

Faculty Profile

Faculty Name	Dr. Santosh Kumar Kurre
Designation	Associate Professor
Qualification	Ph.D. M.E. B.E. Mechanical engineering
Email	
Area of Interest	Mechanical engineering, Tribology, Biofuels
Work Experience (Total)	
• Teaching	20 years
• Research	15 years
• Industry	-
• Others	-
Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level	Fluid Mechanics, Engineering Graphics, Hydraulic Machine, Automobile, Turbomachinery, Engineering mechanics, Tribology, Hydraulic and pneumatic control system, Workshop technology
Membership of Professional Bodies	Tribology Society of India, ISTE
Research Publications	
• Research Papers UGC-CARE	
• Research Papers SCOPUS	13
• Research Papers WoS/SCI/ABDC	8
• List of Publications	<p>Kumar, Ashok S., Yadav, Jitendra and Kurre, Santosh K. "Assessment of engine oil viscosity and vibration characteristics of CI engine fuelled with jatropha biodiesel blends" International Journal of Chemical Reactor Engineering, 2023. https://doi.org/10.1515/ijcre-2023-0032</p> <p>Kurre, Santosh Kumar, and Jitendra Yadav. "A review on bio-based feedstock, synthesis, and chemical modification to enhance tribological</p>

	<p>properties of biolubricants." Industrial Crops and Products 193 (2023): 116122, https://doi.org/10.1016/j.indcrop.2022.116122</p> <p>Dravid, S., Yadav, J., & Kurre, S. K. (2021). Comparison of loosening behavior of bolted joints using plain and spring washers with full-threaded and plain shank bolts. Mechanics Based Design of Structures and Machines, 1-19. DOI: https://doi.org/10.1080/15397734.2021.2008258</p> <p>Yadav, J., Maity, D., Kurre, S. K., Kumar, A., Kumar, R., & Chouhan, S. (2022). Identification of damping prohibiting stick-slip form friction influenced dynamic system. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 09544062221135517.</p> <p>Kurre, S. K., Garg, R., & Pandey, S. (2017). A review of biofuel generated contamination, engine oil degradation and engine wear. Biofuels, 8(2), 273-280DOI: https://doi.org/10.1080/15397734.2021.2008258</p> <p>Kurre, S. K., Pandey, S., Garg, R., & Saxena, M. (2015). Condition monitoring of a diesel engine fueled with a blend of diesel, biodiesel, and butanol using engine oil analysis. Biofuels, 6(3-4), 223-231. DOI: https://doi.org/10.1080/15397734.2021.2008258</p> <p>Kurre, S. K., Pandey, S., Garg, R., & Saxena, M.</p>
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	<p>(2015). Experimental study of the performance and emission of diesel engine fueled with blends of diesel–ethanol as an alternative fuel. <i>Biofuels</i>, 6(3-4), 209-216, DOI: https://doi.org/10.1080/15397734.2021.2008258</p> <p>Ashok Kumar S, Jitendra Yadav* and Santosh Kumar Kurre (2023), Comparative study of vibration signatures by correlating them with engine oil degradation for diesel and blended fuel DBD20 in a CI engine, <i>International Journal of Advanced Technology and Engineering Exploration</i>, Vol 10(103) http://dx.doi.org/10.19101/IJATEE.2022.10100406</p> <p>Kurre, Santosh Kumar, Sumit Arya, and Jitendra Yadav. "Thermal analysis of batteries of electrical vehicle battery for effective thermal management." <i>Materials Today: Proceedings</i> (2023).</p> <p>Kurre, Santosh Kumar, Yadav, Jitendra, Mudgal, Ashish, Malhotra, Nikhil Shukla, Akarsh Srivastava, V K “Experimental study of friction and wear characteristics of bio-based lubricant on pin-on-disk tribometer”. <i>Material Today: Proceedings</i> (2023)</p> <p>Kurre, Santosh Kumar, et al. "Experimental evaluation of performance and emission of diesel engine fueled with nano-material titanium dioxide (TiO₂) nanoparticles supplemented diesel-biodiesel-ethanol blends." <i>Materials Today: Proceedings</i> (2023).</p>
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	<p>Chouhan, S., Chouhan, J., Mukati, G., Kumbhare, K., Yadav, J., Kurre, S. K., & Srivastav, V. K. (2023). Design of meander line antenna using low tangent loss material. Materials Today: Proceedings.</p> <p>Chouhan, S., Dubey, P. K., Mukati, G., Kumbhare, K., Yadav, J., Kurre, S. K., & Deorari, R. (2023). 2x1 slotted MIMO antenna with slotted ground for high frequency wireless application. Materials Today: Proceedings.</p> <p>Kurre, Santosh Kumar, Jitendra Yadav, and Shubham Thakur. "Comparative Study of the Rear and Rear Side Impact on a Roll Cage Using FEM." Recent Trends in Design, Materials and Manufacturing: Selected Proceedings of ICRADMM 2020. Singapore: Springer Nature Singapore, 2022. 475-484.</p> <p>Yadav, Jitendra, Santosh Kumar Kurre, and Shubham Thakur. "FEM-Based Impact Analysis of Roll Cage of an All-Terrain Vehicle." Recent Trends in Design, Materials and Manufacturing: Selected Proceedings of ICRADMM 2020. Singapore: Springer Nature Singapore, 2022. 199-209.</p> <p>Yadav, Jitendra, Santosh Kumar Kurre, and Rajesh Deorari. "An insight into facets of different dry friction models used for simulation." Materials Today: Proceedings 69 (2022): 276-281</p>
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	<p>Yadav, J., Kurre, S. K., & Thakur, S. (2022). Estimation of the dynamic response of roll cage under impact loading by modeling and simulation. Materials Today: Proceedings, 50, 2181-2188.</p> <p>Yadav, J., Kurre, S. K., Kumar, A., & Kumar, R. (2021). Nonlinear dynamics of controlled release mechanism under boundary friction. Results in Engineering, 100265. DOI: https://doi.org/10.1080/15397734.2021.2008258</p> <p>S.K. Kurre, S. Pandey, N. Khatri, S.S. Bhurat, S.K. Kumawat, S. Saxena, S. Kumar (2020), Study of Lubricating Oil Degradation of CI Engine Fueled with Diesel- Ethanol Blend, Tribology in industry, DOI: 10.24874/ti.913.06.20.11</p>
Book and Chapter Publications	
• Books Authored published by International Publishers	
• Books Authored published by National Publishers	1
• Publication of Chapter in Edited Books	3
• Editor of Book by International Publishers	
• Editor of Book by National Publishers	
• Translation Work of Book	
• List of Book and Chapter	1. Yadav, J., Kurre, S. K., & Thakur, S.

