface Topography: Metrology and Properties, Vol. 9, 013002	N. Sharma, R. Verma, S. Sharma, S. Kango, "Qualitative potentials of surface textures and coatings in the performance of fluid-film bearings: A critical review"
2021	Materials Performance and Characterization Vol. 10, pp. 674–699.	D. Bedi, S. Sharma, S. Kango, N. Sharma, and P. Rakt Patel, “Effect of Coating of Carbon Nanotubes on Mechanical Properties of Polymer Composites: A Review,”
2021	Proceedings of IMechE, Part J: Journal of Engineering Tribology, Vol. 235, pp. 2474-2499	S. Singh, S. Kango, N. Sharma, R. Verma, "Recent advances in the mechanical durability of superamphiphobic surfaces: A review"
2020	Tribology Online, Vol. 15, pp. 265-282	M. Arif, D.K. Shukla, S. Kango, N. Sharma, Implication of Surface Texture and Slip on Hydrodynamic Fluid Film Bearings: A comprehensive survey
2020	Tribology in Industry, Vol. 42, pp. 370-381	N. Sharma and S. Kango, Influence of high permeability parameter on the performance of textured porous journal bearings
2019	Part J: Journal of Engineering Tribology, Vol. 233, pp. 1541-1553	N. Sharma, S. Kango, R. K. Sharma, Adiabatic analysis of micro textured porous journal bearings functioned with power law fluid model
2016	Tribology Transactions, vol. 59, pp. 579-584.	Nitin Sharma, Saurabh Kango, Ashwani Tayal, Rajesh Kumar Sharma and Sunil, “Investigations on the influence of surface texturing on a couple stress fluid based Journal bearing by using JFO boundary conditions"
2016	International journal of surface science and engineering, vol. 10, pp. 485-502.	Nitin Sharma, Rajesh Kumar Sharma, Sunil and Saurabh Kango, “A comparative study for lubrication of surface textured porous journal bearing with two different non-Newtonian fluid models”
2014	International journal of surface science and engineering, vol. 8, pp. 392-407.	Nitin Sharma, Saurabh Kango, Rajesh Kumar Sharma and Sunil, “Investigations on the effects of surface texture on the performance of a porous journal bearing operating with couple stress fluids”

## Conference Publications :

Year	Conference	Publication
2022	ICMSE-2022, 11-12 June, 2022, Dr B R Ambedkar NIT Jalandhar	Ajay Laxman Godase, Nitin Sharma, Saurabh Kango, Md Arif, Investigating the effects of chevron-textures on the performance of a porous journal bearing
2022	ICMSE-2022, 11-12 June, 2022, Dr B R Ambedkar NIT Jalandhar	Jitendra Satyarathi, Vijay Kumar, Saurabh Kango, Nitin Sharama, Rajeev Verma, FABRICATION OF SUPERHYDROPHOBIC SURFACE ON LOW CARBON STEEL
2021	2nd Virtual International Tribology Research Symposium (ITRS 2021), 8th to 10th December 2021	Shivam Verma, Nitin Sharma, Saurabh Kango, Significance of Biotribology in Advanced Biomedical Applications: A Review

2021	2nd Virtual International Tribology Research Symposium (ITRS 2021), 8th to 10th December 2021	Mohammad Arif, Saurabh Kango, Dinesh Kumar Shukla, Nitin Sharma, Stability analysis of Finite Textured Journal Bearing with the Effect of Lubricant Slippage
2020	International Conference on Recent Advances in Mechanical Infrastructure (ICRAM-2020) August 21-23, 2020	Mohammad Arif, Saurabh Kango, D K Shukla, Nitin Sharma, Effect of Optimized Slip & Texture Zone on the Performance of Hydrodynamic Journal Bearing
2020	International Conference on Advances in Materials Processing & Manufacturing Applications (iCADMA 2020)	V. Kumar, N. Sharma, S.K.Tiwari, S. Kango, "Atmospheric Corrosion of Materials and Their Effects on Mechanical Properties: A Brief Review"
2020	International Conference on Advances in Materials Processing & Manufacturing Applications (iCADMA 2020)	A.S. Thakur, N. Sharma, S. Kango and S. Sharma, "Effect of nanoparticles on epoxy based nanocomposites: A short review"
2020	International Conference on Advances in Materials Processing & Manufacturing Applications (iCADMA 2020)	S. Singh, S. Kango, N. Sharma, S. Sharma, "Recent advances of reinforced natural polymers: A review"
2020	International Congress on Advances in Materials Science and Engineering (CAMSE- 2020)	P.G. Nimbolkar, S. Kango, N. Sharma, R. Verma
2019	6th INTERNATIONAL CONFERENCE ON PRODUCTION AND INDUSTRIAL ENGINEERING (CPIE-2019)	Veerendra Kumar, S.K. Tiwari, Nitin Sharma and Saurabh Kango
2019	6th INTERNATIONAL CONFERENCE ON PRODUCTION AND INDUSTRIAL ENGINEERING (CPIE-2019)	Mohammad Arif, Saurabh Kango, Dinesh Kumar Shukla and Nitin Sharma
2019	1st INTERNATIONAL CONFERENCE ON MATERIAL SCIENCE and ENGINEERING (ICMSE-2019)	Shivam Verma, Veerendra Kumar, S.K. Tiwari and Nitin Sharma
2019	17th HWWE Conference	Veerendra Kumar, Shivam Verma, S.K. Tiwari and Nitin Sharma "A comprehensive review on role of impact angle on erosion for different types of steels"
2019	17th HWWE Conference	Shivam Verma, Veerendra Kumar, S.K. Tiwari and Nitin Sharma "Investigations on the wear characterization of PEEK based CNT composites"
2019	7th International and 9th Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, December 05-07, 2019, Department of Mechanical Engineering & Department of Metallurgical and Materials Engineering, INDIAN INSTITUTE OF TECHNOLOGY ROPAR Rupnagar, Punjab, INDIA - 140001	A. Bhadania, S. Kango and N. Sharma "A review on Poly Methyl Methacrylate (PMMA) based composites"
2019	7th International and 9th Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, December 05-07, 2019, Department of Mechanical Engineering & Department of Metallurgical and Materials Engineering, INDIAN INSTITUTE OF TECHNOLOGY ROPAR Rupnagar, Punjab, INDIA - 140001	Sharma, N., Singh, A., Kango, S., Progress in surface texturing and lubricant rheology on hydrodynamic fluid film bearings.
2018	19th ISME conference- Advances in Mechanical Engineering, NIT Jalandhar (20-22 December, 2018)	Shivam Verma, Nitin Sharma and S.K. Tiwari
2018	19th ISME conference- Advances in Mechanical Engineering, NIT Jalandhar (20-22 December, 2018)	V. Kumar, D. Singh, S. S. Sandhu, N. Sharma and S. K. Tiwari

## Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
Optimization Methods in Engineering. Lecture Notes on Multidisciplinary Industrial Engineering.	A Comprehensive Review on Effect of Different Parameters of Solid Particle Erosion in Pipeline System <a href="https://doi.org/10.1007/978-981-15-4550-4_37">https://doi.org/10.1007/978-981-15-4550-4_37</a>	Springer	V. Kumar, S. K. Tiwari, N. Sharma, S. Kango	978-981-15-4550-4	2020
Manufacturing Engineering Select Proceedings of CPIE 2019	Adiabatic Analysis of Spherical and Cylindrical Textured Hydrodynamic Journal Bearing <a href="https://doi.org/10.1007/978-981-15-4619-8_35">https://doi.org/10.1007/978-981-15-4619-8_35</a>	Springer	M. Arif, S. Kango, D.K. Shukla, N. Sharma	978-981-15-4619-8	2020

## Events Organized :

Category	Type	Title	Venue	From	To	Designation
STC	National	Future Scopes in Engineering Materials and Tribology	NIT Jalandhar	15-09-20	19-09-20	Coordinator
STC	National	The Education Factory	NIT Jalandhar	18-09-20	22-09-20	Coordinator

## Professional Affiliations :

Designation	Organization
Reviewer	Industrial Lubrication and Tribology
Reviewer	Indian Journal of Engineering & Materials Sciences
Reviewer	Proceedings of the iMeche, Part J: Journal of Engineering Tribology

## PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Shivam Verma	Mechanical and biotribological investigations of PEEK (PolyetheretherKetone) based biocomposites	Ongoing	2019	
Veerendra Kumar	Study of atmospheric corrosion performance of interstitial free (IF) steel subjected to accelerated corrosion conditions	Ongoing	2018	Dr. S.K. Tiwari

## PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Ajay Laxman Godase	Investigating the effects of chevron and triangular textures on the performance of a porous journal bearing	Awarded	2022	

Ankur Singh Thakur	Molecular Dynamics Simulation Study on Epoxy/SiO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> Hybrid Nanocomposites	Awarded	2021	
Sumit Sharma	Tribological Investigations on the Performance of Textured Porous Journal Bearings	Awarded	2021	
Vinod Tryambak Tayde	Influence of combination of textures on the performance of inclined slider bearings	Awarded	2021	
Rajat Uniyal	Tribological Investigations on the performance of textured porous slider bearings	Awarded	2021	
Amit bhadania	Molecular Dynamics simulation study on PMMA/SiC nanocomposites	Awarded	2020	
Shivam Verma	Development, characterization and tribological investigations of PEEK (Poly Ether Ether Ketone)/CNT based composites	Awarded	2019	Dr S.K.Tiwari
Vijay Saini	Design and development of an experimental setup for trajectory control and force control of prosthetic fingers by a tendon based actuation system in MATLAB	Awarded	2019	Dr Joseph A. VAZ
Abhinav Kumar Mishra	Denoising bearing vibration signal through empirical mode decomposition	Awarded	2019	Dr S.K.Tiwari

### Admin. Responsibilities :

Position Held	Organization	From	To
Assistant Controller of Examination	NIT Jalandhar	27/02/2019	01/03/2021
Coordinator, Training and Placement	Deptt. of Mechanical Engineering, NIT Jalandhar	22-01-2018	28-03-2019
Member, Unnat Bharat Abhiyan (UBA) Cell	NIT Jalandhar	25/07/2018	01/03/2021
Coordinator, Examinations	NIT Jalandhar	02/03/2021	Till Date