Curriculum Vitae

DR. ANUJ KUMAR SHARMA

Associate Professor
Coordinator, Mechatronics Program,
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Professional and Academic Qualification

- **PhD** from Indian Institute of Technology (ISM), Dhanbad in 2017.
- **M. Tech** in Mechanical Engineering from Uttar Pradesh Technical University, Lucknow with a CPI of 9.00 on a scale of 10 in 2008.
- **B.E.** in Mechanical Engineering from Chaudhary Charan Singh University, Meerut, UP with an aggregate of 75.1% marks in the batch 1999-2003.
- Intermediate (C.B.S.E.) with an aggregate of 73.2 % marks in 1997.
- High school (C.B.S.E.) with an aggregate of 80.8 % marks in 1995.

Employment & other Experiences (More than Fourteen years at undergraduate level**)**

April 17, 2021 to till date

Working as Associate Professor in Mechatronics Program at Centre for Advanced Studies, Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh Lucknow.

April 17, 2018 to April 16, 2021

Worked as Assistant Professor and Coordinator of Mechatronics department at Centre for Advanced Studies, Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh Lucknow.

June 05, 2017 to April 16, 2018

Worked as Research Assistant Professor in Department of Mechanical Engineering at SRM University Kattankulathur, Kancheepuram District Chennai.

August 13, 2003 to May 31, 2017

Worked as faculty member in various engineering colleges affiliated to Dr. APJ Abdul Kalam Technical University Uttar Pradesh Lucknow (Previously Uttar Pradesh Technical University) UP (India)

Visiting Faculty

- Kumaon Engineering College, Dwarahat, Distt. Almora (An Uttarakhand State Govt. Engineering College) during academic session 2007-08.
- Amity University Noida, UP during session 2008-09.

Publications

Google Scholar Citations:
https://scholar.google.com/citations?hl=en&user=Dy6t9FQAAAAJ

SPONSORED PROJECTS:

S NO.	Project Title	Funded amount (Rs.)	Funding agency	Duration (yrs)	Role (PI/Co-PI)	Status
1	Information Security Education and Awareness (ISEA) Project Phase-III	6250000.0	MeitY, Govt. of India	5 Years	PI	Ongoing
2	Development of thermal sensors for measuring the tool tip temperature and its online monitoring	470000.00	AKTU Lucknow	2 years	PI	Completed
3	Development of sustainable hybrid nano-lubricant with improved tribological properties for green machining	1830000.0	SERB (statutory body of DST GOI	2020 (3 years)	PI	Completed
4	Design and fabrication of human hand inspired with robotic hand for Differently-able persons	300000.00	TEQIP-III of AKTU Lucknow (World Bank scheme)	2019/ 1 year	PI	Completed
5	Computational fluid dynamics (CFD) analysis for designing of ore transportation through pipelines	300000.00	TEQIP-III of AKTU Lucknow (World	2019/ 1 year	Co-PI	Completed

			Bank scheme)			

PATENTS

S No.	Patent Title	Name of applicant(s)	Patent No.	Award date	Agency /country	Status
1	METHOD AND DEVICE FOR OPTIMIZING CUTTING FLUID IN METAL CUTTING OPERATIONS	Anuj Kumar Sharma, Mahip Singh, Amit Rai Dixit	202111033458	Filed on 26/7/2021	India	Granted Patent Number :505650 in Jan 2024.
2	AN ISOTHERMAL PROPULSION SYSTEM FOR METAL CUTTING OPERATION BY MINIMUM QUANTITY LUBRICATION PROCESS MAINTAINING FLUID TEMPERATURE ABOVE FREEZING POINT	Anuj Kumar Sharma, Mahip Singh, Amit Rai Dixit	202331079637	Date of publication 08/12/2023	India	Published
3	SYSTEM AND METHOD FOR SANITIZING CURRENCY NOTE(S)	Anuj Kumar Sharma, Mahip Singh	IN202011035026, TEMP/E-1/38794/2020-DEL	Date of Filing-14/08/2020	India	Published
4	MULTIPURPOSE SANITIZATION APPARATUS	Anuj Kumar Sharma, Mahip Singh	202011037517	Date of Filing-31/08/2020	India	RQ Filed
5	ROBOTIC BASED HEALTH CARE SYSTEM	Anuj Kumar Sharma, Mahip Singh	202111030805	Date of Filing-09/07/2021	India	RQ Filed
6	OIL REMEDIATION COMPOSITE AND METHOD FOR SYNTHESIS THEREOF	Dr Saurabh Mishra, Ujjawal Singh, Dr Anuj Kumar Sharma	Application No-202211030925	Date of filing 30/05/2022	India	Awaiting Request for Examination

7	ITPI- steel and mining waste management: intelligent technology and process management for steel industry and mining waste".	Navneet Kumar, Anuj Kumar Sharma, Brijesh Singh et. al	Application number: 202011047142	Date of filing 29/10/2020	India	Published

