Supplementary information

New Journal of Chemistry, September 2014

Strawberry-like SiO_2@Pd and Pt nanomaterials

Alfonso Cornejo,[a,b] Gad Fuks,[a] Víctor Martínez-Merino,[b] Íñigo Sarobe,[b] Maria José Gil,[b] Karine Philippot,[c] Bruno Chaudret,[a] Fabien Delpech,[a*] and Céline Nayral[a*]

a) Université de Toulouse ; INSA, UPS, CNRS ; LPCNO (Laboratoire de Physique et Chimie des Nano-Objets), 135 avenue de Rangueil, F-31077 Toulouse, France.

b) Dpto, de Química Aplicada, Ed. "Los Acebos", Campus de Arrosadia, Universidad Pública de Navarra, E31006, Pamplona, Spain.

c) CNRS, LCC (Laboratoire de Chimie de Coordination du CNRS), 205 route de Narbonne, BP 44099, F-31077 Toulouse, France ; Université de Toulouse, UPS, INPT, F-31077 Toulouse Cedex 4, France

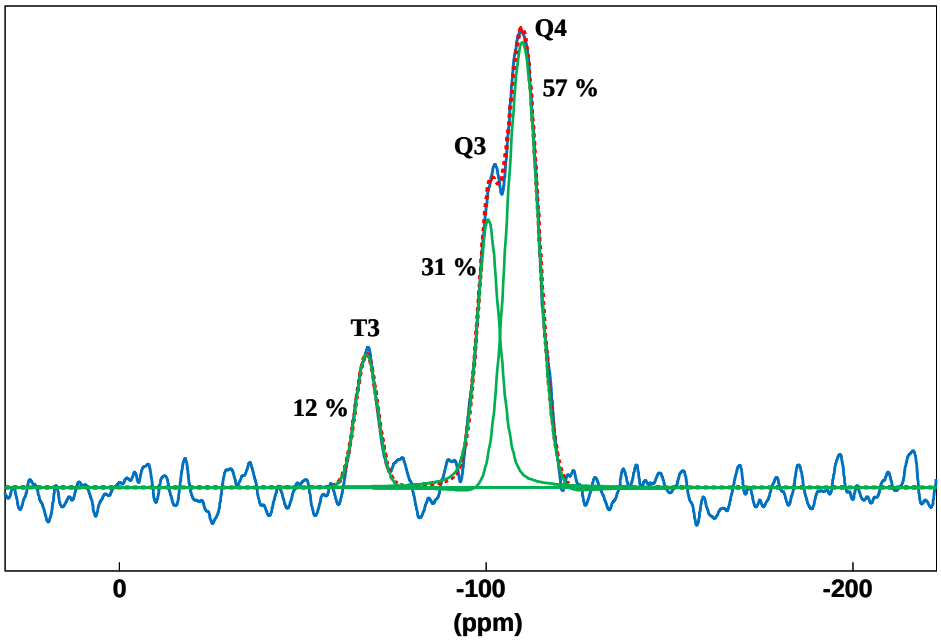

Figure S1: $^{29}Si\{^{1}H\}$ MAS NMR spectrum of Pd NPs grafted onto silica NPs functionalized with APTES/PTES in a 1/1 ratio. Spectrum was fully deconvoluted using dmfit software

