CURRICULUM VITAE

Dr. Mayank Pokhriyal
Assistant Professor
Department of Mechanical Engineering
Gurukula Kangri Vishwavidyalaya (Deemed to be University), Haridwar, Uttarakhand, India
Email Id: mayank.pokhriyal@gkv.ac.in | **Contact:** +91-7500690555
Scopus Id: https://www.scopus.com/authid/detail.uri?authorId=28167869400
Orchid Id: https://orcid.org/0000-0002-2561-7897
LinkedIn Id: https://www.linkedin.com/in/mayankpokhriyal
Google Scholar: https://scholar.google.com/citations?user=54vGj6QAAAAJ&hl=en&oi=ao

Academic Qualifications

1. **Ph.D. awarded in November 2023** titled with *"Processing and Characterization of Himalayacalamus Falconeri Fiber Reinforced Polylactic Acid Composites"* from National Institute of Technology, Srinagar (Garhwal), Uttarakhand, India
2. **M.Tech (2015),** titled with *"An Experimental Study on Thermo-Mechanical behavior of Himalayan Nettle Fiber Reinforced Polyester Composite"* from Govind Ballabh Pant Engineering College, Pauri Garhwal, Uttarakhand, India
3. **B.Tech (2013),** titled with *" Hand Pump With Integrated Filter System "* from Gurukula Kangri Vishwavidyalaya, Haridwar, Uttarakhand, India

Teaching Experience

1. Assistant Professor (Adhoc.), MED, FET, Gurukula Kangri (Deemed to be University), Haridwar *(Nov 2020- till Date)*
2. Assistant Professor (Guest Faculty) , MED, Govind Ballabh Pant Institute of Engineering & Technology (GBPIET), Pauri Garhwal, Uttarakhand (*Oct 2015- June2017*)

Subjects Taught

1. Product Design and Development
2. Basic Mechanical Engineering
3. Strength of Materials
4. Measurement and Metrology (*Theory and Lab*)
5. Workshop Technology – I (*Theory and Lab*)
6. Workshop Technology – II(*Theory and Lab*)
7. Principle and practices of Management
8. Quality Control & Reliability Engineering.

Research Interests

1. Processing of Polymer Matrix Composites
2. Biocomposites
3. 3D Printing
4. Waste Management (3R-Reduce, Reuse, Recycle)
5. Rapid Prototyping
6. Processing of Natural fibers for sustainable products
7. Fabrication of Specimen (As per ASTM) on Injection Moulding Machine
8. Material Characterization

Consultancy Projects

1. Forest Landscape Restoration (FLR) project on rehabilitation Report of Invasive Species Lantana camara, **Haridwar Forest Division in 2025** *(Surveying and Research on potential use of Weed to wealth creation)* (*Dr. Rakesh Bhutiyani and Dr. Mayank Pokhriyal*)

Patent Granted

1. Pawan Kumar Rakesh , *Mayank Pokhriyal*, Rajesh Kumar, Shaurya Bhatt and Vivek Bahuguna , A Novel Fibre Reinforced Biodegradable Composite and Method of Preparing Same, (**Patent No.: 531351**)

Journal Publications (Total=05)

1. **Pokhriyal, M.,** & Rakesh, P. K. (2023). Processing and characterization of novel Himalayacalamus falconeri fiber reinforced biodegradable composites. *Biomass Conversion and Biorefinery*, 1-16. ***(Sci Indexed , IF=4.1)***
2. **Pokhriyal, M.,** Rakesh, P. K., Rangappa, S. M., & Siengchin, S. (2023). Effect of alkali treatment on novel natural fiber extracted from Himalayacalamus falconeri culms for polymer composite applications. *Biomass Conversion and Biorefinery*, 1-17. ***(Sci Indexed , IF=4.1)***
3. **Pokhriyal, M**., Prasad, L., & Raturi, H. P. (2018). An experimental investigation on mechanical and tribological properties of Himalayan nettle fiber composite. *Journal of natural fibers*, *15*(5), 752-761. ***(Sci Indexed , IF=3.1)***
4. Lalit, R., **Mayank, P.,** & Ankur, K. (2018). Natural fibers and biopolymers characterization: A future potential composite material. *Strojnícky časopis-Journal of Mechanical Engineering*, *68*(1), 33-50. ***(Scopus Indexed)***
5. Raturi, H. P., Prasad, L., **Pokhriyal, M.,** & Tirth, V. (2017). An estimating the effect of process parameters on metal removal rate and surface roughness in WEDM of composite Al6063/Sic/Al2o3 by Taguchi method. *Strojnícky časopis–Journal of mechanical engineering*, *67*(2), 25-36. ***(Scopus Indexed)***