Publications	<p>(2022). FEM-Based Impact Analysis of Roll Cage of an All-Terrain Vehicle. In Recent Trends in Design, Materials and Manufacturing (pp. 199-209). Springer, Singapore.</p> <p>2. Kurre, S. K., Yadav, J., & Thakur, S. (2022). Comparative Study of the Rear and Rear Side Impact on a Roll Cage Using FEM. In Recent Trends in Design, Materials and Manufacturing (pp. 475-484). Springer, Singapore.</p> <p>3. Dravid S., Yadav J., Kurre S.K., Kumar A., Kumar R. (2021) Experimental Evaluation of the Performance of Diaphragm Spring Clutch of a Four-Stroke Multi-cylinder Petrol Engine Under Dry Friction Conditions. In: Choudhury S., Gowri R., Sena Paul B., Do DT. (eds) Intelligent Communication, Control and Devices. Advances in Intelligent Systems and Computing, vol 1341. Springer, Singapore. https://doi.org/10.1007/978-981-16-1510-8_31</p>
Patents	
• Published	6
• List of published patent(s)	<ul style="list-style-type: none"> • Chainless transmission system for bicycles • Extendable chair cum cloth hanger • Ladder • Almirah cum ladder • A Device for generating Voltage via footsteps • Fire fighting tool
• Filed	-
• List of filed patent(s)	-

PhD Guidance	
• Degree Awarded	1
• Thesis Submitted	
M.Tech. Guidance	
• Degree Awarded	6
• Thesis Submitted	
Research Project	
• List of Research project	1
Consultancy	
• List of Consultancy	
Awards & Honours	
• List of Awards & Honours	
Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference	
• International (Abroad)	
• International (Within Country)	2
• National	3
• List of published papers	<p>1.Jitendra Yadav, Santosh K Kurre, Estimation of dynamic response of roll cage under impact loading by modeling and simulation accepted in ICFMMP 17-18 Sept. 2021, LPU Ludhiyana.</p> <p>2.J Yadav, S K Kurre, FEM based impact analysis of roll cage of an all-terrain vehicle, International Conference on Recent Advances in Design, Materials and Manufacturing (ICRADMM 2020) 15th and 16th October 2020, Volume, Year 2020, at Amity University Gwalior - 474 005</p> <p>3.S K Kurre, J Yadav, S Thakur, Comparative</p>

	<p>study of the rear and rear side impact on a roll cage using fem, International Conference on Recent Advances in Design, Materials and Manufacturing (ICRADMM 2020) 15th and 16th October 2020, Year 2020, Amity University Gwalior - 474 005</p> <p>4.S K Kurre, S Pandey, R Garg, M Saxena, Effect of butanol on performance and emission of a compression ignition engine fueled with diesel-butanol blends, 24th national conference on IC engine and combustion, at UPES Dehradun, volume 2, Year 2015, Pages 70-75</p> <p>5.D.P.S. Chauhan, Santosh K. Kurre, Feature extraction for lubrication monitoring in gear system, All India seminar on Advances in tribology and Maintenance at Medi- Caps Institute of technology and Management, Indore M.P., Year 2007.</p>
Organizing National Conference/ International Conference/ FDP/STTP	
<ul style="list-style-type: none"> List of Conference/FDP/STTP committee 	
Social Contributions and Sports	
<ul style="list-style-type: none"> List of Social Contributions and Sports 	