

CURRICULUM VITAE

Dr. Shuhaib Mushtaq

Address Assistant Professor
 Mechanical Engineering Department,
 Islamic University of Science & Technology
 Awantipora Kashmir India 192122

Contact +91-6005804403, 9469811076

Email shuhaibmushtaq@gmail.com,
 shuhaibmushtaq@iust.ac.in

TEACHING EXPERIENCE

Feb.2020- Present

Assistant Professor, Department of Mechanical Engineering, IUST Awantipora.

Aug. 2018 – Dec. 2019

Assistant Professor, Islamic University of Science & Technology Awantipora, Kashmir.

RESEARCH AREA

Development of Materials (Metallic, Non Metallic), Self-Lubricating composites, Tribological Characterization, High Temperature Tribology, Study of Mechanical Properties, Fatigue Analysis.

EDUCATION

- 2018, **Ph.D.**, Mechanical Engineering Department, National Institute of Technology (NIT) Srinagar, India (CGPA **7.8 / 10**).
- 2011, **M.Tech.**, Mechanical System Design, Mechanical Engineering Department, National Institute of Technology (NIT) Srinagar, India (CGPA **7.6 / 10**).
- 2007, **B.E.**, Mechanical Engineering, SSM College of Engineering & Technology, University of Kashmir, (**69.73%**).
- 2001, **Senior School Certificate Examination**, J&K Board, (**54.6%**).
- 1999, **Secondary School Examination**, J&K Board, (**72.6%**).

COURSES TAUGHT at UG/PG level

- Fundamentals of Tribology
- Tribo Materials

- Design of Tribo Systems
- Machine Design
- Machine Drawing
- Engineering Mechanics
- Measurement and Instrumentation
- Material Science
- Basic and Applied Thermodynamics
- Refrigeration and AC

RESEARCH PUBLICATIONS (SCI/SCOPUS PEER REVIEWED JOURNALS)

1. **Shuhaib. M and M.Nadeem** ‘Impact of section thickness on cooling curve morphology, structure and morphology of SG Iron” *Sādhanā* **46**, 17 (2021). <https://doi.org/10.1007/s12046-020-01541-9>
2. **Shuhaib. M** and Wani. M.F. ‘A study on friction and wear characteristics of Fe-Cu-Sn alloy with MoS₂ as a solid lubricant under dry conditions’. *Sadhana Springer Indian Academy of Science* <https://doi.org/10.1007/s12046-019-1208-8>.
3. **Shuhaib. M** and Wani. M.F. ‘Tribological characterization of Fe-Cu-Sn alloy with graphite as solid lubricant’. *Industrial lubrication and Tribology*, <https://doi.org/10.1108/ILT-11-2017-0337>.
4. **Shuhaib. M** and Wani. M.F. ‘High-Temperature Friction and Wear Studies of Fe-Cu-Sn Alloy Containing Graphite as Solid Lubricant under Dry Sliding Conditions’. *Material Research Express*, <https://doi.org/10.1088/2053-1591/aaa9a5>.
5. **Shuhaib. M** and Wani. M.F. (2017). ‘Self-lubricating tribological characterization of lead free Fe-Cu based plain bearing material’. *Jurnal Tribologi* 12, pp.18-37.
6. **Shuhaib. M**, Wani. M.F., Shahid. S. and Junaid. M. ‘Tribological and Mechanical properties of PM Fe-Cu-Sn alloy containing graphite as a solid lubricant’. World review of science, technology and sustainable development, *Inderscience publishers*. [doi 10.1504/WRSTSD.2018.10014265](https://doi.org/10.1504/WRSTSD.2018.10014265)
7. **Shuhaib. M** and Wani. M.F. (2017) ‘The study of micro hardness of powder metallurgy fabricated Fe-Cu alloy using Vickers indenter’. *Advanced Material Proceedings*, [doi.10.5185/amp.2017/411](https://doi.org/10.5185/amp.2017/411).
8. K.A Najar, N.A Sheikh, **Shuhaib Mushtaq**, M.Mursaleen, M.A.Shah. (2019) ‘Engineered Synthetic Diamond Film as a Protective Layer for Tribological and Machining Applications: A Review’ *J Bio Tribo Corros* (2019) 5: 59. <https://doi.org/10.1007/s40735-019-0252-6>
9. S.S. Saleem, M.J.Mir, M.F.Wani and **Shuhaib. M** (2018). Experimental investigation and modelling of PMEDM process with aluminium powder suspended dielectric on AISI-H11. *Discovery Engineering* Vol.6, [ISSN 2320-6675](https://doi.org/10.1007/s12046-018-1208-8).
10. **Shuhaib. M.** & Sheikh, N. A. (2013). Experimental evaluation of the effect of thread angle on the fatigue life of bolts. *IOSR J Mech Civil Eng*, 7(1), 12-19.
11. **Shuhaib. M.** & Khan, R. A. (June - 2014). A study of Wear and frictional behavior of metals and polymers in Total Hip Arthroplasty: A Review. *International Journal of Engineering Research and Technology*, 3(6).

