

In situ evaluation of interfacial affinity in CeO₂ based hybrid nanoparticles by pulsed field gradient NMR

François Ribot,^{*a} Virginie Escax,^b Claire Roiland,^a Clément Sanchez,^a José C. Martins,^c Monique Biesemans,^b Ingrid Verbruggen,^b Rudolph Willem^b

^a Chimie de la Matière Condensée (CNRS UMR 7574), Université Pierre et Marie Curie, 4 place Jussieu, 75252 Paris, France. Fax: 33 1 4427 4769; Tel: 33 1 4427 4135; E-mail: fri@ccr.jussieu.fr

^b Hoog Resolutie NMR Centrum (HNMR), Vrije Universiteit Brussel, Pleinlaan 2, 1050 Brussel, Belgium.

^c Eenheid NMR en Structuuranalyse, Vakgroep Organische Chemie, Universiteit Gent, Krijgslaan 281, 9000 Gent, Belgium.

Electronic Supplementary Information

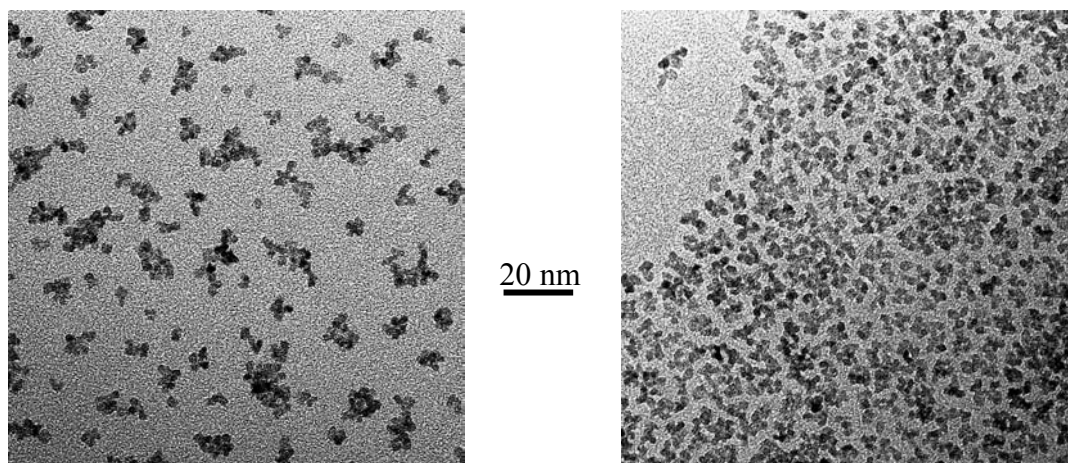


Fig. 1 TEM observation (Jeol 100 Cx II) of the original cerium oxide nanoparticles (left) and after reaction with lauric acid (right)

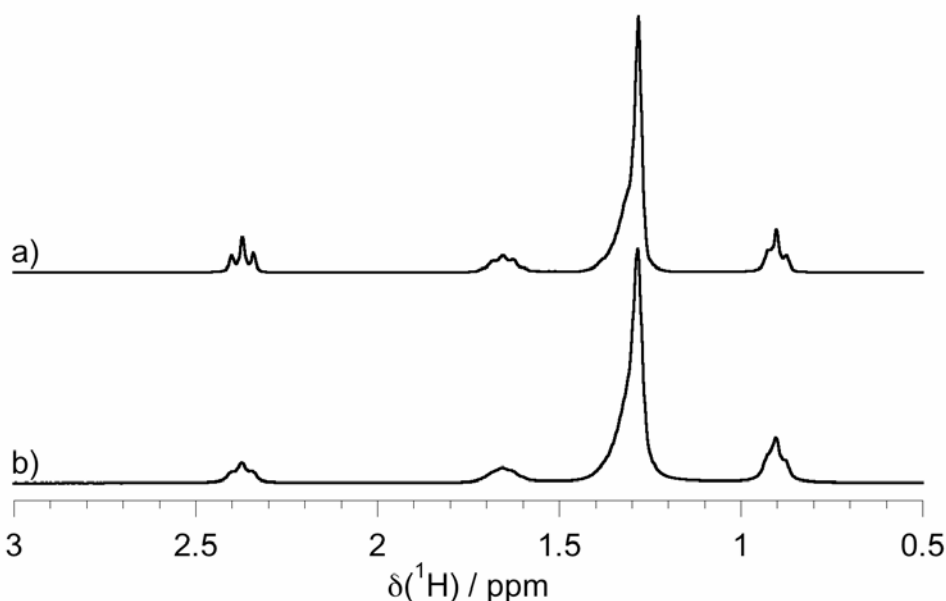


Fig. 2 ¹H NMR spectra (at 250 MHz) of lauric acid in CDCl₃ (a) and of functionalized cerium oxide nanoparticles in CDCl₃ (b)