Research Guidance

(a) <u>PhD. Scholars</u>

S No.	Name	Registration Number	Topic	Year of registration	Awarded/ Ongoing
1	Mithilesh Kumar Koiri	PhD/18/MEC/2340	CARANGIFORM TYPE TAIL DESIGN FOR SMA SPRING ACTUATOR BASED SOFT ROBOTIC FISH	2018	2022
2	Vineet Dubey	PhD/19/MEC/2442.1	AN INVESTIGATION ON THE PERFORMANCE OF NANOPARTICLE ENRICHED CUTTING FLUID IN MACHINING OF AISI 304 STEEL	2019	2022
3	Rakesh Chandra Joshi	CAS/PHD/20/CSE/012	Design and Optimization of Some Artificial Intelligence Architectures and Applications (Jointly with Prof. M. K. Dutta, Amity University Noida)	2020	Thesis submitted
4	Mukul Saxena	CAS/PHD/20/NAN/0007	AN INVESTIGATION ON MoS2 BASED NANO-LUBRICANTS FOR TRIBOLOGICAL AND MACHINING APPLICATIONS	2020	Thesis submitted (2024)

5	Abhishek Kaushal	CAS/PHD/20/MEC/0006	MACHINE LEARNING ENABLED COLOUR LIGHT COMMUNICATION FOR ROBOT SWARM COORDINATION	2020	Thesis submitted
6	Mahip Singh		Experimental investigation on Nanofluid assisted machining Jointly with Dr. Amit Rai Dixit (IIT ISM Dhanbad)	2017	Ongoing

M.Tech Students:

S No.	**Name**	**Program Name**	**Batch**	**Topic**
1	Abhishek Kaushal, Roll No. 1885895001	Mechatronics	2018-20	Development of swarm robotics system and its applications.
2	Juwairiya Siraz Khan, Roll No. 1885895009	Mechatronics	2018-20	Design and control of a human inspired compliant hand. Jointly with Prof. S.M. Hazarika, IIT Guwahati
3	Himanshu, Roll No. 1885895008	Mechatronics	2018-20	A Novel Technique for luggage sorting at the Airport using Robotic System
4	Neha Mohanta Roll No. 1885895010	Mechatronics	2018-20	Development of Temperature Measurement System useful in Tool Condition Monitoring for Turning Operation
5	Amit Gupta Roll No. 1885895004	Mechatronics	2018-20	Reactive Power Planning using Swarm Evolutionary Techniques
6	Avinash Bhaskar 190858095002	Mechatronics	2019-21	Design and development of low cost 3D printed QDD robotic leg

				and terrain analysis using proprioception.
7	Deepak Chandra Joshi 190858095003	Mechatronics	2019-21	Designing of Trans-radial Prosthetic Hand for Amputee Person.
8	Satyendra Shukla 190858095007	Mechatronics	2019-21	Optimized Dynamic incorporated A-Star Algorithm for a four wheeled mobile robot
9	Mohd. Ilyas 190858095004	Mechatronics	2019-21	Prediction of Temperature of Turning operation using CFD
10	Prameet Vats 19858151004	Manufacturing Technology & Automation	2019-21	Optimization of Machining parameter in MQL Turning of 1040 Steel Using Hybrid MCDM Technique.
11	Sudhir Kumar Rajput 190858095010	Mechatronics	2019-21	A Study and Fabrication of SMA Based 3D Printed Adaptive Gripper Jointly with Dr. Rabesh K Singh (Assistant Professor on contract in MTA program
12	Tushar Singh 19858151007	Manufacturing Technology & Automation	2019-21	An Investigation on the performance of the cutting fluid in Turning of AISI 316 Steel for Sustainable Machining.
13	Prashant Kumar Prasad 190858095006	Mechatronics	2020-22	Prognosis of Surface Roughness of AISI 304 Steel in Nanofluid assisted turning using machine learning technique.
14	Piyush Singh 200858151078175	Manufacturing Technology & Automation	2020-22	Comparative study of tool wear and chip morphology under dry and MQL assisted turning
15	Ratnakar Yadav 167364072744	Manufacturing Technology & Automation	2020-22	An investigation on Tribological behaviour of mono and Hybrid Nano particle based cutting fluid

16	Vishal Kumar 142814053794	Manufacturing Technology & Automation	2020-22	A machine learning approach in prediction of Responses in MQL turning of AISI 304 steel.
17	Ajay Singh 141224028207	Manufacturing Technology & Automation	2020-22	Thermal modelling of cutting tool using computational fluid dynamics in turning of AISI 304 Steel.
18	Abhishek Shukla 2008581515001	Manufacturing Technology & Automation	2020-22	Optimization of MQL Parameter for Various cutting fluids in turning operation.
19	Gaurav Sharma 167364072729	Manufacturing Technology & Automation	2020-22	An Optimization of cutting forces and surface roughness in Turning of AISI 304 Steel Using Mono and hybrid Graphene Nanoparticle Enrich Cutting fluids
20	Sudhanshu Maurya 160544012628	Manufacturing Technology & Automation	2020-22	Optimization of Process Parameter in Electrical Discharge Machining of Titanium Alloy Using Brass and Copper as an Electrode.
21	Sarthak Singh 150304007898	Manufacturing Technology & Automation	2020-22	An Investigation on Wettability Characteristics and Machining Performance of Nanoparticle Enriched cutting fluid.
22	Pramod Kumar Nishad 133584023897	Manufacturing Technology & Automation	2020-22	An Investigation on the Machining forces and surface roughness in MQL Milling of Aluminium Alloy 6061 with Alumina Nano Fluid.
23	Naman Sisodiya 170324034475	Manufacturing Technology & Automation	2021-23	Experimental investigation of Cutting Fluid consumption using cutting fluid optimizer in Turning Operation. Jointly with Dr. Rabesh K Singh (Assistant Professor on contract in MTA program

