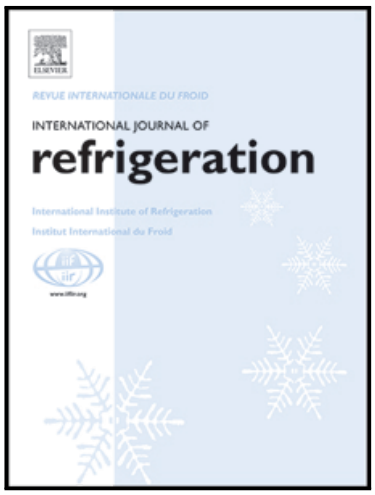

Effect of Oxide Nanoparticles on the Thermal, Rheological and Tribological Behaviours of Refrigerant Compressor Oil; An Experimental Investigation

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Highlights

- Thermal and rheological properties of oxide - PAG nanolubricant are studied.
- Thermal conductivity and viscosity increase with particle volume concentration.
- Shear rate plays a vital role on the behaviour of nanolubricant.
- Non-Newtonian shear thinning behavior is evidenced.
- Oxide based nanolubricants exhibit better friction reduction capability.