

3. Morphological Studies

3.1 - SEM pictures of $[\text{Y}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (1)

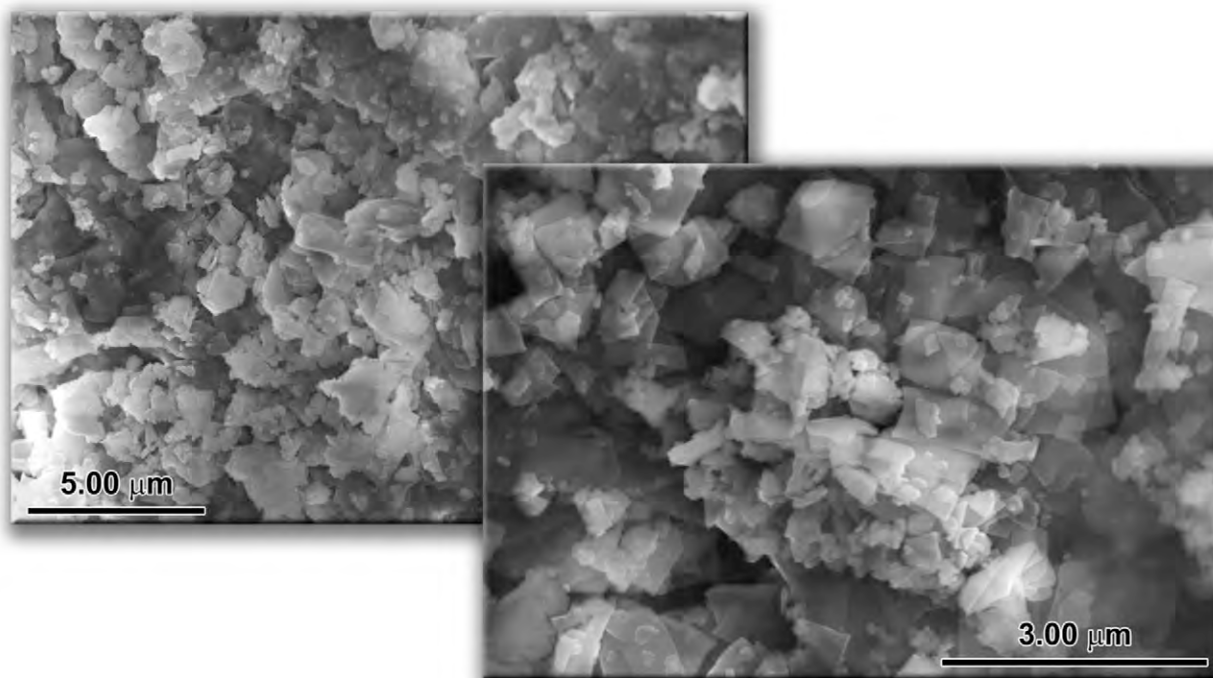


Figure S14 - SEM pictures of $[\text{Y}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (1).

3.2 - SEM pictures of $[\text{Pr}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (3)

