Dr. Mir Irfan Ul Haq

Assistant Professor,

School of Mechanical Engineering,

Shri Mata Vaishno Devi University,

Katra, Jammu and Kashmir, India-182320

Email: haqmechanical@gmail.com; mir.irfan@smvdu.ac.in

Contact: +91-9419026617(M)

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

Scopus Author ID: 57192694406

ORCID: http://orcid.org/0000-0003-4848-0851

Researchgate: https://www.researchgate.net/profile/Mir_Irfan_Ul_Haq

Dr. Mir Irfan Ul Haq is currently working as Assistant Professor at the School of Mechanical Engineering, Shri Mata Vaishno Devi University. He has previously worked with the R&D wing of Mahindra and Mahindra. He has obtained Bachelor of Technology in Mechanical Engineering from SMVD University and Master of Engineering in Mechanical System Design (Gold Medallist) from National Institute of Technology Srinagar. He has carried his Ph.D. in the area of tribology at SMVD university. He is actively involved in teaching and research for the past 7 years in the field of materials, tribology and 3D printing. His research interests include lightweight materials, New Product Development and 3D Printing, Development of Green Lubricants, Self-Lubricating Materials and Cutting Fluids, Mechanical Testing of Composites, Friction and Wear of Materials, Surface Engineering.

He has published around 25 research papers in SCI and Scopus indexed journals. Moreover, he has been awarded various research grants for various projects from various agencies like DST and NPIU AICTE. He has attended numerous conferences and workshops both in India and abroad like USA and Singapore. He is member of reviewer boards of various international journals apart from chairing technical sessions in various international and national conferences. Dr. Haq is actively involved in organizing various conferences and workshops. He has also coordinated various student events such as SAEBAJA, ECOKART and TEDX. Moreover, he has supervised around 06 Masters and 12 Bachelor level projects.

EDUCATION

Shri Mata Vaishno Devi University, Katra Doctor of Philosophy, Mechanical Engineering	-2020
National Institute of Technology, Srinagar Master of Technology, Mechanical System Design GPA: 9.133/10 (Gold Medalist)	-2012
Shri Mata Vaishno Devi University, Katra Bachelor of Technology, Mechanical Engineering GPA: 8.1/10	-2010
<u>Tyndale Biscoe School, Srinagar</u> Grade XII: 77.33%	-2005
IMHS School, Pulwama Grade X: 82.6%	-2003

Research and Teaching Experience

1. Organization: Mahindra Research Valley (R&D of Mahindra & Mahindra Ltd.)

Position: Deputy Manager (CAE) **Duration:** 22/08/ 2012 to 08/05/ 2013

2. Organization: Shri Mata Vaishno Devi University, Katra(J&K) India

Position: Assistant Professor (L10 with AGP 6000)

Duration: 10/05/2013 to 10/05/2018

3. Organization: Shri Mata Vaishno Devi University, Katra(J&K) India

Position: Assistant Professor (L11 with AGP 7000)

Duration: 10/05/2018 to Present

Details of the Courses Taught

B.Tech.

- 1. Automobile Engineering
- 2. Product Development and Design
- 3. Mechanics of Materials
- 4. Metrology and Measurements
- 5. Automobile Engineering Lab
- 6. Metrology and Measurement Lab

M.Tech.

- 1. Metrology and Inspection
- 2. Product Development and Design
- 3. Metrology and Inspection Lab

Research Interests

- ✓ Development of New Light weight and Sustainable Metal Matrix Composites
- ✓ New Product Development and 3D Printing
- ✓ Development of Green Lubricants, Self-Lubricating Materials and Cutting Fluids
- ✓ Mechanical Testing of Composites
- ✓ Friction and Wear of Materials
- ✓ Surface Engineering

Journal Publications (SCI/SCIE)

1. Rutba Aziz, **Mir Irfan Ul Haq**, Ankush Raina, "Effect of surface texturing on friction behaviour of 3D printed polylactic acid (PLA)" *Polymer Testing* 85, 106434.(2020) https://doi.org/10.1016/j.polymertesting.2020.106434

