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## PRINCIPAL RESEARCH OF INTEREST:

- Nanofluids
- Heat Transfer
- Phase Change Material
- Nanostructure Coatings

## PUBLICATIONS:

1. Salyan, S., Praveen, B., Singh, H., **Suresh, S.** and Reddy, A.S., 2020. Liquid Metal Gallium in Metal Inserts for Solar Thermal Energy Storage: A Novel Heat Transfer Enhancement Technique. *Solar Energy Materials and Solar Cells*, 208, p.110365.
2. Pethurajan, Vignesh, **Sivan Suresh**, Ahmad Mojiri, and Alan Johny Konatt. "Microencapsulation of nitrate salt for solar thermal energy storage-synthesis, characterisation and heat transfer study." *Solar Energy Materials and Solar Cells* 206 (2020): 110308.
3. **Suresh, S.** "An experimental investigation on the effect of gravitational orientation on flow boiling performance in different channel sizes ranges from minichannels to microchannels." *Heat and Mass Transfer* (2019): 1-30.
4. Goud, Mallikarjuna, Mugi Vishnu Vardhan Reddy, V. P. Chandramohan, and **S. Suresh**. "A novel indirect solar dryer with inlet fans powered by solar PV panels: drying kinetics of Capsicum Annum and Abelmoschus esculentus with dryer performance." *Solar Energy* 194 (2019): 871-885.
5. Kalidoss, P., S. Venkatachalapathy, and S. Suresh. "Photothermal energy conversion enhancement studies using low concentration nanofluids." *Journal of Solar Energy Engineering* 141, no. 6 (2019).
6. Venkitaraj, K. P., **S. Suresh**, and B. Praveen. "Experimental charging and discharging performance of alumina enhanced pentaerythritol using a shell and tube TES system." *Sustainable Cities and Society* 51 (2019): 101767.
7. Elankovan, R., **S. Suresh**, Krishnadass Karthick, Mohammed Muaaz MD Hussain, and V. P. Chandramohan. "Evaluation of thermoelectric power generated through waste heat recovery from long ducts and different thermal system configurations." *Energy* 185 (2019): 477-491.

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10. Raj, Cyril Reuben, **S. Suresh**, R. R. Bhavsar, and Vivek Kumar Singh. "Recent developments in thermo-physical property enhancement and applications of solid solid phase change materials." *Journal of Thermal Analysis and Calorimetry* 139, no. 5 (2020): 3023-3049.
11. Anbu, S., S. Venkatachalapathy, and **S. Suresh**. "Convective heat transfer studies on helically corrugated tubes with spiraled rod inserts using TiO<sub>2</sub>/DI water nanofluids." *Journal of Thermal Analysis and Calorimetry* 137, no. 3 (2019): 849-864.
12. Raj, Cyril Reuben, **S. Suresh**, R. R. Bhavsar, Vivek Kumar Singh, A. Sarath Reddy, and Arijit Upadhyay. "Manganese-based layered perovskite solid-solid phase change material: Synthesis, characterization and thermal stability study." *Mechanics of Materials* 135 (2019): 88-97.
13. Karthick, Krishnadass, **S. Suresh**, Mohammed Muaaz MD Hussain, Hafiz Muhammad Ali, and CS Sujith Kumar. "Evaluation of solar thermal system configurations for thermoelectric generator applications: A critical review." *Solar Energy* 188 (2019): 111-142.
14. Praveen, B., **S. Suresh**, and Vignesh Pethurajan. "Heat transfer performance of graphene nano-platelets laden micro-encapsulated PCM with polymer shell for thermal energy storage based heat sink." *Applied Thermal Engineering* 156 (2019): 237-249.
15. Muraleedharan, M., H. Singh, M. Udayakumar, and **S. Suresh**. "Modified active solar distillation system employing directly absorbing Therminol 55-Al<sub>2</sub>O<sub>3</sub> nano heat transfer fluid and Fresnel lens concentrator." *Desalination* 457 (2019): 32-38.
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17. Venkitaraj, K. P., and **S. Suresh**. "Experimental thermal degradation analysis of pentaerythritol with alumina nano additives for thermal energy storage application." *Journal of Energy Storage* 22 (2019): 8-16.
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19. Praveen, B., and **S. Suresh**. "Thermal performance of micro-encapsulated PCM with LMA thermal percolation in TES based heat sink application." *Energy Conversion and Management* 185 (2019): 75-86.

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- performance in a rectangular microgap channel." *International Journal of Heat and Mass Transfer* 120 (2018): 1341-1357.
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