

CuO-In₂O₃ Catalysts Supported on Halloysite Nanotubes for CO₂ Hydrogenation to Dimethyl Ether

Alexey Pechenkin^{1,2,*}, Dmitry Potemkin^{2,3}, Maria Rubtsova¹, Pavel Snytnikov², Pavel Plyusnin⁴ and Aleksandr Glotov¹

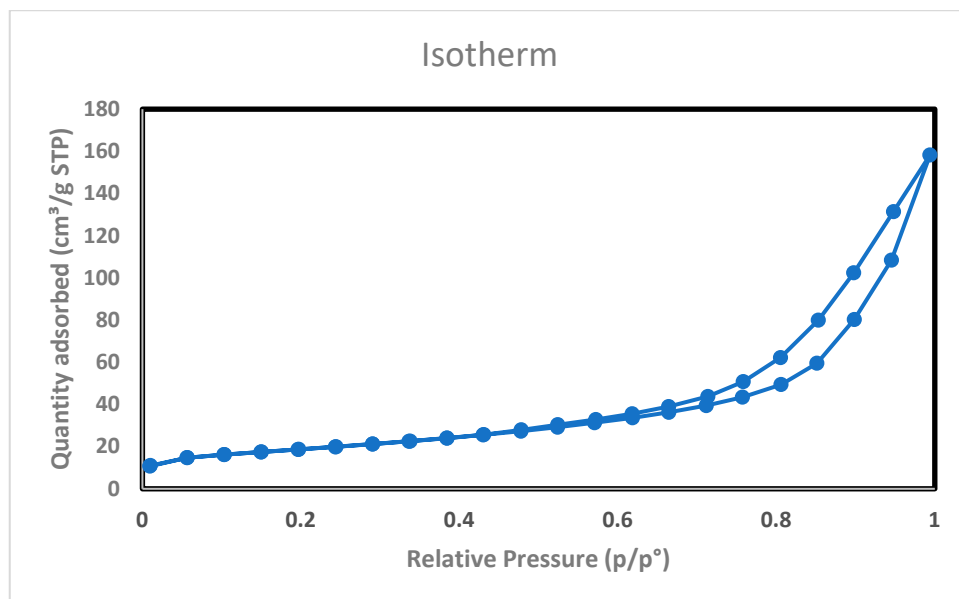
¹ Department of Physical and Colloid Chemistry, Faculty of Chemical Technology and Ecology, Gubkin Russian State University of Oil and Gas, 65 Leninsky prosp., 119991 Moscow, Russia; pechenkin@catalysis.ru (A.P.); artemovamai@gmail.com (M.R.); glotov.a@gubkin.ru (A.G.)

² Boreskov Institute of Catalysis, Pr. Akademika Lavrentieva, 5, 630090, Novosibirsk, Russia; potema@catalysis.ru (D.P.), pvsnyt@catalysis.ru (P.S.)

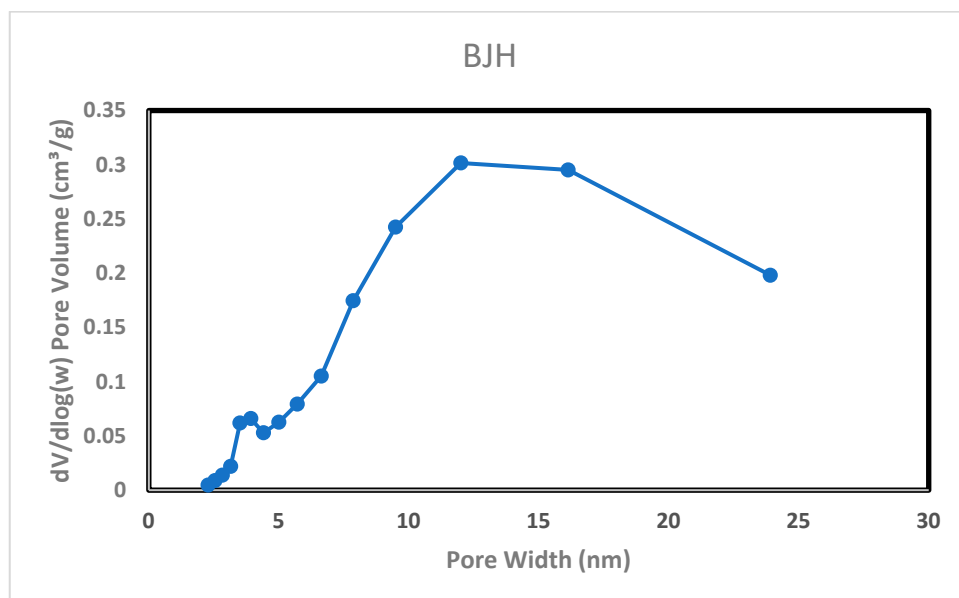
³ Department of Environmental Engineering, Novosibirsk State Technical University, Karl Marx Pr., 20, 630073, Novosibirsk, Russia.

⁴ Nikolaev Institute of Inorganic Chemistry, Siberian Branch of the Russian Academy of Science, Novosibirsk 630090, Russia; plus@niic.nsc.ru.

* Correspondence: pechenkin@catalysis.ru



(A)



(B)

Figure S1. Nitrogen adsorption/desorption isotherms (A) and pore size distribution (B) of $\text{CuO-In}_2\text{O}_3/\text{HNT}$ catalyst.

