

Thesis

LIST OF PAPER PUBLISHED, PRESENTED IN CONFERENCES/WORKSHOP

Paper published (SCI Journals):

1. **Debashis Dutta** & Mira Debnath Das (2017) Optimization and partial characterization of intracellular anticandidal protein from *Aspergillus giganteus* MTCC 8408 using taguchi DOE, Bioengineered. 2017; 8(5): 536–548.
2. **Debashis Dutta** & Mira Debnath Das (2017) Effect of C/N ratio and microelements on nutrient dynamics and cell morphology in submerged fermentation of *Aspergillus giganteus* MTCC 8408 using Taguchi DOE, 3 Biotech May 2017, 7:34
3. **Debashis Dutta** & Mira Debnath Das (2017) Effect of Carbon and Nitrogen Sources on Mycelial Biomass and Biosynthesis of Antifungal Protein from *Aspergillus giganteus* MTCC 8408 in Submerged Fermentation, JSIR Vol.76(06)369-375.
4. **Debashis Dutta** & Mira Debnath Das (2018) Biosynthesis of Low Molecular Weight Antifungal Protein from *Aspergillus giganteus* in Batch Fermentation And in-Vitro assay, Journal of Biocontrol Science, Volume 23 Issue 2 Pages 41-51. <https://doi.org/10.4265/bio.23.41>

Book published (International):

1. **Debashis Dutta** & Mira Debnath Das (2016) Production and Optimization of Anti-fungal Protein Using Taguchi DOE, ISBN-13: 978-3-659-93695-1, GmbH, Germany, Omniscryptum (LAP).

Book chapter published (International):

1. **Debashis Dutta** & Mira Debnath Das (2016) Food Irradiation Technology: A Novel Aspect for the Future in Food Process Engineering and Quality Assurance, ISBN: 978-1-315-23296-6, Taylor & Francis, USA (AAP).

Paper presentation in Conference (International):

1. International Conference on Biomolecular Engineering 2016, at Singapore on January 5-7, 2016 by Society for Biological engineering, USA and AIChE, USA.

Paper presentation in Conference (National):

1. Biomedicine: Unfolding the Secrets from Nature, January 10-11, 2014 at Institute of Bioinformatics and Biotechnology, University of Pune.

2. Annual meeting of the Proteomics Society of India, December 7-9, 2014 at Indian Institute of Technology Bombay (IIT-B).

Conference Proceedings (National):

1. **Debashis Dutta**, Mira Debnath (Das). 2014. Purification Assay and Production Optimization of Antifungal protein from *Aspergillus giganteus* (MTCC No 8408) Using Taguchi Statistical Approach (Conference Proceedings). Journal of Proteins and Proteomics, Vol. 5, No. 3, ISSN: 0975-8151.

Workshop (National):

1. Bioinformatics workshop on genomics, proteomics, drug design and high performance computing, September 16-25, 2014 at Indian Institute of Technology Delhi (IIT-D).

2. Mass spectrometry workshop, December 10-11, 2014 at Indian Institute of Technology Bombay (IIT-B).

3. Advanced Microscopy and imaging Techniques workshop, August 7-8, 2015 at Indian Institute of Technology BHU (IIT-BHU) by DSS Image tech Olympus Medical System and Photometric, USA.

QIP-Short Term Course:

1. Bioprocess Instrumentation and Control in Bioreactor Design, November 7-13, 2017 at Indian Institute of Technology BHU (IIT-BHU).

Scientific Articles (National):

1. Debashis Dutta, Mira Debnath (Das). E Coli and Salmonella-The Most Causative Food Borne Pathogens-National Threat to Human Health. 2014. ISSN 2349-1418. Scientific India. ISSN 2349-1418.
2. Debashis Dutta, Mira Debnath (Das). Proteomic Assay in Clinics: Vision 2020. 2016. ISSN 2349-1418. Scientific India.
3. Debashis Dutta (2016). Risk assessment and Safety Hazards in Foods. ISSN 2349-1418. Scientific India.
4. Debashis Dutta and Mira Debnath (Das). Food Irradiation: A Novel perspective against emerging Post Harvest loss. ISSN 2349-1418. Scientific India.

SKILLS:

♣ High throughput bioprocess design and scale up; Sustainable Food Irradiation scale-up; biosynthesis of microbial metabolic products from waste resources.

♣ Application on fungal diseases and food spoilage microorganisms; Protein fractionation, expression and purification;

♣ Protein modification with various cross linking/conjugation/PEGylation; Filtration; lyophilization;

♣ Taguchi statistical DOE and optimization; Proficient in various biotechnology related software, Berkley-Madona, Qualitek-4, SPSS, etc...