

## Documents

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### **CNTS-Water-Based Nanofluid Over a Stretching Sheet**

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#### **Abstract**

This article mainly focuses on the energy transfer with the effects of carbon nanotubes (CNTs) of magnetohydrodynamic (MHD) nanofluids flow past a stretching sheet under thermal radiation and Newtonian heating. Single and multi-wall CNTs are considered in water as convectional based fluid. With the help of similarity transformations, the nonlinear ODEs are obtained from system of PDEs. Closed form analytic solutions are obtained for velocity, temperature, and concentration. These solutions are plotted and discussed for pertinent parameters. The results indicate that temperature of CNTs-water-based nanofluid is higher than CNTs-engine oil (or kerosene). Further, heat transfer rate increases due to suspension of CNTs. © 2019, Springer Science+Business Media, LLC, part of Springer Nature.

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