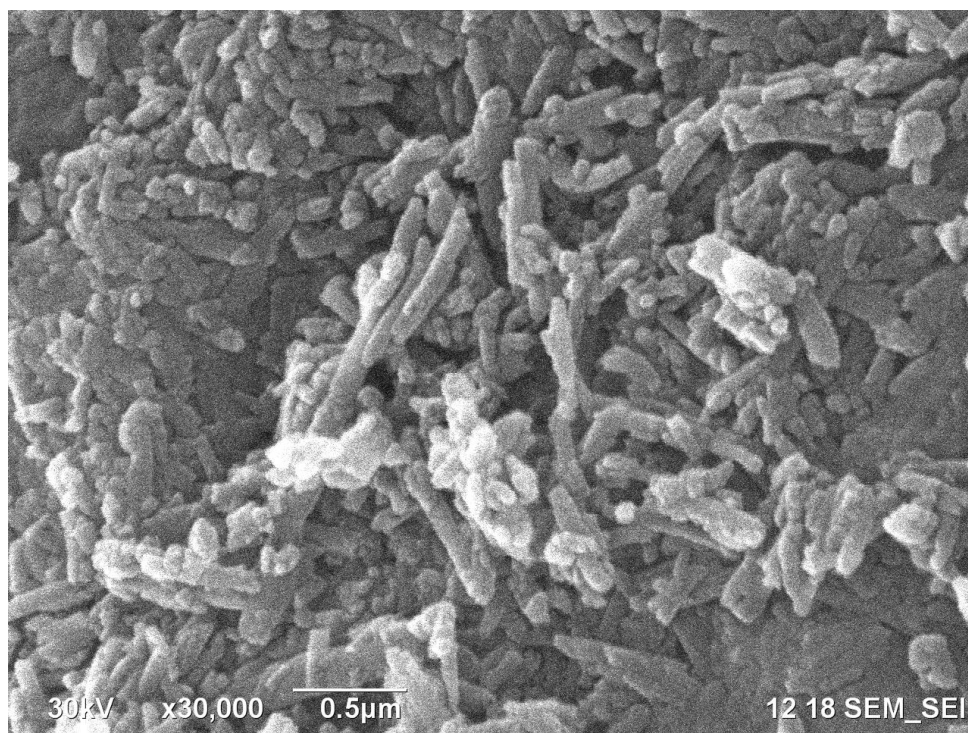


Figure. S2. SEM image of HNT.

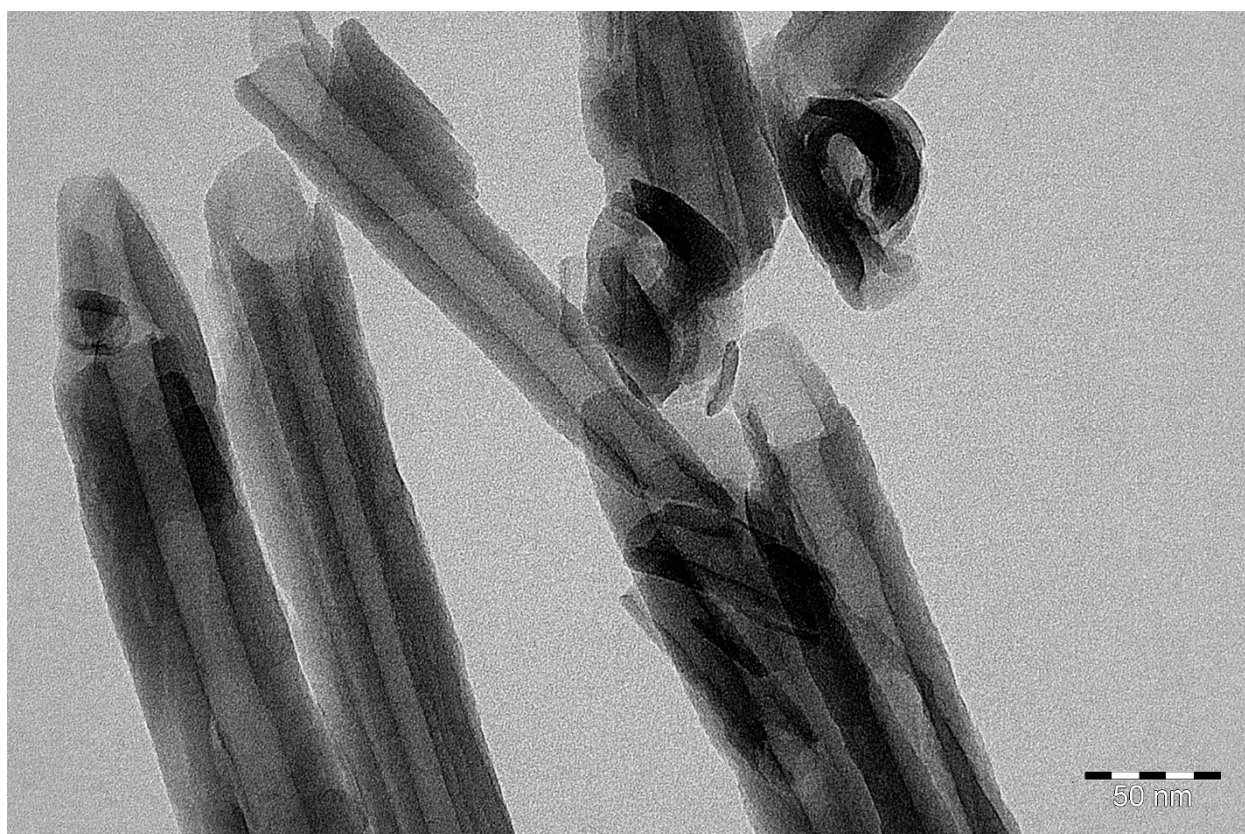


Figure. S3. TEM image of HNT.