

RESEARCH PUBLICATIONS

- **Articles in SCI/SCIE indexed International Journal**

1. Singh, PK, **Rathore, PKS**, Shukla, SK. Experimental and numerical analysis of solar still using Pyrex glass quantum dot in tropical climate. *Int J Energy Res.* 2021; 1- 15. doi:10.1002/er.7214. Impact Factor 5.16.
2. **Rathore, P. K. S.**, & kumar Shukla, S. (2021). Improvement in thermal properties of PCM/Expanded Vermiculite/Expanded Graphite shape stabilized composite PCM for building energy applications. *Renewable Energy*. **Impact Factor 8.001.**
3. **Rathore, P. K. S.**, & Shukla, S. K. (2021). Enhanced thermophysical properties of organic PCM through shape stabilization for thermal energy storage in buildings: A state of the art review. *Energy and Buildings*, 110799. **Impact Factor 5.879.**
4. Gupta, N. K., Sharma, A., **Rathore, P. K. S.**, & Verma, S. K. (2020). Thermal performance optimization of heat pipe using nanofluid: response surface methodology. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 42(11), 1-16. **Impact Factor 2.220.**
5. Chauhan, V. K., Shukla, S. K., Tirkey, J. V., & **Rathore, P. K. S.** (2020). A comprehensive review of direct solar desalination techniques and its advancements. *Journal of Cleaner Production*, 124719. **Impact Factor 9.297.**
6. **Rathore, P. K. S.**, Shukla, S. K., & Gupta, N. K. (2020). Yearly analysis of peak temperature, thermal amplitude, time lag and decrement factor of a building envelope in tropical climate. *Journal of Building Engineering*, 31, 101459. **Impact Factor 5.318.**
7. **Rathore, P. K. S.**, Shukla, S. K., & Gupta, N. K. (2020). Synthesis and characterization of the paraffin/expanded perlite loaded with graphene nanoparticles as a thermal energy storage material in buildings. *Journal of Solar Energy Engineering*, 142(4). **Impact Factor 2.384.**
8. **Rathore, P. K. S.**, & Shukla, S. K. (2020). An experimental evaluation of thermal behavior of the building envelope using macroencapsulated PCM for energy savings. *Renewable Energy*, 149, 1300-1313. **Impact Factor 8.001.**

9. **Rathore, P. K. S.**, Shukla, S. K., & Gupta, N. K. (2020). Potential of microencapsulated PCM for energy savings in buildings: A critical review. *Sustainable Cities and Society*, 53, 101884. **Impact Factor 7.587.**
10. Gupta, N. K., Verma, S. K., **Rathore, P. K. S.**, & Sharma, A. (2020). Effects of cuo/water nanofluid application on thermal performance of mesh wick heat pipe. *Heat Transfer Research*, 51(9). **Impact Factor 2.44.**
11. **Rathore, P. K. S.**, & Shukla, S. K. (2019). Potential of macroencapsulated PCM for thermal energy storage in buildings: A comprehensive review. *Construction and Building Materials*, 225, 723-744. **Impact Factor 6.141.**
12. **Rathore, P. K. S.**, Chauhan, D. S., & Singh, R. P. (2019). Decentralized solar rooftop photovoltaic in India: On the path of sustainable energy security. *Renewable energy*, 131, 297-307. **Impact Factor 8.001.**
13. Gupta, N. K., Tiwari, A. K., Verma, S. K., **Rathore, P. K. S.**, & Ghosh, S. K. (2019). A comparative study of thermal performance of a heat pipe using water and nanofluid, and a nanoparticle-coated wick heat pipe using water. *Heat Transfer Research*, 50(18). **Impact Factor 2.44.**
14. **Rathore, P. K. S.**, Das, S. S., & Chauhan, D. S. (2018). Perspectives of solar photovoltaic water pumping for irrigation in India. *Energy strategy reviews*, 22, 385-395. **Impact Factor 6.425.**
15. **Rathore, P. K. S.**, Rathore, S., Singh, R. P., & Agnihotri, S. (2018). Solar power utility sector in india: Challenges and opportunities. *Renewable and Sustainable Energy Reviews*, 81, 2703-2713. **Impact Factor 14.982.**

