An Experimental Evaluation of Specific Heat of Mono and Hybrid Nanofluids



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Abstract The experimental study evaluates the specific heat capacity of diversified mono and hybrid nanofluids. Specific heat is one of the most important attributes of mono and hybrid nanofluids for various heat and thermal applications. Herein, varied mono nanofluids such as CNC, Al₂O₃, and ZnO and only one hybrid nanofluid such as Al₂O₃/CNC have been studied to figure out their specific heat capacity. Standard test method applied to measure the specific heat of mono and hybrid nanofluids by using DSC. Mono nanofluids and hybrid nanofluids present some significant results of specific heat capacity and hybrid nanofluids show a maximum of 126% negativity than mono nanofluids. These experimental values would be a good aspect of the nanofluid applications.

Keywords Specific heat · Mono nanofluids · Hybrid nanofluids · Base fluid

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