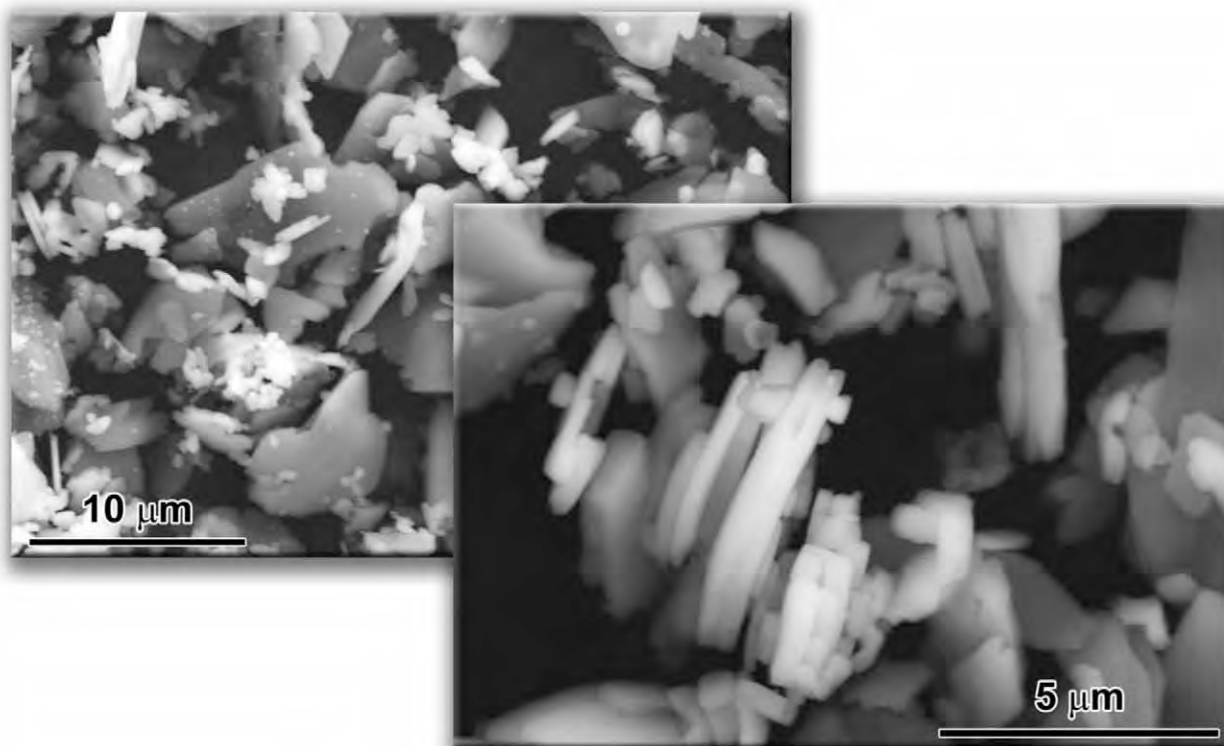


Figure S15 - SEM pictures of $[\text{Pr}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (3).

3.3 - SEM pictures of $[\text{Nd}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (4)