{Impact Factor-2.94}

- 2. Avi Gupta, Sanjay Mohan, Ankush Anand, **Mir Irfan Ul Haq**, Ankush Raina, Rajiv Kumar, R Arvind Singh, Jayalakshmi Subramanian, Mohd Kamal "Tribological behaviour of Fe-C-Ni self-lubricating composites with WS₂ solid lubricant" *Materials Research Express* (2019) https://doi.org/10.1088/2053-1591/ab52d2 [Impact Factor-1.4]
- 3. Harpal Singh, **Mir Irfan Ul Haq***, Ankush Raina "Dry Sliding Friction and Wear Behaviour of AA6082- TiB₂ In Situ Composites" Silicon https://doi.org/10.1007/s12633-019-00237-y

{Impact Factor-1.2}{*Corresp. Author}

- 4. Love Kerni, Ankush Raina, **Mir Irfan Ul Haq**, "Friction and wear performance of olive oil containing nanoparticles in boundary and mixed lubrication regimes" *Wear* https://doi.org/10.1016/j.wear.2019.01.022 *[Impact Factor-2.9]*
- 5. **Mir Irfan Ul Haq** and Ankush Anand. "Dry Sliding Friction and Wear Behavior of AA7075-Si₃N₄Composite." *Silicon*(2018): https://doi.org/10.1007/s12633-017-9675-1 *[Impact Factor-1.2]*
- 6. **Mir Irfan Ul Haq*** and Ankush Anand. "Friction and Wear Behavior of AA 7075-Si₃N₄ Composites Under Dry Conditions: Effect of Sliding Speed." *Silicon* (2018): 1-7. https://doi.org/10.1007/s12633-018-9967-0

{Impact Factor-1.2}{*Corresp. Author}

7. Wani Khalid Shafi, Ankush Raina, **Mir Irfan Ul Haq** "Performance evaluation of Hazelnut oil with copper nanoparticles - A new entrant for sustainable lubrication" *Industrial Lubrication and Tribology* 10.1108/ILT-07-2018-0257

{Impact Factor-1.03}

8. Shafi, Wani Khalid, Ankush Raina, and **Mir Irfan Ul Haq**. "Tribological performance of avocado oil containing copper nanoparticles in mixed and boundary lubrication regime." *Industrial Lubrication and Tribology* (2018). https://doi.org/10.1108/ILT-06-2017-0166 *[Impact Factor-1.03]*

9. **Mir Irfan Ul Haq*** and Ankush Anand. "Dry sliding friction and wear behaviour of Hybrid AA7075/Si3N4/Gr self-lubricating composites." *Materials Research Express* (2018). https://doi.org/10.1088/2053-1591/aacc50

{Impact Factor-1.4}{*Corresp. Author}

- 10. Raina, Ankush, G. A. Harmain, and **Mir Irfan Ul Haq**. "Numerical investigation of flow around a 3D bluff body using deflector plate." *International Journal of Mechanical Sciences* 131 (2017): 701-711. https://doi.org/10.1016/j.ijmecsci.2017.08.018 *[Impact Factor-4.13]*
- 11. Singh, Navdeep, **Mir Irfan Ul Haq***, Ankush Raina, Ankush Anand, Vinay Kumar, and Sanjay Mohan Sharma. "Synthesis and tribological investigation of Al-SiC based nano hybrid composite." *Alexandria Engineering Journal* (2018). https://doi.org/10.1016/j.aej.2017.05.008 [Impact Factor-3.69] [*Corresp. Author]

Journal Publications (SCOPUS)

