



**Dr. Jaydip Ghosh**

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**Designation:** Assistant Professor

**Qualification:** M.Sc., Ph.D.

➤ **Short Profile:**

**Graduation in Chemistry, post-graduation in Biochemistry (with Molecular Biology as special paper) from Calcutta University.**

**Ph.D. from the Department of Biophysics, Molecular Biology and Genetics, Calcutta University. Ph.D. thesis title: "Protein Folding: Chaperones and Ribosomes."**

**First post-doctoral research in Uppsala University, Sweden where primarily worked on (i) Sporulation in Mycobacteria, and (ii) Identification and Characterization of small non coding RNA in Mycobacteria.**

**Second post-doctoral research in Bordeaux University, France where the major project was the elucidation of the role of small noncoding RNA in the regulation of antibiotic tolerance in bacterial persister cells.**

➤ **Published Articles:**

**1. Identification and Characterization of the Antimicrobial and Active Components of Tea (*Camellia Sinensis*).**

Hridi Halder, Reetish Raj Sahoo, Shuvrangshu Guha, Sagnik Bhattacharjee, Dyutika Banerjee, Sejuti Ray, Arpita Pareshchandra Mondal, **Jaydip Ghosh** and Sudeshna Shyam Choudhury.

**IOSR Journal Of Pharmacy And Biological Sciences (IOSR-JPBS)** e-ISSN:2278-3008, p-ISSN:2319-7676. Volume 15, Issue 1 Ser. II (Jan –Feb 2020), PP 51-58.

**2. Comparison of Antioxidant and Antimicrobial Potential of Tea Samples from Seven Valleys of Darjeeling.**

Sejuti Ray, Srijan Bhattacharya, **Jaydip Ghosh**, Sudeshna Shyam Choudhury.

**Research and Reviews: Journal of Crop Science and Technology.** 2020, Vol 9, (2) pg-4-13

**3. A possible role of the full-length nascent protein in post-translational ribosome recycling.**

Debasis Das, Dibyendu Samanta, Arpita Bhattacharya, Arunima Basu, Anindita Das, Abhijit Chakrabarti, **Jaydip Ghosh** and Chanchal Das Gupta.

**PLOS ONE**. 2017 Jan 18; 12 (1)

**4. CRISPR: Future of genetic engineering?**

**Jaydip Ghosh**.

**Journal of Scientific Letters**. 2016; Vol .1(3):86-90

**5. Involvement of Mitochondrial Ribosomal Proteins in Ribosomal RNA-mediated Protein Folding.**

Anindita Das, **Jaydip Ghosh (co-first author)**, Arpita Bhattacharya, Dibyendu Samanta, Debasis Das, and Chanchal Das Gupta.

**Journal of Biological Chemistry**. 2011, 286, 43771-43781.

**6. Ribosome: The structure–function relation and a new paradigm to the protein folding problem.**

Debasis Das, Dibyendu Samanta, Anindita Das, **Jaydip Ghosh**, Arpita Bhattacharya, Arunima Basu, Abhijit Chakrabarti, and Chanchal DasGupta.

**Israel Journal of Chemistry**.2010, 50, 1–8.

**7. Growth, cell-division and sporulation in mycobacteria.**

Singh B, **Ghosh J**, Islam NM, Dasgupta S, Kirsebom LA.

**Antonie Van Leeuwenhoek**. 2010 Aug; 98(2):165-77. Epub 2010 May 1.

**8. Sporulation in mycobacteria.**

**Ghosh J**, Larsson P, Singh B, Pettersson BM, Islam NM, Sarkar SN, Dasgupta S, Kirsebom LA.

**Proceedings of National Academy of Sciences, U. S. A**. 2009 Jun 30; 106(26):10781-6. Epub 2009 Jun 16.

*(Appeared as Research Highlight in Nature Microbiology Reviews, vol 7, 2009)*

**9. Role of the ribosome in protein folding.**

Das D, Das A, Samanta D, **Ghosh J**, Dasgupta S, Bhattacharya A, Basu A, Sanyal S, Das Gupta C.

**Biotechnology Journal**. 2008 Aug; 3(8):999-1009.

**10. Protein folding by domain V of *Escherichia coli* 23S rRNA: specificity of RNAprotein interactions.**

Samanta D, Mukhopadhyay D, Chowdhury S, **Ghosh J**, Pal S, Basu A, Bhattacharya A, Das A, Das D, DasGupta C.

**Journal of Bacteriology**. 2008 May; 190(9):3344-52. Epub 2008 Feb 29.

**11. In vitro protein folding by *E. coli* ribosome: unfolded protein splitting 70S to interact with 50S subunit.**

Basu A, Samanta D, Das D, Chowdhury S, Bhattacharya A, **Ghosh J**, Das A, Dasgupta C.

**Biochemical and Biophysical Research Communications**. 2008 Feb 8; 366(2):598-603. Epub 2007 Dec 7.

**12. Ribosome-DnaK interactions in relation to protein folding.**

**Ghosh J**, Basu A, Pal S, Chowdhuri S, Bhattacharya A, Pal D, Chatteraj DK, DasGupta C.

**Molecular Microbiology**. 2003 Jun; 48(6):1679-92.

**13. Splitting of ribosome into its subunits by unfolded polypeptide chains.**

Basu Arunima, **Ghosh Jaydip**, Bhattacharya Arpita, Pal Saumen, Chowdhury Saheli, and Dasgupta Chanchal.

**Current science**, 2003, vol. 84, no. 8, pp. 1123-1125.

**14. Mutations in domain V of the 23S ribosomal RNA of *Bacillus subtilis* that inactivate its protein folding property in vitro.**

Chowdhury S, Pal S, **Ghosh J**, DasGupta C.

**Nucleic Acids Research**. 2002 Mar 1; 30(5):1278-85.

➤ **Text Book:**

**1. Snatak Ajaiba Rasayana (Inorganic Chemistry, Degree Course).**

Saktiprosad Ghosh and **Jaydip Ghosh**.

**Book Syndicate Pvt. Ltd.** (2014)

➤ **Book Chapter:**

**1. Ribosome Assisted Protein Folding: Some of its Biological Implications.**

Dibyendu Samanta, Anindita Das, Debasis Das, Arpita Bhattacharya, Arunima Basu, **Jaydip Ghosh** and Chanchal DasGupta.

**2. Protein Folding, Novascience publications**, Editor: Eric C. Walters, 2010, 4th quarter, ISBN: 978-1-61728-990-3

**3. Unique Extremophilic Bacillus: Their application in Plant Growth Promotion and Sustainable Agriculture (Book Chapter no. 16 from the Book: Microbes and Microbial Biotechnology for Green Remediation, Editor: Junaid Ahmed Malik).**

Bedaprana Roy, Debapriya Maitra, **Jaydip Ghosh**, Arup Kumar Mitra.

**In Press, Elsevier Publications.**

➤ **Patent:**

As an **inventor**, I am a part of an **international patent (US-8779088-B2)** titled “**New vaccine for the treatment of *Mycobacterium* related disorders**”. (2014)