Curriculum Vitae

Name: SAMAR KUMAR SAHA
Designation: Professor
Date of birth: 22/12/1966
Nationality: Indian **Religion:** Hindu
Affiliation: Professor, Department of Zoology, Visva-Bharati (A Central University), Santiniketan 731235, West Bengal.

Residential address: Homoeopathic College Road, Sastinagar, Ismile, Asansol 713301, District- Paschim Bardhhaman, West Bengal
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Educational qualifications:

Degree obtained	Subject	University	Year
B.Sc. (Hons.)	Hons. In Life Science (Major Zoology), Physics, Chemistry	Visva-Bharati (A Central University)	1987
M.Sc.	Life Science (Major Zoology)	Visva-Bharati (A Central University)	1989
NET	Life Science	UGC	1989 June& December
GATE	Physiology, Biochemistry, Microbiology	IITs	1989
Ph.D.	Zoology (Fish disease)	Calcutta University	1997

Educational service experiences: 25 years

Area of expertise/interest: Aquatic Parasitology, Fish Biology, Developmental Biology

Students awarded Ph.D. under supervision:

1. Sanghamitra Das (RGNF)-Title of the Ph.D.thesis:"Arsenic induced thyrotoxicity and testicular toxicity in mice: amelioration by selenium" Year of award- 2013
2. Arun Guha (CAS Fellow)-Title of the Ph.D. thesis: "Population dynamics and control of piscine ectoparasites *Argulus bengalensis* Ramakrishna, 1951 (Crustacea: Branchiura)" Year of award- 2014
3. Anirban Banerjee (UGC MRP Fellow) Title of the Ph.D. thesis: "Studies on gametogenesis, embryonic development of piscine ectoparasites *Argulus bengalensis* (Crustacea: Branchiura) and its control" Year of award- 2014
4. Archa Sengupta (WBDBT Project Fellow) Title of the Ph.D.thesis: - "Efficacy of murrel hypothalamic extract in regulation of spawning and expression of myogenic regulatory factors in *Labeo rohita* (Hamilton, 1822)" Year of award- 2015
5. Sandip Mazumder (UGC MRP Fellow) Title of the Ph.D. thesis: Study on utilization pattern of natural food resources through feeding ecology of *Labeo rohita* Hamilton 1822 under substrate free and substrate-based environment" Year of award- 2016

6. Md. Shabbir (UGC Non-NET Fellow) Title of the Ph.D. thesis: Genotoxicity evaluation and bioremediation of chloropyrifos pesticide Year of award- 2019
7. Netri Datta (UGC Non-Net Fellow) Title of the Ph.D. thesis: "Physiological Implications of *Argulus bengalensis* (Ramakrishna,1951) infection and its control in *Labeo rohita* (Hamilton, 1822)" Year of award- 2024
8. Moumita Ghoshal (UGC BSR Fellow) Title of the Ph.D. thesis: Isolation, identification and functional characterization of bacteria from *Argulus bengalensis* Ramakrishna,1951'Year of award: Year of award- 2024
9. Beauty Saha (UGC NET Fellow) Title of the Ph.D. thesis: "Determination of suitability of *Acacia auriculiformis* fruit as a piscicide of choice and evaluation of its efficacy" Year of award- 2024

Research scholars presently working:

1. Dutimoy Mukherjee (UGC Non-NET Fellow) Title: Developmental assaults of anti-rheumatic drugs upon chick embryo.
2. Mriganka Das (CSIR-NET Fellow) Title: Teratogenicity of an anti-hypertensive drug on chick embryo.
3. Pritam Pal (UGC NET Fellow) Title: Biomagnification of cadmium through aquatic trophic structure in microcosm and its impact on biotic components
4. Supriya Mondal (CSIR-UGC-NET(JRF)) Title: Developmental consequences of statin exposure to chick embryo
5. Shromona Roy (Joined as Non-NET Fellow): Tentative title: Oogenic dynamics of *Argulus* sp. and impact of azadirachtin upon it.

