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(54) Title of the invention : AN INJECTABLE HYDROGEL WITH PH SENSITIVITY AND A PROCESS FOR THE PREPARATION THEREOF

(51) International classification :A61L0027520000, A61K0009000000, C08G0059420000, A61Q0019080000, A61L0027540000 (86) International Application No :NA Filing Date :NA (87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date :NA (62) Divisional to Application Number :NA Filing Date :NA		(71)Name of Applicant : 1)INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD Address of Applicant :Dhanbad - 826004, Jharkhand, India Dhanbad ----- Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Arpita Roy Address of Applicant :Department of Chemistry & Chemical Biology, Indian Institute of Technology (Indian School of Mines), Dhanbad, Dhanbad – 826004, Jharkhand, India Dhanbad ----- ----- 2)Sagar Pal Address of Applicant :Department of Chemistry & Chemical Biology, Indian Institute of Technology (Indian School of Mines), Dhanbad, Dhanbad – 826004, Jharkhand, India Dhanbad ----- -----
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(57) Abstract :

This invention relates to an injectable hydrogel with pH sensitivity and a process for the preparation thereof. The synthesis of the injectable hydrogel involves two steps, the first step being synthesis of an amino acid and methacrylic anhydride-based monomer (AA-Ma), followed by synthesis of crosslinked hydrogel cl- β -CD-p(AA-Ma). In particular, the invention involves the synthesis of an injectable hydrogel cl- β -CD-g-p(Gly-Ma) by the synthesis of an amino acid and methacrylic anhydride-based monomer (Gly-Ma), followed by synthesis of crosslinked hydrogel cl- β -CD-p(Gly-Ma).

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