Rare Earth Doped Silica Nanoparticles *via* Thermolysis of a Single Source Metallasilsesquioxane Precursor

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Supplementary Information

Figures and Tables

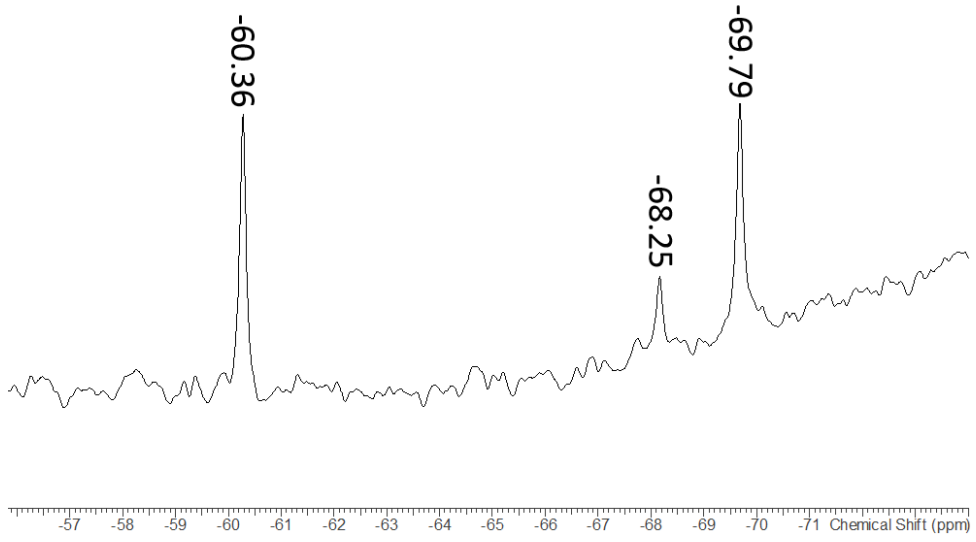

Figure S1. ^{29}Si NMR of (c-C_6H_{11})$_7$Si$_7$(OH)$_3$ showing peaks at -60.36, -68.25 and -69.79 ppm in a ratio of 3:1:3, representing the 3 environments of Si in the incompletely condensed trisilanol.

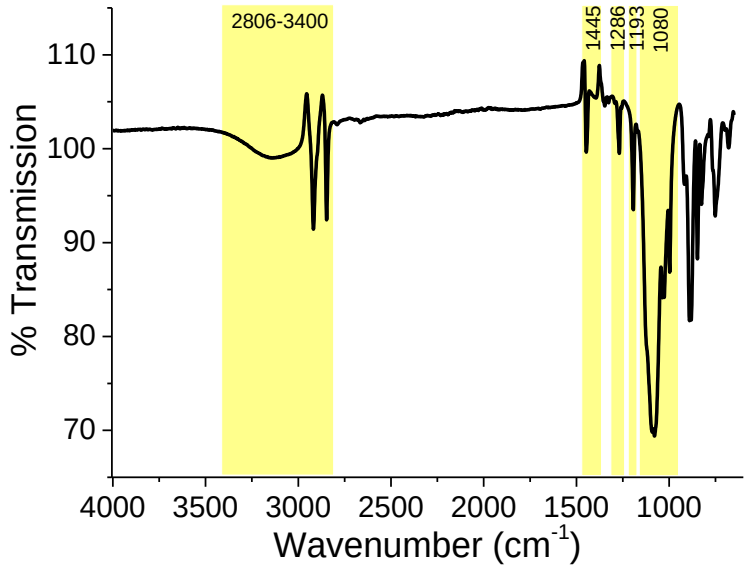

Figure S2. FTIR of (c-$C_6H_{11})_7Si_7(OH)_3$.