List of publications (Corresponding author in bold)**:**
Citation Index: 378 **h-index:** 10; **i10-index:** 12

1. Saha SK, Homechaudhuri S, Banerjee S (1997) Natural prevalence of *Trypanosoma mukundi* in *Heteropneustes fossilis* (Bloch) and related haematological analysis. *Journal of Aquaculture in the Tropics* 12: 79-87

2. Maiti M, Saha SK, Homechaudhuri S, Banerjee S (2000) Characterization of erythropoietic cells in *Oreochromis niloticus* (L) and *Cirrhinus mrigala* (HAM). *Journal of Aquaculture in the Tropics* 15: 81-90

3. **Saha SK**, Guha A, Banerjee A (2011) Feeding apparatus and associated glands in the freshwater fish ectoparasite *Argulus siamensis* Wilson,1926 (Branchiura). *Crustaceana* 84: 1153-1168 DOI: 10.1163/156854011X587469

4. Chowdhury P, Saha SK, Guha A, Saha SK (2012) Chemical and biochemical activities of sonochemically synthesized poly (N-isopropylacrylamide)/silica nanocomposite. *Applied Surface Science* 261: 598-604 DOI:https://doi.org/10.1016/j.apsusc.2012.08.062

5. BanerjeeA, **Saha SK**(2013) Biphasic control of *Argulus bengalensis* Ramakrishna (1951) (Crustacea: Branchiura) with plant derivatives. *Aquaculture* 414: 202-209DOI: https://doi.org/10.1016/j.aquaculture.2013.07.044
6. Guha A, Aditya G, **Saha SK** (2013) Survivorship and fecundity of *Argulus*

bengalensis (Crustacea; Branchiura) under laboratory conditions. *Invertebrate Reproduction & Development* 57:301-308.
DOI: https://doi.org/10.1080/07924259.2013.793217

7. Guha A, Aditya G, Saha SK (2013) Correlation between body size and fecundity in fish louse *Argulus bengalensis* Ramakrishna, 1951 (Crustacea: Branchiura). *Journal of Parasitic Diseases* 37:118-124 DOI: DOI 10.1007/s12639-012-0144-x

8. Majumder S, Saikia SK, Saha SK (2013) Preliminary investigation on the diversity of plankton and periphyton from a freshwater pond stocked with rohu, *Labeo rohita* (Hamilton, 1822). *Ege Journal* of *Fisheries* and *Aquatic* Sciences 30: 183-186 DOI:10.12714/egejfas.2013.30.4.06

9. Banerjee A, Manna S, **Saha SK** (2014) Morphological characterization of testicular cells, spermatogenesis and formation of spermatophores in a fish ectoparasite *Argulus bengalensis* Ramakrishna,1951(Crustacea:Branchiura) *Tissue and Cell* 46:59-69(**Photograph Journal cover paged)** DOI:https://doi.org/10.1016/j.tice.2013.11.003

10. Banerjee A, Manna S, **Saha SK** (2014) Effect of aqueous extract of *Azadirachta indica* A. Juss (neem) leaf on oocyte maturation, oviposition, reproductive potentials and embryonic development of a freshwater fish ectoparasite *Argulus bengalensis* Ramakrishna, 1951 (Crustacea:Branchiura). *Parasitology Research*113:4641-4650 DOI:10.1007/s00436- 014-4155-7

11. Banerjee A, **Saha SK** (2014) Tissue specific structural variations of mitochondria of fish ectoparasite *Argulus bengalensis* Ramakrishna,1951(Crustacea:Branchiura): Functional implications. *Journal of Advanced Research*.
DOI:http://dx.doi.org/10.1016/j.jare.2013.04.004

12. Saha SK, Das S, Chowdhury P, Saha SK (2014) Biocompatibility of sonochemically synthesized poly(N-isopropylacrylamide)/silicananocomposite. *RSCAdvances* 4:14457-14467 DOI: https://doi.org/10.1039/C3RA46301J

13. Sengupta A, Mukherjee S, Bhattacharya S, Saha SK, Chattopadhyay A (2014) Expression pattern of myogenic regulatory transcription factor mRNAs in the embryo and adult *Labeo rohita* (Hamilton,1822). *International Journal of Zoology* 2014:1-9 Article ID259685DOI: https://doi.org/10.1155/2014/259685

14. Banerjee A, Manna S, **Saha SK** (2015) Histological evaluation of development and axis formation in freshwater fish ectoparasite *Argulus bengalensis* Ramakrishna,1951(Crustacea: Branchiura). *Parasitology Research* 114: 2199–2212 DOI: 10.1007/s00436-015-4411-5

15. Banerjee A, Manna S, **Saha SK** (2015) Male reproductive system of the fish ectoparasite *Argulus bengalensis* (Crustacea: Branchiura). *Journal of Morphology* 276: 540–549 DOI: https://doi.org/10.1002/jmor.20364

16. Banerjee A, **Saha SK** (2016) Histological and ultrastructural investigation of the female reproductive system of *Argulus bengalensis* Ramakrishna,1951(Crustacea: Branchiura). *Journal of Morphology* 277: 707-716

DOI: https://doi.org/10.1002/jmor.20528

17. Banerjee A, Poddar S, MannaS, **Saha SK** (2016) Mutualistic association of rotifer *Philodina roseola* with the branchiuran fish ectoparasite *Argulus bengalensis* at its embryonic stage. *Biology Letters*12:1-5 DOI:https://doi.org/10.1098/rsbl.2015.1043

18. Majumder S, Ghosh P, Saha SK Saikia SK (2016) Study on food selection of *Labeo rohita* (Hamilton,1822) by determining electivity index in periphyton based and periphyton free monoculture pond. *International Journal of Applied Research* 2 (3): 04-07.