RESEARCH PUBLICATIONS (Conference Proceedings)

1. G.Khajuria, M.F.Wani, **Shuhaib.M**, R.Sehgal. Optimization of the effect of indentation load and dwell time on micro-hardness using fuzzy logic predictive model. IOP Conf. Series: Journal of Physics: Conf. Series **1240** (2019) 012085, IOP Publishing, doi:10.1088/1742-6596/1240/1/012085
2. Bisma.P, M.F.Wani, **Shuhaib.M** and et.al, Tribological characterization of Iron based ceramic reinforced self-lubricating material. IOP Conf. Series: Journal of Physics: Conf. Series **1240** (2019) 012108, IOP Publishing, doi:10.1088/1742-6596/1240/1/012108
3. S.Kumar, M.F.Wani, R.Sehgal, **Shuhaib.M**. Friction and Wear of Si₃N₄/TiC Ceramic composite under Nano lubrication. IOP Conf. Series: Journal of Physics: Conf. Series **1240** (2019) 012134, IOP Publishing, doi:10.1088/1742-6596/1240/1/012134
4. Md. Firdous, M.F.Wani, **Shuhaib.M** and et.al. Tribological characterization of Cu-Ni Metal matrix composites using MoS₂ nano-lubricant. IOP Conf. Series: Journal of Physics: Conf. Series **1240** (2019) 012135, IOP Publishing, doi:10.1088/1742-6596/1240/1/012135
5. **Shuhaib. M**, M.F.Wani, S.S.Saleem, Sumera B, Jebran K, Junaid M. and Jagtar, S. Tribological Characteristics of Fe-Cu-Sn Alloy with Molybdenum Di Sulfide as a Solid Lubricant under Dry Conditions. <http://ssrn.com/abstract=3321083> Elsevier 2019.
6. Sumera B, M.F.Wani, S.S.Saleem, **Shuhaib. M**, Jebran K, Junaid M. and Jagtar, S. Nanoscratch property of self-lubricating Ti/MoS₂ Nano coating at Nano scratch level. <http://ssrn.com/abstract=3321096> Elsevier 2019.
7. Jebran K, Sumera B, M. F. Wani, S.S.Saleem, **Shuhaib. M**, Junaid M. and Jagtar, S. Tribological performance of PTFE in aqueous environments and dry sliding. <http://ssrn.com/abstract=3321151> Elsevier 2019.
8. Jagtar, S. M. F. Wani, S.S.Saleem, **Shuhaib. M**, Junaid M and Jebran K. Nano mechanical property of Max phase material Ti₂AlC. <http://ssrn.com/abstract=3321143> Elsevier 2019.

