

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202441042716 A

(19) INDIA

(22) Date of filing of Application :01/06/2024

(43) Publication Date : 14/06/2024

(54) Title of the invention : A METHOD OF GREEN SYNTHESIS OF ZWITTERIONIC POLYMERIC NANOPARTICLES

(51) International classification

:A61K0009510000, C02F0101200000, C09K0011770000, C02F0001280000, B29C0065000000

(86) International Application No
Filing Date

:NA
:NA

(87) International Publication No

: NA

(61) Patent of Addition to Application Number
Filing Date

:NA
:NA

(62) Divisional to Application Number
Filing Date

:NA
:NA

(71)Name of Applicant :

1)National Institute of Technology Karnataka

Address of Applicant :Srinivasnagar PO, Surathkal, Mangaluru - 575025, Karnataka, India Mangalore -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Arun M. Isloor

Address of Applicant :Dept. of Chemistry,National Inst. of Technology Karnataka, Surathkal,Mangaluru- 575 025,Karnataka,India Mangalore -----

2)Nidhi Regina Mendonca

Address of Applicant :Dept. of Chemistry,National Inst. of Technology Karnataka, Surathkal,Mangaluru- 575 025,Karnataka,India Mangalore -----

(57) Abstract :

A method (100) of green synthesis of Zwitterionic Polymeric Nanoparticles is disclosed. The method (100) includes taking V-50 as an initiator. The method (100) includes taking MBAAm (1.0 g, 6.48 mmol), SBMA (0.2 g, 0.71 mmol), and the V-50 (0.02 g, 0.073 mmol) in a single neck Round Bottom Flask (RBF). The method further (100) includes adding a predefined amount of solvent to the RBF to obtain a reaction mixture, purging the reaction mixture with N₂ for a first predefined time, heating the purged reaction mixture under nitrogen atmosphere using distillation precipitation method (DPP) after attaching a 24?19 connector for a second predefined time at first predefined temperature to obtain a product, centrifuging and washing the product with a solvent, and drying the washed product at a second predefined temperature for a third predefined time to obtain the green synthesised Zwitterionic Polymeric Nanoparticles

No. of Pages : 16 No. of Claims : 7