- 1. Sukesh Gupta, **Mir Irfan Ul Haq**, Sanjay Mohan, Ankush Anand, Ankush Raina, Varun Dutta, Karan Vohra, Rajiv Kumar, "Evaluation of mechanical properties of ramie/banana reinforced hybrid composites" *Journal of Mechanical Engineering* Vol SI 8(1), 95-104, 2019.
- 2. Ayesha Farzana Kichloo, Ruttba Aziz, **Mir Irfan Ul Haq**, Ankush Raina," Mechanical & Physical Behaviour of 3D Printed Polymer Nanocomposites A Review" *International Journal of Industrial and Systems Engineering* (Accepted Article) {*Corresp. Author}
- 3. Abhinav Chadha, **Mir Irfan Ul Haq**, Ankush Raina, Rana Singh, Narendra P, Manjeet Bishnoi "Effect of Fused Deposition Modelling Process Parameters on Mechanical Properties of 3D Printed Parts" *World Journal of Engineering*. Vol. 16 No. 4, pp. 550-559. https://doi.org/10.1108/WJE-09-2018-0329

{*Corresp. Author}

- 4. Zaid Ullah Baba, Wani Khalid Shafi, Ankush Raina, **Mir Irfan Ul Haq**," Towards Sustainable Automobiles- Advancements and Challenges" *Progress in Industrial Ecology*, An Int. Journal **{*Corresp. Author}**
- 5. Rajiv Kumar, **Mir Irfan Ul Haq**, Ankush Raina & Ankush Anand (2018) Industrial applications of natural fibre-reinforced polymer composites challenges and opportunities, *International Journal of Sustainable Engineering* https://doi.org/10.1080/19397038.2018.1538267
- 6. Shafi, Wani Khalid, Ankush Raina, and **Mir Irfan Ul Haq**. "Friction and wear characteristics of vegetable oils using nanoparticles for sustainable lubrication." *Tribology-Materials, Surfaces & Interfaces* 12, no. 1 (2018): 27-43. https://doi.org/10.1080/17515831.2018.1435343
- 7. Anand, A., K. Vohra, **Mir Irfan Ul Haq**, Ankush Raina, and M. F. Wani. "Tribological Considerations of Cutting Fluids in Machining Environment: A

- Review." *Tribology in Industry* 38, no. 4 (2016). http://www.tribology.rs/journals/2016/2016-4/4.pdf
- 8. **Mir Irfan Ul Haq,** Ankush Raina, Karan Vohra, Rajiv Kumar, and Ankush Anand. "An Assessment of Tribological Characteristics of Different Materials under Sea Water Environment." Materials Today: Proceedings 5, no. 2 (2018): 3602-3609. https://doi.org/10.1016/j.matpr.2017.11.610
- 9. Gupta, Gourav, Pranav Kumar, Ankush Raina, and **Mir Irfan Ul Haq**. "Effect of SiC reinforcement on mechanical behaviour of aluminium alloys–A review." In *AIP Conference Proceedings*, vol. 2006, no. 1, p. 030051. AIP Publishing, 2018. https://doi.org/10.1063/1.5051307
- 10. Slathia, Smridh, **Mir Irfan Ul Haq**, and Ankush Raina. "Fabrication and mechanical characterization of AA2024-ZrO2-Gr hybrid composite." In AIP Conference Proceedings, vol. 2006, no. 1, p. 030047. AIP Publishing, 2018. https://doi.org/10.1063/1.5051303 {*Corresp. Author}
- 11. Singh, Harpal, Ankush Raina, and **Mir Irfan Ul Haq**. "Effect of TiB2 on Mechanical and Tribological Properties of Aluminium Alloys–A Review." *Materials Today: Proceedings* 5, no. 9 (2018): 17982-17988. https://doi.org/10.1016/j.matpr.2018.06.130 {*Corresp. Author}
- 12. Kerni, Love, Ankush Raina, and **Mir Irfan Ul Haq**. "Performance evaluation of aluminium alloys for piston and cylinder applications." *Materials Today: Proceedings* 5,no.9(2018):18170-18175. https://doi.org/10.1016/j.matpr.2018.06.153
- 13. **Mir Irfan Ul Haq** and Ankush Anand. "Microhardness studies on Stir Cast AA7075-Si3N4 Based Composites." *Materials Today: Proceedings* 5, no. 9 (2018): 19916-19922. https://doi.org/10.1016/j.matpr.2018.06.357 [*Corresp. Author]
- 14. Anand, Ankush, **Mir Irfan Ul Haq**, Karan Vohra, Ankush Raina, and M. F. Wani. "Role of Green Tribology in Sustainability of Mechanical Systems: A State of the Art Survey." *Materials Today: Proceedings* 4, no. 2 (2017): 3659-3665. https://doi.org/10.1016/j.matpr.2017.02.259
- 15. Anand, Ankush, **Mir Irfan Ul Haq**, Ankush Raina, Karan Vohra, Rajiv Kumar, and Sanjay Mohan Sharma. "Natural Systems and Tribology-Analogies and Lessons." *Materials Today: Proceedings* 4, no. 4 (2017): 5228-5232. https://doi.org/10.1016/j.matpr.2017.05.031
- 16. Smridh Slathia, Rahul Anand, Mir Irfan Ul Haq, Ankush Raina, Sanjay Mohan, Rajiv Kumar, Ankush Anand, "Friction and Wear Behaviour of AA2024/ZrO2 Composites: Effect of Graphite" Recent Advances in Mechanical Engineering pp 597-601(2020) https://link.springer.com/chapter/10.1007/978-981-15-1071-7_49
 **Corresp. Author*
- 17. Sanjay Mohan, Ankush Anand, **Mir Irfan Ul Haq**, Ankush Raina, Rajiv Kumar, "Calcium Fluoride a Potential Solid Lubricant for Green Tribology and