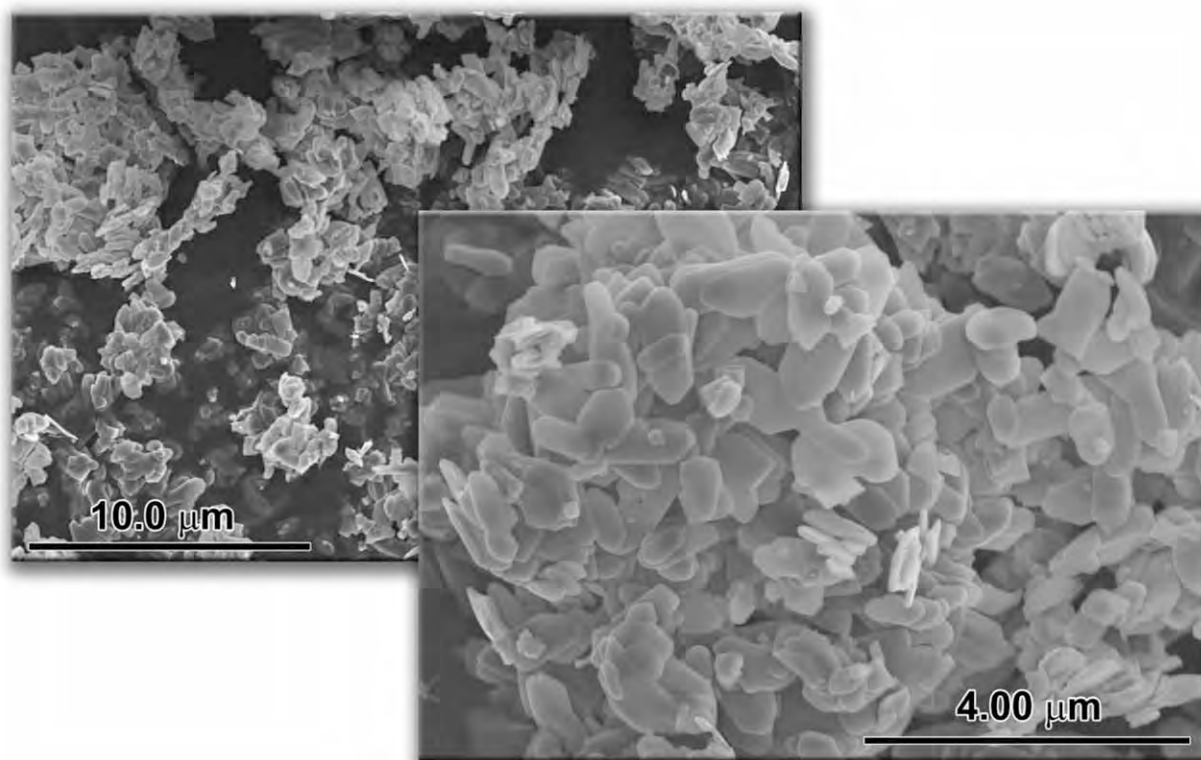


Figure S16 - SEM pictures of $[\text{Nd}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (4).

3.4 - SEM pictures of $[\text{Sm}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (5)



Figure S17 - SEM pictures of $[\text{Sm}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (5).

3.5 - SEM pictures of $[\text{Eu}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (6)

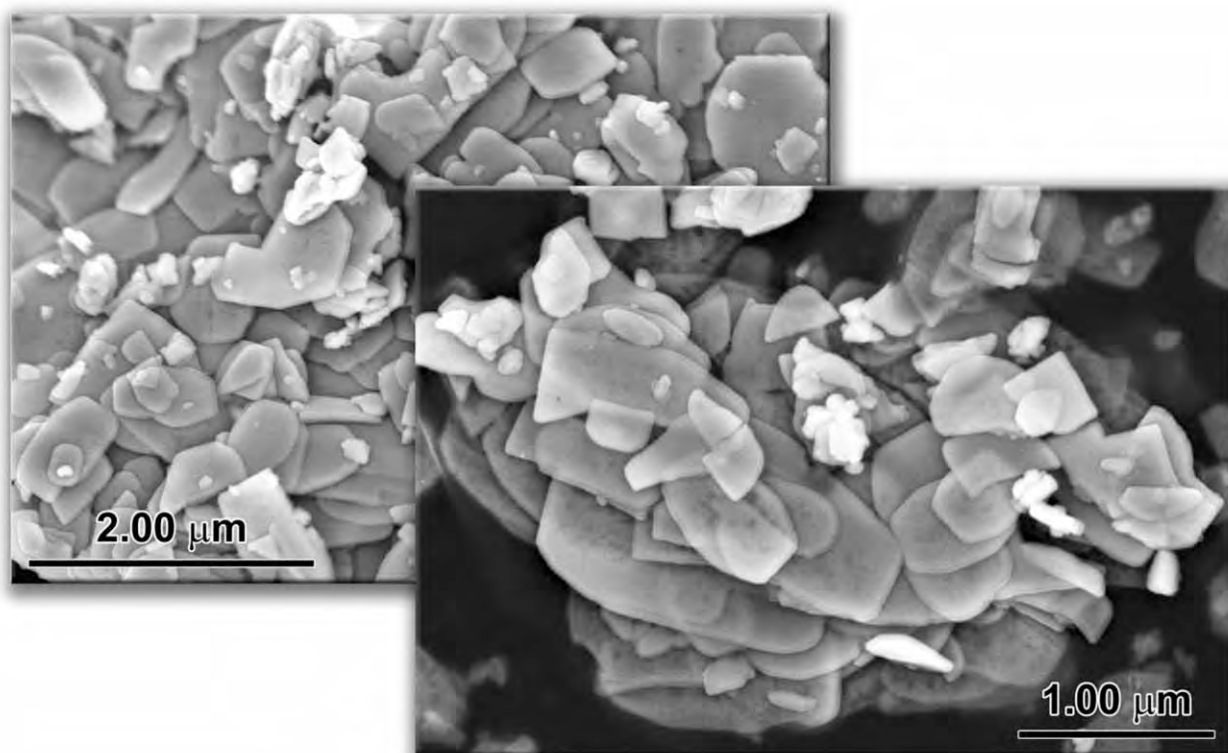


Figure S18 - SEM pictures of $[\text{Eu}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (6).