Conference Publications

International Conferences

1. **Pokhriyal, M.,** Prasad, L., Rakesh, P. K., & Raturi, H. P. (2018). Influence of fiber loading on physical and mechanical properties of Himalayan nettle fabric reinforced polyester composite. Materials Today: Proceedings, 5(9), 16973-16982. ***(Scopus Indexed)***
2. Prasad, L., Singh, G., & **Pokhriyal, M.** (2018). A comparative study on physical and mechanical behaviour of functionally graded composite materials reinforced with natural fillers. *Materials Today: Proceedings*, *5*(9), 16990-16994. ***(Scopus Indexed)***
3. **Pokhriyal, M**., & Rakesh, P. K. (2022). Mechanical and microstructural behaviour of NaOH treated Himalayacalamus falconeri fibers as biodegradable reinforcing material in polymer based composites. *Materials Today: Proceedings*, *62*, 1078-1082. ***(Scopus Indexed)***

National Conferences

1. **Pokhriyal M.,** Raturi, H. P., Prasad L., & Sanjeev kumar Lambha S. K**.,** Tensile Behaviour and Potential of Natural Bast Fiber Composites -A Review, 1st National Conference on Recent Advances in Science & Technology (NCRAST-2015) Organized by seemant Institute of Technology, Pithoragarh, Uttarakhand (India) held on 22-23 Aug, 2015, (pp. 80-91) ISBN: 978-93-85437-03-8
2. Raturi, H. P., **Pokhriyal M.,** & Prasad L. (2015), Parameteric Effects on Metal Matrix Composite and Hybrid Metal Matrix Composite Machining Through Wedm –A Review, 1st National Conference on Recent Advances in Science & Technology (NCRAST-2015) Organized by Seemant Institute of Technology, Pithoragarh, Uttarakhand (India) held on 22-23 Aug, 2015, (pp.92-100), ISBN: 978-93-85437-03-8
3. Raturi, H. P., Prasad L. & **Pokhriyal M**., (2016), Investigation of Cutting Parameters on Turning Operation—A Review, 2nd National Conference on Recent Advances in Science & Technology (NCRAST-2016) Organized by seemant Institute of Technology, Pithoragarh, Uttarakhand (India) held on 29-30 Aug, 2016, (pp.288-291), ISBN: 978-93-85777-96-7
4. **Pokhriyal M.,** Prasad L. & Raturi, H. P., (2016), A Review on Influence of Fiber Loading and Orientation on the Mechanical Properties of Natural Fiber Reinforced Composites, 2nd National Conference on Recent Advances in Science & Technology (NCRAST-2016) Organized by seemant Institute of Technology, Pithoragarh, Uttarakhand (India) held on 29-30 Aug, 2016, (pp.292-294), ISBN: 978-93-85777-96-7
5. Raturi, H. P., Prasad L., & **Pokhriyal M.,** (2016), Optimization of Sand Abrasion Wear of Aluminium-Based Metal Matrix Composites Reinforced with Al2O3 and SiC Particles, Using Taguchi's Method, National Conference on Advances in Mechanical Engineering held at B.S. Anangpuria Institute of Technology & Management, Faridabad, Haryana, India on 12March , 2016 .
6. **Pokhriyal M**., Prasad, L., Raturi, H. P., Vasistha V., Coir Natural Fiber Composites- A Review, National Conference on Science & Technology for National Development November 20-22, 2016, The Indian Science Congress Association: Haridwar Chapter

And Department of Chemistry, Gurukula Kangri Vishwavidyalaya, Haridwar 249 404, Uttarakhand.

