



BioMed Research International

Special Issue on

**Biobased Polymeric Formulations and Processes**

# CALL FOR PAPERS

Consumers who are paying close attention will soon notice a change in products they use every day. Some diapers, clothing, athletic shoes, and automobile tires currently made from petroleum will instead be made entirely from plants. Yet the quality and performance of these products will be identical to those made by the old-fashioned way. Thanks to many years of work on engineered microbes and new catalysts, the reach of biobased chemicals into consumer items is expanding. In the field of detergents the current state-of-the-art focuses on biosurfactants and natural amphiphiles synthesized by microorganisms, including their synthesis and applications, especially as lung surfactants. Many developments report the chemical and enzymatic synthesis and applications of biobased surfactants consisting of polyols derived from nature, particularly, mono- and disaccharides, and amino acids. The employment of enzymes as catalysts to direct the synthesis of biobased surfactants is particularly attractive due the reduction of solvent and energy use during the surfactants' manufacture and the reduction of purification costs and formation of impurities and by-products.

Cosmetic industry including surfactants, detergents, hydrating agents, and emulsifiers; takes a renewed interest in biobased resources. Plant-based materials are "in," not merely because they are in public demand but because biorefinery delivers a growing supply of plant-based substances.

The trend is towards nature and high technology at the same time. All of the mentioned products are based in heterogeneous processes sharing similar features between them.

Therefore, this special issue intends to present and discuss original work and review articles that will stimulate the continuing efforts to develop new biobased process and products, namely, detergents, cosmetics, textiles, and topical pharma products. We are interested in articles describing past and existing strategies as well as future directions of research.

Potential topics include, but are not limited to:

- ▶ Biobased textile processes
- ▶ Biobased detergents and cosmetic
- ▶ Biobased polymers
- ▶ Topical pharma applications

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/biotechnology/bpfp/>.

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