3.6 - SEM pictures of $[\text{Gd}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (7)

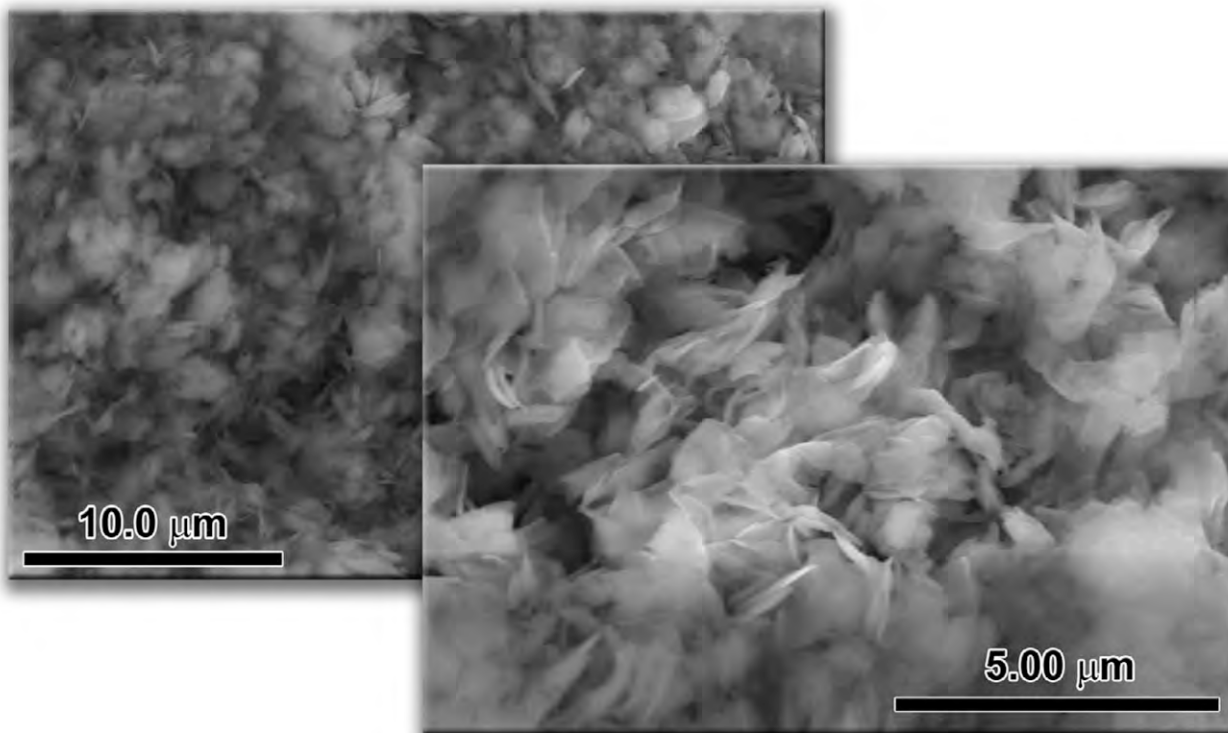


Figure S19 - SEM pictures of $[\text{Gd}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (7).

