



FUTURE SCOPE FOR BIOPOLYMERS AND BIOPLASTICS

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Abstract:

Biopolymers are polymers that can be found in or manufactured by means of living organisms. Those also involve polymers which can be acquired from renewable resources that may be used to manufacture Bioplastics by using polymerization. There are mainly two types of Biopolymer, one that is obtained from residing organisms and any other this is produced from renewable resources however require polymerization. The ones created by means of living beings consist of proteins and carbohydrates. Unlike synthetic polymers, Biopolymers have a well-marked shape. Those polymers have a uniformly distributed set of molecular mass and appear as an extended chain of worms or a curled up string ball under a microscope. This sort of polymer is differentiated based on their chemical shape. Examples of the maximum used biopolymers are chitosan, cellulose, carageenans, alginate, polyesters, and proteins together with enzymes and DNA. The applications of biopolymers are immense and could be found in many fields such as food, pharmaceutical, cosmetics, agriculture, biomedicine and lots of chemical industries the use of enzymes. Those polymers play an essential role in nature. They may be currently being produced in massive quantity with the aid of microbial fermentation method in industries. Among all of the polyhydroxy, alkanooates, polyhydroxy butyrate or PHB is the most essential one as bio plastics. The conventional plastics, made from coal or oil are not biodegradable. They survive 100s of years and are a first-rate source of environmental pollution, often resulting in ecological imbalance. A heavy call for biodegradable plastic materials has generated inside the contemporary international. There are a few tries to chemically synthesize biodegradable polyesters such as polylactic acid and polyglycolic acid. The production of polyhydroxy alkanooates with the help of fermentation is the preferred technique for production of biodegradable plastics.

Biography:

Makhdoom Zada Arsalan Ahmed was born on 30th July, 1988 in Karachi Pakistan. I have done B.E in Polymer & Petrochemical Engineering from NED University of Engineering and Technology Karachi Pakistan in December 2011. Initial-



ly I started my career with injection molding, extrusion, sheet metal machine and assembly line of automobile sector. After that moved to new Flexible Packaging Film Industry (BOPET) Plant. I took part in erection, commissioning and startup of Pakistan first BOPET Film Line project of 90 TPD capacities. I have got good experience by working with Foreign Consultant. Currently Working as a Team Leader Production in BOPP Film Line Production Department in Tripack Films Limited. A Petrochemical Plant of Polypropylene/Polymer based films at Port Qasim Karachi. Manage Raw Material, select recipe and suitable operating parameters of Plant that comes in the endless wastage and good quality.

Recent Publications:

1. Leire Urbina et al; Bacterial-cellulose-derived carbonaceous electrode materials for water desalination via capacitive method: The crucial role of defect sites, 2020.
2. Leire Urbina et al; Tailoring the in situ conformation of bacterial cellulose-graphene oxide spherical nanocarriers, 2020.
3. Leire Urbina et al; Cocoa shell: an industrial by-product for the preparation of suspensions of holocellulose nanofibers and fat, 2020.
4. Leire Urbina et al; Valorization of apple waste for active packaging: multicomponent polyhydroxyalkanoate coated nanopapers with improved hydrophobicity and antioxidant capacity, 2019.

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