

Supporting Information

High Pressure Methane, Carbon Dioxide and Nitrogen Adsorption on Amine-Impregnated Porous Montmorillonite Nano-Clays

Mert Atilhan^{*a}, Selma Atilhan,^{b§} Ruh Ullah^{a§}, Baraa Anaya^a, Tahir Cagin^b, Cafer T. Yavuz^c
Santiago Aparicio^{*d}

^a Department of Chemical Engineering. Qatar University, Doha. Qatar

^b Department of Chemical Engineering. Texas A&M University, College Station. TX, USA

^c Graduate School of EEWS, KAIST, Daejeon 305-701 Republic of Korea

^d Department of Chemistry. University of Burgos, Burgos, Spain

*Corresponding author: mert.atilhan@qu.edu.qa (MA) and sapar@ubu.es (SA)

§Equal Contribution

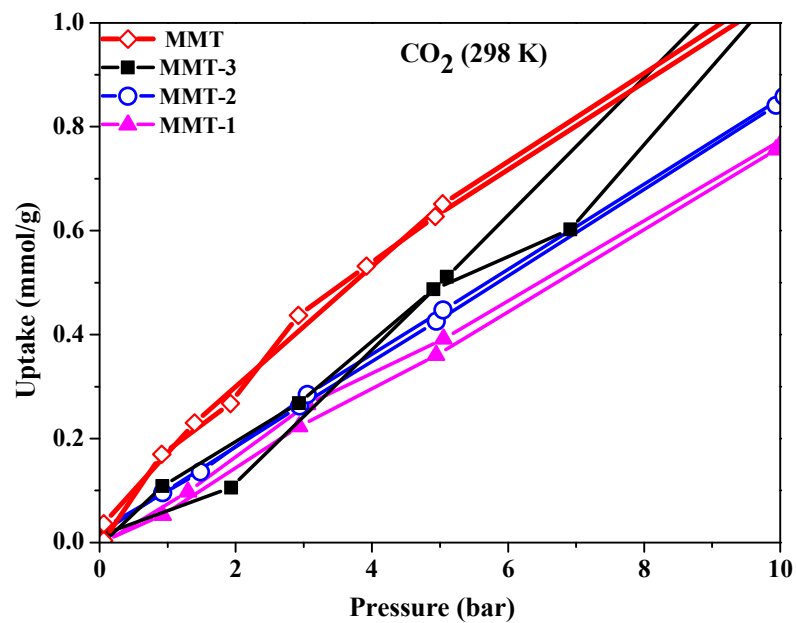


Figure S1. CO₂ adsorption at low pressure up to 10 bars and 298 K.

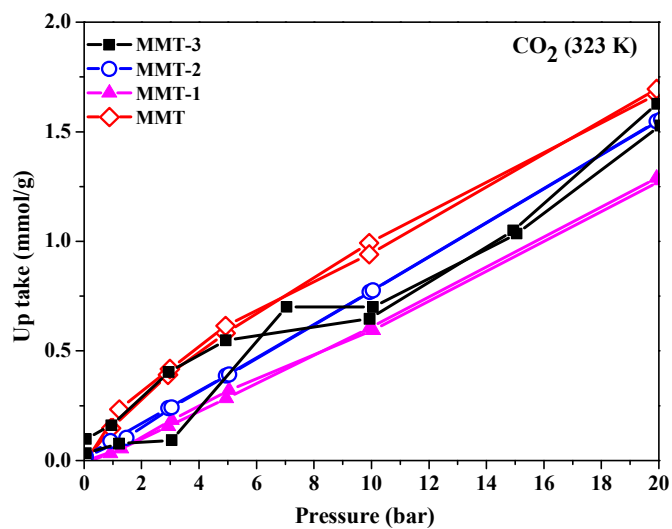


Figure S2. CO₂ adsorption at low pressure up to 20 bars and 323 K.

