

Supporting Information

**Insights into the structure-property-activity relationship in molybdenum-doped octahedral molecular sieve manganese oxides for catalytic oxidation**

Homer C. Genuino<sup>a,b</sup>, Diego Valencia<sup>c</sup>, Steven L. Suib<sup>a,d,e\*</sup>

<sup>a</sup> Department of Chemistry, University of Connecticut, 55 North Eagleville Road, Storrs, Connecticut, 06269-3060, USA

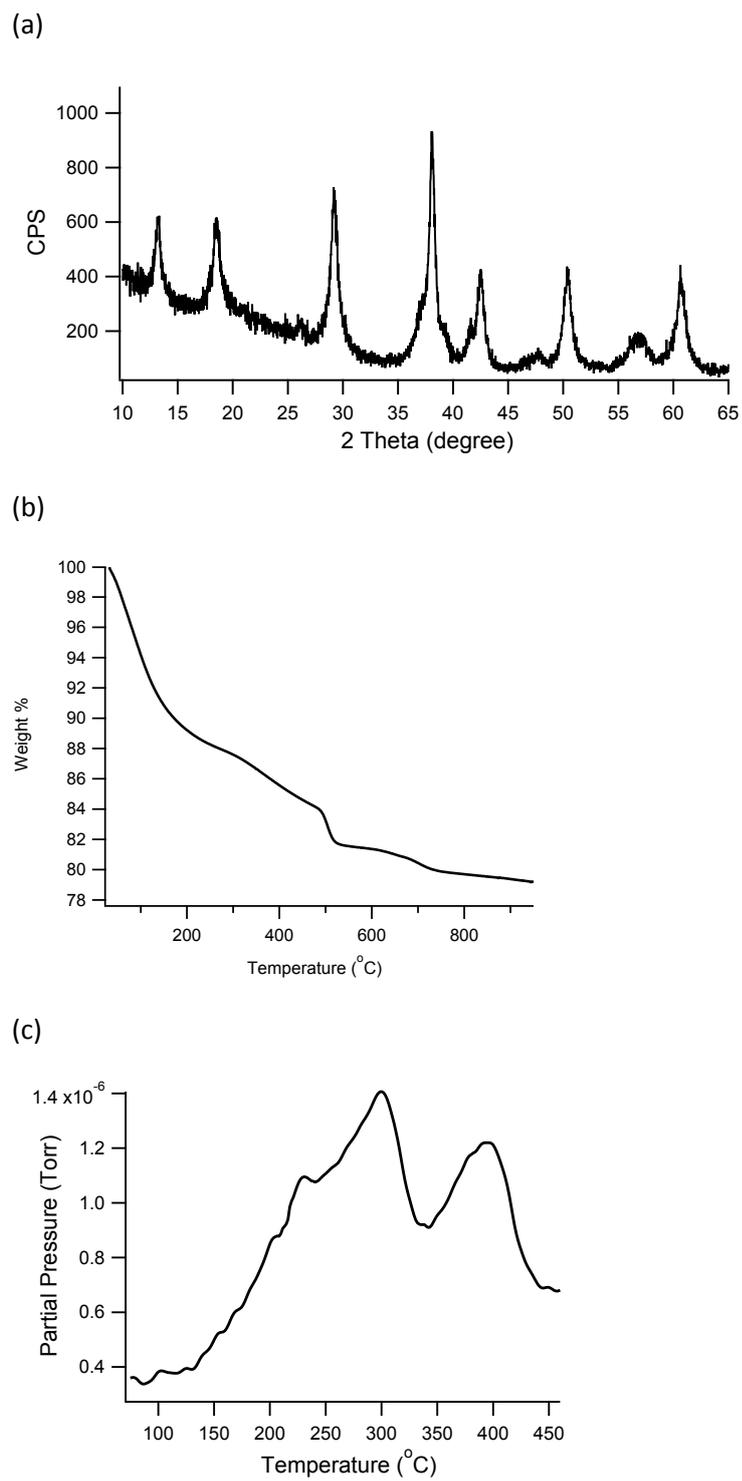
<sup>b</sup> Engineering and Technology institute Groningen (ENTEG), Department of Chemical Engineering, University of Groningen, Nijenborgh 4, 9747 AG, Groningen, The Netherlands

<sup>c</sup> Dirección de Investigación en Transformación de Hidrocarburos, Instituto Mexicano del Petróleo, Eje Central Lázaro Cárdenas 152, Colonia San Bartolo Atepehuacán, C.P. 07730 Mexico City, Mexico

<sup>d</sup> Institute of Materials Science, University of Connecticut, 97 North Eagleville Road, Storrs, Connecticut, 06269-3136, USA

<sup>e</sup> Department of Chemical and Biomolecular Engineering, University of Connecticut, 191 Auditorium Road, Storrs, Connecticut, 06269-3222, USA

\* Corresponding author at: Telephone: +1-860-486-2797; Fax: +1-860-486-2981; Email: Steven.Suib@uconn.edu



**Figure S1.** (a) XRD pattern, (b) TGA profile, and (c) CO-TPR profile of spent 5% Mo-K-OMS-2 after stability runs for 28 h at 150 °C under wet conditions.

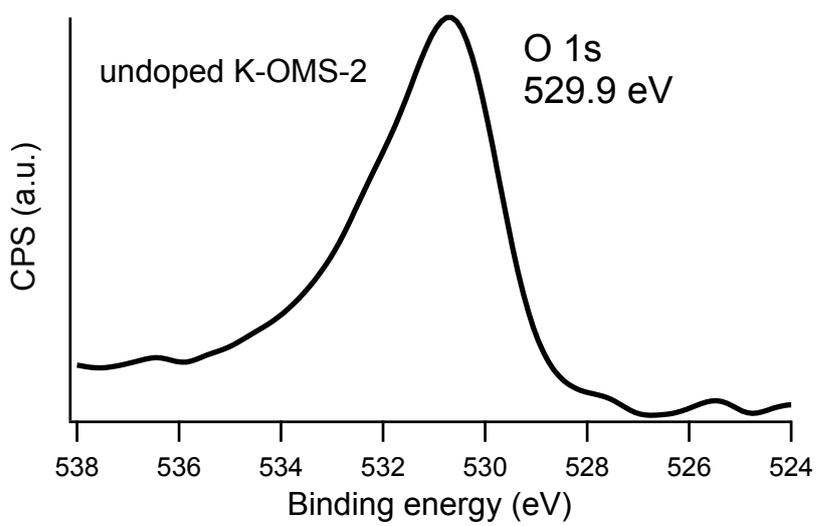


Figure S2. O1s XPS spectrum of undoped K-OMS-2 material.