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(51) International classification :C12P0007620000, C08L0003020000, A01G0009020000, C02F0001680000, C08K0005000000 (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)SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY Address of Applicant :Department of chemical engineering, Sathyabama Institute of Science and Technology, Chennai-600119 Tamil Nadu, India ----- Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr D.Venkatesan Address of Applicant :Associate Professor Department of chemical engineering, Sathyabama Institute of Science and Technology, Chennai-600119 Tamil Nadu, India ----- --- 2)R. Mohana Prakash Address of Applicant :Department of chemical engineering, Sathyabama Institute of Science and Technology, Chennai-600119 Tamil Nadu, India ----- 3)Dr D. Prabu Address of Applicant :Associate Professor Department of chemical engineering, Sathyabama Institute of Science and Technology, Chennai-600119, Tamil Nadu, India ----- --- 4)Dr S.Sathish Address of Applicant :HOD, Professor Department of chemical engineering, Sathyabama Institute of Science and Technology, Chennai-600119, Tamil Nadu, India ----- 5)Dr. S. Balasubramanian Address of Applicant :HOD, Professor Department of chemical engineering, KPR Institute of Engineering and Technology, Coimbatore-641407 Tamil Nadu, India -----
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(57) Abstract :

The present invention is in the field of bio-plastics. The invention particularly provides a synthesis method for preparation of fruit peel based bioplastics and biodegradation analysis of fruit peel based bioplastics thereof. The method of synthesis of bioplastics in that starch were prepared by cutting down peel into pieces then blended, thereby adding chemicals and upon drying process. This method involves the synthesis of bioplastic in dual process by natural and chemical method in order to achieve better biodegradation capability. Biodegradation analysis in soil and water environment, water absorption analysis, and characterization techniques were reported by Fourier transform infrared spectroscopy. Biodegradation analysis of prepared bioplastics has been the green root to sustain in world of plastics, biodegradable and easily adaptable.

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