RESUME

Dr. ANKUR BISHT

Assistant Professor, Women Institute Technology,

Veer Madho Singh Bhandari

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Uttarakhand, India

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Career Objective

I am seeking a dynamic carrier in an organization where I can enhance my skill and be an asset to the organization by accepting challenges, to gain expert knowledge in the field of Mechanical Engineering technology.

Professional/Educational Qualification

- ➤ **Ph.D.** in **Mechanical Engineering** from Uttarakhand Technical University Dehradun in 2021.
- ➤ M. Tech. in Production Engineering from G. B. Pant Institute of Engineering & Technology, Pauri Garhwal in 2014 with 74.27%.
- ➤ **B. Tech.** in **Mechanical Engineering** from Punjab College of Engineering & Technology in 2010 with 71.78%.
- ➤ Intermediate from G. I. C. Gairsain, Uttarakhand with 77% in 2005.
- ➤ **High school** from G. I. C. Gairsain, Uttarakhand with **72%** in 2003.

Ph.D. Dissertation

"Investigation on Mechanical and Sliding Wear Behavior of Metal Foam with Addition of Zinc and Magnesium for Structural Applications" under the supervision of Dr. Vinay Kumar Patel and Dr. Brijesh Gangil.

Close cell metal foams are the cellular solid comprising the pores distributed uniformly throughout the metal matrix. Metal foams are a novel material catching interest in various sectors due to their multifunctional properties. The thesis work is based on enhancing the mechanical and sliding wear properties of the aluminum base close cell metal foam by adding reinforcing particles in varying percentages. Aluminum-based metal foams are prepared through the melt route method where Ca and CaCO₃ are used as thickening agents and blowing agents respectively. For improving mechanical and tribological properties, Zn and Mg were used as reinforcing particles. The addition of Zn offers good mechanical properties than pure

Al foam but lacks in sliding wear behavior. By adding Mg to the melt, it was observed that Mg helps in improving the interfacial bond strength. The compressive strength, energy absorption behavior, and pore morphology improve with increasing the weight percentage of Mg in the melt.

M. Tech. Dissertation

Investigating the Compressive Properties of Aluminum Metal Foam with different zinc addition prepared by melt route method under the Supervision of Dr. K.K.S Mer.

Research Area

- ➤ Metal Foam.
- ➤ Composite Materials.

Teaching Experience

S. No.	Organization	Duration	
		From	То
1.	College of Advance Technology, Roorkee	11/08/2011	21/01/2012
2.	WGVS Group of Institution, Manglour Roorkee	24/01/2012	30/07/2012
3.	School of Engineering and Technology, HNBGU, Srinagar Garhwal	14/11/2014	30/08/2023
4.	Women Institute Technology ,Veer Madho Singh Bhandari Uttarakhand Technical University, Dehradun	01/09/2023	Till Date

Co-curricular Activities

- ❖ Gate 2012 and 2013 Qualified.
- ❖ One week Short term course on Advances in Materials and Manufacturing sponsored by TEQUIP, G B Pant Institute of Engineering and Technology from 24-28 December 2018.

Online Courses

- 1. 12-week online course on Composite materials by Dr. Nachiketa Tiwari.
- 2. 8-week online course on Nature and Properties of material by Prof. Bishakh Bhattacharya.

Subject Taught

- 1. Mechanical Vibration
- **2.** Engineering Mechanics
- **3.** Manufacturing Science
- 4. Material Science
- **5.** Composite Material

Publications in International Journal

- Ankur Bisht, Brijesh Gangil, Vinay Kumar Patel, and Sandeep Kumar, "Effect of Zinc addition on the tribological behavior of aluminum-based close cell metal foams" Kovove Materialy. (In Press) 2022. SCI.
- 2. Mukesh Chauhan, Sandeep Kumar, Aarti Kalra, Ankur Bisht, Kks Mer, and Vinay Kumar Patel. "Grey-Taguchi optimization of mechanical and abrasive wear properties for cotton grass fiber reinforced epoxy composites." Journal of Natural Fibers (2022): 1-13.
 SCI.
- **3. Ankur Bisht**, Brijesh Gangil and Vinay Kumar Patel, "Selection of blowing agent for metal foam production: A review" Journal of Metals, Materials and Minerals, Vol. 30, No. 1, pp. 1-10, (2020). **SCI**.
- **4. Ankur Bisht**, Brijesh Gangil and Vinay Kumar Patel, "Physico-compression, sliding wear and energy absorption properties of Zn/Mg infiltrated closed-cell aluminum foam" Mater. Res. Express 6 (2019). **SCI**.
- **5. Ankur Bisht**, Brijesh Gangil "Structural and physio-mechanical characterization of closed-cell aluminum foams with different zinc additions". Science and engineering of composite materials 2017. **SCI**.
- 6. Ankur Bisht, Brijesh Gangil," Effect of Mn and Mg reinforcing particles on physico-mechanical behavior of close-cell Al metal foam for energy absorption applications."
 Iranian Journal of Science and Technology. (Under Review) 2022 SCI.

Paper Presented in Conferences

- Presented a paper at International Conference on Emerging Developments in Engineering & Technology on "Effect of fiber loading and walnut filler on Mechanical Properties of Sisal- Kevlar hybrid composite". Shivalik Institute of Engineering & Technology, Dehradun on 11-12 November 2016.
- Presented a paper at International Conference on Cutting Edge Technological Challenges in Mechanical Engineering on "Processing of Syntactic Foams: A Review". Noida Institute of Engineering & Technology Greater Noida on 18th & 19th February 2017.
- 3. Presented a paper the International Conference on Cutting Edge Technological Challenges in Mechanical Engineering on "Manufacturing Processes and Applications

of Aluminum foam sandwich (AFS) Panels: A Review". Noida Institute of Engineering & Technology, Greater Noida, on 18th & 19th February 2017.

- 4. Presented a paper at International Conference on Innovative Research in Mechanical Engineering, Automotive and Aerospace Technology (MEAT-2016) on "Investigating Compressive Properties of Closed-cell Aluminum Foams Fabricated by Melt Route Method with Addition of Mg Particles" Jawaharlal Nehru University, New Delhi on 23rd January 2016.
- Presented a paper at National Conference on Recent Advances on Mechanical Engg.
 On "D-Gun Spraying Technique-A Review", G. B. Pant Institute of Engineering & Technology, Pauri Garhwal on 8-9 July 2013.

Book Chapter

 Ankur Bisht, Vinay Kumar Patel, and Brijesh Gangil, "Future of Metal Foam Materials in Automotive Industry" Automotive Tribology, Energy, Environment, and Sustainability, Springer Nature Singapore Pte Ltd. 2019.

Strengths

- ➤ Responsible & Hardworking
- ➤ Fast Learner
- ➤ Flexible

Personal Details

Name : Dr. Ankur Bisht.
Father's Name : Late K.S.Bisht.
Date of Birth : 26 Feb. 1989.

Sex : Male.

Marital Status : Married.

Nationality : Indian.

Religion : Hindu.

Languages Known : English, Hindi.

Declaration

I hereby declare that the above-mentioned information is correct to the best of my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.

Place : Srinagar Garhwal

Date: Ankur Bisht