

A Significant Review on Utilization of Hybrid Nanofluid in Heat Exchangers: Theoretical and Experimental

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Abstract:

Heat exchanger is important for cooling and heating in industrial sectors. Current working fluid widely used for heat transfer in heat exchangers is water, which requires large space in a plant. Researchers has found an engineered, nanosized colloidal suspensions named nanofluids that have high potential in replacing water due to its superior thermal properties. Whilst nanofluid shows a promising heat transfer enhancement in heat exchanger, the dispersion of two different types of nanoparticles in a base fluid are expected to have a better efficiency of heat transfer. This paper compiled the studies done by various researchers in implementing hybrid nanofluids as working fluid in heat exchangers and its limitations.

Keywords : Nanotechnology, Hybrid Nanofluid, Heat Exchanger, Heat Transfer

Acknowledgments

The authors would also gratefully acknowledge the financial support from the Ministry of Higher Education and Universiti Malaysia Pahang under the Fundamental Research Grant Scheme (Project Number: Rdu1703253