Sustainability" Recent Advances in Mechanical Engineering pp 587-595 (2020) https://link.springer.com/chapter/10.1007/978-981-15-1071-7_48

Book Chapters

1. Rahul Anand, **Mir Irfan Ul Haq**, Ankush Raina, "Bio-Based Nano-Lubricants for Sustainable Manufacturing" Nanomaterials and Environmental Biotechnology, Nanotechnology in the Life Sciences. Springer. https://link.springer.com/chapter/10.1007/978-3-030-34544-0_18

{*Corresp. Author}

International Conferences

- 1. **Mir Irfan Ul Haq**, Ankush Anand at Malaysia Singapore Research Symposium (MS 2019) held at *National University of Singapore* on 5th November, 2019.
- 2. **Mir Irfan Ul Haq**, Ankush Anand, "Effect of MoS₂ on the Tribological Performance of AA7075/Si₃N₄ Composite" 2019 STLE Annual Meeting, Nashville, Tennessee, USA held during 19th May, 2019 to 24th May, 2019.
- 3. **Mir Irfan Ul Haq**, A. Anand, Navdeep Jamwal. "Study of Mechanical and Tribological Properties of Aluminium Based Ceramics- A Review", International Conference on Newest Drifts in Mechanical Engineering, M. M. University, Mullana Ambala, 2014.
- Contributed a paper entitled "Lightweight Material for Automobile Body and Chassis-A Review" in ITMAEP-2014 on 20th and 21st December at JNU New Delhi,2014
- 5. Contributed a paper entitled "Geometry optimization of Automobile Chassis A review" in ITMAEAP-2014 on 20th and 21th December,2014 at JNU New Delhi.
- 6. **Mir Irfan Ul Haq**, Ankush Anand, "High Speed Tribological Characterization of AA7075-Si3N4 Composite Under Dry Conditions" International Conference on Emerging Trends in Engineering Innovations & Technology Management at NIT Hamirpur during 16th –18th December, 2017.
- 7. **Mir Irfan Ul Haq**, Ankush Anand, "Alumunium Alloys in Sliding Applications-opportunities and Challenges" in 4th International Conference on Recent Trends and Advancements in Engineering and Technology held during 3rd to 4th November, 2017 at SMVDU.
- 8. Wani Khalid Shafi, Ankush Raina and **Mir Irfan Ul Haq**, "Recent advancements in Tribology: A Review", International Conference on Renewable Energy for Sustainable Environment Challenges and Remedies (ICRESE-2017) Shri Mata Vaishno Devi University Katra, India, March, 20-21, 2017
- 9. Ankush Anand, **Mir Irfan Ul Haq**, Ankush Raina and Mohammad Farooq Wani, "A Holistic Framework for Selection of Biomaterials for Biotribological

Applications", 3rd International conference on Bio Tribology (ICoBT-2016), Imperial College London, London, UK, September,11-14, 2016.