Book Chapters (Total-08)

1. **Pokhriyal, M.,** Rakesh, P. K., Kumar, R., Bhatt, S., Bahuguna, V., & Sharma, H. (2024). Drilling Characteristics of Fibre-reinforced Polylactic Acid Composites: A Study on Himalayacalamus falconeri Fibre-based Composites. In *Forming and Machining of Polymers, Ceramics, and Composites* (pp. 124-133). CRC Press. ***(Scopus Indexed)***
2. Rakesh, P., Ranakoti, L., **Pokhriyal, M.,** Bhatt, S. & Bahuguna, V. (2024). Chapter 1. Processing on polylactic acid and its applications. In P. Rakesh & J. Davim (Ed.), *Polylactic Acid Composites: Sustainable Biocomposites* (pp. 1-12). Berlin, Boston: De Gruyter. https://doi.org/10.1515/9783111067285-001 ***(Scopus Indexed)***
3. Rakesh, P., **Pokhriyal, M.,** Bhatt, S. & Bahuguna, V. (2024). Chapter 9. Study on mechanical properties of Himalayacalamus falconeri fiber-reinforced polylactic acid composites. In P. Rakesh & J. Davim (Ed.), *Polylactic Acid Composites: Sustainable Biocomposites* (pp. 181-216). Berlin, Boston: De Gruyter. https://doi.org/10.1515/9783111067285-009 ***(Scopus Indexed)***
4. Rakesh, P., Bhatt, S., Bahuguna, V. & **Pokhriyal, M.** (2024). Chapter 10. The fabrication process of the pine needle fiber-reinforced polylactic acid composites. In P. Rakesh & J. Davim (Ed.), *Polylactic Acid Composites: Sustainable Biocomposites* (pp. 217-226). Berlin, Boston: De Gruyter. https://doi.org/10.1515/9783111067285-010 ***(Scopus Indexed)***
5. Rakesh, Pawan Kumar, Ranakoti, Lalit, Bhatt, Shaurya and **Pokhriyal, Mayank**. (2024). "Chapter 14. Processing and applications of silk fiber-reinforced biocomposite for tissue engineering". *Polylactic Acid Composites: Sustainable Biocomposites*, edited by Pawan Kumar Rakesh and J. Paulo Davim, Berlin, Boston: De Gruyter, 2024, pp. 289-302. https://doi.org/10.1515/9783111067285-014 ***(Scopus Indexed)***
6. Rakesh, Pawan Kumar, Ranakoti, Lalit, Bhatt, Shaurya and **Pokhriyal, Mayank.** (2024). "Chapter 15. The development of silk fiber-, jute fiber-, Grewia optiva fiber-reinforced biopolymer composites". *Polylactic Acid Composites: Sustainable Biocomposites*, edited by Pawan Kumar Rakesh and J. Paulo Davim, Berlin, Boston: De Gruyter, 2024, pp. 303-320. https://doi.org/10.1515/9783111067285-015 ***(Scopus Indexed)***
7. Rakesh, Pawan Kumar, Bhatt, Shaurya, Bahuguna, Vivek and **Pokhriyal, Mayank.** (2024). "Chapter 16. Machinability characteristics of pine needle fiber-reinforced polylactic acid composites". *Polylactic Acid Composites: Sustainable Biocomposites*, edited by Pawan Kumar Rakesh and J. Paulo Davim, Berlin, Boston: De Gruyter, 2024, pp. 321-330. https://doi.org/10.1515/9783111067285-016 ***(Scopus Indexed)***
8. Raturi, H. P., Prasad, L., **Pokhriyal, M.,** & Kumar, A. (2018). Study on Wear Behavior of Al-Based Hybrid Metal Matrix Composites Reinforced with Al2O3/SiC Particles. In *Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering (I-DAD 2018) Volume 1* (pp. 17-25). Singapore: Springer Singapore. ***(Scopus Indexed)***

