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**Gamma-irradiation effects on chitosan / polyethylene glycol (peg) polymer**

José Silva de Sousa, Mitiko Yamaura, Ademar Benévolo Lugão

Instituto de Pesquisas Energéticas e Nucleares (IPEN / CNEN - SP)

Av. Professor Lineu Prestes 2242, 05508-000 São Paulo, SP, Brazil

[jssousabio@yahoo.com.br](mailto:jssousabio@yahoo.com.br)

Gamma irradiation has been applied in polymer matrices to facilitate the formation of films and gels by crosslinking, to promote chain scission changing its solubility and its biodegradability or make them sterile inhibiting the formation of toxic products, which may enable its use for controlled drug delivery system.

In this study, the gamma-irradiation effects on the Chitosan / Polyethylene glycol (PEG) polymer were investigated. The polymer blend was irradiated at doses of 5 and 25 kGy using a source  $^{60}\text{Co}$ . The blend was characterized by means of thermal analysis (DSC, TGA and DMTA) and the Fourier Transform Infrared (FTIR) spectroscopy.