19. Saha S K, Naaz S, Poddar S, Bayen SP, Mondal MK and Chowdhuri P (2017) Tenfold enhancement of fluorescence quantum yield of water-soluble silver nanoclusters for nano- molar level glucose sensing and precise determination of blood glucose level. *Sensors and Actuators B: Chemical* 255: 332–340
DOI: https://doi.org/10.1016/j.snb.2017.07.143

20. Shabbir M,Singh,M, Maiti S,Saha SK (2018) Removal enactment of organo-phosphorous pesticide using bacteria isolated from domestic sewage. *Bioresource Technology* 263: 280- 288 DOI: 10.1016/j.biortech.2018.04.122

21. Majumder S, Majumdar N, Ghosh P, Saikia SK, Saha SK (2018) Rohu *Labeo rohita* (Hamilton, 1822) changes feeding strategy throughout its ontogeny: An explanation from feeding ecology. *International Journal of Scientific Research in Biological Sciences* 5:92-96 DOI:https://doi.org/10.26438/ijsrbs/v5i4.9296

22. Majumder S, Majumdar N, Ghosh P, Roy K, Saikia SK, Saha SK (2018) Feeding pattern of an Indian major carp, *Labeo rohita* (Hamilton, 1822) in periphyton based monoculture and polyculture earthen pond. *International Journal of Scientific Research in Biological Sciences* 5: 21-28 DOI:https://doi.org/10.26438/ijsrbs/v5i4.2128

23. Shabbir M, Singh, M, Maiti S, Saha SK (2021) Organophosphate pesticide (Chlorpyrifos): Environmentalmenace; study reveals genotoxicity on plant and animal cells. *Environmental Challenges* 5:100313
DOI: https://doi.org/10.1016/j.envc.2021.100313

24. Datta N, Kar PK, **Saha SK**(2022) Circulatory physiology and erythropoiesis in freshwater fish *Labeo rohita* experimentally parasitized by *Argulus bengalensis*. *Journal of Applied Ichthyology* 8: 63-72 DOI: 10.1111/jai.14287

25. Datta N, Kar PK, **Saha SK** (2022) Primary stress response and biochemical profile of *Labeo rohita* (Hamilton,1822) experimentally parasitized with *Argulus bengalensis* (Ramakrishna, 1951). *Journal of Fish biology* 100: 1-13 DOI: https://doi.org/10.1111/jfb.15048

26. Saha B, **Saha SK** (2022) Phytochemical analysis of *Acacia auriculiformis* pericarp through liquid chromatography-electrospray ionization-mass spectrometry. *Indian Journal of Pharmaceutical* Sciences 84: 660-668

27. Saha B, **Saha SK** (2022) *Acacia auriculiformis* pericarp–a substitute of Mohua oil cake as piscicide in pre-stocking pond preparation. *Aquaculture* 548: 737586

DOI:https://doi.org/10.1016/j.aquaculture.2021.737586

28. Ghoshal M, Ghosh K and **Saha SK** (2023) Isolation,characterization and identification of gut bacteria from piscine ectoparasite *Argulus bengalensis* (Ramakrishna 1951) and their relationship with haematophagy. *Journal of Advanced Zoology*, 44: 240-250

29. Datta N, Banerjee A, Kar PK, Saha SK (2024) Cleaning symbiosis between *Macrobrachium lamarrei* (H.Milne-Edwards, 1837) and *Labeo rohita* Hamilton: An approach for biological control of ectoparasitic burden of *Argulus bengalensis* Ramakrishna. *Aquaculture581*: 740456
DOI:https://doi.org/10.1016/j.aquaculture.2023:740456

30. Datta N, Al Basir F, Adhurya S, Saha SK and Ray S (2025) Mathematical validation of cleaning symbiosis between *Macrobrachium lamarrei* and *Labeo rohita* as an effictive bio- control method against *Argulus bengalensis. Ecological Modelling* 508: 111205 DOI:https://doi.org/10.1016/jecolmodel.2025.111205

Book chapters:

1. Shabbir M., Saha S K and Singh M (2017) Toxicological Study of Organo-phosphorus Pesticide and Proposed Detoxification Methodology. Chapter 9 In: '*Sustaining Future Food Security in Changing Environment*' (Ed. Divya Pandey and Abhijit Sarkar), Nova Science Publishers, Inc., New York. USA, pp. 211-220.**ISBN:** 978-1-53610-301-4-eBook

2. Saha B, **Saha SK** (2024) LC-MS analyses of secondary metabolites in *Acacia auriculiformis* pericarp. Volume 17 Chapter 01 In Recent advances in Pharmaceutical Sciences (Ed. Nidhi Dubey) Innovare Academic Science Pvt. Ltd, Bhopal. pp 1-19. **ISBN:** 978-81-964888-6-4

Research projects completed:

1. **UGC Major Research Project:** "Reproductive Biology of Piscine Ectoparasite, *Argulus* sp. (Crustacea: Branchiura) with special emphasis on vitellogenesis" UGC MRP Ref.: 33-333/2007(SR) dt.10.3.2008 Period:01/04/2008 to31/03/2011

2. **RGNFS offered to Sanghamitra Das:** "Amelioration of arsenic induced thyrotoxicity and testicular toxicity by selenium" Period: 01.01.2008to 31/12/2012

3. **DST Government of West Bengal:** "Study on the effect of murrel GnRH- enriched fraction in fish reproduction and its comparison with some commercial synthetic products" No.:917(Sanc.)/ST/P/S&T/2G-1/2009 (Co-PI) Period: 16.06.2009 to 15.06.1012

4. **UGC Major Research Project:** "Evaluation of natural feed selectivity and trophic status of rohu (*Labeo rohita* H.) for periphyton based aquaculture system" (Co-investigator) Period:1- 2-2011 to 31.1.2014

5. **DST NASI fellowship offered to Neha Mazumder:** "Biocompatibility assessment of polymer coated nanocomposite" Period: 12/01/2015 to 11/01/2016

Journal Editorship and reviewer:

Handling Editor of *Frontiers in Drug Discovery* for 2022 and 2023

Reviewer: Reviewer of numbers of National and International Journal

Members of Academic bodies:

1. Former Member of Post Graduate Board of Studies, The University of Burdwan
2. Member of Post Graduate Board of Studies in Animal Science, Kazi Nazrul
3. University Member of Post Graduate Board of Studies in Zoology, Kazi Nazrul
4. University Member of Research Board of Animal science, Kazi Nazrul University
5. Member of under Graduate Board of Studies in Zoology, Kazi Nazru
6. University Postgraduate Board of Studies in Conservation Biology,
7. KazaiNazrul University Member of Research Board in Zoology, Cooch Behar Pnachanan Barma University

Organization of Seminar: Organizing members of a number of seminars, symposium and Workshops; **Convenor** of National Seminar on 'Advancement of Biology in the 21st Century' in collaboration with the Zoological Society, Kolkata28-02-2020 to 29-02-2020

Societal membership:

- Life Member of Zoological Society, Calcutta
- Life member of Association of Teachers in Biological Sciences
- Life Member of Association of Aqua culturists, Bhubaneswar

Member of Selection Committees

- Acted as the member of a Selection Committee for the post of SMS (Fishery Science) in KVK West Bengal University of Animal and Fishery Scince) on 21/07/2010
- Acted as a member of Selection Committee for the post of Professor in Zoology, Cooch Behar Pnanchanan Barma University on 25/01/2018
- Acted as the Honourable Chancellor nominee of Selection committee for the post of Assistant Professor and Associate Professor in Animal Science of Kazi Nazrul University on 15/11/2028- 16/11/2018
- Acted as the Honourable Chancellor nominee of a Selection committee of Biological sciences of Aliah University for the post of Assistant Professor and Professor on 25/07/2019
- Acted as the Honourable Chancellor nominee of Selection Committee for the post of Professor in Animal Science of Kazi Nazrul University on 10/11/ 2020
- Acted as the Honourable Chancellor nominee of Selection committee for the post of Associate Professor in Animal Science of Kazi Nazrul University on 18/02/ 2021
- Acted as the Chairman of a Selection Committee of Zoology, Cooch Behar Pnanchanan Barma University for the post Assistant Professor 12/01/2021 – 13/01/2021

- Acted as the member of a Selection Committee for the post of Assistant Professor in the Department of Zoology of Gauhati University 26/02/2022
- Subject expert of the Selection Committee for CAS for promotion of Assistant Professor to Associate professor, Kulti College, Kazi Nazrul University on 12.08.2022
- Subject expert of the Selection Committee for CAS for promotion of Assistant Professor to Associate professor, T.D.B. College, Kazi Nazrul University on 18.02.2022

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