24	Neelam Verma 210858095049634	Mechatronics	2021-23	Development and control of Fish-inspired anguilliform robot and waypoint following control. *Jointly with Dr. Atul Thakur, Associate Professor of Department of Mechanical Engineering*
25	Suraj Chaurasia 164312055629	Mechatronics	2021-23	Live Terrain Monitoring and Classification using Mobile Robot.
26	Anand Kumar Yadav 2108580955001	Mechatronics	2021-23	Real Time Controlling of Multiple Robots Using Computer vision.
27	Akash Gaurav	Manufacturing Technology & Automation	2022-24	An investigation on the strength of different 3D lattice structures implemented in the design of the profile rod used in vacuum gripper of a 6-axis robot
28	Devendra Prajapati	Manufacturing Technology & Automation	2022-24	Experimental investigation on the selection of 3D printing process parameters for the fabrication of PLA based ceramic composite parts
29	Saumya Kanwal	Manufacturing Technology & Automation	2022-24	Comparative study of performance of different dielectrics in Electric discharge machining
30	Anurag Pandey	Mechatronics	2022-24	An Investigation on the Impact of Overloading on the Performance of E-Rickshaw Loaders in India.
31	Aparna	Mechatronics	2022-24	Enhancing Video Stabilization Through Novel Dynamic Object-Centric Approach for Multiple Independent Objects.
32	Bikrant Rai	Mechatronics	2022-24	Automated Healthcare Solutions: Advanced Segmentation of Tinea Pedis Lesions
33	Kshitiz Shukla	Mechatronics	2022-24	Experimental analysis on Mechanical Properties of Kuka

				KR-16 Robot-Assist CMT Welding Using Machine Learning
34	Mayank Kumar	Mechatronics	2022-24	AI VISION ASSISTED LIVE TERRAIN CLASSIFICATION USING AUTONOMOUS MOBILE ROBOT
35	Mukul Kumar	Mechatronics	2022-24	Design and Development of a Single Screw Filament Extruder for the application in FDM based 3D Printing
36	Shashi Kumar Singh	Mechatronics	2022-24	Detection of irregular shapes resembling non-uniform gaps for UAVs navigation
37	Shubham Dubey	Mechatronics	2022-24	Kinematic analysis and Modelling of the gait by parametrization of the body trajectories of 18 Degree of freedom Hexapod robots using Reinforcement Learning
38	Shubham Verma	Mechatronics	2022-24	Robust Marker for Navigation and Landing of Drones
39	Vidit Datt Prabhakar	Mechatronics	2022-24	Localization through RGBD Camera for the Quadrotor

RESEARCH PUBLICATIONS:

S No.	Authors	Title	Journal/Proceeding Name	Year
1	Rakesh Chandra Joshi, Anuj Kumar Sharma, Malay Kishore Dutta	"AI-SensorVision: A Low-cost Artificial Intelligence-based Robust and Real-time Assistance for Visually Impaired People	IEEE Transactions on Human-Machine Systems	2024
2	Koiri, Mithilesh Kumar; Dubey, Vineet; Sharma, Anuj Kumar; Chuchala, Daniel;	Design of a Shape-Memory-Alloy-Based Carangiform Robotic Fishtail with Improved Forward Thrust	Sensors	2024
3	Bhashkar, Avinash; Sharma, Anuj Kumar;	Experimental Analysis on Different Terrains Using Proprioceptive Information of One Leg of Quadruped Robot	Advances in Mechanical and Energy Technology	2023
4	Kaushal, Abhishek; Sharma, Anuj Kumar; Srivastava, Ashish	Color-Coded Light Signals Based Communication for Swarming Behaviors in Mobile Robotic System	Journal of Sensors	2023