3.7 - SEM pictures of $[\text{Tb}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (8)

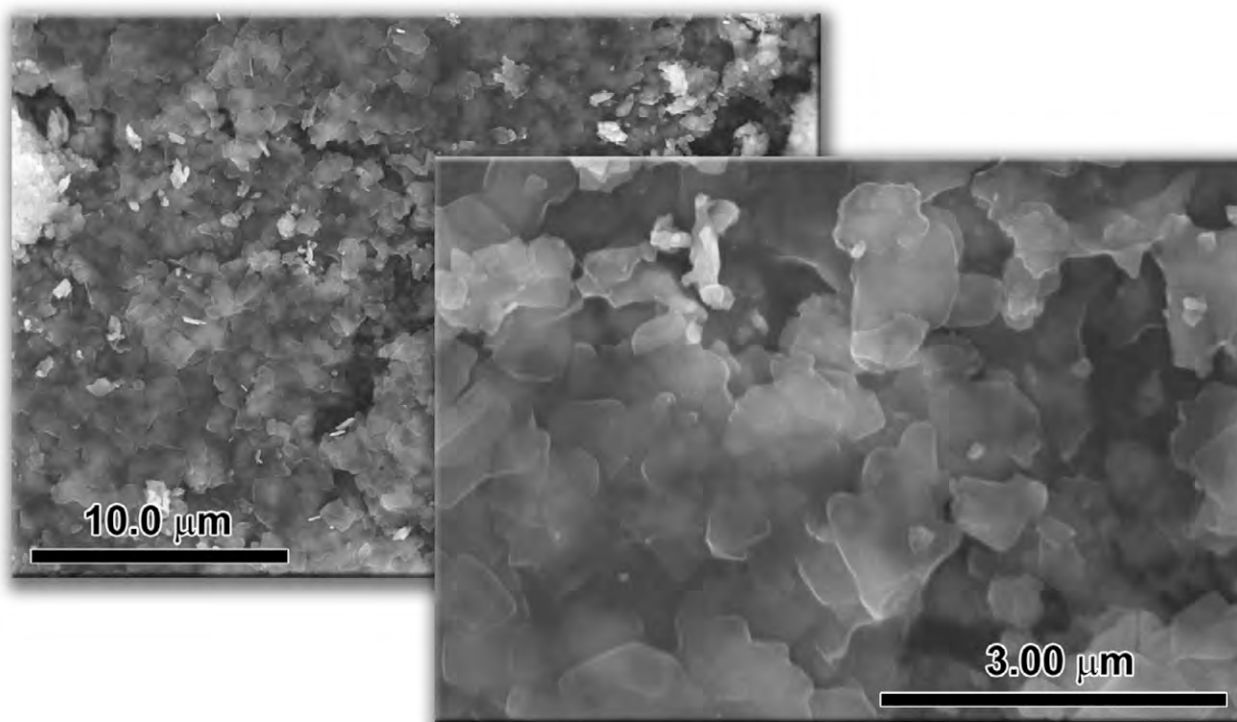


Figure S20 - SEM pictures of $[\text{Tb}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (8).

3.8 - SEM pictures of $[\text{Dy}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (9)

