Electronic Supplementary Material (ESI) for Journal of Materials Chemistry

Synthesis of ordered mesoporous silica templated with biocompatible surfactants and applications in controlled release of drugs

Pablo Botella,* Avelino Corma* and Manuel Quesada

Instituto de Tecnología Química (UPV-CSIC), Avda. Los Naranjos s/n, 46022 Valencia, Spain

Supporting Information

Materials characterization

Nitrogen adsorption-desorption isotherms

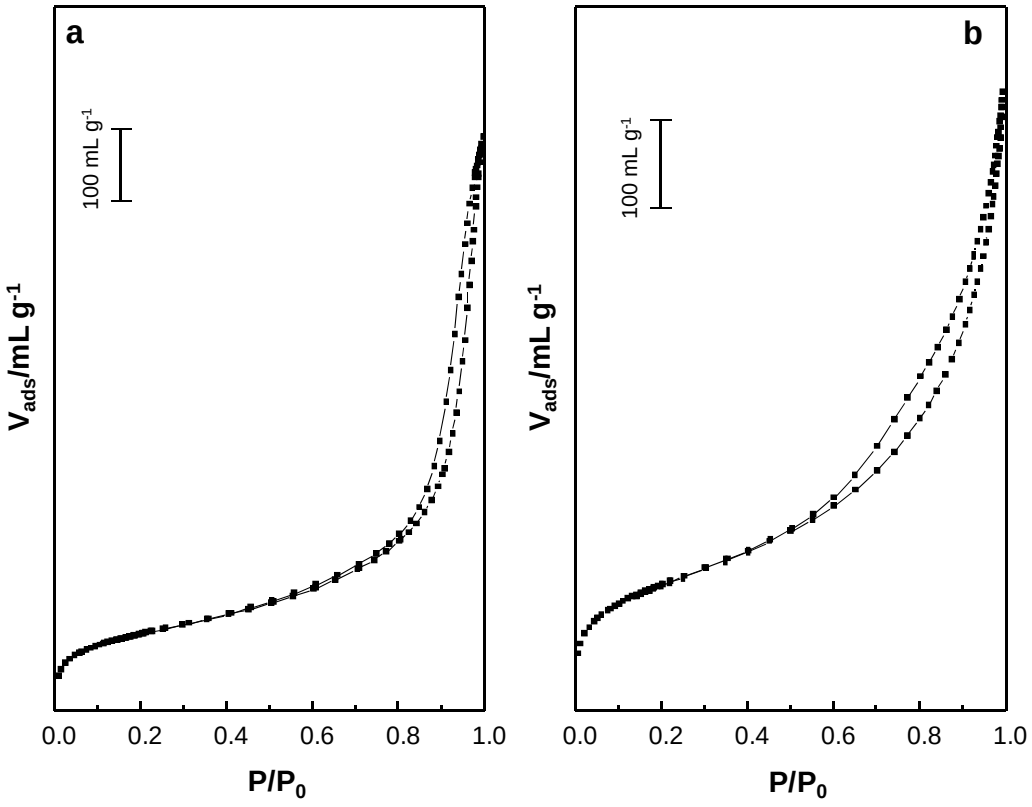

Fig. S1 Representative nitrogen adsorption-desorption isotherms at -196 ºC: (a) $SC_{10}M$-2; (b) $SC_{12}M$-2.

Table S1 Textural characteristics of heat-treated (500 ºC) materials.

Sample	S_{BET} [a] ($m^2\ g^{-1}$)	Vp ($cm^3\ g^{-1}$)	Pore diameter [b] (nm)
$SC_{10}M$-2	392	0.81	3.8
$SC_{12}M$-2	512	0.82	3.8

[a] BET specific surface area.[27]

[b] Average mesopore diameter estimated from the desorption branch of the nitrogen isotherms using the BJH method.[28]

