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Lamellar Zeolites (20110222, Dr. Michael Tsapatsis)

IP Status: Issued US Patent; **Application #:** 13/288,595

Superior Catalytic and Molecular Sieve Applications

A method has been developed to synthesize zeolites in a lamellar morphology with thinner layers than can be produced using alternative techniques. The zeolites are produced at lower cost than alternative methods and can be used as catalysts, as coatings for molecular sieve membranes and as low-dielectric constant materials in electronic applications.

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- Trial fee is $5,000 for a six month license

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Nanometer Thick Lamellar Zeolite Layers

The lamellar zeolite structures are layered crystalline materials with porosity within layers as well as across layers. As such, catalysis and separation can take place at pores on both the surface and within the layers. With the produced layers less than a nanometer thick, the method produces materials with superior catalytic and molecular sieve functions at a lower cost than currently available technology.

BENEFITS OF LAMELLAR ZEOLITES:

- Thinner layers lead to superior catalytic and molecular sieve functions.
- Lower cost to produce than alternative methods.
- Potential use as low-dielectric constant material in microelectronics applications

Fulfillment Details Licensee will receive rights to practice the intellectual property (Patent application) for the purposes of developing and manufacturing a commercial product.

Phase of Development Preparation method has been developed and tested on laboratory scale.

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Category
Engineering & Physical Sciences/Chemicals
Engineering & Physical Sciences/Materials

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