- **Conference proceedings and Chapters in peer reviewed books (International/National)**

1. H. sawarn, S.K. Shukla , **P.K.S. Rathore.** (2021). Development in Solar Cooking Technology in the Last Decade: A Comprehensive Review. International Conference on Futuristic and Sustainable Aspects in Engineering and Technology (FSAET-2020), GLA University. **Selected for publication in IOP Conference Series materials science and engineering. Scopus Indexed.**
2. Sawarn H., **Rathore P.K.S.**, Shukla S.K. (2021) Techno-Economic Feasibility Analysis of Parabolic Solar Cooker in Tropical Environment of India. In: Sikarwar B.S., Sundén B., Wang Q.

(eds) *Advances in Fluid and Thermal Engineering. Lecture Notes in Mechanical Engineering.* Springer, Singapore. https://doi.org/10.1007/978-981-16-0159-0_20. **Scopus Indexed.**

3. Shukla, S. K., & **Rathore, P. K. S.** (2020). Production of biodiesel and its application in engines. *Waste Biorefinery: Integrating Biorefineries for Waste Valorisation*, 379. **Published by Elsevier. Scopus indexed.**

4. N. K. Gupta, **P. S. Rathore** and S. Sinha, "Biodiesel production from waste cooking oil using ultrasonic cavitation & its characteristics," *2017 International Conference on Advances in Mechanical, Industrial, Automation and Management Systems (AMIAMS)*, Allahabad, 2017, pp. 139-143. **Available on IEEE Explore. Scopus indexed.**

5. **Rathore P.K.S.** (2019) An Experimental Study On Solar Water Heater Integrated With Phase Change Material. In: Saha P., Subbarao P., Sikarwar B. (eds) *Advances in Fluid and Thermal Engineering. Lecture Notes in Mechanical Engineering.* **Springer, Singapore. Scopus Indexed**

6. **Rathore PK.** Technological Evaluation of Enhancing Thermal Energy Storage in Buildings Using PCM. Proceedings of the International Conference on Smart Technologies for Green and Sustainable Future, **NIT Bhopal**, 2017, Pages 260-265, **ISBN 978-81-909984-9-9**

7. Rathore PK, Srivastava S, Gupta NK. Solar energy in India: Key for sustainable development. Proceedings of the International Conference on Frontiers in Engineering, Applied Sciences and Technology, **NIT Tiruchurapalli**, 2017, Pages 22-27, **ISBN 978-81-908388-8-7.**

8. Rathore PK, Rathore S. Solar power profile of India: on the path of sustainable development. Proceedings of the National Conference on Energy, **NIT Calicut**, 2016.

9. Rathore PK, Tripathi RN. Performance analysis of 2-stroke gasoline engine by using compressed air. Proceedings of International conference on Industrial Engineering Science and Applications, **NIT Durgapur**, 2014, Pages 177-181, **ISBN 978-93-80813-27-1.**

10. Rathore PK, Rathore S. Performance Analysis of a 2-Stroke Compressed Ignition Engine by Using Compressed Air. Proceedings of International conference on Recent Advances in Mechanical Engineering and Interdisciplinary Developemnts, **IEEE**, 2014, Pages 143-147, **ISBN 978-1-4799-3158-3.**

11. Rathore PK, Singh MP, Agnihotri S. Performance Study of Diesel Engine by using Mahua Methyl Ester (biodiesel)and its Blends with Diesel Fuel. *International Journal of System and Algorithm*, Volume 3, Issue ICRASE 13, 2013, Pages 111-114, **ISSN 2277-2677.**

12. Shukla SK, Singh T, Rathore PK. Comparative Analysis of Plate Type and Fin Tube Type Heat Exchanger for Organic Rankine Cycle. Proceedings of National conference on emerging materials and nanotechnology, 2019, S. S. P. Mandal's Chandmal Tarachand Bora College of Arts, Commerce and Science, Pune.