

ABSTRACT**RECOVERY OF ORGANIC TEMPLATES FROM POROUS MATERIALS USING
SUPERCRITICAL FLUID EXTRACTION**

This invention relates to the application of supercritical fluid extraction as a fast, environmentally safe, and non-destructive method to recover efficiently the surfactant templates from the pores of the freshly synthesized porous materials. More than 90% of the templated surfactant is extracted from M41S materials using supercritical fluid CO₂ modified with organic modifiers. The extracted surfactant has the same chemical structure as the fresh surfactant. The invention proves beneficial in recycling the expensive surfactant templates, hence offering an inexpensive method to substantially reduce the production cost of M41S materials.

Fig.1 is to be published.

