

*Supplementary Material*

# Condensation By-Products in Wet Peroxide Oxidation: Fouling or Catalytic Promotion? Part II: Activity, Nature and Stability

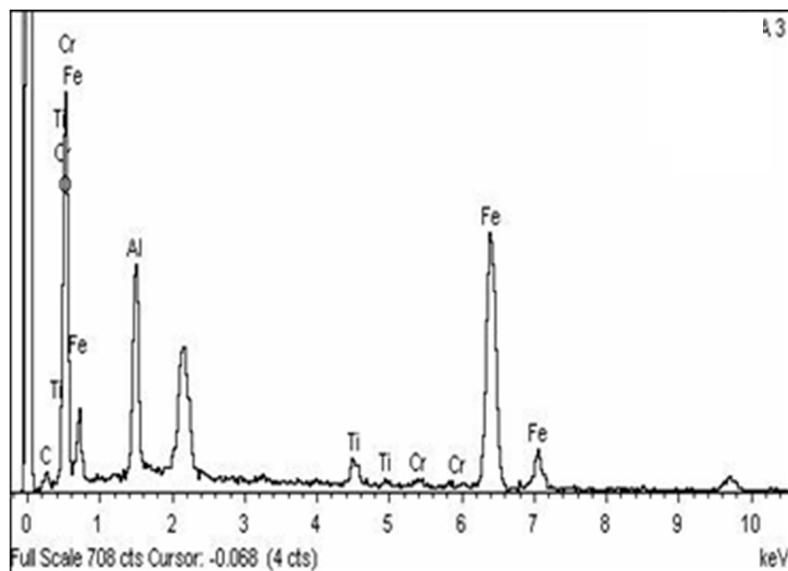
Asunción Quintanilla<sup>1</sup>, Jose L. Diaz de Tuesta<sup>2,3</sup>, Cristina Figueruelo<sup>1</sup>, Macarena Muñoz<sup>1,\*</sup> and Jose A. Casas<sup>1</sup>

<sup>1</sup> Chemical Engineering Department, Universidad Autónoma de Madrid, Ctra. Colmenar km 15, 28049 Madrid, Spain; asun.quintanilla@uam.es (A.Q.); cfigueruelo@gmail.com (C.F.); jose.casas@uam.es (J.A.C.)

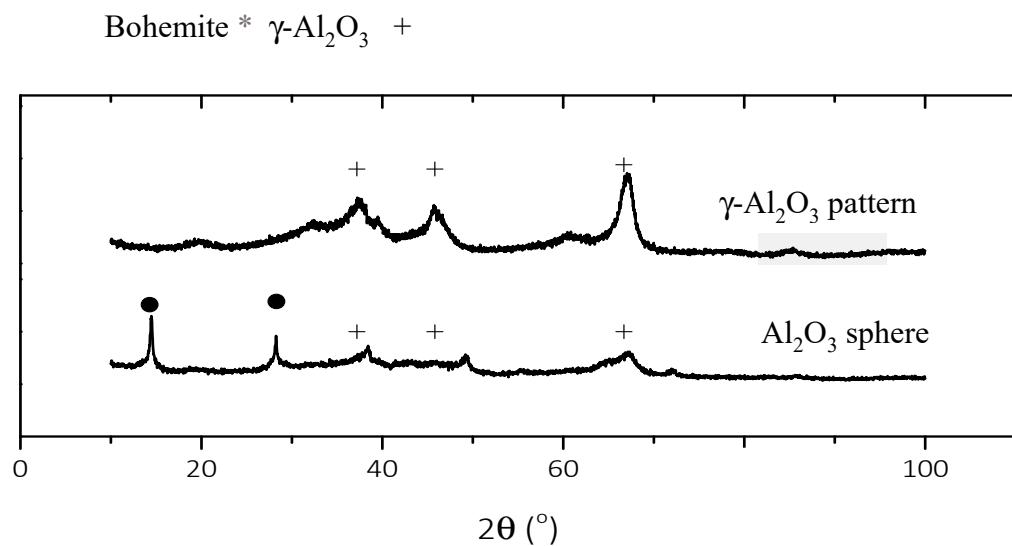
<sup>2</sup> Centro de Investigação de Montanha (CIMO), Instituto Politécnico de Bragança, 5300-253 Bragança, Portugal; jl.diazdetuesta@ipb.pt

<sup>3</sup> Laboratório de Processos de Separação e Reação - Laboratório de Catálise e Materiais (LSRE-LCM), Faculdade de Engenharia, Universidade do Porto, 4200-465 Porto, Portugal

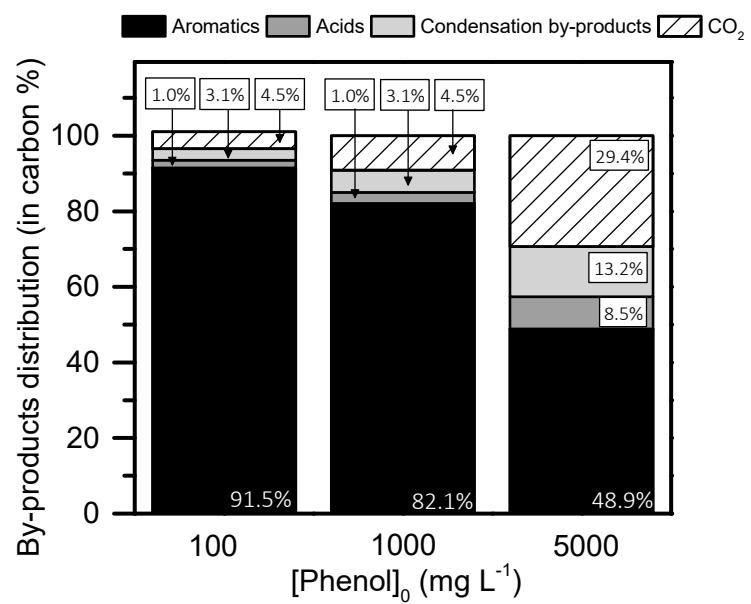
\* Correspondence: macarena.munoz@uam.es; Tel: 34 91 497 3991; Fax: +34 91497 3516



**Figure S1.** EDX spectra of the Al<sub>2</sub>O<sub>3</sub> spheres after being used in the WPO-O<sub>2</sub> of phenol.



**Figure S2.** XRD spectra of the fresh Al<sub>2</sub>O<sub>3</sub>



**Figure S3.** Influence of the initial phenol concentration on the by-product distribution in the WPO-O<sub>2</sub> process.