National Conferences

- 1. Attended and presented a paper on "An Overview of the Virtual Tests in Modern Auto Industry for Mitigation of Failures on an Automotive Chassis", 9th J&K Science Congress and Regional Science Congress, University of Kashmir, Hazratbal, Srinagar, October, 2013.
- 2. Attended and presented a paper on "An Assessment of Biomimetic approaches in Tribology"11th JK Science Congress, October 12-14, 2015, University of Kashmir.
- 3. Attended and presented a paper on "Environmentally Conscious Technologies in Automobiles- A State of the Art Survey "11th JK Science Congress, October 12-14,2015 University of Kashmir.
- 4. **Mir Irfan Ul Haq**, Rajiv Kumar, Sanjay Mohan Sharma and Ankush Anand, "Plant Products Towards Sustainable Automobiles- Challenges and Opportunities" In National Conference on Interdisciplinary Aspects of Plant Sciences and 27th APSI Scientist Meet held during 2nd to 4th November, 2017 at Shri Mata Vaishno Devi University, Katra, J&K.
- 5. Ankush Raina, Wani Khalid Shafi, **Mir Irfan Ul Haq**, "Lubrication Characteristics of Avocado Oil containing Copper Nanoparticles" In National Conference on Interdisciplinary Aspects of Plant Sciences and 27th APSI Scientist Meet held during 2nd to 4th November, 2017 at Shri Mata Vaishno Devi University, Katra, J&K.
- 6. **Mir Irfan Ul Haq**, Ankush Anand, "Role of Tribolayers In Friction And Wear Of Aluminium Alloys" in National Conference on Renewable Energy and Sustainable Environment: Challenges and Remedies held during 24th to 25th April 2018 at SMVDU.
- 7. Aysha Farzana, Ruttba Aziz, **Mir Irfan Ul Haq** and Ankush Raina "Applications of 3D-Printing- Challenges and Opportunities", 2nd National Conference on Innovative Trends in Mechanical Engineering (NCITME-2018), Shri Mata Vaishno Devi University Katra, March, India, 23-24, 2018.
- 8. Aysha Farzana, Ruttba Aziz, Ankush Raina and **Mir Irfan Ul Haq**, "Additive manufacturing in Medical Sciences -A Review", 2nd National Conference on Innovative Trends in Mechanical Engineering (NCITME-2018), Shri Mata Vaishno Devi University Katra, March, India, 23-24, 2018.
- 9. Rahul Anand, Ankush Raina, **Mir Irfan Ul Haq**, Sanjay Mohan Sharma and Ankush Anand, "An Evaluation of Near Dry Machining Over Dry Machining", 2nd National Conference on Innovative Trends in Mechanical Engineering (NCITME-2018), Shri Mata Vaishno Devi University Katra, March, India, 23-24, 2018

10. Love Kerni, Ankush Raina and **Mir Irfan Ul Haq**, "Synthesis and Characterisation of Olive oil based nano-lubricant" National Conference on Emerging Trends in Materials Science (NCETMS-2018), Shri Mata Vaishno Devi University Katra, India, February, 7-8, 2018.