Faculty Development Programmes (FDPs)/ATAL FDPs (Total-13)

1. **Six Days FDP** on *Design, Optimization and Manufacture of Materials*, organized by the Department of Mechanical Engineering, SSN College of Engineering, Chennai, **7–12 March 2022**.
2. **One Week FDP** on *Design for Excellence: A Step Towards Innovation*, organized by Design Innovation Center, NIT Uttarakhand in collaboration with Design Innovation Center, IIT Roorkee, **26–30 September 2021**.
3. **One Week ATAL Online FDP** on *Manufacturing Applications of Automation and Robotics*, organized by Graphic Era (Deemed to be University), Dehradun, **26–30 July 2021**.
4. **One Week ATAL Online FDP** on *Plastic Mould & Design*, organized by Central Institute of Petrochemicals Engineering and Technology (CIPET), **20–24 July 2021**.
5. **One Week ATAL Online FDP** on *3D Printing & Design*, organized by K.L.N. College of Engineering, **30 November – 4 December 2020**.
6. **One Week ATAL Online FDP** on *3D Printing & Design*, organized by Mar Athanasius College of Engineering, **16–20 November 2020**.
7. **One Week ATAL Online FDP** on *Sustainability Engineering*, organized by Indian Institute of Technology, Jammu, **26 October 2020**.
8. **One Week ATAL Online FDP** on *3D Printing & Design*, organized by Excel Engineering College, **19–23 October 2020**.
9. **One Week ATAL Online FDP** on *Green Technology & Sustainability Engineering*, organized by Punjab Engineering College, **5–9 October 2020**.
10. **One Week ATAL Online FDP** on *Leadership & Excellence*, organized by Faculty of Engineering, GK(DU), Haridwar, **14–18 September 2020**.
11. **One Week Online FDP** on *Research and Development in Materials Behaviour, Processing and Characterization Techniques*, organized by Department of Mechanical Engineering, GLA University, Mathura in association with The Institute of Metals (IIM), Mathura Chapter and Panjab University, Chandigarh, **9–14 June 2020**.
12. **Faculty Development Programme** on *Computer Based Product Design and Manufacturing*, conducted by Electronics & ICT Academy, IIT Roorkee at National Institute of Technology Uttarakhand, **9–13 February 2018**.
13. **Two Days Faculty Development Programme** on *Teaching and Soft Skills*, organized by Faculty of Engineering & Technology, GK(DU), Haridwar, **3–4 October 2018**.

Short-Term Training Programmes (STTPs) / TEQIP Courses (Total-07)

1. **One Week TEQIP-III Sponsored Short Term Course** on *Machine Learning for Beginners*, organized by the Department of Mechanical Engineering, MNIT Jaipur, **16–20 January 2021**.
2. **One Week TEQIP-III Sponsored Online Short Term Course** on *Microwave Material Processing: Opportunities and Challenges*, organized by the Department of Mechanical Engineering, NIT Uttarakhand, **14–18 December 2020**.
3. **One Week TEQIP-III Sponsored Online Short Term Course** on *Recent Advancements in Micromanufacturing*, organized by the Department of Mechanical Engineering, NIT Uttarakhand, **23–27 November 2020**.
4. **One Week TEQIP-III Sponsored Online Short Term Course** on *Recent Developments in Mechanical Systems*, organized by the Department of Mechanical

Engineering, G.B. Pant Institute of Engineering & Technology, Pauri-Garhwal under TEQIP-III (Mentoring System), **7–11 September 2020**.

5. **Five Days Workshop** on *Design Thinking for Innovative Products*, organized by Design Innovation Center (DIC), National Institute of Technology Uttarakhand, **4–8 March 2019**.
6. **One Week TEQIP-II Sponsored Short Term Course** on *Advanced Manufacturing Technology*, organized by the Department of Mechanical Engineering, G.B. Pant Engineering College, Pauri-Garhwal, **8–12 June 2018**.
7. **Short Term Course** on *CNC and Reverse Engineering*, conducted by 4i Lab, IIT Kanpur, **22–26 December 2015**.

