Supporting information

Biocompatible, porous hydrogels composed of aliphatic polyesters and poly(2-isopropenyl-2-oxazoline). Their application as scaffolds for bone tissue regeneration.

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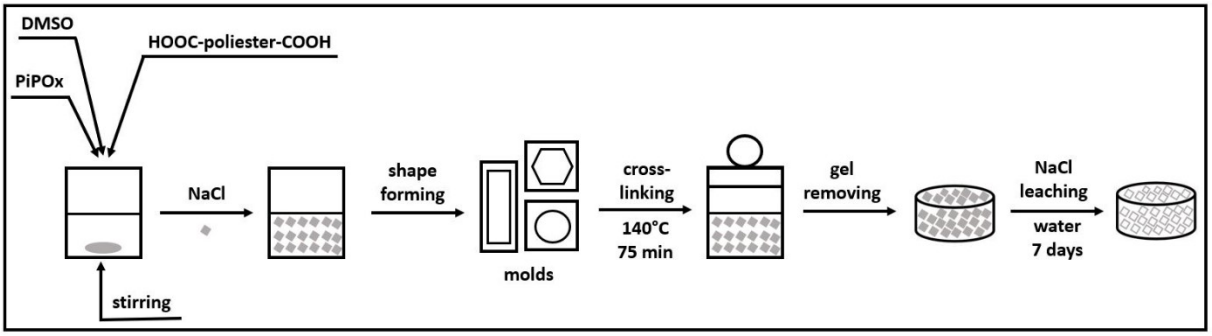
Movie 1.

Movie 1.mp4



Scheme S1. Preparation of porous PiPOx-polyester networks using the NaCl leaching technique.

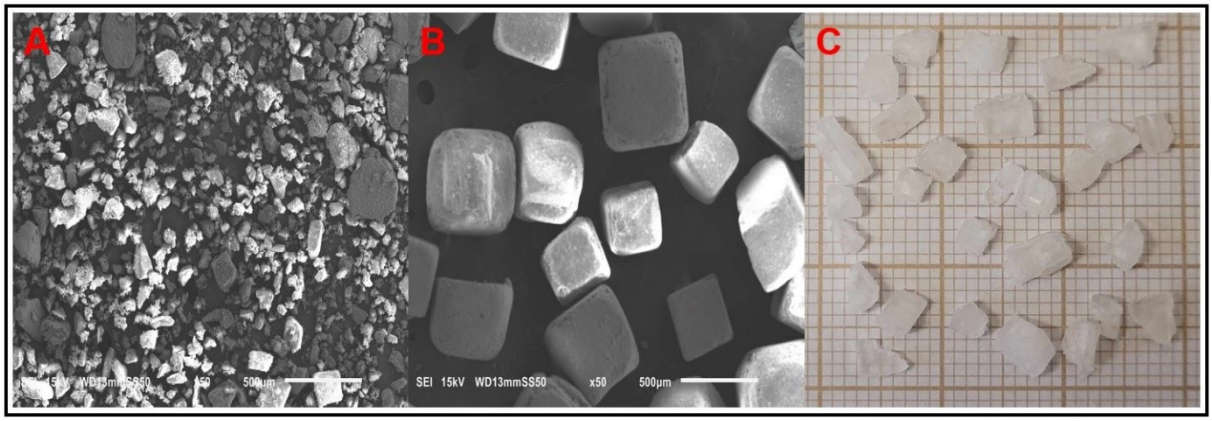


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Table S1. Fabrication of porous PiPOx-polyester networks in the presence of NaCl crystals.

Conditions: T=140 ºC, time= 75 min.

Network code	Polyester[a] (mg)	PiPOx[b] (mg)	DMSO (mL)	NaCl			Shape
				A [g]	B [g]	C [g]	
PiPOx-PLA	44	83	1.0	3	3	3	disc
	132	249	3.0	----	11	----	cylinder
PiPOx-PCL	44	83	1.0	3	3	3	disc
	132	249	3.0	----	11	----	cylinder