	Kumar; Singh, Gyanendra Kumar;			
5	Srivastava, Himanshu; Kaushal, Abhishek; Kumar, Harish; Tripathi, Anurag; Sharma, Anuj Kumar;	A Design and Development of Baggage Sorting Robotic System at the Airport		2022
6	Mishra, Upendra Kumar; Chandel, Vishal Singh; Singh, Om Prakash; Alam, Navshad; Sharma, Anuj Kumar;	Effect of La co-doping in Zr-doped CeO2 (LaxZr0. 05Ce1-(x+ 0.05) O2) catalyst synthesized via orange peel extract for soot oxidation	Ionics	2024
7	Dubey, Vineet; Sharma, Anuj Kumar;	A short review on hybrid nanofluids in machining processes	Advances in Materials and Processing Technologies	2023
8	Singh, Tushar; Vats, Prameet; Dubey, Vineet; Arora, Pawan Kumar; Kumar, Harish; Sharma, Anuj Kumar;	Investigation of Machining Parameters in Turning of AISI 316 Steel Using Palm Oil-Enriched Cutting Fluid	Advances in Mechanical and Energy Technology	2023
9	Tiwari, Ravi Shanker; Vats, Prameet; Singh, Tushar; Dubey, Vineet; Arora, Pawan Kumar; Sharma, Anuj Kumar;	An Investigation on Effect of Hybrid Nanofluids in End Milling of Aluminium 6061 Alloy	Advances in Mechanical and Energy Technology	2023
10	Maurya, Sudhanshu; Dubey, Vineet; Sharma, Anuj Kumar;	Optimization of machining parameters in EDM of titanium alloy (Ti6Al4V) using brass electrode	AIP Conference Proceedings	2023
11	Singh, Piyush; Dubey, Vineet; Sharma, Anuj Kumar;	Analysis of tool wear and chip morphology under different machining environments in turning operation	Materials Today: Proceedings	2023
12	Nishad, Pramod Kumar; Dubey, Vineet; Mishra, Dipesh Kumar; Sharma, Anuj Kumar;	An investigation on performance of castor oil and Pongamia oil based cutting fluid in MQL milling of aluminium alloy 6061	Materials Today: Proceedings	2023
13	Singh, Ajay; Dubey, Vineet; Sharma, Anuj Kumar;	Thermal modelling of cutting tool under different cutting environment in turning	Materials Today: Proceedings	2023
14	Saxena, Mukul; Sharma, Anuj Kumar; Srivastava, Ashish Kumar; Singh, Narendra; Dixit, Amit Rai;	An Investigation for Minimizing the Wear Loss of Microwave-Assisted Synthesized g-C3N4/MoS2 Nanocomposite Coated Substrate	Coatings	2023
15	Shukla, Abhishek; Dubey, Vineet; Sharma, Anuj Kumar;	Comparative study of dry machining with MQL assisted soybean oil in turning operation of AISI 304 steel	Materials Today: Proceedings	2023

16	Mishra, Avinash; Paul, Amrit Raj; Mukherjee, Manidipto; Singh, Rabesh Kumar; Sharma, Anuj Kumar;	Evaluation of Cu-Ti dissimilar interface characteristics for wire arc additive manufacturing process	Rapid Prototyping Journal	2023
17	Kumar, Avinash; Sharma, Anuj Kumar; Katiyar, Jitendra Kumar;	State-of-the-art in sustainable machining of different materials using nano minimum quality lubrication (NMQL)	Lubricants	2023
18	Dubey, Vineet; Sharma, Anuj K; Singh, Balbir;	Optimization of machining parameters in chromium-additive mixed electrical discharge machining of the AA7075/5% B4C composite	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	2022
19	Kaushal, Abhishek; Sharma, Anuj Kumar;	A Novel Color-Coded Light-Based Communication for Autonomous Swarm Robotics Research	Advances in Energy Technology	2022
20	Sharma, Anuj; Agrawal, Atul Kumar; Rastogi, Vikas; Gupta, Ashish;	Multi-scale dynamic analysis of metal matrix composite shafts through morphological evaluations	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	2022
21	Mishra, Saurabh; Dubey, Vineet; Sharma, Anuj Kumar;	Potential of various metal-oxide nanofluids for sustainable machining application—a review	Recent Trends in Industrial and Production Engineering	2022
22	Dubey, Vineet; Sharma, Anuj Kumar; Kumar, Harish; Arora, Pawan Kumar;	Prediction of cutting forces in MQL turning of AISI 304 steel using machine learning algorithm	J. Eng. Res	2022
23	Mishra, Rishish; Dubey, Vineet; Singh, Rabesh Kumar; Sharma, Anuj Kumar;	Prediction and Modelling of Nodal Temperature in Turning Operation	Advances in Mechanical and Materials Technology	2022
24	Pant, Meena; Nagdeve, Leeladhar; Moona, Girija; Kumar, Harish; Sharma, Anuj;	Tribological behavior investigation of 316L stainless steel samples processed by selective laser melting	Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology	2022
25	Mishra, Anurag Kumar; Kaushal, Abhishek; Singh, Rabesh Kumar; Sharma, Anuj Kumar;	Finite Element Analysis of Infill Density on the Compressive Strength of 3D Printed Parts by Fused Deposition Modelling	Recent Advances in Industrial Production	2022
26	Singh, Vaibhav; Sharma, Anuj Kumar; Sahu, Ranjeet Kumar; Katiyar, Jitendra Kumar;	State of the art on sustainable manufacturing using mono/hybrid nano-cutting fluids with minimum quantity lubrication	Materials and Manufacturing Processes	2022