^{13}C-MAS-NMR spectra

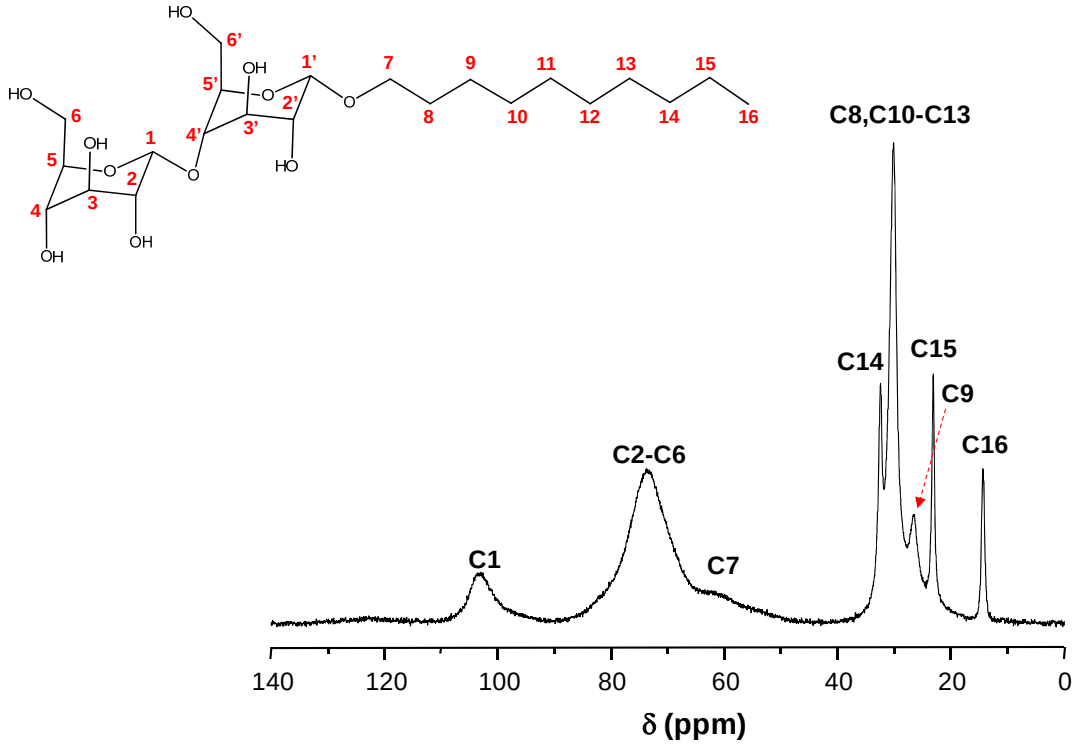

Fig S2 Representative ^{13}C-MAS-NMR spectrum of alkyl maltosides: n-decyl β-D-maltoside.

FTIR spectra

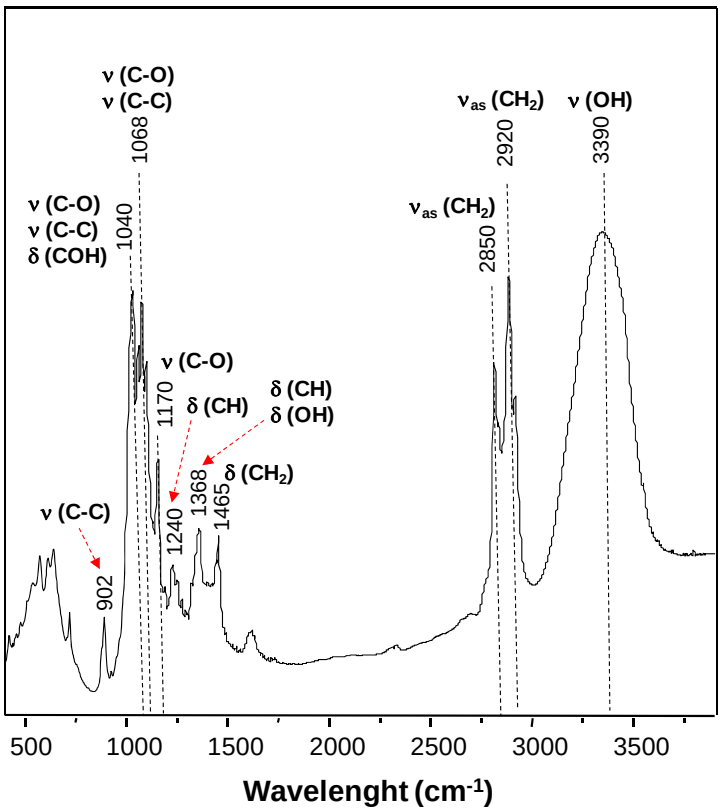

Fig S3 Representative FTIR spectrum of alkyl maltosides: n-decyl β-D-maltoside. Assignments were done according to ref. 38.

X-Ray diffraction

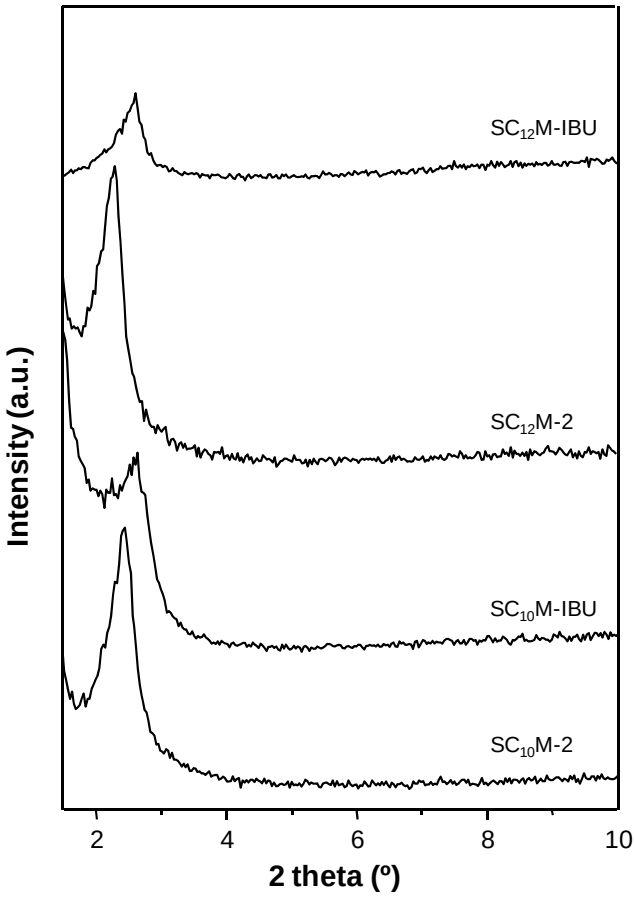

Fig S4 Powder XRD files of IBU-containing samples and their corresponding pattern materials.