[a] polyester: M_n= 3 000 g/mol, [b] PiPOx: M_n= 150 000 g/mol,

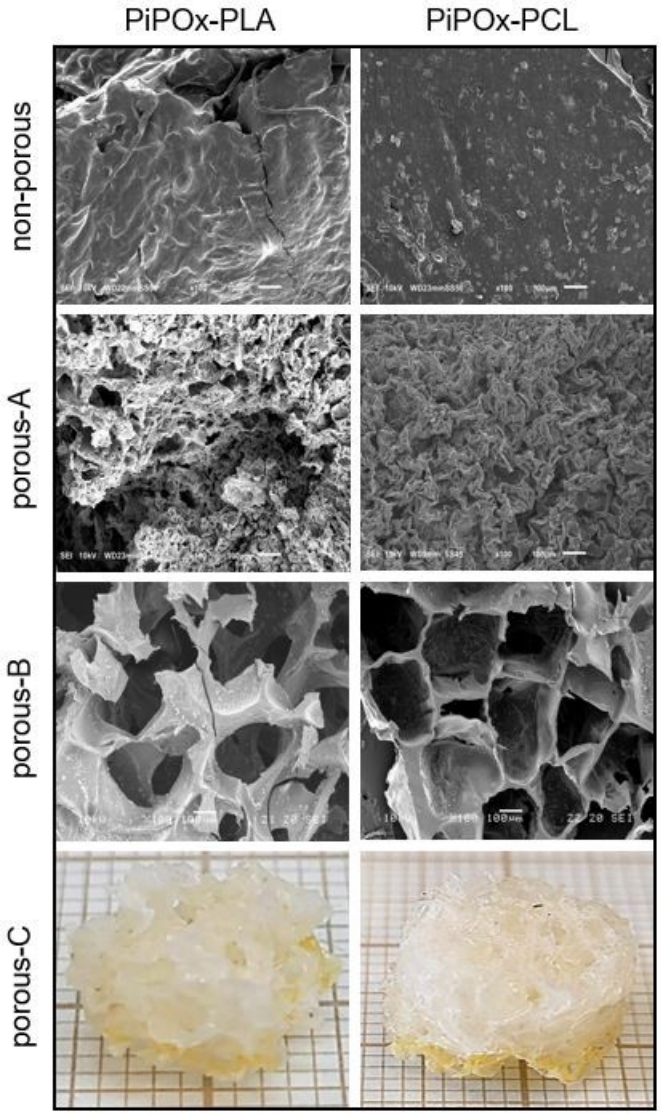

Figure S2. SEM images of PiPOx-polyester networks: non-porous (bulky) and porous obtained in the presence of porogen: “A” and “B”. Digital pictures of PiPOx-polyester networks prepared in the presence of porogen C.

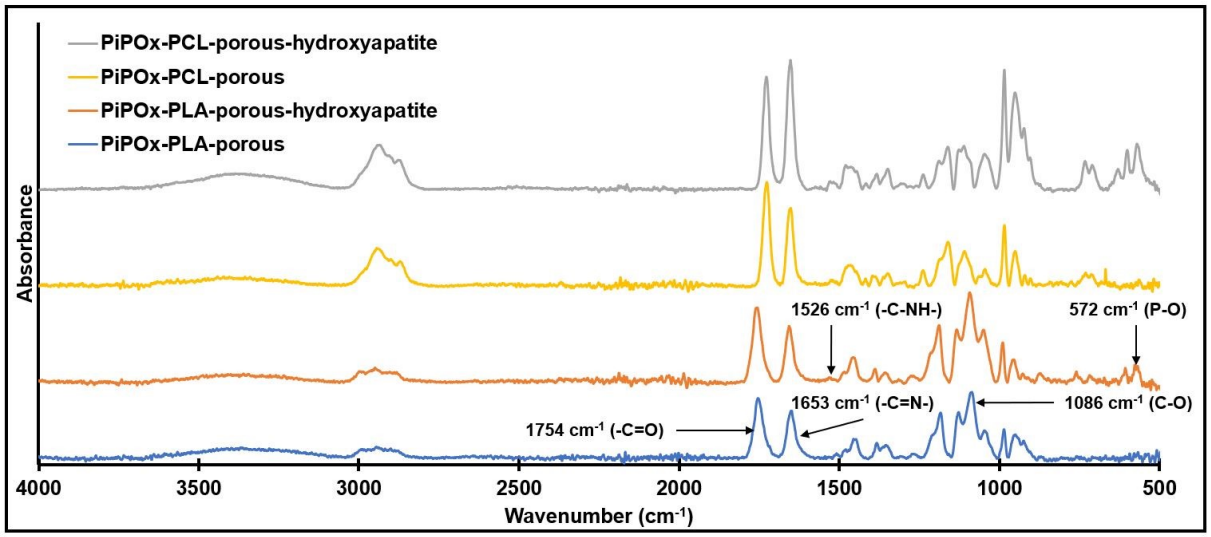

Figure S3. ATR FT-IR spectra of porous networks (dry state) obtained from PiPOx using HOOC-PLA$_{3000}$-COOH and HOOC-PCL$_{3000}$-COOH as crosslinker.