Workshops / Training Programmes

1. **Exposure Visit cum Training Program** under *Mentor–Mentee Program for IIC Institutions (2021–22)*, held at RIT Roorkee, **27–28 July 2022**.
2. **One Month Innovation Ambassador Training (Foundation Level)**, conducted by Ministry of Education's Innovation Cell & AICTE, **30 June – 30 July 2021**.
3. **Two Days TEQIP-III Sponsored Workshop** on *Materials Characterization using SEM, TEM, XRD and EBSD*, organized by the Department of Mechanical Engineering, GBPIET, Pauri-Garhwal, **27–28 October 2017**.

Research Guidance

M.Tech Guidance (No. of PG dissertations guided: 01)

S.No.	**Name of Student**	***Thesis Title***	**Year and Department**
1.	Vinod kumar kirmoliya	An experimental investigation on physico-mechanical properties of Rambans fiber reinforced polyester composite materials	M.Tech. Thesis **(2017),** MED,G.B.P.I.E.T (Uttarakhand)

***B.Tech Guidance (*No. of UG Students guided:** 40)

S.No.	*Name of student*	*Enrollment No.*	*Project Title*	*Year*
1.	Ankit Kumar	186310008	Fabrication of Natural Fiber Composites Using Injection Molding	May 2022
2.	Amarjeet Singh Chauhan	196312001		
3.	Piyush Narula	186310042		
4.	Ajeet Kumar	196312009	Thermosyphonic Water Purification System	May 2022
5.	Arya Aditya	186310012		
6.	Rajan Kumar	186310048		
7.	Akash Kushwaha	186310005	Natural Fiber Reinforced Epoxy Composite	May 2022
8.	Akhil Bajpai	186310006		
9.	Vivek Ranjan	186310065		
10.	Utkarsh Kumar	196312006	Fabrication of Natural Fiber Composite by Hand Lay-Up Technique	May 2022
11.	Shivnarayan	186310052		
12.	Vanshul Sharma	196312007		

13.	Aditya Malik	196310006	Effects of Fiber Loading and Fiber Treatment on Tribological Behaviour of Hill Bamboo/PLA .	May 2023
14.	Sarthak Rathi	196310062		
15.	Ashutosh Dubey	196301019		
16.	Grandhi Subhash	196310032	Wear Characteristics of $NaHCO_3$ and $NaHCO_3$–STEX Treated Hill Bamboo Reinforced Green Composites	May 2023
17.	Kake Sai Kumar	196310038		
18.	Sattaru Vivek Vardhan	196310063		
19.	Thutta Daddy Sampath	196310079	Wear Behaviour of NaOH–STEX Treated Hill Bamboo Biocomposites: Effect of fiber loading	May 2023
20.	Eslavath Sreeram	196310027		
21.	Bhukya Navaneeth Naik	196310022		
22.	Rajeev Rajan	196310052	Comparative Analysis of Wear Behaviour of Polyester- and Epoxy-Based Composites Reinforced with Himalayan Bamboo Fibre	May 2023
23.	Shubham Gupta	196310071		
24.	Utkarsh Hiranwal	196310080		
25.	Yash Kumar	206310065	Fire Extinguisher Drone	May 2024
26.	Shobhit Rajput	206310058		
27.	Piyush Kumar	206310007		
28.		206310003		
29.	Harsh Bokadia	206310030	Varaible width plastic strip making & 3D Printer Filament Machine	May 2024
30.	Akash Kushwaha	216312002		
31.	Tushar Kumar	206310061		
32.	Himanshu Chaudhary	206310032		
33.	Aayush Kumar	206310019	Fabrication and characterization of natural fiber (Sun hemp, Basalt) and CNT reinforced with Epoxy resin	May 2024
34.	Chandan Kumar	206310071		
35.	Keshav kumar chaturvedi	206310035		
36.	Shailendra Singh	206310056		
37.	Vineet Vaibhav	206310064		
38.	Ayush Ranjan	216310033	Fabrication and testing of Hill bamboo reinforced PP composite using direct injection molding	MAY 2025
39.	D. Dharma Raju	216310012		
40.	Sachin singh Kanwar	216310023		

