

SUPPLEMENTARY INFORMATION

Hierarchically Structured Bioactive Foams Based on Polyvinyl Alcohol-Sepiolite Nanocomposites

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Fig. SI 1 FTIR spectra in the 3750-3650 cm^{-1} region of (a) the pristine sepiolite, (b) the sepiolite treated with 0.4%(w/v) borax solution, (c) a nanocomposite sample containing a PVA:Sep mass ratio of 10:90, and (d) a film of neat PVA. All the samples were processed as thin films. The inserted table shows the relative intensity of the ν_{OH} (SiOH) and ν_{OH} (MgOH) bands shown in the spectra a, b, and c.

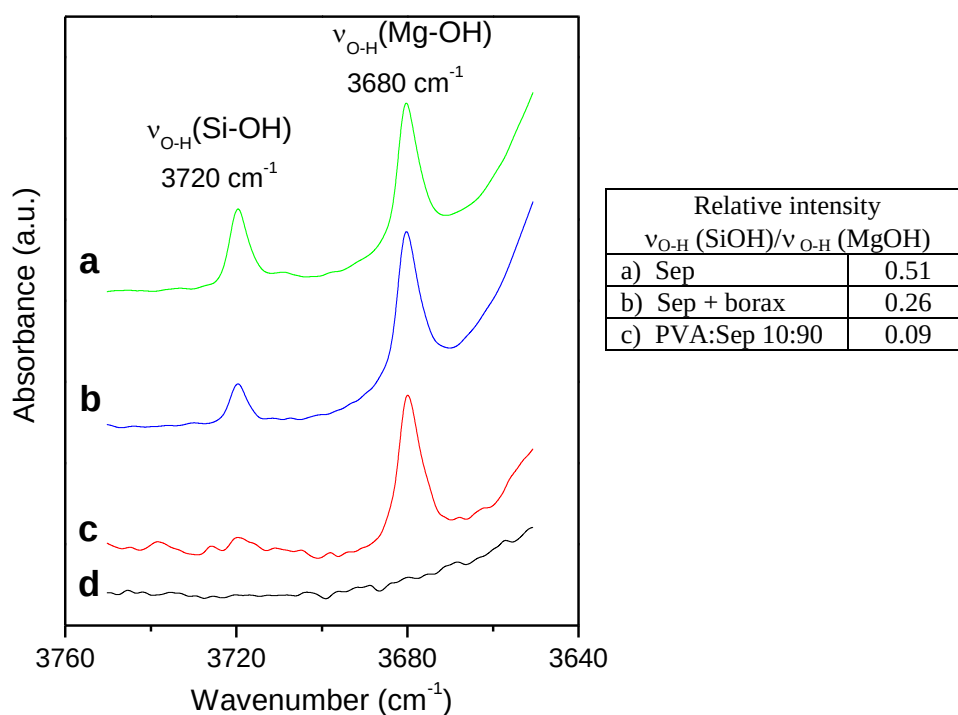


Fig. SI 2 Corrected ATR spectra in the 4000-400 cm^{-1} region of the (a) PVA, (b) PVA-CL, (c) PVA-Sep3, (d) PVA-Sep3-CL, (e) PVA-SepPC, and (f) PVA-SepPC-CL, (g) PVA-Sep3/PC, and (h) PVA-Sep3/PC-CL foams.

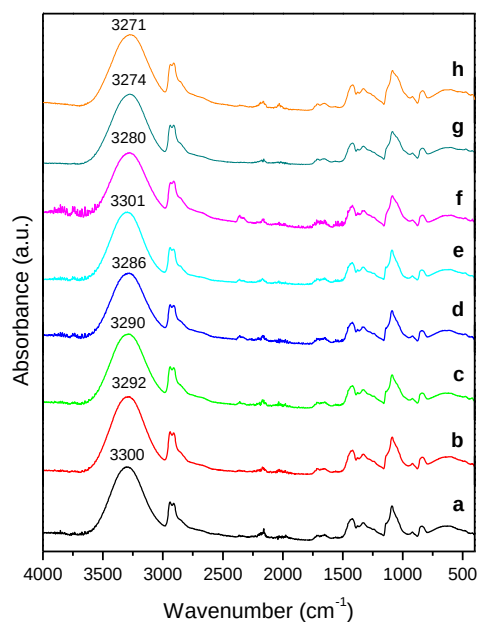


Fig. SI 3 DSC curves for PVA-based nanocomposite foams.

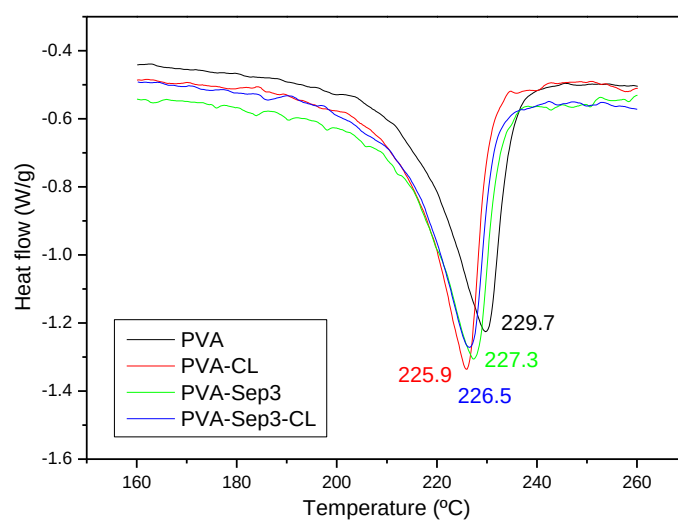


Fig. SI 4 Analysis of the FESEM images of cross-sections of various PVA-based foams by means of the ImageJ1.46r software, showing the pore size distribution.

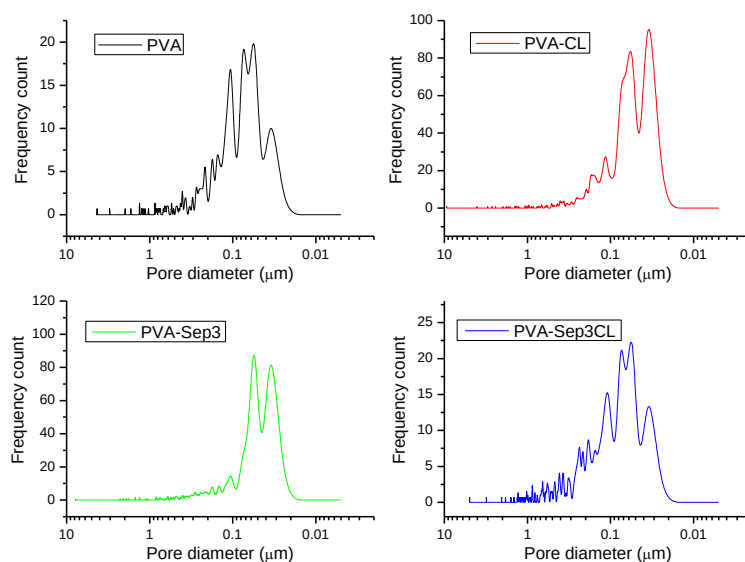


Fig. SI 5 Reusability of the PVA-Sep3/PC/URE-CL bioactive foams. Potentiometric data from urea conversion with an as prepared foam (circles) and with the same foam after storage in PBS for one night (squares).

