Dr. Gurmeet Singh, Doctorate in the year 2019 and is presently working as an Associate Professor at the Mechatronics Engineering Department of Chandigarh University, Mohali, India. He has more than 9 years of experience in teaching and research. He has published more than 25 research articles including 5 SCI Journal papers. His area of research includes Tribology, Material Characterization, Coatings, Manufacturing, Machining and Additive Manufacturing

PUBLICATIONS

Publications

SCI Indexed: 05 **Scopus & Reputed Index: 15** **Conferences: 14**

SCI Indexed Journals

1. **Singh, G.**, Kumar, S. and Sehgal, S.S., 2018. Erosion tribo performance of HVOF deposited WC-10Co-4Cr and WC-10Co-4Cr+ 2% Y2O3 micron layers on pump

impeller steel. **Particulate Science and Technology**, pp.1-11.

2. **Singh, G.**, Kumar, S. and Sehgal, S.S., 2018. Taguchi approach to erosion wear optimization of WC-10Co-4Cr sprayed austenitic steel subjected to equisized slurry. **Industrial Lubrication and Tribology**, 70(9), pp.1774-1782.
3. **Singh, G.**, Kumar, S. and Sehgal, S.S., 2019. Tribo-erosion performance of few HVOF coated micron layers subjected to equi-sized slurry particles. **Material Research Express**.
4. **Singh, G.**, Kumar, S., Sehgal, S.S.and Prasad, S.B. 2019. Erosion wear analysis of HVOF coated Colmonoy-88 and Stellite-6 micron layers on pump impeller steel by using the Taguchi's. **Industrial Lubrication and Tribology**, 36(09), pp.1-9.
5. **Singh, G.**, Kumar, S., Sehgal, S.S.and Gill, S. H. 2020. Investigation on the impact of physical properties of the coal-ash slurries on the erosion wear performance of WC coated steel by using Image processing technique. **Coal Preparation and Utilization**, 1851208, pp.1-21.

Scopus & Reputed Journals

1. **Singh, G.,** Singh, M.P., Singh, G., 2013. Optimization of the machining parameters for surface roughness during turning of Al/SiC/Gr Hybrid MMC. International **Journal of Engineering Research and Technology**, pp. 1613-1617.
2. **Singh, G.,** Mangat, H.S, Sodhi, H.S. 2014. Optimization of end milling process for d2 (die steel) by using response surface methodology, **Journal of Production Engineering**, pp. 73-78.
3. Shah, V., Singh, C., **Singh**, **G.,** 2016. Optimization of the machining parameters for surface roughness during CNC vertical milling of D3 (Die Steel), **International Journal in applied studies and production management**, pp. 184-195.
4. Shah, V., Singh, C., **Singh, G.**, 2016. To optimize the face milling process by using response surface methodology for d3 (die steel) material. **International Journal for Multi-Disciplinary Engineering and Business Management**, pp. 101-113.
5. Biswal, V., Singh, B., Singh, G., **Singh, G.,** 2016. Heat transfer and pressure drop characteristics of thermal energy storage system with aluminum oxide. International **Research Journal of Engineering and Technology**, pp. 444-446.
6. Patyal V., Singla, A., **Singh, G**., Sharma, S., 2017. Fabrication an experimental set-up to investigated design and development of jet tester to check the erosion wear behavior of coated and uncoated SS-304 at various distinct angles. **International Journal of Current Advanced Research**, pp. 2341-2345.

