

CURRICULUMVITAE

Dr. Pritosh Tomar

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Date of Birth: 24 July 1994

Objective: Looking for a prospect with which I can use my inherent talent and work in a challenging atmosphere and get engaged in firm management, research analysis and product development using the latest technology.



Professional Experience

- Working as Assistant Professor in the Mechanical department at Women Institute of Technology, Veer Madho Singh Bhandari Uttarakhand Technical University.
- Worked as Dean Research, Ph.D. Coordinator, Haridwar University, Roorkee. (04 March 2024 – 14 August 2024).
- Worked as Assistant Professor in the Mechanical department at Quantum University, Roorkee (04 Feb, 2019- 04 March 2024).
- Worked as Assistant Professor in the Mechanical department at Phonics institute of technology, Roorkee (01 Jan, 2018- 31 Jan 2019).
- Worked as Project Assistant (Research) under NMSHE- project titled “Hydrological modeling in Alaknanda Basin and Assessment of climate change impact” at The National Institute of Hydrology (NIH), IIT Campus Roorkee. (22 June 2016 – 30 December 2017)
- Worked as Junior Engineer in Laxmi Sugar Mills Co. PVT. Limited, Iqbalpur. (15 Feb 2014 - 09 March 2015)

Educational and Professional qualification details

<i>Exam</i>	<i>Specialization</i>	<i>School/College</i>	<i>Board/University</i>	<i>Percentage/CGPA</i>	<i>Year of Passing</i>
Doctor of Philosophy (Ph.D.)	Major in: Mechanical Engg., Minor in: Industrial and Production Engg.	COT, G.B. Pant University of Agriculture and Technology, Pantnagar.	G.B. Pant University of Agriculture and Technology	77%	2023
Master of Technology (M.Tech)	Thermal Engineering	Uttarakhand Technical University (Campus) Dehradun	UTU	68%	2017
Bachelor of Technology (B.Tech)	Mechanical Engineering	Quantum School of Technology	UTU	61%	2014
Senior Secondary (12 th)	PCM	Sarvagya Public School, Roorkee	CBSE	56%	2010
Secondary School (10 th)	-	A.S.A.S.V.M., Roorkee	CBSE	62%	2008

Patents

- “Smart stick for visually impaired persons” Patent Number 202211037203, July 2022.
- “Die for fragile material with cylindrical shape mold” Patent Grant Number-372494-001, September 2022
- “Advance artificial intelligence and machine learning based high-tech video surveillance and intelligent security system” June 2021
- “Paper shredder machine” Status- Published, October 2022.
- “Carport - a portable car garage” Status- Published, October 2022.
- “Bag cum chair” Status- Under Process
- “Design and develop advanced artificial intelligence and machine learning based QUKAM wireless Bluetooth pulse oximeter” July 2021

Papers and Conferences

- Effect of glass fiber and nylon fiber reinforcement on the mechanical and thermal properties of styrene butadiene rubber mixed PMMA denture base material, Elsevier-Journal of the Mechanical Behavior of Biomedical Materials, Volume 150, February 2024, 106308. (SCI)
- “Improvement of mechanical properties for PMMA based Denture material” Paper presented at the International Conference on Mechanical Engineering and Technology (ICMET-2024) held at the NIT Kurukshetra, Haryana on 1st March 2024. (SCI)
- "Experimental Study of Friction Factor Properties and HTE using Circular Perforated TT Inserts in Heat Interchanger" paper accepted for the Journal of process Mechanical Engineering. (SCOPUS)
- Design and Analysis on Fuzzy Logic Control of Buck Converter for Photo Voltaic Emulator, **IEEE** March 2023.
- Sentiment Analysis on Amazon Dataset using Transfer learning, **IEEE** March 2023.
- Emotional Recognition through Facial Expression Using Support Vector Machine, **IEEE** March 2023.
- Climate change is not a HOAX: Understanding the reality and Urgency, Article, Agri Roots e- Magazine, 2(7): July 2024
- Examining the Variations in World Gold Prices: An Extensive Review from 1980 to 2024, IJMMST, 3(1): 22-38, June 2024.
- Policy for Energy Conservation: A Need for New Mind Set, New Law and Great Empathy, IJERA, 3(1): 01-05, June 2024.
- Internet of Things: An Innovative Approach Towards Technological Advancements IJMMST, 3(1): 49-60, June 2024.
- Advances in Nanotechnology: Exploring the Diversity and Applications of Nano-sensors, IJERA, 3(1): 14-24, June 2024.
- Digital Image Correlation: A Review, IJMMST, 3(1): 61-71, June 2024.
- Experimental Investigation on Mechanical Properties of Fiber Reinforced PMMA

Denture Base Material, IJERA, 2(2): 127-134 (December 2023)