27	Vats, Prameet; Singh, Tushar; Dubey, Vineet; Sharma, Anuj Kumar;	Optimization of machining parameters in turning of AISI 1040 steel using hybrid MCDM technique	Materials Today: Proceedings	2022
28	Pal, Vijay Kumar; Sharma, Anuj Kumar;	Complex shaped micro-channels generation using tools fabricated by AWJ milling process	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	2022
29	Dubey, Vineet; Sharma, Anuj Kumar; Pimenov, Danil Yurievich;	Prediction of Surface Roughness Using Machine Learning Approach in MQL Turning of AISI 304 Steel by Varying Nanoparticle Size in the Cutting Fluid	Lubricants	2022
30	Gufran, Mohd; Mishra, Avinash; Singh, Rabesh Kumar; Sharma, Anuj Kumar; Dixit, Ankit; Shah, Ashiv;	Dependence of process planning strategy on deposition ratio in wire arc additive manufacturing	Materials Today: Proceedings	2022
31	Saxena, Mukul; Sharma, Anuj Kumar; Srivastava, Ashish Kumar; Singh, Rabesh Kumar; Dixit, Amit Rai; Nag, Akash; Hloch, Sergej;	Microwave-Assisted Synthesis, Characterization and Tribological Properties of a g-C3N4/MoS2 Nanocomposite for Low Friction Coatings	Coatings	2022
32	Prasad, Prashant Kumar; Dubey, Vineet; Sharma, Anuj Kumar;	Surface Roughness Prediction of AISI 304 Steel in Nanofluid Assisted Turning Using Machine Learning Technique	Key Engineering Materials	2022
33	Kamal; Kumar, Devender; Sharma, Anuj Kumar;	Statistical Analysis of Feature Selection and Clustering for Building the Optimised Drug Toxicity Prediction Model	International Conference on Information and Communication Technology for Competitive Strategies	2022
34	Koiri, Mithilesh Kumar; Kumar, Harish; Arora, Pawan Kumar; Sharma, Anuj Kumar;	Design and optimization of Caudal fin for robotic fish driven by crank-slotted slider and lever mechanism	Journal of Engineering Research	2021
35	Vaibhav Singh, Anuj Kumar Sharma, Ranjeet Kumar Sahu, Jitendra Kumar Katiyar;	Novel application of graphite-talc hybrid nanoparticle enriched cutting fluid in turning operation	Journal of Manufacturing Processes	2021
36	Koiri, Mithilesh Kumar; Sharma, Anuj Kumar;	Characterization and Behavior Study of Nitinol Shape Memory Alloy Wire for Effective and Efficient Use in Soft Robotics as an Actuator	Indian Journal of Pure & Applied Physics	2021

37	Mohanta, Neha; Singh, Rabesh Kumar; Katiyar, Jitendra Kumar; Sharma, Anuj Kumar;	A Novel Fluid–Structure Interaction (FSI) Modeling Approach to Predict the Temperature Distribution in Single-Point Cutting Tool for Condition Monitoring During Turning Process	Arabian Journal for Science and Engineering	2021
38	Yadav, Ajeet; Dubey, Vineet; Singh, Rabesh Kumar; Sharma, Anuj Kumar;	Effect of Temperature and Humidity on Tribological Properties of Rail and Wheel Using Pin-On-Disc	Recent Advances in Smart Manufacturing and Materials	2021
39	Kumar, Navneet; Sharma, Gaurav Kumar; Singh, Desh Bandhu; Sharma, Anuj Kumar; Sharma, Sanjeev Kumar;	Effect of Grain Size on the Rheology of Fly Ash Slurry	Advances in Geotechnics and Structural Engineering	2021
40	Anuj Raturi, Desh Bandhu Singh, Pravin P Patil, Anuj Kumar Sharma;	Sensitivity analysis of solar still of single slope type included with N similar evacuated tubular collectors having series connection	Desalination and Water Treatment	2021
41	Kumar, Harish; Sharma, Anuj; Shrivastava, Yogesh; Khan, Shahroz Akhtar; Arora, Pawan Kumar;	Optimization of process parameters of pin on disc wear set up for 3D printed specimens	Journal of Engg. Research EMSME Special Issue pp	2021
42	Sharma, Anuj; Kumar, Rajesh;	Potential use of minimum quantity lubrication (MQL) in machining of biocompatible materials using environment friendly cutting fluids: An overview	Materials Today: Proceedings	2021
43	Rajput, Sudhir Kumar; Kaushal, Abhishek; Singh, Rabesh Kumar; Sharma, Anuj Kumar;	A Study and Fabrication of SMA based 3D Printed Adaptive Gripper	2021 Smart Technologies, Communication and Robotics (STCR)	2021
44	Kisan, Unni; Dubey, Vineet; Sharma, Anuj Kumar; Mital, Arun;	Synthesis of Groundnut Shell/Rice Husk Hybrid Composite–A Review	IOP Conference Series: Materials Science and Engineering	2021
45	Darshan, Shiv; Singh, Rabesh Kumar; Sharma, Anuj Kumar;	A Novel Method to Develop an Origami based Crawler Robot	2021 Smart Technologies, Communication and Robotics (STCR)	2021
46	Dubey, Vineet; Sharma, Anuj Kumar; Vats, Prameet; Pimenov, Danil Yurievich; Giasin, Khaled; Chuchala, Daniel;	Study of a multicriterion decision-making approach to the Mql turning of Aisi 304 steel using hybrid nanocutting fluid	Materials	2021
47	Malhotra, A; Sharma, A; Sharma, D; Ahmed, F;	Résumé builder over rejuvenated AI features in website development	Smart Computing	2021