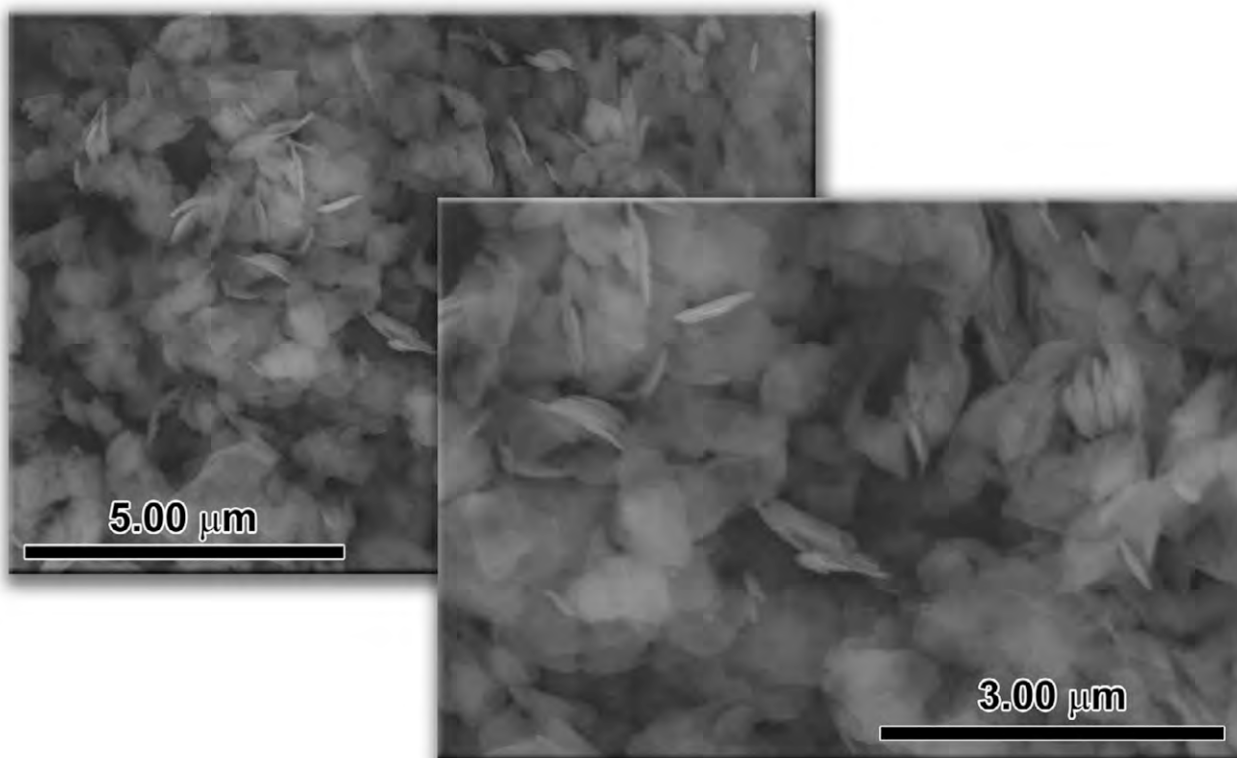


Figure S21 - SEM pictures of $[\text{Dy}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (9).

3.9 - SEM pictures of $[\text{Ho}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (10)