Faculty Development Programs and Workshops Attended

- 1. One Week TEQIP III sponsored STC on "Engineering Optimization" at SMVDU from 21th to 25th October 2019 in collaboration with JNTU, Hyderabad.
- 2. One Week QIP Course on "Fundamentals of Tribology" organized by IISC Bangalore during 7th to 11th October,2019
- 3. One Week International Indo-Tunisian Symposium on "Tribology for Sustainability" organized by National Institute of technology, Srinagar in collaboration with University De Sfax, Tunisia during 17th to 21st June, 2019
- 4. One Week Workshop on "Professional Ethics and Human Values- A Gandhian Perspective" at Faculty Development Centre, Shri Mata Vaishno Devi University Approved under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching Scheme of Government of India, Ministry of Human Resource Development from 11th to 15th March, 2019.
- 5. Two Day DST SERB and TEQIP-III Sponsored National Workshop on "Advances in Clean Energy Conversion Technologies and Materials for Energy Storage Applications" at SMVDU from 24th to 25th January 2019 in collaboration with JNTU, Hyderabad.
- 6. One Week TEQIP-III Sponsored Faculty Development Program on "Best Manufacturing Practices in Industry" organized School of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra from December 17-21, 2018 in collaboration with JNTU, Hyderabad.
- 7. One-Day Workshop on "Communication Skills Required for Teaching" at Faculty Development Centre, Shri Mata Vaishno Devi University Approved under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching Scheme of Government of India, Ministry of Human Resource Development on 15th December 2018.
- 8. Two Week Faculty Development Program on "Foundation program in ICT for Education" conducted by IIT Mumbai during 8th March 2018 to 12th April 2018.
- 9. One Week Faculty Development Program on "Sustainable Design and Manufacturing" organized by School of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra from February 12-16, 2018.
- 10. Attended One-day workshop on "Patent Drafting and Filing", organized by Department of Biotechnology, Shri Mata Vaishno Devi University, Katra in collaboration with Technology Information, Forecasting and Assessment Council (TIFAC), Department of Science & Technology (DST), Govt. of India on 20th October, 2016

- 11. One Day National Seminar on "Mechanical Engineering Research Opportunities and Challenges", organized by School of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra on April, 8, 2017.
- 12. One Week QIP Short-course on Tribology of Soft Matters: Biotribology, Microsystems and Automotive Applications organized by Department of Mechanical Engineering and Industrial Tribology, Machine Dynamics and Maintenance Engineering Centre (ITMMEC), IIT Delhi, New Delhi, India from November 7-11, 2016.
- 13. One Week Workshop on "Optimization using MATLAB" organized by Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra in collaboration with NITTTR Chandigarh, Punjab from October 24 28, 2016.
- 14. Workshop on "Research Methodology and Data Analysis" at Human Resource Development Centre (HRDC), Shri Mata Vaishno Devi University, Katra (J&K) from September, 26-28, 2016.
- 15. One Month 30th General Orientation Course at Human Resource Development Centre (HRDC), Punjabi University Patiala, Punjab from June 20 July 16, 2016.
- 16. One Week 5th ICT based workshop on Recent Trends in Automobile Engineering organized by Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra in collaboration with NITTTR Chandigarh, Punjab from February 29 to March 4, 2016.
- 17. One week AICTE Sponsored Short Term Course on "Additive Manufacturing" held at IIT Kanpur during February 05 February 09, 2018.
- 18. Two Week 66th Refresher Course on "Experimental Physics" by Indian Academy of Science, Bangalore and Indian National Science Academy, New Delhi held at School of Physics, SMVDU during 10th to 15th December, 2014.
- 19. Two Week Workshop on "Engineering Mechanics" conducted by IIT Mumbai during 26th Nov,2013 to 6th Dec,2013.
- 20. Four Week MOOC certification on "Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading" hosted by Georgia Institute of Technology, USA
- 21. Four Week MOOC certification on "Material Science: 10 Things Every Engineer Should Know" hosted by University of California, Davis

Foreign Academic Visits

- 1. United States of America (2019)
- 2. Singapore (2019)

Awards and Grants

1. Awarded International Travel Grant of **2,04,343 INR Under** Young Scientist Scheme by DST SERB to Attend 2019 STLE Annual Meeting at USA. (2019)

- 2. Best Paper Award for Co-authored paper "Evaluation of mechanical properties of ramie/banana reinforced hybrid composites" at 6th International Conference on Advances in Mechanical Engineering (ICAME 2019), Malaysia held during 14th to 16th August, 2019.
- 3. Best Paper Award for Co-authored paper "Calcium Fluoride a potential solid lubricant for Green Tribology and Sustainability" at NCAME 2019 held at NIT Delhi on 16 March, 2019.