Administrative Responsibilities

1. Programme Officer, National Service Scheme(NSS), GKDU (April 2023- till date)
2. Warden, Pandit Lekhram Engineering Hostel, GKDU (May 2024- till date)

Academic Responsibilities

1. Internship Coordinator, Institute Innovation Cell (IIC) (April 2023- till date)
2. Departmental Placement Coordinator (Nov 2021- till date)
3. Departmental Alumni Coordinator (Nov 2021- till date)
4. Faculty Coordinator- Student Activity Club (June 2025- till date)
5. Departmental Coordinator – MoU (June 2025- till date)
6. Departmental Coordinator – Industrial Visit(May 2023- June 2025)
7. Departmental Coordinator – NBA (Sept 2021- May 2023)
8. Departmental Coordinator – Sessional Examination (Nov 2020- Sept 2021)
9. Departmental Coordinator – Time Table (May 2023- June 2025)
10. Cultural Coordinator – Jnangni 2025 (National Level Techno-Cultural Fest)
11. Member, Internship Institute Innovation Cell (IIC) (Dec 2021- April 2023)
12. Faculty Incharge- Criteria 5 (Student support and progression) (July 2025 - till date)

Awards and Honour Received

1. Felicitated by Prof. Pratibha Mehta Luthara, Hon'ble VC , GK(DU), Haridwar on the occasion of Swami Shraddhanand Ji Balidan Diwas (23 Dec 2025) for getting First Position in FET Tableau on Theme "Value based Technology: Swami Shraddhanand Ji's dreams" participated in Shobha Yatra.
2. Felicitated by Dr. Lalit Narayan Mishra, ADM Haridwar for motivating and inspiring for blood donation and organsing a blood donation camp (51 unit Blood donated) for NSS UNIT 03 on 11 Nov 2025.
3. Received certificate of appreciation from Sparsh Ganga Abhiyan (An NGO) for Environmental conservation and Ganga Cleanliness awareness drives.
4. Received certificate of appreciation from Dr. Sunil Kumar, Registrar, GKDU, Haridwar on Swami Shraddhanad Ji Balidan Diwas on 23 Dec 2024 for exemplary work with NSS Volunteers during Punyabhumi.
5. Received certificate of appreciation from Prof. Vivek Kumar, Director, IQAC, GKDU, Haridwar for Exemplary service as a NSS programme officer and successfully organized NSS Seven Days special Camp (13 March- 19 March 2024) in adopted Village Bairagi camp, Haridwar
6. Received certificate of appreciation from Dean FET, GKDU, Haridwar for Exemplary service as a NSS programme officer and successfully organized NSS Seven Days special Camp (13 March- 19 March 2024) in adopted Village Bairagi camp, Haridwar.
7. Received certificate of appreciation from District Youth welfare and Prantiya Rakshak Dal, Haridwar for Exemplary service as a NSS programme officer and successfully organized NSS Seven Days special Camp (13 March- 19 March 2024) in adopted Village Bairagi camp, Haridwar.
8. Received certificate of appreciation from Forest Range Officer, Haridwar Range , Haridwar for environmental conservationa and community service as a NSS programme officer and successfully organized NSS Seven Days special Camp (13 March- 19 March 2024) in adopted Village Bairagi camp, Haridwar.
9. Received certificate of appreciation from Fire Department, Haridwar for running fire Safety awareness programme during NSS Seven Days special Camp (13 March- 19 March 2024) in adopted Village Bairagi camp, Haridwar.
10. Received certificate of appreciation from Maa Gange Blood Centre, Haridwar for motivating and inspiring for blood donation and organizing Blood Donation camp during NSS Seven Days special Camp (13 March- 19 March 2024) in adopted Village Bairagi camp, Haridwar.

Declaration

I hereby declare that the information furnished above is true and correct to the best of my knowledge.

25.12.2025

Haridwar, Uttarakhand, India **(Dr. Mayank Pokhriyal)**