Supplementary Materials: Tribological and Thermophysical Properties of Environmentally-Friendly Lubricants Based on Trimethylolpropane Trioleate with Hexagonal Boron Nitride Nanoparticles as Additive

José M. Liñeira del Río¹, María J. G. Guimarey¹, María J. P. Comuñas¹, Enriqueta R. López^{1,*}, Jose I. Prado², Luis Lugo² and Josefa Fernández¹

- ¹ Laboratory of Thermophysical Properties, NaFoMat Group, Department of Applied Physics, Faculty of Physics, University of Santiago de Compostela, E-15782 Santiago de Compostela, Spain
- ² Departamento de Física Aplicada, Facultade de Ciencias, Universidade de Vigo, E-36310 Vigo, Spain
- * Correspondence: enriqueta.lopez@usc.es

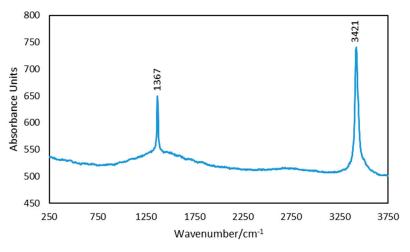


Figure S1. Raman spectrum of h-BN nanoparticles.

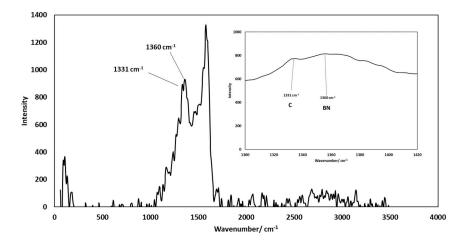


Figure S2. Deconvolution of the Raman spectrum corresponding to the red areas of the mapping (Figure 11d) for the 0.75 wt.% h-BN nanolubricant. Inset: Detail of the overlapping peaks.

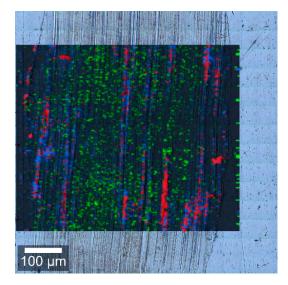


Figure S3. Optical image of the worn surface tested with the 0.75 wt.% h-BN nanolubricant combined the with its Raman spectra mapping (Figure 10).

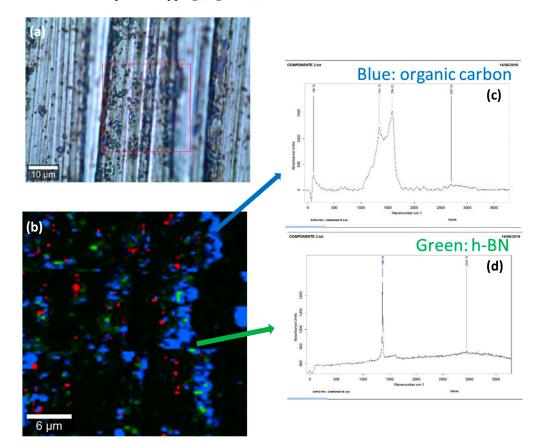


Figure S4. Raman spectra corresponding to the worn surface obtained with the 1 wt.% h-BN nanolubricant. (a) Micrograph of the worn surface; (b) Mapping of the components in the worn surface; (c) Spectrum of the blue area; (d) Spectrum of the green area.



© 2019 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).