Sponsored Research Projects

Name of the Project	Scheme/ Sponsoring Agency	Amount(INR)	Duration	Role	Status
Development and Tribological characterization of self-lubricating Aluminium alloy (AA6061) / nano-Ceramic composite	AICTE through CRS-TEQIP-III scheme	13,28,000	12 months	Co- Investigator	Ongoing (**Additional 8 Lakh approved)

Member of Committees

- 1. Member Secretary, Academic Affairs Committee, School of Mechanical Engineering
- 2. Member NSS SMVDU
- 3. Member Guest House Committee
- 4. Member Inspection Committee Guest House
- 5. Member Guest House Committee(Purchase)
- 6. Member of Anti Ragging Squad SMVDU
- 7. Member Admission Brochure Committee SMVDU
- 8. Member School Information Committee
- 9. Member School Finance Affairs Committee
- 10. Member School M.Tech. Admission Committee
- 11. Member School Technical Committee
- 12. Member Nanotechnology Cell, SMVDU
- 13. Member Organizing Committee 5th Convocation, SMVDU
- 14. Member Anti Ragging Committee, SMVDU
- 15. Member School Technical Committee, SoME, SMVDU
- 16. Member School Event Committee, SoME, SMVDU
- 17. Member Board of Studies, SME

- 18. Member, School Research Committee
- 19. Member, Stock Verification Committee

Research Guidance

M.Tech. Supervision ----(06 Awarded)

- **1. Navdeep Singh**, "Investigation of Mechanical and Tribological properties of Al-SiC Based Nano Hybrid Composite" (2016)
- **2. Samridh Slathia,** "Investigation of Mechanical and Tribological properties of AA2024 based Hybrid Composites" (2017)
- **3. Harpal Singh**, "Synthesis and Mechanical Characterization of AA6082-TiB2 in Situ Composites" (2018)
- **4. Ayesha Farzana Kichloo,** "Mechanical & Tribological Behaviour of 3D Printed Carbon Fibre Reinforced Polyethylene Terephthalate Glycol Composite" (2019)
- **5. Rahul Anand** "Synergism of TiO₂ and Graphene as Nano-additives in Cutting Fluids" (2019)
- **6. Gaurav Jamwal** "Lubrication Characteristics of Chemically Modified Canola and Sunflower Oil" (2019)

B.Tech. Projects Supervision-----[12 Awarded]

Events Organized

Conferences

- Co-Convener in TEQIP-III sponsored "International Conference on Mechanical Engineering and Allied Sciences, 2018 (ICMEAS-2018) held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, 14th to 15th September, 2018
- 2. **Organizing Member**, 2nd International Conference On Recent Trends & Advancements in Engineering and Technology, held at Shri Mata Vaishno Devi University, Katra, India during 27th 29th November, 2015.
- 3. **Organizing Secretary** in "National Conference in Innovative Trends in Mechanical Engineering" held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, March 3-4, 2017.
- 4. **Organizing Secretary** in "2nd National Conference in Innovative Trends in Mechanical Engineering" held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, March 23-24, 2018.
- 5. **Organizing Member**, "5th International Conference on Recent Trends and Advancements in Engineering and Technology (ICRTAET) at Shri Mata Vaishno Devi University, Katra, J&K from 25-26 October 2018"