48	Sharma, Anuj Kumar; Tiwari, Arun Kumar; Dixit, Amit Rai; Singh, Rabesh Kumar;	Measurement of machining forces and surface roughness in turning of AISI 304 steel using alumina-MWCNT hybrid nanoparticles enriched cutting fluid	Measurement	2020
49	Dubey, Vineet; Sharma, Anuj Kumar; Singh, Rabesh Kumar;	Study of various cooling methodology used in machining processes	Materials Today: Proceedings	2020
50	Sharma, Anuj Kumar; Singh, Rabesh Kumar; Tiwari, Arun Kumar; Dixit, Amit Rai; Katiyar, Jitendra Kumar;	Rheological behaviour of hybrid nanofluids: A review	Tribology in Materials and Applications	2020
51	Mohanta, Neha; Singh, Rabesh Kumar; Sharma, Anuj Kumar;	Online monitoring system for tool wear and fault prediction using artificial intelligence	2020 International Conference on Contemporary Computing and Applications (IC3A)	2020
52	Dwivedi, Vivek; Kaushal, Abhishek; Singh, Rabesh Kumar; Sharma, Anuj Kumar;	Analysis of an adaptive vibration absorber in robotics using ferrofluid	2020 International Conference on Contemporary Computing and Applications (IC3A)	2020
53	Koiri, Mithilesh Kumar; Sharma, Anuj Kumar; Singh, Rabesh Kumar;	Design of SMA based Electro-Hydraulic/Pneumatic Actuated Robotic Octopus Arm	2020 International Conference on Contemporary Computing and Applications (IC3A)	2020
54	Mohanta, Neha; Gupta, Amit; Singh, Rabesh Kumar; Sharma, Anuj Kumar; Chauhan, Saurabh;	Control Dynamics and Motion Estimation for Chaotic Three-Link Robotic Manipulator	2020 International Conference on Contemporary Computing and Applications (IC3A)	2020
55	Dubey, Vineet; Sharma, Anuj Kumar; Singh, Rabesh Kumar;	A Technological Review on Temperature Measurement Techniques in Various Machining Processes	Lecture Notes in Mechanical Engineering:55-67: Advances in Metrology and Measurement of Engineering Surfaces	2020
56	Khan, Juwairiya Siraj; Sharma, Anuj K; Hazarika, Shyamanta M;	Estimating Corticomuscular Coherence using Kernel Partial Least Square	2020 International Conference on Contemporary Computing and Applications (IC3A)	2020
57	Gupta, Amit; Gupta, Ankit; Kaushal, Abhishek; Chaubey, Anurag; Sharma, Anuj Kumar;	Reactive power planning using swarm evolutionary techniques	2020 2nd International Conference on Advances in Computing, Communication Control and	2020

			Networking (ICACCCN)	
58	Pandey, Kuldeep; Dubey, Vineet; Sharma, Anuj Kumar; Mital, Arun;	State of art on tribological behaviour of nanoparticle enriched cutting fluid	Materials Today: Proceedings	2020
59	Bhaumik, Shubrajit; Paleu, Viorel; Pathak, Rajan; Maggirwar, Rishabh; Katiyar, Jitendra Kumar; Sharma, Anuj Kumar;	Tribological investigation of r-GO additived biodegradable cashew nut shells liquid as an alternative industry lubricant	Tribology International	2019
60	Sharma, Anuj Kumar; Singh, Rabesh Kumar; Dixit, Amit Rai; Tiwari, Arun Kumar; Singh, Mahip;	An investigation on tool flank wear using Alumina/MoS 2 hybrid nanofluid in turning operation	Advances in Manufacturing Engineering and Materials: Proceedings of the International Conference on Manufacturing Engineering and Materials (ICMEM 2018), 18–22 June, 2018, Nový Smokovec, Slovakia	2019
61	Khan, Juwairiya Siraj; Koiri, Mithilesh Kumar; Raj, Manish; Sharma, Anuj Kumar; Singh, Rabesh Kumar;	Actuation and fabrication of human inspired artificial hand	2019 4th International Conference on Information Systems and Computer Networks (ISCON)	2019
62	Mohanta, Neha; Mishra, Rishish; Sharma, Anuj K; Raj, Manish;	Design and Control Dynamics of Multi-Fingered Prosthetic Hand	2019 4th International Conference on Information Systems and Computer Networks (ISCON)	2019
63	Dwivedi, Vivek; Raj, Manish; Yadav, Ajeet; Sharma, Anuj Kumar;	Additive Fabrication and Additive Technique: A Survey	2019 4th International Conference on Information Systems and Computer Networks (ISCON)	2019
64	Sharma, Anuj K; Tiwari, Arun K; Dixit, Amit R; Singh, Rabesh K;	Hybrid Nanoparticles Enriched Cutting Fluids in Machining Processes		2019
65	Shil, Arnav; Roy, Sandipan; Balaji, PS; Katiyar, Jitendra	Experimental analysis of mechanical properties of stir casted aluminium-graphene nanocomposites	IOP Conference Series: Materials	2019

