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New method for magnetic composite deposition onto a stent surface

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The study is devoted to investigating the possibility of using an alternating magnetic field (AMF) for deposition and covering a stent surface and improve its functionalities with a new magnetic composite (MC). MC was prepared *in situ* during functionalization of poly(maleic anhydride-co-3,9-divinyl-2,4,8,10-tetraoxaspiro [5.5] undecane) copolymer by opening the anhydride ring with erythritol and introducing magnetic nanoparticles into the polymer matrix. Ten different solvents were used to evidence the dependence between AMF presence, the reaction medium characteristics and the kinetic deposition. Interdependence among the viscosity, density and molar polarization of the solvents and the yield of deposition was registered. The covering of stent with MC is also analyzed by microscopy and the new magnetization values are estimated.

Biography

Aurica P Chiriac has completed her PhD in 1994. She has published more than 100 papers in reputed journals and is an Editorial Board Member of some reputed journals. She participated in more than 15 Romanian Projects and 5 European Projects.

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