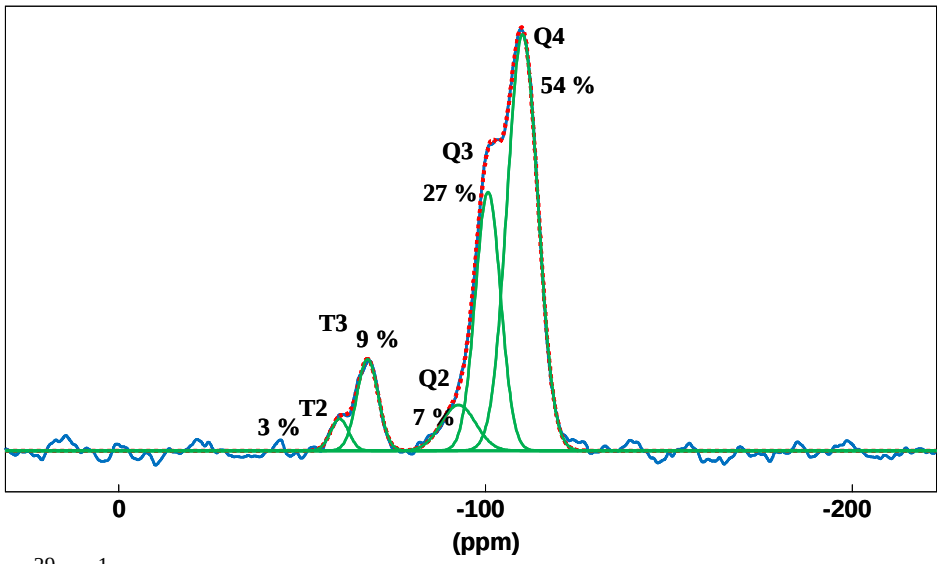

Figure S2: $^{29}Si\{^{1}H\}$ MAS NMR spectrum of Pd NPs grafted onto silica NPs functionalized with APTES/PTES in a 1/3 ratio. Spectrum was fully deconvoluted using dmfit software

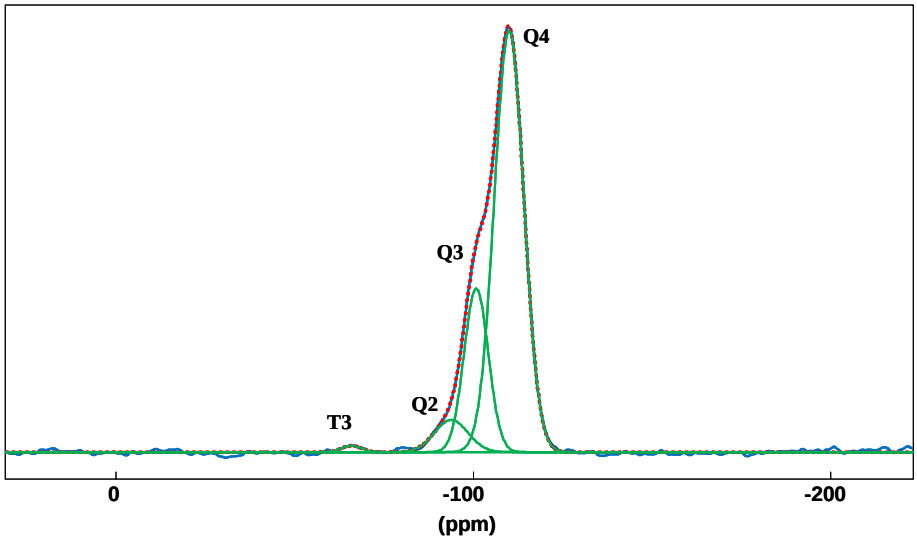

Figure S3: $^{29}Si\{^{1}H\}$ MAS NMR spectrum of Pd NPs grafted onto silica NPs functionalized with PhPETES. Spectrum was fully deconvoluted using dmfit software

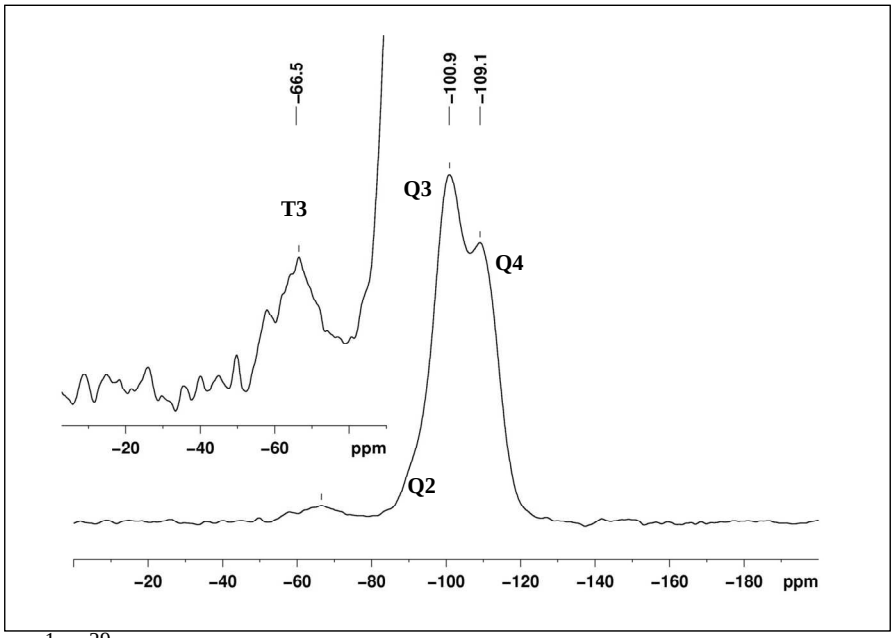

Figure S4: CP ^{1}H-^{29}Si MAS NMR spectrum of Pd NPs grafted onto silica NPs functionalized with PhPETES.