	Kumar; Pramanik, Sumit; Sharma, Anuj Kumar;		Science and Engineering	
66	Sharma, AK; Tiwari, AK; Dixit, AR; Singh, RK; Singh, M;	Novel uses of alumina/graphene hybrid nanoparticle additives for improved tribological properties of lubricant in turning operation	Tribology International	2018
67	Katiyar, Jitendra K; Sharma, Anuj Kumar; Pandey, Basant;	Synthesis of iron-copper alloy using electrical discharge machining	Materials and Manufacturing Processes	2018
68	Sharma, A.K.; Tiwari, A.K.; Dixit, A.R.;	Prediction of temperature distribution over cutting tool with alumina-MWCNT hybrid nanofluid using computational fluid dynamics (CFD) analysis	The International Journal of Advanced Manufacturing Technology	2018
69	Sharma, AK; Katiyar, JK; Bhaumik, S; Roy, S;	Influence of alumina/MWCNT hybrid nanoparticle additives on tribological properties of lubricants in turning operations	Friction	2018
70	Rathaur, AS; Katiyar, JK; Patel, VK; Bhaumik, S; Sharma, AK;	A comparative study of tribological and mechanical properties of composite polymer coatings on bearing steel	International Journal of Surface Science and Engineering	2018
71	Katiyar, Jitendra Kumar; Bhaumik, Shubrajit; Ashok, Ashwin; Sharma, Anuj Kumar;	Physiochemical Properties of Hexagonal Boron Nitride Blended Coconut Oil	Proceedings of TRIBOINDIA-2018 An International Conference on Tribology	2018
72	Singh, R; Dixit, A; Sharma, A; Tiwari, A; Mandal, Vimal; Pramanik, Alokesh;	Influence of graphene and multi-walled carbon nanotube additives on tribological behaviour of lubricants	International Journal of Surface Science and Engineering	2018
73	Singh, Rabesh Kumar; Sharma, Anuj Kumar; Mandal, Vimal; Gaurav, Kumar; Sharma, Abhishek; Kumar, Amit; Dixit, Amit Rai; Mandal, Amitava; Das, Alok Kumar;	Effect of multi-walled carbon nanotubes based nanofluid on surface roughness and cutting temperature in turning operation using minimum quantity lubrication	IOP Conference Series: Materials Science and Engineering	2018
74	kumar Singh, Rabesh; Sharma, Anuj Kumar; Mandal, Vimal; Gaurav, Kumar; Nag, Akash; Kumar, Amit; Dixit, Amit Rai; Mandal, Amitava; Das, Alok Kumar;	Influence of graphene-based nanofluid with minimum quantity lubrication on surface roughness and cutting temperature in turning operation	Materials Today: Proceedings	2018
75	Sharma, Anuj Kumar; Tiwari, Arun Kumar; Dixit, Amit Rai; Singh, Rabesh Kumar;	Investigation into Performance of SiO2 Nanoparticle Based Cutting Fluid in Machining Process	Materials Today: Proceedings	2017

76	Singh, Rabesh Kumar; Sharma, Anuj Kumar; Dixit, Amit Rai; Tiwari, Arun Kumar; Pramanik, Alokesh; Mandal, Amitava;	Performance evaluation of alumina-graphene hybrid nano-cutting fluid in hard turning	Journal of cleaner production	2017
77	Singh, R.K.; Dixit, A.R.; Mandal, A; Sharma, A.K.;	Emerging application of nanoparticle-enriched cutting fluid in metal removal processes: a review	Journal of the Brazilian Society of Mechanical Sciences and Engineering	2017
78	Sharma, AK; Singh, RK; Dixit, AR; Tiwari, AK;	Novel uses of alumina-MoS2 hybrid nanoparticle enriched cutting fluid in hard turning of AISI 304 steel	Journal of Manufacturing Processes	2017
79	Singh, Rabesh Kumar; Sharma, Anuj Kumar; Dixit, Amit Rai; Tiwari, Arun Kumar; Mandal, Amitava;	Preparation and characterization of nanoparticles mixed cutting fluids	Advanced Materials Proceedings	2017
80	Singh, RK; SHarma, AK; Dixit, AR; Mandal, A; Tiwari, AK;	Experimental investigation of thermal conductivity and specific heat of nanoparticles mixed cutting fluids	Materials Today:Proceedings ICAAMM-2016	2017
81	Rabesh Kumar Singh, Anuj Kumar Sharma, Vimal Mandal, Kumar Gaurav, Bishwajeet, Amit Kumar, Amit Rai Dixit, Amitava Mandal, Alok Kumar Das;	Effect of MWCNT Mixed Nanofluid in Turning Operation Using Minimum Quantity Lubrication	Conference: COPEN 2017 at IIT Madras-10th International Conference on Precision, Meso, Micro and Nano Engineering IITM hennai	2017
82	Sharma, Anuj Kumar; Tiwari, Arun Kumar; Dixit, Amit Rai;	Rheological behaviour of nanofluids: A review	Renewable and Sustainable Energy Reviews	2016
83	Sharma, Anuj Kumar; Tiwari, Arun Kumar; Dixit, Amit Rai;	Effects of Minimum Quantity Lubrication (MQL) in machining processes using conventional and nanofluid based cutting fluids: A comprehensive review	Journal of cleaner production	2016
84	Sharma, Anuj Kumar; Tiwari, Arun Kumar; Dixit, Amit Rai;	Characterization of TiO2, Al2O3 and SiO2 Nanoparticle based cutting fluids	Materials Today: Proceedings	2016
85	Sharma, Anuj Kumar; Tiwari, Arun Kumar; Singha, Rabesh Kumar; Dixit, Amit Rai;	Tribological Investigation of TiO2 Nanoparticle based Cutting Fluid in Machining under Minimum Quantity Lubrication (MQL)	Materials Today: Proceedings	2016
86	Sharma, Anuj Kumar; Singh, Rabesh Kumar; Dixit, Amit Rai; Tiwari, Arun Kumar;	Characterization and experimental investigation of Al2O3 nanoparticle based cutting fluid in turning of AISI 1040 steel under minimum quantity lubrication (MQL)	Materials Today: Proceedings	2016