7. Sharma, R., **Singh G.,** Kumar, S., 2018. Optimization and erosion wear response of slurry pipeline material with and without coating. **Recent Developments in Engineering & Technology,** Vol. 11, pp. 1-7.
8. Sharma. R., Kumar, S., **Singh, G.,** 2019. Optimization and erosion wear response of HVOF coated pipeline material at different impingment angles. National Conference on **Recent Developments in Engineering & Technology**, Vol. 12, pp. 11-16.
9. Kumar N., Singh, M., Kumar S., **Singh, G.,** Prashad S. 2019. Comparative analysis of different uncoated pump impeller materials SS-410 and SS-430 using Fly Ash. **International Journal of Mechanical and Production Engineering Research and Development (IJMPERD),** Vol. 9, Special Issue, pp. 1-7.
10. Kumar N., Singh, M., Kumar S., **Singh, G.,** Prashad S. 2020. Optimization and erosion wear response of uncoated pump impeller material ss-404 using fly ash. **International Journal of Mechanical and Production Engineering Research and Development (IJMPERD),** Vol. 10, Special Issue, pp. 12-19.
11. **Singh, G.** 2020. A review on effect of heat treatment on the properties of mild steel. **Material Today Proceedings, Elsevier,** 2214-7853, pp.1-03.
12. **Singh, G.** 2020. A review on different high velocity oxyfuel coated matrix materials. **Material Today Proceedings, Elsevier,** 2214-7853, pp.1-04.
13. **Singh, G.** 2020. A review on erosion wear of different types of slurry pump impeller materials. **Material Today Proceedings, Elsevier,** 2214-7853, pp.1-04.
14. Haque, A., **Singh, G.**, Gill, H.S. and Sehgal, S.S. 2020. Tribo-performance of 80%WC + 20%TIO2 HVOF thermal spray coating on SS-404. **Material Today Proceedings, Elsevier,** 2214-7853, pp.1-10.
15. **Singh, G.** 2020. Replace wooden pattern to polymer pattern by 3D printing. **Material Today Proceedings, Elsevier,** 2214-7853, pp.1-05.

Conferences

1. **Singh, G.**, Sodhi, H., Singh, S., Singh, G., 2014. A review on omptimization of face milling process for d2 by using rsm methodology. National Conference on Advancements in Simulation and Experimental Techniques in Mechanical Engineering, pp. 142-147. @ **Chandigarh University.**
2. **Singh, G**., Sodhi, H., Singh, S., 2015**.** Optimization of the Machining Parameters for surface roughness during CNC vertical milling of D2 (die steel). Advances in Mechanical, Industrial and Materials Engineering, pp. 251-266. @ **Banda Singh Bahadur Engg.College**
3. Shah, V., **Singh, G.,** Singh, C., 2016. A review on optimization of face milling process

for D3 (die steel) by using response surface methodology. 3rd National Conference On Advancements In Simulation And Experimental Techniques In Mechanical Engineering, pp. 334-340. @ **Chandigarh University.**

4. Patyal, V., **Singh, G.,** Sharma, N., Thakur, A., 2017. A review on effect of heat treatment on the properties of mild steel. 4th National Conference On Advancements In Simulation And Experimental Techniques In Mechanical Engineering, pp. 444-448. @ **Chandigarh University.**
5. Singh, I., Kumar, A., **Singh, G.,** 2017. Effect of Pressure on quality of steam in separating and throttling calorimeter which deteriorates life of turbine blades. 4th National Conference on Advancements in Simulation and Experimental Techniques in Mechanical Engineering, pp. 444-448. @ **Chandigarh University.**
6. Sharma, R., **Singh G.,** 2018. A review on optimization and erosion wear response of pipeline material with and without coating. 5th National Conference on Advancements in Simulation And Experimental Techniques In Mechanical Engineering, pp. 48-54. @ **Chandigarh University.**
7. **Singh, G.,** Chopra A., Singh, H., 2018. Analysis on effect of heat treatment on the properties of mild steel. 5th National Conference on Advancements in Simulation and Experimental Techniques in Mechanical Engineering, pp. 92-99. @ **Chandigarh University.**
8. **Singh, G.,** Singh, I., Chopra, A., 2018. Optimization of end milling process for D2 (Die Steel) by using Taguchi's method. 5th National Conference on Advancements in Simulation and Experimental Techniques in Mechanical Engineering, pp. 299-303. @ **Chandigarh University.**
9. Sharma. R., **Singh, G.,** Kumar, S. 2018. Optimization and erosion wear response of HVOF coated pipeline material at different impingment angles. National Conference on Recent Developments in Engineering & Technology, Vol. 11, pp. 79-83. @ **Chandigarh University.**
10. **Singh, G.,** Kumar S., Sehgal, S.S. 2019. Tribo erosion performance of AISI 410 & 317 pump impeller steels subjected to equi sized slurry. 6th National Conference on Advancements in Simulation and Experimental Techniques in Mechanical Engineering, pp. 134-140. @ **Chandigarh University.**
11. Kumar N., Singh, M., Kumar S., **Singh, G.,** Prashad S. 2019. Comparative analysis of different uncoated pump impeller materials SS-410 and SS-430 using Fly Ash. 6th National Conference on Advancements in Simulation and Experimental Techniques in Mechanical Engineering, pp. 168-171. @ **Chandigarh University.**
12. Kumar, S., Singh, V., **Singh, G.,** Singh, M., Ragit, S.C., Kumar, K. 2020. Rheology of Fly And Bottom Ash Slurry At Higher Concentration. TEQIP-III, Sponsored International Conference on Chemical, Bio & Environmental Engineering (Chembioen-2020), Feb. 2020. **@ NIT Jalandhar.**
13. Kumar, S., Kumar, S., Singh, P., Singh, V., Singh, H., and **Singh, G**. 2021. pH

