

DR. ANGANA GHOSHAL

Assistant Professor

M.Sc. (Zoology); B.Ed., Ph.D.

Email: anganaghosal@tdbcollege.ac.in

» **Overview:**

Dr. Angana Ghoshal, has been serving the department of Zoology since 15th March, 2010. She has completed Bachelor's Degree in Zoology (Hons.) from Bethune College (Calcutta University) in 2002 and was awarded the National Scholarship from the University for her commendable performance. She is an alumna of the Banaras Hindu University, from where she completed her post-graduation specializing in Biochemistry and Molecular biology. Prior to her position she was engaged in active research at the Infectious Disease and Immunobiology Division of Indian Institute of Chemical Biology (CSIR), Jadavpur, Kolkata, from where she attained her Doctoral degree on "Exploring the role of sialic acids in Leishmaniasis" in 2009. Her area of research interest is infectious diseases, the immune status and host-pathogen interaction. She has several research publications of international and national repute. Her present area of work involves the study of stress, physiological and immune response in different aquatic fauna. She has been an invitee member of the Post-graduate Board of studies of Zoology, Kazi Nazrul University and has acted as the Co-ordinator (both Undergraduate and Postgraduate) of the Department. At present she is a member of the Undergraduate Board of Studies of Zoology, Kazi Nazrul University.

» **Date of appointment to the present job:**

15th March, 2010

» **Other Academic/ Administrative post:**

- Member of Undergraduate Board of Studies Zoology, Kazi Nazrul University (w.e.f. 09/04/2020)

» **Academic background:**

She has completed Bachelor's Degree in Zoology (Hons.) from Bethune College (Calcutta University) in 2002. She was awarded the Master's Degree in Zoology with specialization in Molecular Biology, Biochemistry & Metabolism from Banaras Hindu University in the year 2004 respectively. She qualified NATIONAL ELIGIBILITY TEST (NET), in 2003, conducted by Council of Scientific and Industrial Research (CSIR). Qualified GATE, 2003 in Life Science category with 93.4 percentile. She has completed her Ph.D. Degree in: "Exploring the role of Sialic acids in Leishmaniasis" from Indian Institute of Chemical Biology (CSIR), Jadavpur, Kolkata. She was awarded the Ph.D. degree in 2009 from Jadavpur University, Kolkata.

» **Information about Ph.D.:**

- **Date of Award:** 11th November, 2009
- **Ph.D. Topic:** *Exploring the role of sialic acids in Leishmaniasis.*

» **Professional Qualifications:**

- **NET:** CISR, 2003

» **Publications in Journals:**

1. Ghoshal A, Gerwig GJ, Kamerling JP, Mandal C. (2010) Sialic acids in different

- Leishmania* sp., its correlation with nitric oxide resistance and host responses. *Glycobiology*. Volume 20(5), pp. 553-66.
2. Ghoshal A, Mukhopadhyay S, Saha B, Mandal C. (2009) 9-O-acetylated sialoglycoproteins are important immunomodulators in Indian visceral leishmaniasis. *Clinical Vaccine Immunology*. Volume 16(6), pp. 889-98.
 3. Ghoshal A, Mukhopadhyay S, Chava AK, Gerwig GJ, Kamerling JP, Chatterjee M, Mandal C. (2009) 9-O-acetylated sialic acids enhance entry of virulent *Leishmania donovani* promastigotes into macrophages. *Parasitology*. Volume 136(2), pp.159-73.
 4. Ghoshal A, Mukhopadhyay S, Demine R, Forgber M, Jarmalavicius S, Saha B, Sundar S, Walden P, Mandal C, Mandal C. (2009) Detection and characterization of a sialoglycosylated bacterial ABC-type phosphate transporter protein from patients with visceral leishmaniasis. *Glycoconj Journal*. Volume. 26(6), pp. 675-89.
 5. Ghoshal A, Mukhopadhyay S, Mandal C. (2008) Sialoglycotherapeutics in protozoal diseases. *Mini Review Medicinal Chemistry*. Volume. 8(4), pp. 358-69.
 6. Ghoshal A, Mandal C. (2011) A perspective on the emergence of sialic acids as potent determinants affecting leishmania biology. *Molecular Biology International*. Volume. 2011, pp. 532106.
 7. Samanta S, Dutta D, Ghoshal A, Mukhopadhyay S, Saha B, Sundar S, Jarmalavicius S, Forgber M, Mandal C, Walden P, Mandal C. (2011) Glycosylation of erythrocyte spectrin and its modification in visceral leishmaniasis. *PLoS One*. Volume. 6(12), pp. 28169.
 8. Khatua B, Ghoshal A, Bhattacharya K, Mandal C, Saha B, Crocker PR, Mandal C. (2010) Sialic acids acquired by *Pseudomonas aeruginosa* are involved in reduced complement deposition and siglec mediated host-cell recognition. *FEBS Letter*. Volume. 584(3), pp. 555-61. (Joint first author).
 9. Jain R, Ghoshal A, Mandal C, Shaha C. (2010) *Leishmania* cell surface prohibitin: role in host-parasite interaction. *Cell Microbiology*. Volume. 12(4), pp. 432-52.
 10. Singh N, Kaur J, Kumar P, Gupta S, Singh N, Ghosal A, Dutta A, Kumar A, Tripathi R, Siddiqi MI, Mandal C, Dube A. (2009) An orally effective dihydropyrimidone (DHPM) analogue induces apoptosis-like cell death in clinical isolates of *Leishmania donovani* overexpressing pteridine reductase 1. *Parasitology Research* Volume. 105(5), pp. 1317-25.
 11. Dutta A, Ghoshal A, Mandal D, Mondal NB, Banerjee S, Sahu NP, Mandal C. (2007) Racemoside A, an anti-leishmanial, water-soluble, natural steroidal saponin, induces programmed cell death in *Leishmania donovani*. *Journal of Medical Microbiology*. Volume. 56(Pt 9), pp. 1196-204.
 12. Ghoshal A. (2018) A Comparative Study of Thermal Stress affecting the respiratory rate, physiochemical and behavioural responses of *Chhanna punctatus* and *Mystus gulio*. *Journal of Emerging Technologies and Innovative Research (JETIR)*; Volume. 5 Issue 8; pp. 968-975 eISSN: 2349-5162
 13. Ghoshal A. (2018) Climate change poses a threat to prevalence of Visceral Leishmaniasis: An Overview; *International Journal of Research and Analytical Reviews (IJRAR)*; Volume. 51 Issue 3; pp.837y-839y e ISSN 2348 –1269, Print ISSN 2349-5138
 14. Ghoshal A. (2019) Neglected tropical diseases and social determinants: An intersection of incidence. *International Journal of Pharma Biological Sciences*. Volume.