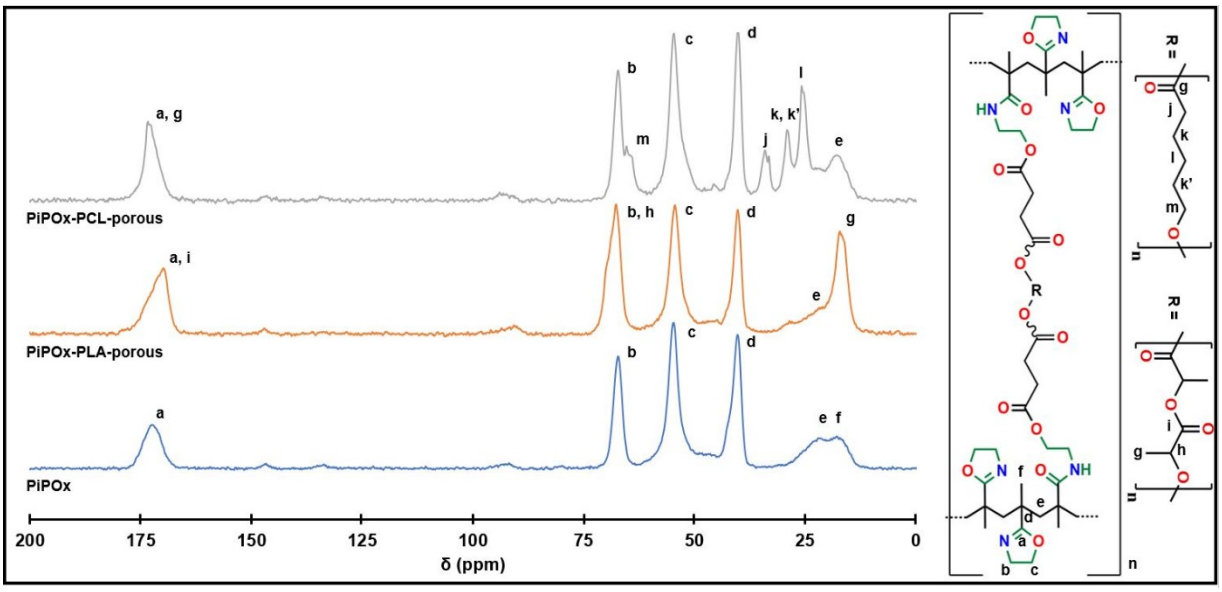

Figure S4.^{13}C-CP/MAS spectra of porous networks (dry state) obtained from HOOC-PLA$_{3000}$-COOH and HOOC-PCL$_{3000}$-COOH as PiPOx crosslinker.