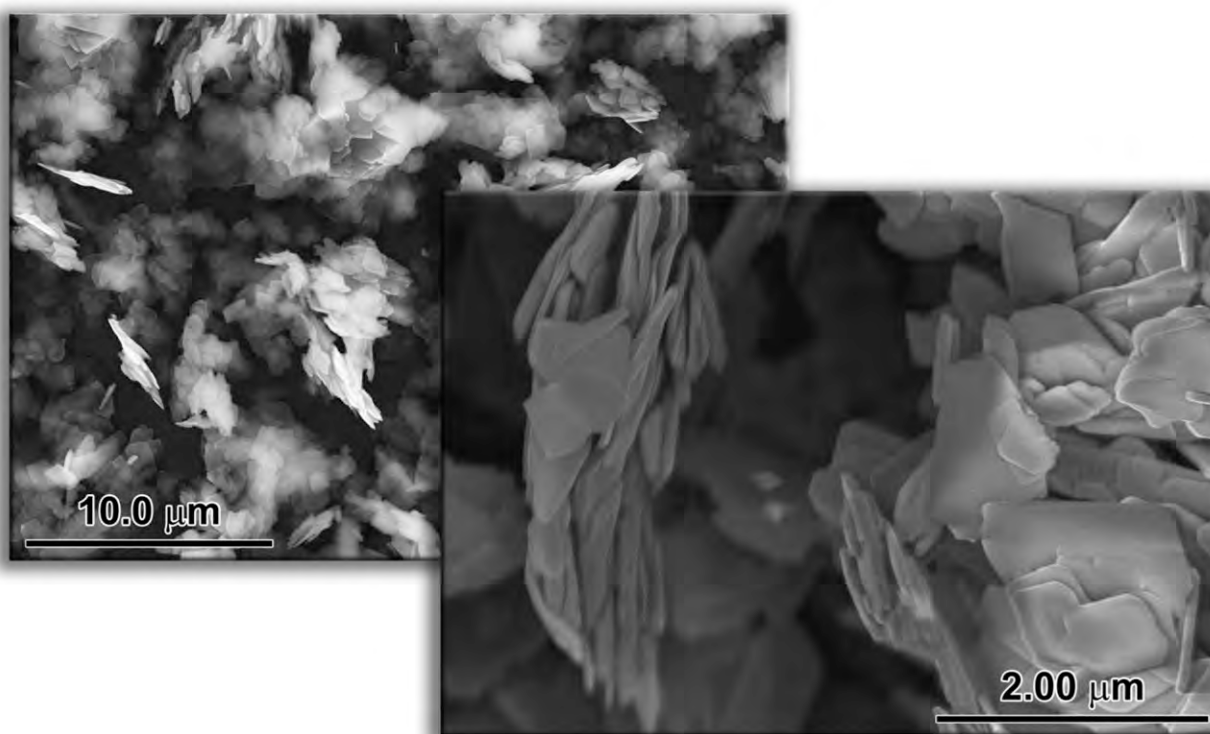


Figure S22 - SEM pictures of $[\text{Ho}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (10).

3.10 - SEM pictures of $[\text{Er}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (11)

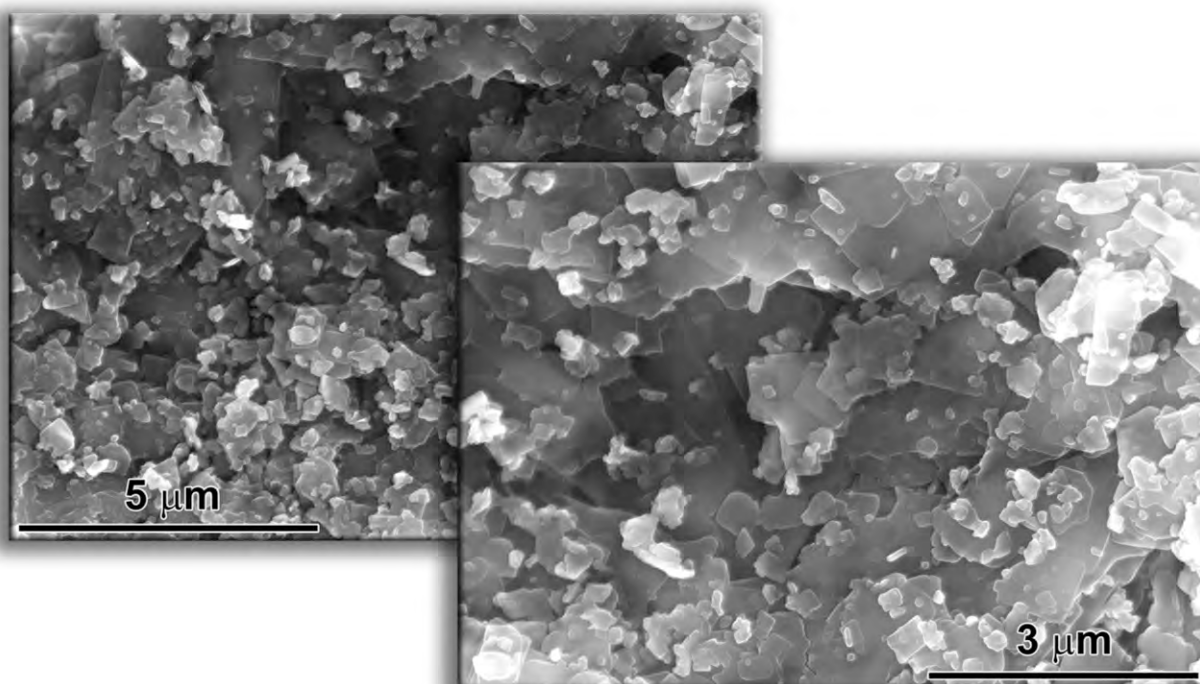


Figure S23 - SEM pictures of $[\text{Er}(\text{H}_2\text{cmp})(\text{H}_2\text{O})]$ (11).