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THE ROLE OF CARBON NANOTUBES IN THERMAL BEHAVIOR OF HEAT TRANSFER NANOFLUIDS

Invited Paper

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SUMMARY

Carbon Nanotubes (CNTs) lead to increased thermal conductivity for heat transfer fluids. Oil suspensions were studied as a function of CNT concentration. Purified and functionalized nanotubes were used. CNTs enhanced the thermal conductivity by an order of magnitude. Modeling showed the role of the CNTs in enabling increased thermal conductivity.