

Heat Transfer Augmentation of a Car Radiator Using Nanofluids

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ABSTRACT

The car radiator heat transfer enhancement by using TiO₂ and SiO₂ nanoparticles dispersed in water as a base fluid was studied experimentally. The test rig is setup as a car radiator with tubes and container. The range of Reynolds number and volume fraction are (250–1,750) and (1.0–2.5 %) respectively. Results showed that the heat transfer increases with increasing of nanofluid volume fraction. The experimental data is agreed with other investigator.

KEYWORDS: Thermodynamics; Car radiator; Heat transfer

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