## Biopolymer Congress 2016

# Theme: Recent advances and future trends in Biopolymers


## Summary:

Biopolymers are chain-like molecules made up of repeating chemical blocks and can be very long in length. The prefix bio means that they are produced by living organisms and thus are biodegradable. Biopolymers can be classified in three groups, depending on the nature of the repeating unit they are made of: (i) polysaccharrides are made of sugars, (ii) proteins of amino acids, and (iii) nucleic acids of nucleotides. The following substances are example-biopolymers for each group: cellulose (found in plants), myoglobin (muscle tissues), and DNA (genetic material of a given organism). At Novozymes, we produce macromolecules belonging to the two first classes, namely polysaccharides and proteins.

Biopolymer Congress 2016 is an event delivering the concept of biobased world across the globe. In the present world where the use of conventional plastics, the consequences of plastic products use and the waste management of these products when they become waste, is a current and pressing issue. Concerns focus on the potential impact of conventional plastics they cause to the environment.

For more details please visit: http://biopolymers.conferenceseries.com/


### Importance & Scope:

The history of Biopolymer is not a long one. They are beginning to emerge as a result of needing to be more responsible in taking care of the world we live in. Thus, the recent emergence of bio-based products rather than petroleum or natural gas based products. Various reasons are associated with the research and development of Biopolymers. The use of biopolymers could markedly increase as more durable versions are developed, and the cost to manufacture these bio-plastics continues to go fall. Bio-plastics can replace conventional plastics in the field of their applications also and can be used in different sectors such as food packaging, plastic plates, cups, cutlery, plastic storage bags, storage containers or other plastic or composite material items you are buying and therfore can help in making environment sustainable.

### Why Manchester?

The United Kingdom has consistently been the largest producer of biopolymer and the synthetic plastic market is engrained in the UK and world economy, but now the focus has been shifted to Bioplastics as plastics are having many adverse effects. The biopolymer market is miniscule in comparison to the plastics marketplace; however, bioplastics are gaining in capital and popularity. Europe is the 2$^{nd}$ biggest market for biopolymers, consuming more than one-third of the total global demand for biopolymers.

Many institutions and departments in UK are encouraging the research for biopolymers. Departments such as Department of Defense (DOD), National Science Foundation (NSF), National Institute of Health (NIH), Department of Health and Human Services (DHHS) , Department of Energy (DOE), University of

Manchester, University of Nottingham, University of Westminster etc. are involved in the research for Biopolymers and Bioplastics.

Various companies like Biopolymer Solutions, Fmc Biopolymer Uk Ltd,etc. are now a part of UK and their product services are entirely based on Biodegradable Plastics i.e., Bioplastics.

Apart from Research and Industrial point of view, Manchester is a beautiful city, and metropolitan borough of Greater Manchester, in North West England, with a population of 514,417 in 2013. It lies within the United Kingdom's second most populous urban area, with a population of 2.55 million, and third-most populous metropolitan area. Manchester is fringed by the Cheshire Plain to the south, the Pennines to the north and east and an arc of towns with which it forms a continuous conurbation. The local authority is Manchester City Council.

Today Manchester is ranked as a beta world city by the Globalization and World Cities Research Network and is consequently the highest ranked British city except for London. Its metropolitan economy is the third largest in the United Kingdom with an estimated PPP GDP of US$92 billion as of 2014. Manchester is the third-most visited city in the UK by foreign visitors, after London and Edinburgh. It is notable for its architecture, culture, musical exports, media links, scientific and engineering output, social impact, sports clubs and transport connections. Manchester Liverpool Road railway station was the world's first inter-city passenger railway station and it was in the city that scientists first split the atom and developed the stored-program computer.

## Why to attend???

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## Conference Highlights:

- Advances in the Biopolymers
- Future and scope of Biopolymers
- Biopolymer Feedstock Challenges & Opportunities
- Biomaterials and Biopolymers
- Recycling, compostability & waste
- Cutting-edge advancements in biopolymer production
- Biofibers and microbial cellulose

## Major Associations around the Globe:

- British Plastics Federation
- European Council for Plasticizers and Intermediates
- American Coatings Association
- American Chemical Society (Division of Polymer Chemistry)
- American Physical Society Division of Polymer Physics (APS DPOLY)
- Polymer Division of the Royal Australian Chemical Institute (RACI Polymer Division)
- Belgian Polymer Group (BPG)

- Brazilian Polymer Association
- European Polymer Federation
- Bioenvironmental Polymer Society

## Target Audience:

Eminent Scientists/ Research Professors, Junior/Senior research fellows, Students, Directors of companies, Engineers, Members of different physics associations.

## Top Universities in UK:

- Glyndwr University
- Newcastle University
- University of Nottingham
- University of Westminster
- University of Manchester

## Biopolymers Market Analysis:

As there is need for eradication of polymers, there is increase in growth of industries for Biopolymers. Biopolymers have found wide acceptance in various industries, on account of its distinguished environment friendly properties. Biopolymers are now an important part of every sector Food tech, nanotech, chemistry, medical, agriculture etc.

There is an increase of 20% (approx.) in the production of biopolymers products and bioplastics per year. Market of around 1.2 million tones in 2011 may see a five-fold increase in production volumes by 2016, to almost 6 million tones. By 2020 Bioplastics production could rise to 12 million tones.

## Biopolymers Production Market