Workshops/ Seminars/Faculty Development Programs

- 1. **Coordinator** in TEQIP-III Sponsored Workshop on "3D Printing for New Product Development" organized School of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra on 13th September, 2019.
- 2. **Co- Coordinator,** TEQIP-III sponsored 3rd Industry Academia Conclave on "Bridging Gap between Industry and Academia" held on 8th January, 2019 at Shri Mata Vaishno Devi University, Katra.
- 3. **Member, Organizing Committee**, TEQIP-III Sponsored Faculty Development Program on "Best Manufacturing Practices in Industry" organized School of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra from December 17-21, 2018 in collaboration with JNTU, Hyderabad.
- 4. **Member, Organizing Committee**, TEQIP-III Sponsored STC on "Engineering Optimization" organized School of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra from October 21-25, 2019 in collaboration with JNTU, Hyderabad.
- 5. **Organizing Member,"** Indo US one-week Workshop on "Next Generation Logistics, Logistic Models and Supply Chain" held during 5th -9th August, 2019 at SMVDU in collaboration with Indo-US Science & Technology Forum (IUSSTF)
- 6. **Member, Organizing Committee**, "National Seminar on Research Opportunities and Challenges in Mechanical Engineering" held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, April 8, 2017.
- 7. **Member, Organizing Committee** ,2nd Industry Academia Conclave held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India on 28th April, 2018.
- 8. **Member Organizing Committee**, TEQIP-III Sponsored Faculty Development Program on "Sustainable Design and Manufacturing" held at Department of Mechanical Engineering during 12th to 16th Feb, 2018.

Student Events

- 1. Co-Convener in 6th Alumni Meet of SMVDU held on 21st October, 2019.
- 2. Coordinated SAE BAJA 2014 wherein ATV was designed and fabricated in house and students participated in the event at Indore.
- 3. Coordinated "Titiksha 2k13" Technical Festival of SMVDU
- 4. Coordinated National Engineer's Day at School of Mechanical Engineering in 2013
- 5. Faculty Coordinator Titiksha 2014
- 6. Faculty Coordinator SAE BAJA 2015
- 7. Coordinated TEDx SMVDU at SMVDU (2016)

- 8. Faculty Coordinator Ecokart-2017 wherein an eco-friendly vehicle was designed and fabricated at SMVDU Workshop.
- 9. Faculty Coordinator, Titiksha 2016 held during 18th to 20th November, 2016
- 10. Member Organizing Committee 2nd Inter-State (North Zone) Declamation Contest for Silver Rolling Trophy instituted by Hon'ble Governor of Jammu & Kashmir State on 30th November 2016.
- 11. Faculty Coordinator TEDx SMVDU at SMVDU (2018)

Talks Delivered

- 1. Talk on "Recent Trends in Automobiles" during Two Weeks Winter School for Engineering Stream organized by FDC SMVDU.
- 2. Talk on "3D Printing" at Govt. Polytechnique College, Ramban on 4th May,2019.
- 3. Talk on "FDM based 3D Printed Parts-Different Applications" at AICTE Training and Learning Academy Program on Additive Manufacturing (AM) Applications at JMI, New Delhi on 7th October,2019.

Other activities

- 1. Appointed as Member Expert Speaker Panel Society of Automotive Engineers India.
- 2. Appointed as External Examiner for B.Tech. at Baba Ghulam Shah Badshah University Rajouri (2018)
- 3. Involved in Evaluation Process of B.Tech. Mechanical Engineering Jammu University
- 4. Member selection committee for appointment of various posts (CEO, Manager & Secretary) of SMVDU TBIC.
- 5. Appointed as Micro Observer in Jammu and Kashmir Assembly Elections (2014)
- 6. Session Chair in "National Conference in Innovative Trends in Mechanical Engineering" held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, March 3-4, 2017.
- 7. Session Chair in "2nd National Conference in Innovative Trends in Mechanical Engineering" held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, March 23-24, 2018.
- 8. Session Chair in 5th International Conference on Recent Trends and Advancements in Engineering and Technology (ICRTAET) at Shri Mata Vaishno Devi University, Katra, J&K from 25-26 October 2018"
- 9. Member Reviewer Board 7th International and 28th All India Manufacturing Technology, Design and Research Conference 2018 (AIMTDR 2018) to be held during 13th to 15th December,2018 at Anna University, Chennai.
- 10. Member Secretary, Shri Mata Vaishno Devi University Alumni Association
- 11. B.Tech. Project Coordinator, School of Mechanical Engineering.

12. Published a newspaper article entitled "Design for Pedestrians" in daily Greater Kashmir in Jammu Edition https://www.greaterkashmir.com/news/jammu/design-for-pedestrians/224457.html