Supporting Materials

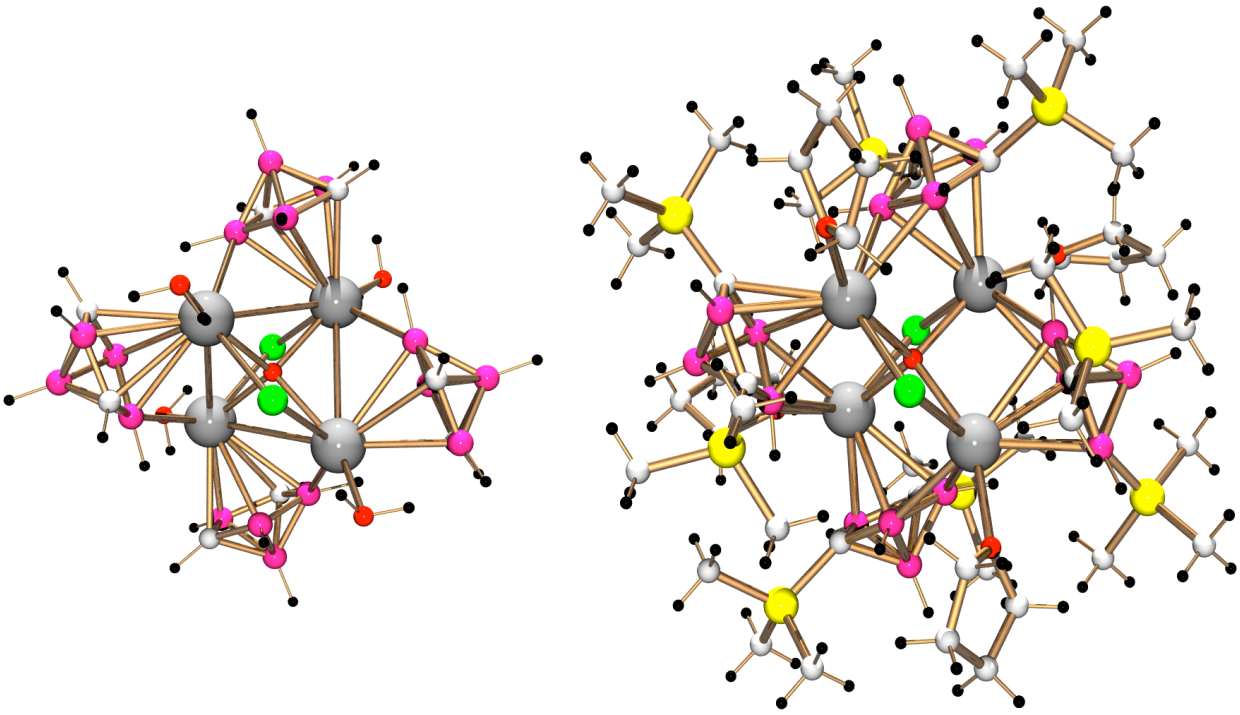

Figure 1. Calculated structure of model system $La_4OCl_2(C_2B_4H_6)_4(OH_2)_4$ (left) as compared with crystallographically determined structure of $Nd_4OCl_2(C_2B_4H_4[SiMe_3]_2)_4(THF)_4$ (right), in the same orientation. Color scheme: B, pink; C, light grey; M, grey; O, red; Si, yellow; H, black.

Table 1. Selected interatomic distances (Å) for calculated structure of $La_4OCl_2(C_2B_4H_6)_4(OH_2)_4$ and crystallographically determined structure of $Nd_4OCl_2(C_2B_4H_4[SiMe_3]_2)_4(THF)_4$.

	$La_4OCl_2(C_2B_4H_6)_4(OH_2)_4$	$Nd_4OCl_2(C_2B_4H_4[SiMe_3]_2)_4(THF)_4$
M-M	3.957, 4.092, 3.898, 3.957, 4.088	3.828, 3.966, 3.825, 3.979, 3.828
M-O	2.421, 2.457	2.378, 2.369
$M\text{-}O_{THF}$	2.575, 2.451	2.484, 2.499
M-Cl	2.951, 2.969	2.780, 2.797
M-C	2.840, 2.753	2.778, 2.795
M-B	2.780, 2.891, 2.850	2.766, 2.786, 2.766
$M\text{-}B_{BRIDGE}$	2.863, 2.968	2.770, 2.877