



UNIVERSITY OF CALCUTTA

ACADEMIC DEPARTMENT: MICROBIOLOGY

FACULTY ACADEMIC PROFILE/ CV

1. **Full name of the faculty member:** SAGARMOY GHOSH
2. **Designation:** PROFESSOR
3. **Specialisation :** RNA Biology
4. **Passport size photograph :**



5. **Contact information :**

Department of Microbiology, University of Calcutta
Room No. MB-755, University College of Science and Technology
35 Ballygunge Circular Road, Kolkata-700 019. INDIA.
Email. sgmicrobio@caluniv.ac.in, sagarmoy@gmail.com

6. **Academic qualifications:**

Please mention here the degrees (graduation onward):

College/ university from which the degree was obtained	Abbreviation of the degree
St. Xavier's College, University of Calcutta	B.Sc. (Hons. in Chemistry)
University of Calcutta	M.Sc. (Biochemistry)
Ph.D.	Jadavpur University

7. **Positions held/ holding:**

Professor, Department of Microbiology, University of Calcutta (since November 2017)
Associate Professor, Department of Microbiology, University of Calcutta (August 2013-October 2017)

Assistant Professor, Department of Microbiology, University of Calcutta (July 2003- August 2013)

CSIR Senior Research Associate, Manovikas Biomedical Research Centre (January 2002- July 2003)

Research Associate, Duke University Medical Center, Durham, NC, USA (September 1998-November 2001)

8. **Research interests:**

Please cite briefly the areas of research interests

- RNA maturation pathways of Hepatitis B virus
- Small RNA (sRNA) mediated gene regulation in bacteria

9. **Research guidance:**

Number of researchers awarded M.Phil/ Ph.D degrees : 6 (six)

Number of researchers pursuing M.Phil/ Ph.D : 2 (two)

10. **Projects :**

Completed projects :

Sl. No.	Title	Agency	Period	Grant/Amount Mobilized
1.	Transcription and polyadenylation control during HBV life cycle	DST, Govt. of India	01/07/2005-30/06/2008, 3 years	8,00,000
2.	Attenuated splicing of nascent Hepatitis B RNA and their nuclear export: implications for the pathophysiology of disease progression	CSIR, Govt. of India	01/03/2005-28/02/2009, 4 years	18,52,000
3.	Studies on microbial biodiversity of soil affected by natural and anthropogenic stress (<i>in collaboration with Dr. Kalyan Chakrabarti, Dept. of Agricultural Chemistry and Soil Sc., University of Calcutta</i>)	UGC, Govt. of India	18/04/2007-31/03/2012, 5 years	14,00,000
4.	Regulation of genes involved in iron metabolism by small RNA (sRNA) in <i>Burkholderia cepacia</i> complex (<i>in collaboration with Dr. Saumya Raychaudhuri, IMTECH, Chandigarh</i>)	DBT, Govt. of India	01/12/2010-30/11/2013, 3 years	49,55,000

Current projects:

Sl. No.	Title	Agency	Period	Grant/Amount Mobilized
1.	Understanding the assembly of nuclear export complex on HBV RNAs	DBT, Govt. of India	26/03/2018-25/03/2021, 3 years	49,24,800