10 Issue 2, pp:181-186.

15. Ghoshal A. (2019). Association of Vitamin D and Obesity: An Overview. International Journal of Research and Analytical Reviews (IJRAR), Volume 6, Issue 2, Pp. 347z-349z. eISSN 2348 –1269, Print ISSN 2349-5138
16. Ghoshal A. (2019) Atherosclerosis: A Silent Killer; International Journal of Research and Analytical Reviews (IJRAR), Volume 6, Issue 2, Pp. 469z-472z. e ISSN 2348 – 1269, Print ISSN 2349-5138.
17. Ghoshal A. (2019) Green Tea: A potent Immunomodulatory Agent; Journal of Emerging Technologies and Innovative Research (JETIR). Volume. 6, Issue 4, Pp 127-135; Print ISSN 2349-5138.
18. Ghoshal A. (2019) Vitamin B 12 and its Health Impacts. Journal of Emerging Technologies and Innovative Research (JETIR); Volume. 6 Issue 5; Pp 878-886; eISSN: 2349-5162
19. Ghoshal A. (2019) Association of Vitamin D and Obesity: An Overview; International Journal of Research and Analytical Reviews (IJRAR), Volume 6; Issue 2, e ISSN 2348 –1269, Print ISSN 2349-5138.
20. Ghoshal A. (2022) The interface of Vitamin C and Covid-19. International Journal of Novel Research and Development (IJNRD); Volume 7, Issue 2, Pp 144-151; ISSN: 2456-4184
21. Ghoshal A. (2022) Impact of Covid-19 on the Mental Health of Children; International Journal of Scientific Research in Engineering and Management (IJSREM); Volume: 06 Issue 02, Pp. 1-11 ISSN: 2582-3930

» **Books and Chapters:**

• **Books:**

1. Ghoshal A., Climate change: A dagger in disguise triggering the emergence of infectious diseases. Aksharmita: A collection of Articles; pp. 120; Publisher: Dibratrir Kavya (UGC Approved) ISBN No. 978-93-84496-07-4.
2. Dawn S & Ghoshal A., Development of the Western Barddhaman as a mining belt since colonial phase: A geographical review; pp197; A collection of Articles; pp. 120; Publisher: Dibratrir Kavya (UGC Approved) ISBN No. 978-93-84496-07-4.
3. Ghoshal A., A brief review on the impacts of Global Warming; The climate on the Edge: A collection of Evidences, Impacts and Trends; ISBN No. 978-81-939474-2-5.

• **Chapters:**

N. A.

» **Seminars, Conferences, Webinars and workshops attended:**

- Seminars/ Conferences/ Workshops: 13

» **Life Membership:**

N. A.

» **Awards/ Academic Achievements:**

N. A.

» **Professional Courses:**

- Orientation Programme/FIP/FDP: 00

- Refresher Course: 01
- Short Term Course: 01

» **Others/ Miscellaneous:**

N. A.