List of publications

Journals

1. **Atwal, J. C.,** & Pandey, R. K. (2020). Performance analysis of thrust pad bearing using micro-rectangular pocket and bionic texture, *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, 235, 1232-1250. DOI: https://doi.org/10.1177/1350650120940076,[ISSN:1350-6501]

2. **Atwal, J. C.,** & Pandey, R. K. (2020). Film thickness and friction investigations in a fluid film thrust bearing employing a new conceived micro-texture on pads, *Journal of Tribology*, 143, 061801. DOI: https://doi.org/10.1115/1.4048500, [ISSN:0742-4787]

3. **Atwal, J. C.,** & Pandey, R. K. (2020). Performance improvement of water-lubricated thrust pad bearing operating with the turbulent flow using a new micro-pocket design, *Tribology International*, 154, 106738. DOI: https://doi.org/10.1016/j.triboint.2020.106738, [ISSN:0301-679X]

4. **Atwal, J. C.,** & Pandey, R. K. (2021). Influence of new surface micro-structures on the performance behaviours of fluid film tilting pad thrust bearings. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, 236, 3111-3134. DOI: https://doi.org/10.1177/09544062211030972, [ISSN:0954-4062]

5. **Atwal, J. C.,** & Pandey, R. K. (2022). Design of hydrodynamically lubricated a new micro-pocketed tilting pad thrust bearing based on simulated performance parameters, Tribology in Industry. 44, 482-497. DOI: 10.24874/ti.1286.04.22.07, [ISSN:0354-8996]

6. Ganai P., **Atwal J. C.,** Pandey R. K., & Dutt J. K. (2022). Performance studies of self-acting oil-lubricated bump journal bearing under lightly loaded conditions employing pocketed top foils, *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, 236, 8714-8730 DOI:10.1177/09544062221087844, [ISSN:0954-4062]

Book chapters

1. **Atwal, J. C.,** & Pandey, R. K. (2021). Synergistic effect of pocket and bionic texture on the performance behaviours of thrust pad bearing, *In Machines, Mechanism and Robotics, Springer, Singapore Publisher*. DOI:10.1007/978-981-16-0550-5, [ISSN:978-981-117-6-0549-9].

2. **Atwal, J. C.,** Pattnayak M. R., Pandey R. K., Ganai P., Atulkar A., Bhardwaj V. and Gupta N. (2022). Mechanisms responsible for performance improvements of pocketed and textured lubricated interfaces, *In Recent Advances in Machines and*

Mechanisms, Springer, Singapore Publisher.
DOI: https://doi.org/10.1007/978-981-19-3716-3_22.[ISSN:978-981-19-3715-6]

International conferences

1. **Atwal, J. C.,** & Pandey, R. K. Combined effects of pocket and bionic texture on the performance behaviours of thrust pad bearing, presented in 46th Leeds-Lyon Symposium on Tribology, September 2nd-4th, 2019, Lyon-France.

2. **Atwal, J. C.,** & Pandey, R. K. Synergistic effect of pocket and bionic texture on the performance behaviours of thrust pad bearing, presented in 4th International and 19th National Conference on Machines and Mechanisms, December 5th-7th, 2019, IIT Mandi.

3. **Atwal, J. C.,** & Pandey, R. K. Performance improvements in water-lubricated sector-shaped pad thrust bearing with new pocket considering cavitation and turbulence effects, First Online International Conference on Recent Advances in Computational and Experimental Mechanics 2020, held at IIT Kharagpur from September 4th-6th, 2020.

4. **Atwal, J. C.,** Pattnayak M. R., Pandey R. K., Ganai P., Atulkar A., Bhardwaj V. & Gupta N. Mechanisms responsible for performance improvements of pocketed and textured lubricated interfaces, presented in 5th International and 19th National Conference on Machines and Mechanisms, December 9th-11th, 2021, IIITDM Jabalpur.

5. **Atwal, J. C.,** & Pandey, R. K. Exploring and improving the role of micro-pockets and bionic texture on the performance behaviours of a tilting pad thrust bearing, 11th International Conference on Industrial Tribology, 12th -14th December 2022, IIT Delhi

6. **Atwal, J. C.,** & Pandey, R. K. Rapid method to design a new micro-pocketed tilting pad thrust bearing, 4th Structural Integrity Conference and Exhibition, at IIT Hyderabad from 14th – 16th December 2022.