11. Select list of publications:

a) *Journals:*

Sl. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	Ghosh, S., Dureja, C., Khatri, I., Subramanian, S., Raychaudhuri, S., and Ghosh, S.	Identification of novel small RNAs in <i>Burkholderia cenocepacia</i> KC-01 expressed under iron limitation and oxidative stress conditions.	<i>Microbiology</i> [IF= 2.268]	163(12)	1924-1936	2017
2.	Chakraborty, D., and Ghosh, S.	The epsilon motif of Hepatitis B virus RNA exhibits a potassium-dependent ribonucleolytic activity.	<i>FEBS J.</i> [IF=4.237]	284(8)	1184-1203	2017
3.	Roy, D., Bhanja Chowdhury, J., and Ghosh, S.	Polypyrimidine Tract Binding protein (PTB) associates with intronic and exonic domains to squelch nuclear export of unspliced RNA.	<i>FEBS Lett.</i> [IF=3.582]	587(23)	3802-3807	2013
4.	Majumder, A., Bhattacharyya, K., Kole, SC., and Ghosh, S.	Efficacy of indigenous soil microbes in arsenic mitigation from contaminated alluvial soil of India.	<i>Environ. Sc. Pollut. Res.</i> [IF=2.651]	20(8)	5645-5653	2013
5.	Das, B., Chakrabarti, K., Ghosh, S. , Majumdar, B., Tripathi, S., and Chakrabarti, K.	Effect of efficient pectinolytic bacterial isolates on retting and fibre quality of jute.	<i>Industr. Crops Products</i> [IF=2.507]	36(1)	41-49.	2012
6.	Barua, S., Tripathi, S., Chakraborty, A., Ghosh, S. , and Chakrabarti, K.	Characterization and crop production efficiency of diazotrophic bacterial isolates from coastal saline soils.	<i>Microbiol. Res.</i> [IF=1.958]	167(2)	95-102	2012
7.	Bhanja Chowdhury, J., Roy, D., and Ghosh, S.	Identification of a unique splicing regulatory cluster in Hepatitis B Virus pregenomic RNA.	<i>FEBS Lett.</i> [IF=	585(20)	3348-3353	2011
8.	Chakraborty, A., Chakrabarti, K., Chakraborty, A., and Ghosh, S.	Effect of long-term fertilizers and manure application on microbial biomass and microbial activity of a tropical agricultural soil.	<i>Biol. Fertil. Soils</i> [IF=2.156]	47(2)	227-233	2011

9.	Ravichandran, S., Dasgupta, J., Chakrabarti, C., Ghosh, S. , Singh, M., and Dattagupta, J. K.	The role of Asn14 in the stability and conformation of the reactive-site loop of winged bean chymotrypsin inhibitor: Crystal structures of two point mutants Asn14 →Lys and Asn14 →Asp.	Protein Engg. . [IF=2.596]	14 (5)	349-357	2001
10..	Ghosh, S. and Garcia-Blanco, M. A.	Coupled <i>in vitro</i> synthesis and splicing of the RNA polymerase II transcripts.	RNA. [IF=5.018]	6 (9)	1325-34	2000
11.	Ghosh, S. , and Singh, M.	cDNA cloning, expression, and rapid purification of a Kunitz-type winged bean chymotrypsin inhibitor.	Protein Expr. Purif. [IF=1.563]	10(1)	100-6	1997

b) **Books/ book chapters :**

S.No	Title	Author's Name	Publisher	Year of Publication
1.	The phosphoryl transfer reactions in pre-messenger RNA splicing.	Garcia-Blanco, M. A., Lindsey L. A., and Ghosh, S.	RNA , D. Söll, S. Nishimura and P. Moore, Eds. Elsevier Science/Pergamon Press. Amsterdam, The Netherlands. Pp. 109-124. (ISBN: 0-080-43408-8).	2000
2.	Attention Deficit Hyperactivity Disorder.	Gangopadhyay, P.K., Ghosh, S. , Mukhopadhyay, K., Gupta, D., and Singh, M.	Rev. Neurol. , M.M. Mehndiratta, Ed. Indian Academy of Neurology, New Delhi, India, Pp. 215-228 (ISSN: 0971-5924, ISBN: 81-900499-09)	2002
3.	Demonstration of a Ribozyme in Epsilon Domain of Hepatitis B Virus RNA.	Chakraborty D., and Ghosh S.	Scarborough R., Gatignol A. (eds) Ribozymes. Methods in Molecular Biology , vol 2167. pp. 45-59. Humana, New York, NY. (Online ISBN: 978-1-0716-0716-9; https://doi.org/10.1007/978-1-0716-0716-9_4).	2020

c) **Conference/ seminar volumes:**

Nil

d) **Other publications :**

Nil

12. **Membership of Learned Societies:**

Nil

13. **Patents:**

Nil

14. **Invited lectures delivered :**

8th RNA group meeting held at CSIR- Centre for Cellular and Molecular Biology, January 8-10, 2016.

15. **Awards:**

Nil

16. **Editor/Editorial board Member:**

Nil

16. **Other notable activities:**

- Convenor, Ph.D. Research Advisory Committee in Microbiology under University of Calcutta