

## عنوان مقاله:

Improvement of SN $\omega\omega$  Lubricant Using CuO and ZnO Nanoparticles

## محل انتشار:

چهارمین کنفرانس بین المللی فناوری های جدید در صنایع نفت، گاز و پتروشیمی (سال: 1401)

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## خلاصه مقاله:

In this research, the effect of CuO and ZnO nanoparticles (NPs) addition on the stability of friction and wear behavior of SN $\omega\omega$  base oil is studied. The wear behavior is studied by the pin-on-disk testing method on ST $\omega\gamma$  steel disks in presence of the prepared lubricants. The test results indicate that ZnO NPs introduced to the base oil are more effective in reducing friction in comparison with CuO NPs. Non-ionic nonylphenol-۱۰ and coconut fatty acid surfactants were used to improve the stability of the nanofluids. Roughness studies by AFM images confirmed that both NPs were effective in reducing friction and wear of ST $\omega\gamma$  steel surface.

## کلمات کلیدی:

Tribology, Nanolubricant, Nanofluid, SN $\omega\omega$  base oil, Friction

## لینک ثابت مقاله در پایگاه سیویلیکا:

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