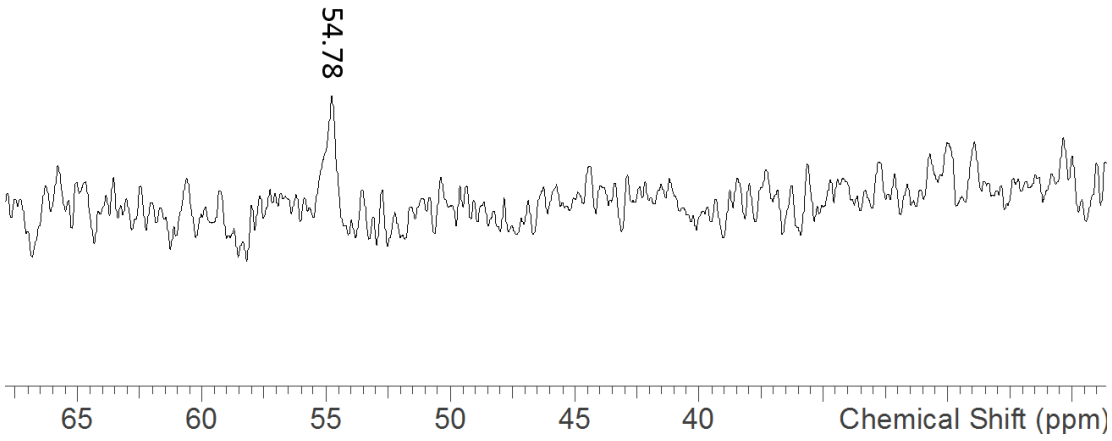

Figure S3. ^{29}Si NMR of [$(THF)_3Li(\mu$-Cl)Eu[$N(SiMe_3)_2]_3$] showing a single peak at 54.78 ppm, as dictated by the symmetry of the compound.

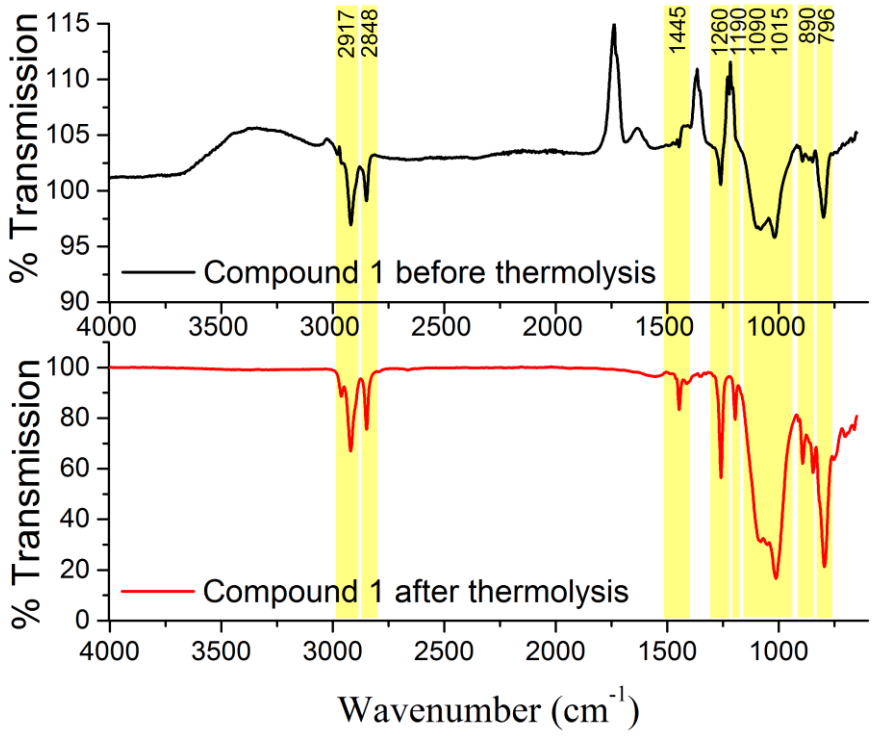

Figure S4. FTIR of compound **1** before and after thermolysis, as labelled.

