

Nanometer-thick Zeolite Layers for Separation Applications

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NNIN Facility utilized: Characterization Facility

- To observe morphology, crystallinity and pore structure of thin zeolite layers
- Major Observations
 - ◆ The zeolite layers are ~2.5 nm in thickness
 - ◆ Layers have high degree of crystallinity
 - ◆ Layers tend to curl along the edges due to high aspect ratio and small thickness
 - ◆ Pore structure of zeolite is intact in thin layers
- Publications
 - ◆ Maheshwari et. al., Journal of American Chemical Society, 2008, 130, 1507.