CONFERENCE PRESENTATIONS

1. **Shuhaib. M** and Wani. M.F. “ Friction and Wear characteristics of Fe based self-lubricating composite containing MoS₂ as solid lubricant”, in **International conference on Tribology “TriboIndia 2018”, 13-15 Dec. 2018 at VJTI Mumbai, India.**
2. **Shuhaib. M** and Wani. M.F. ‘ Effects of Graphite content and temperature on microstructure, mechanical and tribological properties of iron based powder metallurgy materials’, in **International conference on Mechanical Engineering and Allied Sciences (ICMEAS-2018), 14-15 September, 2018, at SMVDU Katra J&K.**
3. **Shuhaib. M** and Wani. M.F. ‘Tribological and Mechanical properties of PM Fe-Cu-Sn alloy containing graphite as a solid lubricant’, in **5th International Conference and Exhibition on Energy and Advanced Materials (ICE-SEAM 2017), 16-19 October, 2017, at Melaka, Malaysia.**
4. **Shuhaib. M** and Wani. M.F. ‘The study of microhardness of powder metallurgy fabricated Fe-Cu alloy using Vickers indenter’, in **International Conference on Materials Science & Technology (ICMTEch 2016), Delhi, India, 01 - 04 March, 2016, at the Conference Centre, University of Delhi, India.**

5. **Shuhaib. M** and Wani. M.F. ‘Tribological study of self-lubricating materials for plain bearings’ **11th JK Science Congress**, University of Kashmir

KEY ACADEMIC PROJECTS

- April 2013 – February 2018
Ph.D. Thesis: Development and Tribological Characterization of Iron based Self-Lubricating Composites for Plain Bearings
Supervisor: **Prof. M.F. Wani** (NIT Srinagar, India)
- July 2010 – June 2011
M.Tech. Project: Experimental Evaluation of the Effect of Thread Angle on the Fatigue Life of Bolts.
Supervisors: **Prof. N.A. Sheikh** (NIT Srinagar, India)
- July 2006 – June 2007
B.E. Project: Design and Modelling of a Mechanical Heart Valve.
Supervisor: **Er. Sajid Amin** (SSM Collage of Engineering and Technology, Kashmir University, India)

PROFESSIONAL AFFILIATIONS

- Organizing member of **2nd Indo Tunsia symposium held in Tribology laboratory** NIT Srinagar 17-21 June 2019
- Member of NBA committee in Mechanical Engineering Department of NIT Srinagar
- Reviewed and Reviewer of many Journals like **Material Research Express, Journal of Material Research and Silicon (Springer)**.
- Team member for organizing **Research Scholars Conclave** at NIT Srinagar.
- Active member of **International Association of Advanced Materials (IAAM) Sweden**.
- Life-time Member of **Institution of Engineers India**.
- Member in compiling NIRF Data for Mechanical Engineering Department at NIT Srinagar.

AWARDS AND ACHIEVEMENTS

Academic:

- Received 1st best paper award in EAH-2109, An International Conference on contemporary issues in engineering and applied sciences, organized by department of MME NIT Srinagar 22-23 June.2019.
- Received 1st best paper award in TRIBOINDIA-2018, An International Conference on Tribology held in Mumbai 13-15 Dec.2018.
- Received Best Session chair Award in International Conference at SMVDU Katra J&K.

TECHNICAL SKILLS

Expert user of the **Controlled Atmosphere Sintering** unit from last five years.

Served as TA for **SEM** in the Mech. Engg. Department, NIT-Srinagar.

Expert user of the **Raman Spectrometer** in the Tribology Laboratory at NIT-Srinagar

Student in-charge for instruments: **Micro-Hardness Tester**, RTec High Temperature Reciprocating and Rotary **Tribometer**, Ducom **Four Ball Tester**, High Magnification Microscope, Rtec **Optical Profilometer** in laboratory.
Expertized in using Origin, Design Expert, MS-Office etc.

PERSONAL INFORMATION

Father's Name : Mushtaq Ahmad Rather
Passport Number : **P1707975**
Barsoo, Awantipora, Pulwama, Kashmir. India 192122

Gender : Male
Marital Status : Married
Nationality / Religion : Indian / Islam
Languages : English, Hindi and Urdu
Hobbies : Reading; Travelling; Drawing.

Date: June. 23rd, 2021



(Shuhaib Mushtaq)