

Mineralization behaviour of some new phema-based copolymers with potential uses in tissue engineering

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R�sum� en anglais	<p>This paper reports the mineralization ability of 2-hydroxyethyl methacrylate (HEMA) and 2-methacryloylamido glutamic acid (MAGA) based copolymers incubated in synthetic fluids. MAGA monomer was obtained by organic synthesis and next p(HEMA-co-MAGA) copolymers with different compositions were prepared by bulk radical polymerization using benzoyl peroxide as initiator and ethyleneglycol dimethacrylate as cross-linking agent. The monomer and polymers were further characterized by FTIR-ATR spectroscopy to confirm their structure. Finally, polymers ability to initiate the formation and growth of HA crystals onto their surface in synthetic fluids was proven. SEM analysis showed the formation of apatite-like crystals (calcospherites), fact confirmed also by EDX analysis.</p>
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