87	Sharma, Anuj Kumar; Tiwari, Arun Kumar; Dixit, Amit Rai;	Improved machining performance with nanoparticle enriched cutting fluids under minimum quantity lubrication (MQL) technique: a review	Materials Today: Proceedings	2015
88	Sharma, Anuj Kumar; Tiwari, Arun Kumar; Dixit, Amit Rai;	Mechanism of nanoparticles functioning and effects in machining processes: a review	Materials Today: Proceedings	2015
89	Singh, RK; Sharma, AK; Jatav, A; Kumar, S; Bajaj, R; Dixit, AR; Das, AK; Mandal, A; Chattopadhyaya, S;	Tribological Analysis of AISI 304 Material on Turning Process Using Coated Carbide Tool	2nd National conference on Mining Equipment: New Technologies, Challenges & Applications (MENTCA) 2015	2015
90	Sharma, Anuj Kumar; Tiwari, Arun Kumar; Dixit, Amit Rai;	Progress of Nanofluid Application in Machining: A Review	Materials and Manufacturing Processes	2014
91	Singh, Rabesh Kumar; Sharma, Anuj Kumar; Jatav, Amit; Kumar, Shakti; Bajaj, Rajesh; Dixit, Amit Rai;	Turning Process Using Coated Carbide Tool		

Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S No.	Name of Award	Awarding agency	Year
1	Author of the Year	MTRES New Delhi	2017
2	AKTU Best Teacher's Award	AKTU Lucknow	2020
3	Corona Warrior	AKTU Lucknow	2021

Seminar/Workshop/FDP

- Delivered more than 10 keynote lectures in international conferences.
- Attended a National conference on "Innovation and Entrepreneurship in ICT" organized by GNIT Girls Institute of Technology Greater Noida on March 12-13, 2010.
- Attended Faculty Development Program on SPSS Clementine organized by SPSS South Asia & college of Engineering Technology-IILM Greater Noida on 19th February 2009.
- Attended two days' Workshop on "Pedagogy of Distance Education" organized by CET-IILM with expertise from IGNOU, New Delhi in Dec 2008.
- Attended an International Conference on "Challenges & Strategies for Sustainable Energy, Efficiency and Environment" organized by UPTU, Lucknow in June 2006.
- Attended two days workshop on "Application of MATLAB in teaching & research"

organized by Hindustan College of Science & Technology, Mathura on April 29-30, 2006.

Reviewer

- Reviewer, International Journal of Heat and Mass Transfer (Elsevier Publications).
- Reviewer, Journal of Vibration and Control (Sage publication)
- Journal of the Brazilian Society of Mechanical Sciences and Engineering
- Tribology International
- Journal of Manufacturing Processes

Courses Taught at undergraduate level

- Engineering Mechanics
- Strength of Materials
- Manufacturing Processes
- Manufacturing Science-I (4^{th} Sem.)
- Manufacturing Science-II (5^{th} Sem.)
- Applied Thermodynamics

Courses Taught at postgraduate level

- Elements of Mechanical Engineering
- Industrial Automation

Administrative & other responsibilities

- Working as an Associate Dean Post Graduate Studies & Research AKTU.
- Working as Associate Dean Innovation and Social Entrepreneurship AKTU and Faculty Coordinator of AICTE AKTU IDEA Lab by Vice-Chancellor AKTU Lucknow.
- Holding the post of Coordinator of Mechatronics department at Centre for Advanced Studies of Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh Lucknow.
- Worked as an Associate Dean Research & Development and industrial consultancy of Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh Lucknow.
- Worked as an Associate Dean Faculty of Engineering and Technology of Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh Lucknow.
- Appointed as Paper setter and Examiner by various State Public Service Commissions.
- Worked as the Head of Department in various reputed Engineering colleges affiliated to APJ Abdul Kalam Technical University (Previously UP Technical University), Lucknow.
- Appointed as Examiner for evaluation in End Semester Examination by UP Technical University, Lucknow, Uttar Pradesh, India.
- Worked as a coordinator for designing the curriculum of the Distance Education program for B.Tech first year at IILM college of Engineering and Technology, Greater Noida.

Honours and Awards

1. **AKTU Best Teachers Award 2020** by Vice-Chairman AICTE Prof. M.P. Poonia and Vice-Chancellor AKTU Prof. Vinay Kumar Pathak on the occasion of Teachers Day (5th September 2020) for commendable work during COVID-19 pandemic by developing various products useful for protection and prevention from corona.
2. **Corona warrior** for contribution during COVID-19 pandemic by Hon'ble Vice-Chancellor AKTU Lucknow.
3. **Research Excellence award (Author of the year)** in the year 2017 from MT Research and Education Society, India.
4. School Topper in class 10^{th} Examination.
5. School Topper in class 12^{th} Examination.

Additional Information

1. Life time member of Indian Society for Technical Education (ISTE).

(Anuj Kumar Sharma)