### **PROFILE**



Name: Dr. Varun Dutta

**Designation**: Associate Professor

**Department**: Mechanical Engineering

Email ID: varun.dutta@smvdu.ac.in

**Contact Number and Extn.:** 9419835685, 2248

**Experience:** 14 years

**Teaching:** 14 yrs **Research:** 08 yrs **Administration: Total:** 03 yrs

## Areas of Interest / Specialization:

- 1. Friction Stir Processing
- 2. Material Processing Techinque
- 3. Tribology
- 4. Surface texturing

## Administrative responsibilities

- 1. Associate NCC Officer
- 2. Nodal Officer (Nasha Mukt Bharat Abhiyan)
- 3. Jt. Warden

## **Educational Qualification:**

S. No.	Qualifications	Discipline / Stream	Year of	University / Institution /
			Passing	College
1.	B.E	Mechanical	2008	Jammu University
		Engineering		
2.	M. Tech.	Mechanical	2011	NIT Srinagar
		Engineering		
		(Mechanical System		
		Design)		
3.	Ph.D	Experimental	2023	SMVDU
		Studies on Friction		
		Stir Processed		
		Chromium		
		Reinforced Nickel		
		Aluminium Bronze		
		Composite for		
		Marine Application		

# <u>Attended Workshops/seminars/Conferences/Orientation/Refresher recognized by National /International Professional bodies:</u>

- 1. AICTE Recognized Faculty Development Programme on Materials Characterization Techniques, 04/12/2023 to 08/12/2023, NITTTR, Chandigarh.
- 2. Faculty Development Program on Green Manufacturing, 4th March 8th March 2024, Faculty Development Centre (FDC)-SMVDU under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching of MOE, GOI.
- 3. Invited Lecture on "Role of NCC in Nation Building" at 4 J&K Bn NCC, November, 2023.
- 4. Expert lecture at FDP on Green Manufacturing on "Friction Stir Processing & its Applications", March, 2024.
- 5. Two week AICTE approved Staff development program on Introduction to MATLAB® and matrix® Imaging Library (MIL) with emphasis on hands on Practice (WMMIL'11) at school of ECE, SMVDU w.e.f 16<sup>th</sup> to 29<sup>th</sup> Dec,2011.
- 6. One week QIP Short Term Course on Integrated Navigation of Flight Vehicles conducted by IIT Bombay w.e.f 9<sup>th</sup> July,2012 to 13<sup>th</sup> July,2012
- 7. Two-day ISTE Workshop on Aakash For Education conducted by IIT Bombay on 10<sup>th</sup> & 11<sup>th</sup> Nov, 2012
- 8. Two week ISTE Workshop on Educational Database Management system, under the National Mission on Educational through ICT (MHRD, govt. of India) conducted by IIT Bombay at SMVDU Remote Centre w.e.f 21<sup>st</sup> to 31<sup>st</sup> may,2013.
- 9. Two week ISTE Workshop on Engineering Mechanics under national Mission on Education through (MHRD Govt. of India) organized by IIT Bombay at SMVDU w.e.f. 26<sup>th</sup> Nov,2013 to 6<sup>th</sup> Dec,2013.
- 10. General Orientation Course at UGC-ASC, University of Jammu w.e.f 17<sup>th</sup> June,2014 to 14<sup>th</sup> July,2014
- 11. Refresher Course in Gender Studies (ID) at UGC\_HRDC, University of Kashmir w.e.f 25<sup>th</sup> May,2015 to 16<sup>th</sup> June,2015
- 12. Attended One day Workshop "Patent Drafting and Filing" conducted by SMVDU,Katra, 20<sup>th</sup> October,2016.
- 13. Attended Short Term Course "Recent Trends in Automobile Engineering through ICT conducted by Mechanical Engineering Department, SMVDU, Katra, 29<sup>th</sup> Feb-4<sup>th</sup> March, 2016.
- 14. Attended Short Term Course 'Optimization using MATLAB through ICT conducted by Mechanical Engineering Department, SMVDU, Katra, 24-10-16 to 28-10-2016.