dependence leaching characteristics of bottom ash. AIP Conference Proceedings 2341, 040038 (May 2021), **@NIT Jamshedpur.**

14. Tripathi, C.B., Kumar, S., Kumar, Sanjay, **Singh, G,** Prashad, S.B. and Kumar, K. 2021. Comparative study of erosion wear resistance on SS 430 and SS SD 2507. AIP Conference Proceedings 2341, 040007 (2021); https://doi.org/10.1063/5.0050122, **@NIT Jamshedpur**

Workshop/Faculty Development Programmes/Seminars Attended

- **National Faculty Development Program 2014** on *"Orientation Program"* held at Chandigarh University, Mohali during **1th – 4th July 2014.**
- **National Faculty Development Program 2014** on *"Faculty Development Program"* held at Chandigarh University, Mohali during **7th – 12th July 2014.**
- **National Faculty Development Program 2015** on *"Technology Oriented Outcome Based Teaching Learning Process"* held at Chandigarh University, Mohali during **1th – 7th July 2015.**
- **National Faculty Development Program 2016** on *"Orientation and Faculty Development Program"* held at Chandigarh University, Mohali during **1th – 15th July 2016.**
- **National Faculty Development Program 2017** on *"Workshop on Trending Advancement in Mechanical Engineering"* held at Chandigarh University, Mohali during **3th – 7th July 2017.**
- **National Faculty Development Program 2017** on *"Emerging Trends in Mechanical Engineering – International Exposure"* held at Chandigarh University, Mohali during **10th – 14th July 2017.**
- Attended a Chandigarh University sponsored hands on training of Solid Works from 15th - 16th September 2017.
- **SERB INDIA workshop** on *"Research Software and Analytics Worsa 2017"* held at Chandigarh University, Mohali during **18th – 22th December 2017.**
- **Autodesk DS Catia & Solid Works Workshop** on *"Autocad & Fusion 360" held* at Chandigarh University, Mohali on **14 Dec 2018**.
- **Workshop** on "***Symposium on Industy 4.0***" held at Chandigarh University, Mohali on **29th January 2019**.
- **Workshop** on "***Sci-Lab (organized by Teaching Learning Centre at IIT Bombay)***" held at Chandigarh University, Mohali on **4th May 2019**.
- **AICTE Training and Learning (ATAL) workshop** on *"Additive Manufacturing 2020"* held at HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, during **16th – 20th Feb. 2021.**
- **AICTE Training and Learning (ATAL) workshop** on *"System Engineering"* held at NIT Jamshedpur, during **18th – 22th Jan. 2021.**
- **Faculty Development Programme** on *"Welding Technology"* held at Sri Sai Ram Engineering College, Chennai during **06th – 11th Jan. 2021.**
- University Institute of Teacher Training and Research workshop on "Outcome Based Education" held at Chandigarh University, Mohali during 27th – 28th May 2021.

Industrial Project Guidance

- Technical support (consultancy) provided to **Surindra Tool Industries, Patiala** on *"Reduction in premature insert edge failure, part appearance, machine noise and the cutter's appearance in milling cutters"*

Book Edited

- Singh, C., Shah, V., **Singh, G.,** 2017. Optimization of face milling process for D3 (Die Steel) by using RSM. *Lambert Academic Publishing*, ISBN-10: 9783330052000.