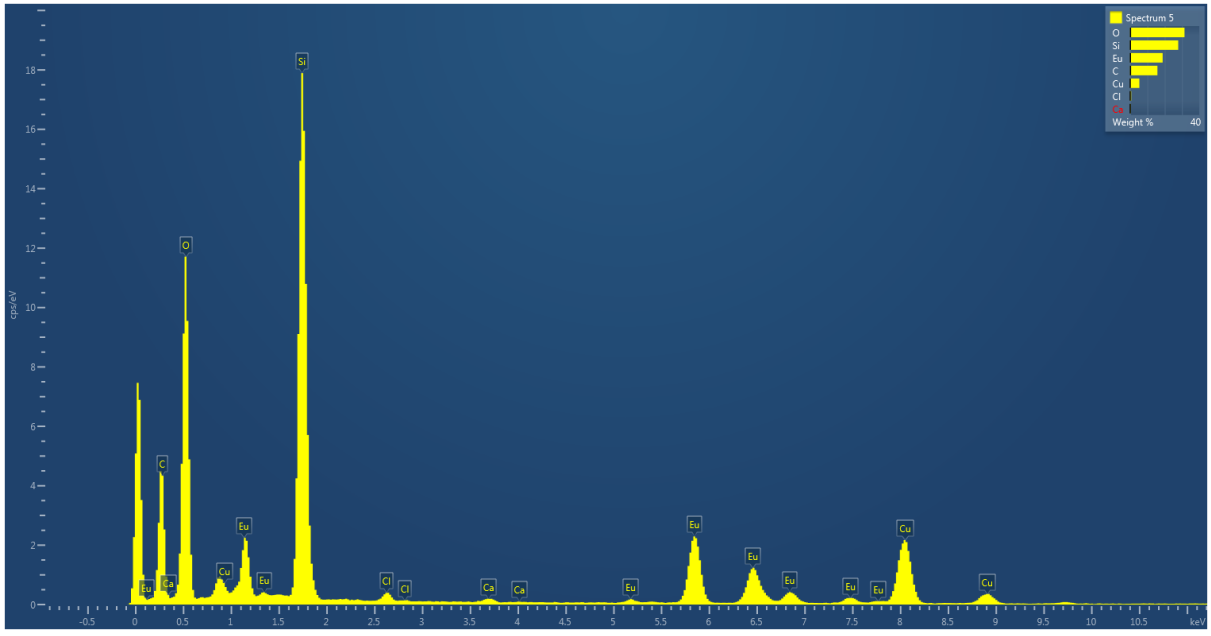

Figure S5. EDS spectrum showing elements present in thermolytically-prepared nanoparticles.

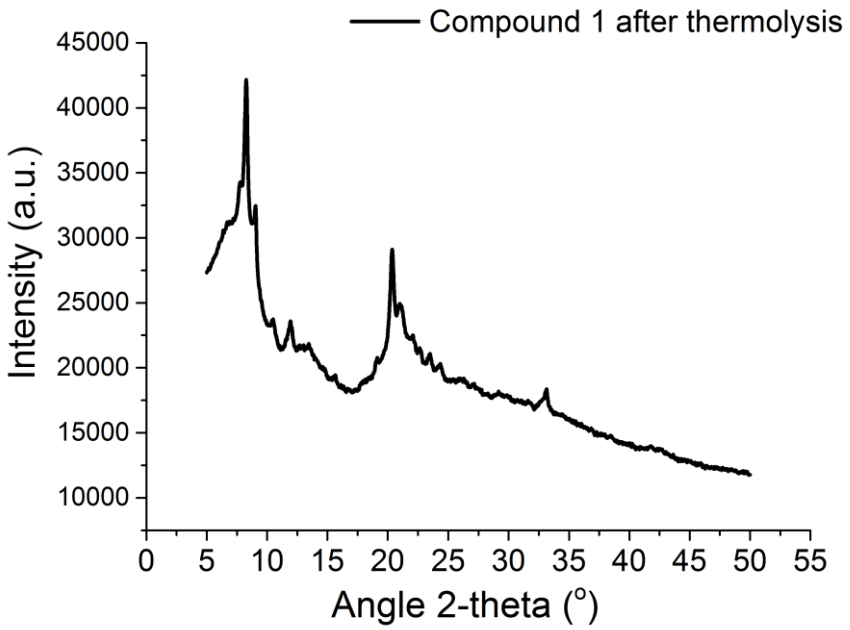

Figure S6. X-ray diffraction pattern of nanoparticles produced after thermolytic treatment of compound **1**.

Table S1. Energy dispersive x-ray spectroscopy(EDS) data showing elemental composition of nanoparticles prepared by the thermolytic decomposition of compound **1**.

Element	%Atom
C [a]	29.21
O	43.65
Si	22.01
Cu [b]	1.86
Eu	2.75

[a] C signal comes predominantly from the carbon support film; [b] The presence of Cu is due to the copper grid used to support sample.