- 15. Attended Faculty Development Programme "Entrepreneurship Development" conducted by Entrepreneurship Development Cell, SMVDU, 12-24 December, 2016.
- 16. Attended two-day workshop on 'Introduction to Robotics on 27<sup>th</sup> & 28<sup>th</sup> October, 2017 organized by Department of Computer Science and Engineering, IIT Bombay, held at Bhargava College of Engineering and Technology, Samba, J&K.

# Conference / Seminars/ FDP/ EDP/Symposium/Workshop/Competition/Events/IIC Events / Guest Lectures organized

- 1. International webinar on "Green Building for cleaner and greener environment", 1st Dec, 2023.
- 2. International webinar on "Electric Vehicle Dynamics and design calculations", 28th Nov, 2023.
- 3. One Day Hands on workshop on Aeromodelling, 2<sup>nd</sup> Dec, 2023.
- 4. Anti-Drug Campaign in collaboration with CRPF Battalion, 6<sup>th</sup> March, 2024.
- 5. Guest Lecture on Role of NCC in Nation building, 12th March, 2024.
- 6. One week FDP on Green Manufacturing at SMVDU, 4<sup>th</sup>-8<sup>th</sup>, March, 2024.

### Presented papers in Conferences conducted or recognized by Professional agencies:

- Co-authored paper presented entitled "Conventional design Engineering Vs Reverse engineering at Annual international conference on Materials processing and Characterization, Gokaraju RamngaRaju Institute of Engineering & Technology, Hyderabad w.e.f 8<sup>th</sup> to 10<sup>th</sup> March,2012.
- Balbir Singh, Sanjay Mohan and Varun Dutta "Study of Challenges and Strategies to Sustain Manufacturing Sector in Business Recession" UGC sponsored National Conference on 'Contemporary Issues in Business with reference to Global Economic Meltdown' on 29th March, 2013 at College of Management, SMVDU.
- 3. Paper presented entitled 'Modal Analysis of Structures using Finite Element Analysis' at National conference on Recent Trends in Mathematical Sciences, at School of Mathematics, SMVDU, Katra (J&K) (October 8-9, 2015).
- 4. Paper presented entitled 'Six Sigma and its Applications in Service Sectors: Challenges and Opportunities, at 2<sup>nd</sup> International Conference on Applied Economics and Business, held on 28<sup>th</sup>-29<sup>th</sup> July, 2016 organized by Department of Economics, SMVDU, Katra (J&K).

#### **Publications in International Journals**

- 1. Influence of Tool Tilt Angle on the Hybrid Surface Composite of AA5083/(SiC-Gr) Produced by Friction Stir Processing, "Aip conference proceedings", 2024.
- 2. Reinforcement of different particulates in aluminum alloy by friction stir process technique A review, "Aip conference proceedings", 2024.
- 3. A study on the influence of SiC, Al2O3, Gr, and CNT reinforcement on hardness property of aluminum AA5083 surface composite produced by friction stir processing, "Aip conference proceedings", 2024.
- 4. Yatheshth Anand and **Varun Dutta** "Testing of Composites-A Review" published in an International Journal of Advanced Materials Manufacturing & Characterization, Vol. 3, March 2013, pp 359-363. ISSN: 2277-3886.
- 5. **Varun Dutta**, Sanjay Sharma, Kapil Chopra, Balbir Singh, Hybrid Electric Discharge Machining Processes for Hard Materials: A Review, International Journal of Material focus (American Scientific Publishers), 5(2016), pp 202-208. (Emerging Sources Citation Index )
- 6. Alankrit Srivastava, Sahil Arora, **Varun Dutta**, Sanjay Sharma, Kapil Chopra, A Review on Photo Voltaic Thermal Systems, International Journal of Scientific and Technical Advancements 2(2016), pp 53-56.
- 7. Natish Patyal, Abhijeet Saini, **Varun Dutta**, To Study Sustainability and Implementation of Green Manufacturing on Various Manufacturing Processes, International Journal of Scientific and Technical Advancements 2(2016), pp 139-142.

#### **Membership of Society**

> Senior Member of Indian Institution of Industrial Engineering (IIIE)