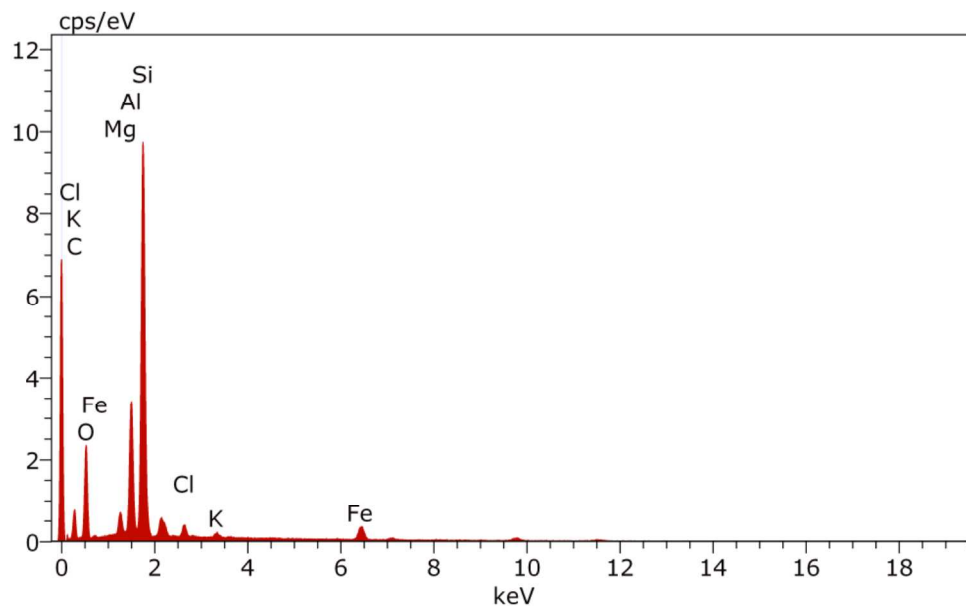


Figure S3. EDX analysis of MMT-1.

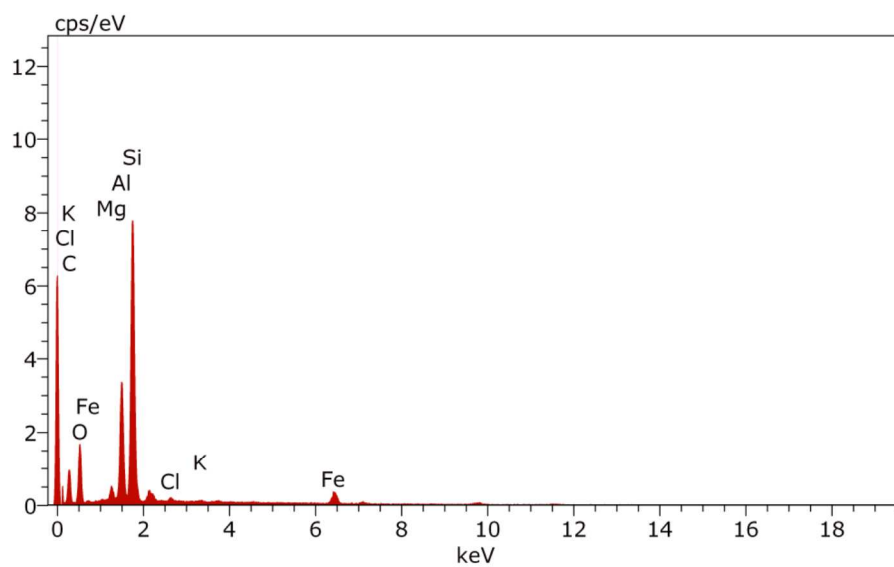


Figure S4. EDX analysis of MMT-2.