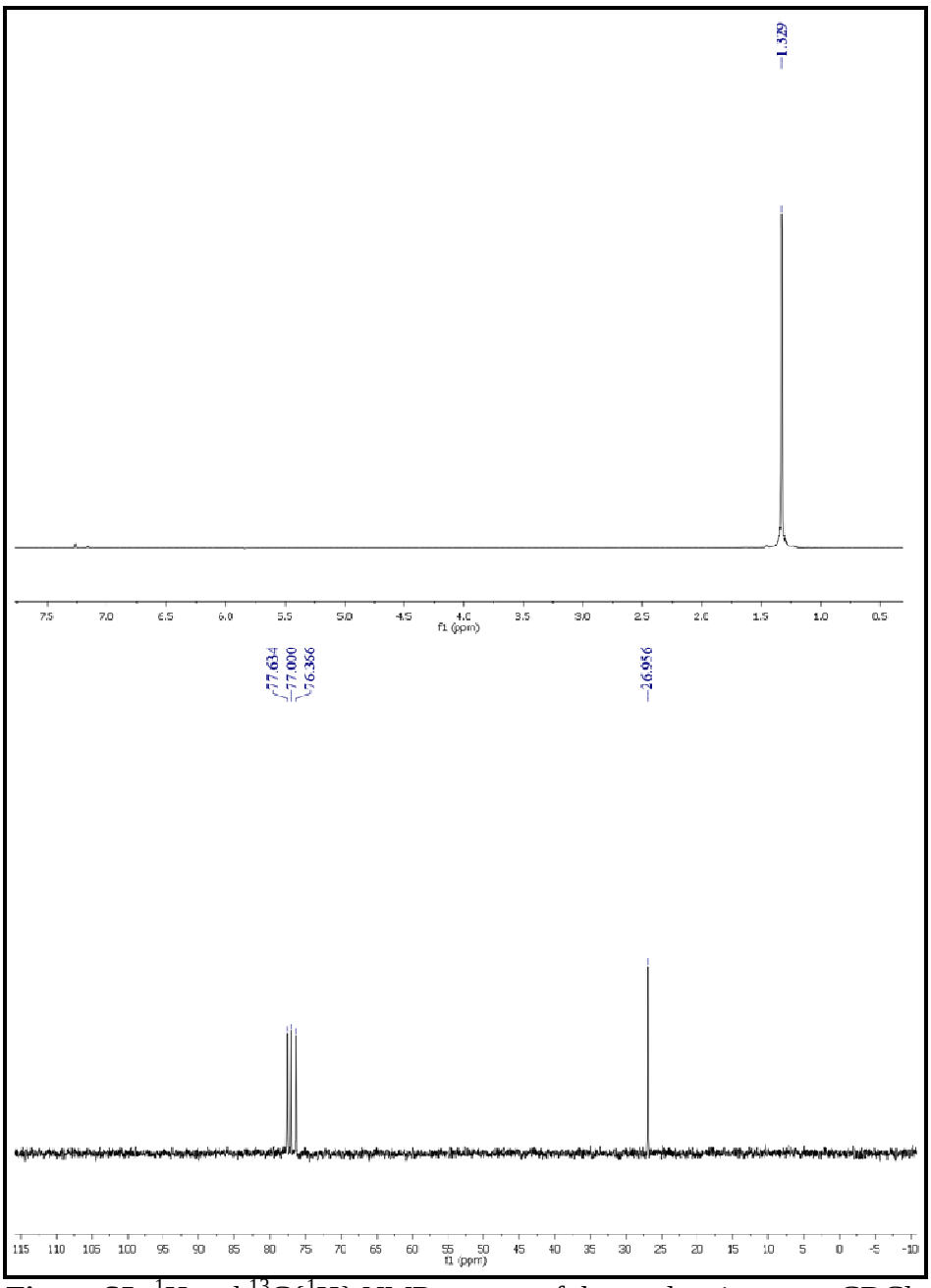

Figure S5: ^{1}H and $^{13}C\{^{1}H\}$ NMR spectra of the crude mixture en $CDCl_3$