

研究简报

高硅SAPO-34与聚四氟乙烯复合材料的合成

王利军^{*1}, 解丽丽¹, 袁昊¹, 李庆华¹, 李全芝²

(¹上海第二工业大学环境工程系环境功能材料实验室 上海 201209)

(²复旦大学化学系分子催化与创新材料实验室 上海 200433)

收稿日期 2006-4-26 修回日期 2006-7-24 网络版发布日期 2007-1-12 接受日期 2006-9-26

摘要 以二乙胺为结构导向剂, 在聚四氟乙烯乳液中水热法合成了高硅SAPO-34与聚四氟乙烯复合材料.

XRD表明合成样品为SAPO-34结构, SEM照片表明型貌完好, 周围牢固地覆盖着聚四氟乙烯材料.

与不加聚四氟乙烯乳液合成样品相比, 添加后晶粒尺寸增大, 晶型更完好, 疏水和成膜性能提高.

关键词 [二乙胺](#) [高硅](#) [SAPO-34](#) [聚四氟乙烯](#) [复合材料](#)

分类号

Synthesis of High-silica SAPO-34 and Polytetrafluoroethylene Com-posite Material

WANG Li-Jun^{*1}, XIE Li-Li¹, YUAN Hao¹, LI Qing-Hua¹, LI Quan-Zhi²

(¹ Department of Environmental Engineering, Shanghai Second Polytechnic University, Shanghai 201209)

(² Laboratory of Molecular Catalysts and Innovative Materials, Department of Chemistry, Fudan University, Shanghai 200433)

Abstract In this paper, combined material of high-silica SAPO-34 with polytetrafluoroethylene (PTFE) was hydrothermally synthesized with diethylamine as the structure-director. It is indicated that the synthesized sample possesses SAPO-34 structure from XRD spectrum and perfect shape surrounded firmly by PTFE material from SEM images. Compared with sample synthesized without PTFE, SAPO-34 in the combined material is much larger in size and perfect in shape. And its hydrophobic and flexible membranous properties have been enhanced.

Key words [diethylamine](#) [high-silica](#) [SAPO-34](#) [polytetrafluoroethylene](#) [combined material](#)

DOI:

通讯作者 王利军 ljiang@eed.sspu.cn

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