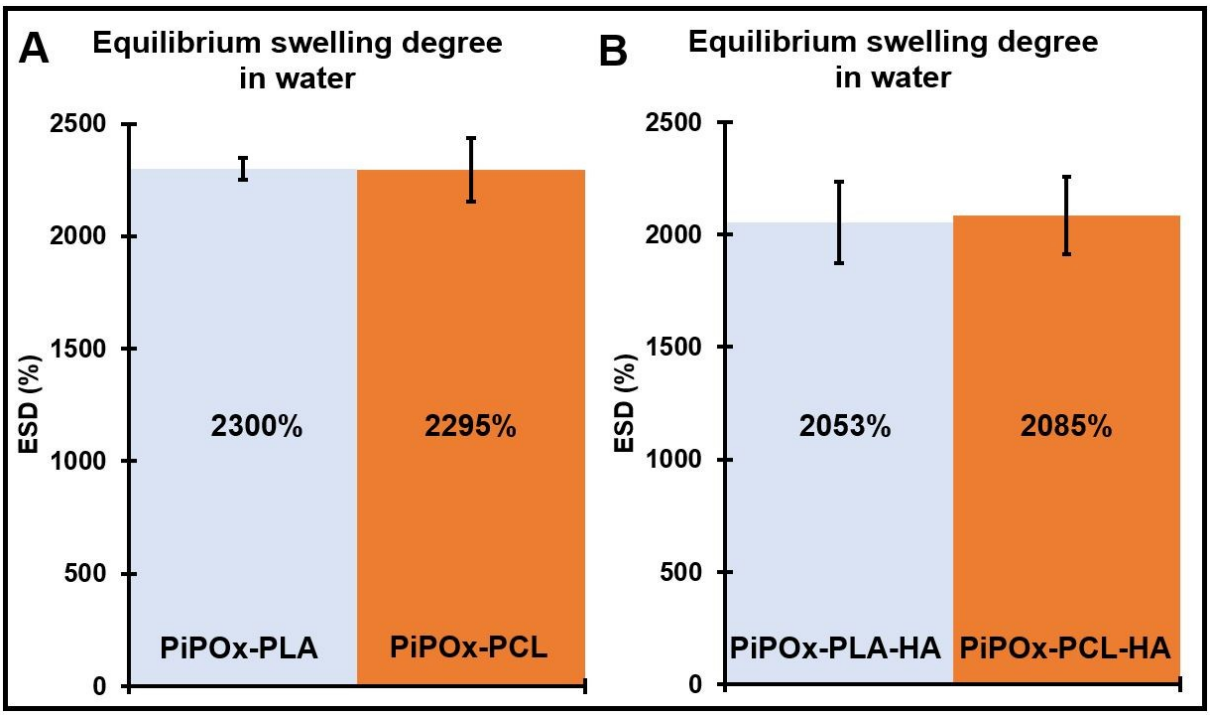

Figure S5. Swelling of porous PiPOx-PCL and PiPOx-PLA networks in water, A) networks obtained with salt A, B) networks obtained with salt B and hydroxyapatite.

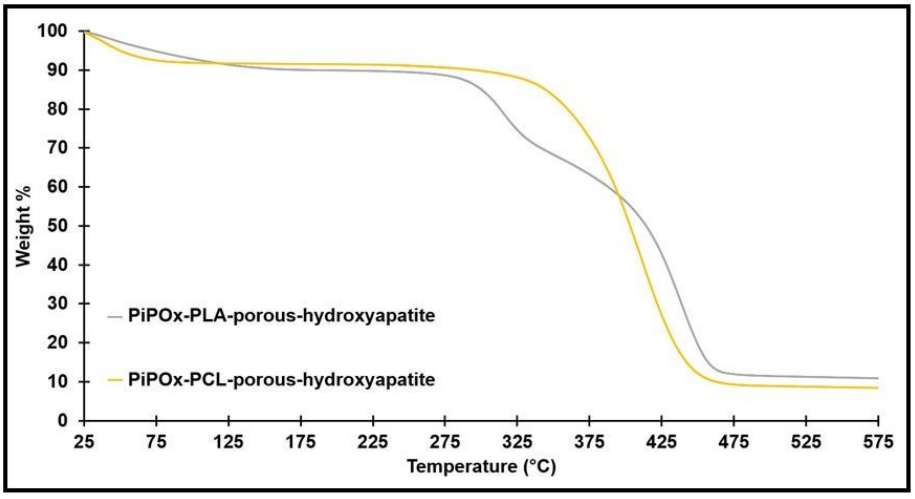

Figure S6. TGA analysis of PiPOx-PLA and PiPOx-PCL porous networks with hydroxyapatite particles.

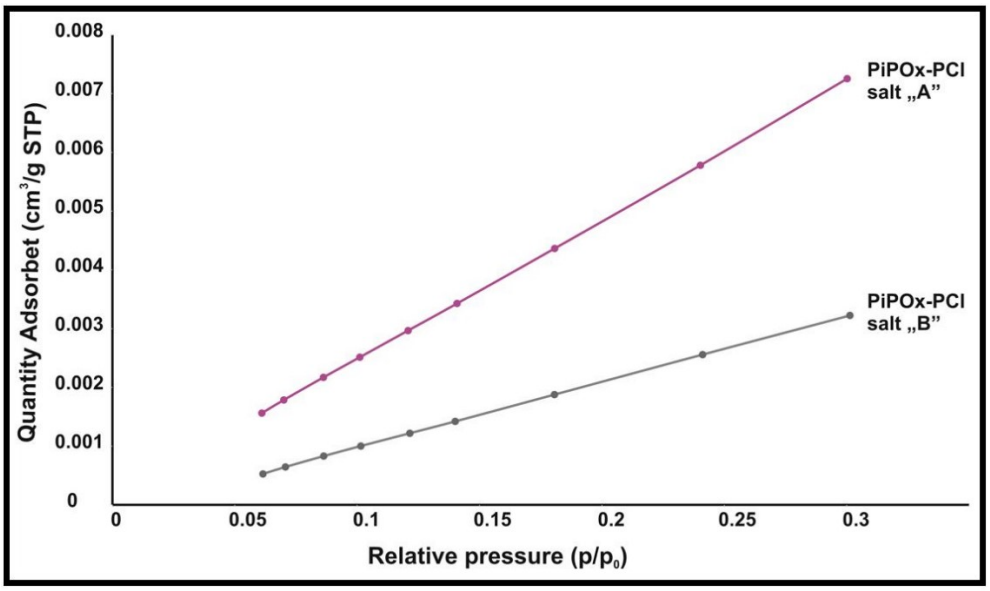

Figure S7. Krypton adsorption isotherms for porous PiPOx-PCL networks prepared with salt " A" and "B".