Supplementary Material

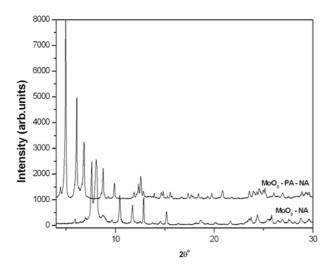


Figure 1. Comparison of the XRD patterns of MoO₃-OA composite with and without propylamine.

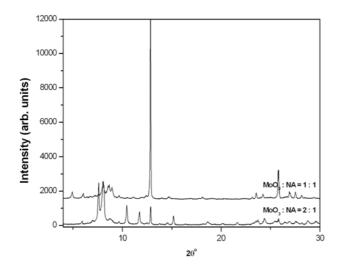
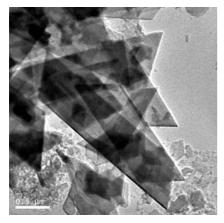
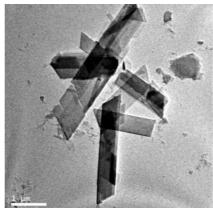
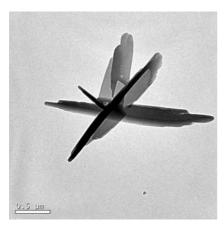


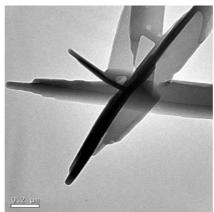
Figure 2. XRD patterns of MoO₃-OA composite with MoO₃: amine ratios of 1:1 and 2:1.



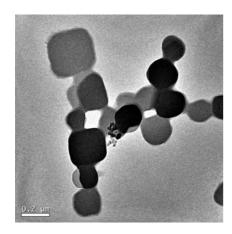


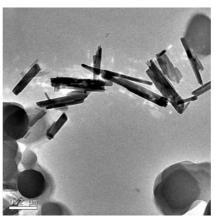
MoO₃-PA composite



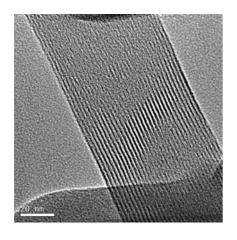


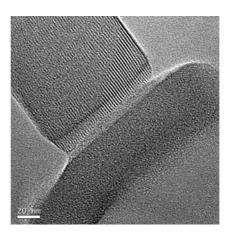
MoO₃-BA composite





 $MoO_3\text{-}OA$ composite after acid treatment





MoO₃-DDA Composite

Figure 3. TEM images of molybdenum oxide amine composites.

As discussed in the article, once amines are intercalated, separation of the sheets of the precursor takes place. Once separated, the sheets are highly unstable and start bending due to their high surface energy. From the Figure one can clearly observe the breaking of large sheets soon after their exfoliation.