- Enhancement of PMMA base Denture Material: A Review, IJMMST, 2(1): 34-40 (April 2023).
- Influence of fiber Reinforcement on properties of PMMA, Int. J. Mech. Therm. Eng., 2023; 4(1): 23-27.
- Impact Strength Enhancement of PMMA base Denture Material by Fiber Addition, IJMMST, 2(1): 34-40 (April 2023)
- “Study of Smart Water Leakage Detection in Water Distribution System through Experimental Model” at ICFIRTP-2022.
- “IoT Based Systematic Study on Smart Storm Water Management for Urban Environment” at ICFIRTP-2022.
- “Study and Evaluate the Effect of Machining Parameters on Material Removal Rate (MRR) During Electric Discharge Machining Using SK2MCr4 Carbon Tool Steel.” at ICFIRTP – 2022.
- “Effect of Carding Process on the Mechanical Properties of Grewia Optiva Bast Fiber” at ICFIRTP-2022.
- Study of waste plastic chips and material removing machining waste mixing of coarse cement concrete, ICFIRTP-2022
- “Grewia Optiva Fiber Reinforced Composites for Sustainable Architecture” at International Conference on ICFIRTP-2022.
- Green Supply Chain Management Initiatives by TCS and DELL in India at ICFIRTP-2022.
- Emotional Recognition and behavioural pattern Through Facial Expression Using SVM at ICFIRTP -2022.
- Pandemic effect on consumer behavior at ICFIRTP-2022
- Study of Smart Water Leakage Detection in Water Distribution System Through Experimental Model at ICFIRTP-2022
- IoT Based Systematic Study on Smart Storm Water Management for Urban Environment at ICFIRTP-2022
- “Mechanical Property Requirements for Denture Base material” at ICFIRTP-2022.
- Published Research paper on topic “Heat transfer Augmentation Techniques used in circular Tubes heat exchanger using inserts” in International Journal of Research in Technology and Management ISSN 2454-6220.
- Presented and Published research paper in international Conference ICFIRTP 2020 on topic “Study of Motion and Behavior Pattern of Bees: A Review
- Presented and published research paper in international Conference ICFIRTP 2020 on topic “Study on vibration fruit collector mechanism.”
- Published and Guided M.Tech student research work on title “CFD numerical analysis of heat transfer characteristics of single heat exchanger tube with different tapered roughness” International Journal of Innovative Science and Research Technology (IJISRT), ijisrt.com, ISSN No:-2456-2165, Paper ID:-"IJISRT21AUG016"
- Guided M.Tech student research work on title “CFD numerical investigation of thermal performance of diamond shape micro rectangular heat exchanger” International Journal of Innovative Science and Research Technology (IJISRT), ijisrt.com, ISSN No :- 2456-2165, Paper ID:-"IJISRT21AUG024"

Thesis and Project Work

- Ph.D. Research work on Topic- Investigations on Mechanical and Thermal Properties of Fiber Reinforced Polymethyl Methacrylate Denture Base Material.
- M.Tech. Thesis Title “Experimental investigation Heat transfer enhancement using Zig-Zag cut twisted tape insert in Circular Pipe Heat Exchanger.”
- B.Tech. Major project on title “Refrigeration and air conditioning using NCER and Peltier effect.”
- Successfully guided 3 M.Tech Student as Main Guide in their M.Tech Research work

Training & Courses

- Techniques of Material Characterization, NPTEL, IIT Kharagpur, October 2022.
- Training of AUTOCAD, CATIA and CNC from Central Institute of Tool Design (CITD), Balanagar, Hyderabad.
- Training on Construction of 500 MW Generators from Bharat Heavy Electricals Limited (BHEL), Haridwar.
- Knowledge of Simulation Software like Ansys.
- Basic Knowledge of Excel, Ms Word, Power Point, C++ language.

Areas of Interest

- Composite Material, Bio Composite, Industrial and Production Engineering.
- Thermal engineering (including Thermodynamics, HMT and Refrigeration, Power Plant Engineering)
- Teaching Mechanical branch subjects.
- Heat Transfer Augmentation Techniques.
- Robotics
- Technical seminars, New Technologies, Research and development.

Certifications(Academic/industrial)

- Advisory member at Pyrax Polymer group of industries Roorkee.
- Member of International Association of Academic Plus Corporate, UID No-FRTJQC-CE002608
- Reviewer at abc index journal with Id Number-000-512-856.
- Reviewer at easy chair ICFIRTP-International Conference on Fourth Industrial Revolution based Technology and Practices conferences.
- Auto Cad, Catia, Pro-e from CITD (Central Institute of Tool and Design, Hyderabad)
- Construction of 500 MW generator from BHEL (Bharat Heavy Electrical Limited, Haridwar)
- Webinar on “Role of 3D Printing during COVID-19 Pandemic”, 01-06-2020 by Bipin Tripathi Kumaon Institute of Technology, Dwarahat
- Webinar on COVID-19: Pneumatics in Critical Healthcare, 28-05-2020
- Introduction to Fusion 360, 30 April 2020 to 6 May 2020, ICT academy
- Awareness of industry safety during covid-19, 20-May-2020 ,S.A Engineering college, Anna University, Chennai

- Digital Manufacturing using Autodesk fusion 360, 22 June 2020 to 27 June 2020, ICT academy
- Smart material for energy and environment-An Experimental and Theoretical Perspective, 26-07-2021 to 30-07-2021, ATAL-AICTE.
- Webinar on "Insights of INDUSTRY 4.0", 29-05-2020 by the Department of Mechanical Engineering, S.A. Engineering College (Autonomous), Chennai.

Other Responsibilities

- Worked as Ph.D. and Masters Coordinator at Haridwar University.
- Worked as QLRC (Quantum Learning Resource Center) Mechanical and Mechatronics Departmental Coordinator.
- Worked as Mechanical and Mechatronics Departmental impulse club Coordinator.
- Worked as Admission Cell Member at Quantum University and Haridwar University.
- Worked as Mentor of Diploma and B.Tech courses.
- Worked as HR and recruitment cell Head at Haridwar University.

Hobbies

- Research Work
- Travelling.
- Newspaper reading.
- Defense matters.
- Athletics.
- Interaction with peoples.
- Social Works

Declaration:

I hereby declare that the details mentioned above are correct to the best of my knowledge.

Date: / /2024

Paritosh

Place:

PRITOSHTOMAR