Proposal for a Theme Issue:
CURRENT PROTEIN & PEPTIDE SCIENCE

Recent Trends in Protein Engineering
Guest Editor: Pratyoosh Shukla, Ph.D.

Aims and Scope:
Protein engineering is the process of developing useful or valuable proteins which may be industrially better than the earlier ones. This field of microbial technology has gained lots of interest and is one of the key areas across the globe. It is a growing discipline, with much studies taking place into the understanding of protein folding and recognition, protein design principles. In past few years it has been seen that most of the work has been centered on increasing yield and application facets. These efforts are providing cost effective solutions to industries either by developing novel proteins or by modifying earlier protein molecules.

Scientific advancement in the field of enzyme technology today facilitates the above mentioned prospects. However, many novel areas are to be identified on protein modification to enable their explicit process applications. This special issue includes such features and also talks about the some diversified aspects of enzyme and protein engineering. Moreover, this issue is inclined towards some priority areas like luciferases in bioluminescence, engineering of virus like particles, bioremediation, pulp and paper technology, prebiotics and probiotics, thermophilic protein adaptation, genome wide analysis, systems biology and proteomics, bioprocess development, kinetic parameters and structure function relationship.

Subtopics:
1. Re-engineering of bacterial luciferase; for new aspects of bioluminescence
2. Emerging Role of Microbial Cytochrome P450 enzymes in bioremediation and drug discovery
3. Engineering virus-like particles for antigen and drug delivery
4. An overview of advanced technologies for selection of probiotics and their expediency: A review
5. Protein engineering approaches in the post-genomic era
6. Structural considerations on the use of endo-xylanases for the production of prebiotic xylooligosaccharides from biomass.

7. Bioengineering for microbial inulinases: Trends and applications

8. Understanding survival in high temperature by thermophilic fungi: Genome-wide analysis

9. Insights into structure and reaction mechanism of Mannanase.

10. Recent advances in proteomics approaches in understanding plant-microbe interactions.

11. Chondroitin sulphate lyases: structure, function and therapeutic applications

**Schedule: (Tentative)**

Manuscript submission deadline: October 15, 2015

Peer Review Due: November 30, 2015

Revision Due: December 20, 2015

Notification of acceptance by the Guest Editor: December 25, 2015

Final manuscripts due: January 15, 2016

Pratyooosh Shukla, Ph.D.
Guest Editor
Enzyme Technology and Protein Bioinformatics Laboratory,
Professor & Head, Department of Microbiology
Department of Microbiology, Maharshi Dayanand University,
Rohtak-124001, Haryana, India.
Phone-91-1262-393398; Fax-91-1262-274133
Cell-91-8813866019,91-9431171157
E-mail: pratyooosh.shukla@gmail.com

**Other Affiliations:**
Former ASM Indo-US Visiting Professor, University of Cincinnati , College of Medicine, Cincinnati Ohio, USA
GENERAL SECRETARY, THE ASSOCIATION OF MICROBIOLOGISTS OF INDIA (AMI)
Editor, Indian Journal of Microbiology (INJM- Springer)