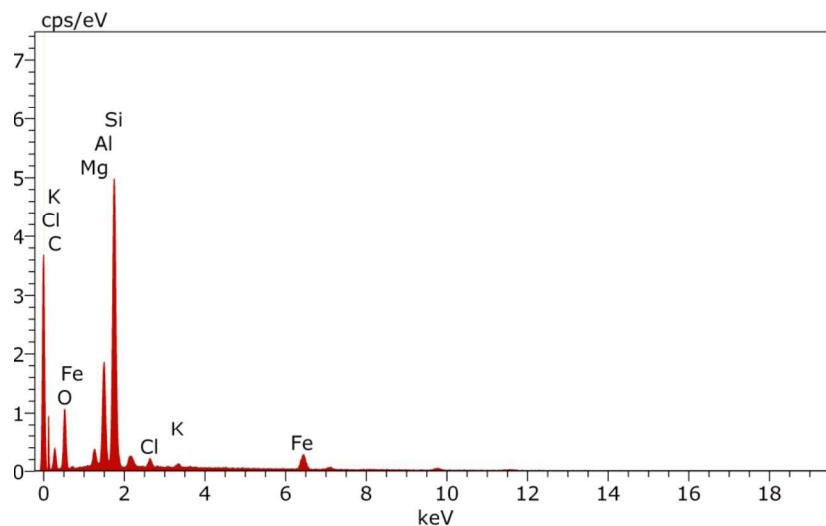


Figure S5. EDX analysis of MMT-3.

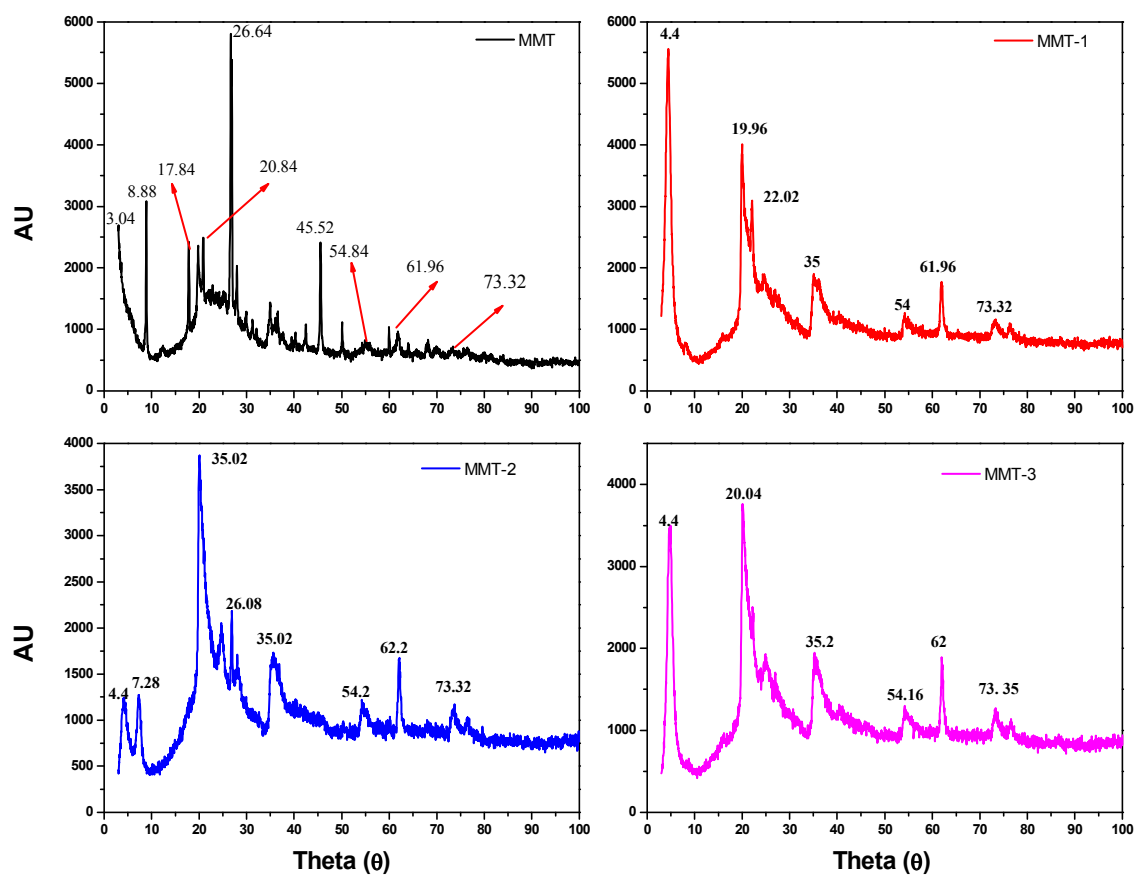


Figure S6. XRD analysis of MMT, MMT-1, MMT-2 and MMT-3.