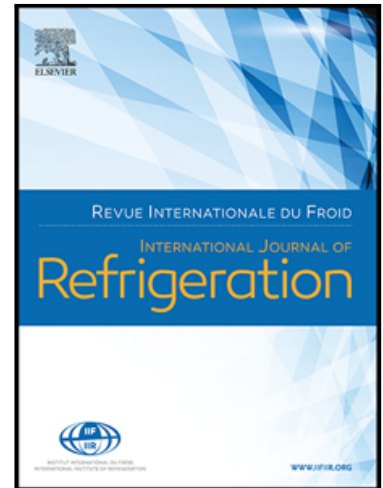


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Tribological and residential air conditioning performance using SiO<sub>2</sub>-TiO<sub>2</sub>/PVE nanolubricant

W.H. Azmi , M.F. Ismail , N.N.M. Zawawi , R. Mamat , S. Safril

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**Tribological and residential air conditioning performance using SiO<sub>2</sub>-TiO<sub>2</sub>/PVE  
nanolubricant**

W.H. Azmi <sup>a,b,\*</sup>, M.F. Ismail <sup>b</sup>, N.N.M. Zawawi <sup>a,\*</sup>, R. Mamat <sup>b</sup>, S. Safril <sup>b</sup>

<sup>a</sup> Centre of Excellence for Advanced Research in Fluid Flow, Lebuhraya Tun Razak, 26300  
Gambang, Kuantan, Pahang, Malaysia. Tel./Fax +6-09-4246338/+6-09-4242202, Email:  
wanazmi2010@gmail.com, naal30@gmail.com

<sup>b</sup> Faculty of Mechanical and Automotive Engineering Technology, Universiti Malaysia  
Pahang Al-Sultan Abdullah, 26600 Pekan, Pahang, Malaysia. Tel./Fax +6-019-6575876,  
Email: mfarid@utem.edu.my, rizalman@ump.edu.my, safril@kemenperin.go.id

\*Corresponding author email: wanazmi2010@gmail.com, naal30@gmail.com

**Title Keywords French**

**Title:**

L'impact de l'Application du nanolubrifiant SiO<sub>2</sub>-TiO<sub>2</sub>/PVE sur la Performance Tribologique  
et Climatiseur Residentiel

**Keywords:**

Nanofluide, nanolubrifiant, tribologie, climatiseur, efficacité énergétique

**Highlights**

1. Tribological and RAC performance using SiO<sub>2</sub>-TiO<sub>2</sub>/PVE nanolubricant was undertaken
2. Nanolubricant was tested using a four-ball method and developed RAC test rig
3. Nanolubricant behaved anti-wear with less friction by 25% for 0.005% concentration
4. Nanolubricant enhanced the COP and EER by up to 39.2% and 52.7%, respectively
5. Nanolubricant feasible to reduce power usage and improve cooling capacity in RAC