

# NEW POROUS SCAFFOLDS NANOMATERIALS FORMATION FOR TISSUE ENGINEERING

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Abstract.

Tissue Engineering requires new biocompatible materials searching. Chitosan has been showed as a biopolymer with great mechanical and chemical characteristics that allows to the formation of new porous prosthesis. The objective of the present work consists in nanomaterial scaffolds manufacturing, using liophilization thecniques, of different composition that offer any application possibilities in vivo. For the scaffold observations, conventional optical, polarization and scanning electron microscopies. Mercury porosimetry provides information about pores sizes. Also swelling behaviour of these materials are investigated.

Keywords: chitosan, nanomaterials, liophilization, mercury porosimetry

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