

Accepted Manuscript

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PII: S1385-8947(16)31450-4
DOI: <http://dx.doi.org/10.1016/j.cej.2016.10.049>
Reference: CEJ 15904

To appear in: *Chemical Engineering Journal*

Received Date: 7 September 2016
Revised Date: 12 October 2016
Accepted Date: 13 October 2016

Please cite this article as: X. Yue, T. Zhang, D. Yang, F. Qiu, J. Rong, J. Xu, J. Fang, The synthesis of hierarchical porous Al_2O_3 /acrylic resin composites as durable, efficient and recyclable absorbents for oil/water separation, *Chemical Engineering Journal* (2016), doi: <http://dx.doi.org/10.1016/j.cej.2016.10.049>

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**The synthesis of hierarchical porous Al₂O₃/acrylic resin
composites as durable, efficient and recyclable absorbents for
oil/water separation**

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Abstract:

In this work, we report a facile and inexpensive approach which was demonstrated for the creation of hierarchical porous Al₂O₃/acrylic resin composites as durable, highly-efficient and recyclable absorbents for oil/water separation. Using hexadecyl trimethyl ammonium bromide (CTAB) as a structure-directing agent, the lamellar γ -AlOOH with porous architectures was successfully prepared via a hydrothermal route. The hierarchical Al₂O₃ clusters, as the inorganic phase of resin

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