**Supplement Table 1** Comparison of the surface area, pore volume and pore size between MMT and CHC

| Items                                      | MMT    | CHC    |
|--------------------------------------------|--------|--------|
| **Surface Area (m²/g)**                    |        |        |
| Single point surface area                  | 39.23  | 1313.40|
| BET surface area                           | 40.71  | 1440.09|
| Langmuir surface area                      | 54.16  | 1692.65|
| T-plot micropore area                      | 0      | 991.87 |
| T-plot external surface area               | 40.71  | 448.22 |
| BJH adsorption cumulative surface area     | 42.45  | 457.52 |
| BJH desorption cumulative surface area     | 59.68  | 473.19 |
| **Pore Volume (cm³/g)**                    |        |        |
| Single point adsorption total pore volume  | 0.18   | 1.28   |
| T-plot micropore volume                    | 0      | 0.42   |
| BJH adsorption cumulative volume           | 0.18   | 0.87   |
| BJH desorption cumulative volume           | 0.18   | 0.87   |
| **Pore Size (nm)**                         |        |        |
| Total adsorption average pore width (4V/A by BET) | 17.23  | 3.56   |
| BJH adsorption average pore width (4V/A)   | 16.94  | 7.64   |
| BJH desorption average pore width (4V/A)   | 12.05  | 7.39   |
| BJH median pore width                      | 2.23   | 2.04   |
Supplement Figure 1 Elemental analysis for CHC

Supplement figure 1 Elemental analysis of CH