

عنوان مقاله:

Experimental study on effect of stability of graphene nanofluids on convective and overall heat transfer coefficients

محل انتشار:

چهارمین کنفرانس بین المللی دوسالانه نفت، گاز و پتروشیمی (سال: 1401)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

This research, presents the results of an experimental study on the effect of nanofluid stability by controlling the concentration of nanoparticles and surfactant on heat transfer coefficients. The water based nanofluids of graphene prepared at concentrations of 0.01 to 0.1 wt%. A shell and tube heat exchanger has been used to investigation the heat transfer coefficients. By studying the optimal concentration of nanoparticles dispersed in the base fluid, it was concluded that low and high concentration of nanoparticles and surfactants can affect the heat transfer coefficients. By using an appropriate of nanoparticle concentration and surfactant, the convective and overall heat transfer coefficient has improved by 22.47% than the base fluid at highest concentrations

کلمات کلیدی:

Nanofluid, Nanoparticle, Graphene, Heat transfer coefficient, Overall heat transfer coefficient

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