- 1. Name: DR. SUDIPTA KUMAR GHORAI
- 2. Present Position & Office Address:

Associate Professor in Zoology, Dept. of Zoology, Egra S. S. B. College, Egra, Purba Medinipur, West Bengal, PIN- 721429, India.

3. Research Centre: Centre for Coastal
Environmental Studies, Egra SSB College under
Vidyasagar University



C/O- Sri Jagadis Chandra Ghorai Vill..: Balavadrapur, P.O: Brajalalchalk P.S.: Chandipur, Purba Medinipur West Bengal,India-721440

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E-mail: sudiptag8@gmail.com

sudiptakrghorai@gmail.com sudipta@egrassbcollege.ac.in



- 5. Nature of Employment: Regular
- 6. Date of Birth: 1st May 1981

7. Educational Qualification:

Degree	Year of completion	University/Institution	Subjects	% of Marks
Post Doc	14 th Nov, 2021	IISERKolkata (funded by SERB TARE)	Integrated Taxonomy	Not Applicable
PhD	25 th July, 2016	Vidyasagar University	Zoology	Not Applicable
MPhil	23 rd Sep, 2005	Kalyani University	Environmental Science	71.6
M.sc *	2003	Vidyasagar University	Zoology Spl Ecology	73.2
B.Sc **	2001	Vidyasagar University	Zoology	68.5

- * First class first gold medalist in M.Sc. (2003).
- ** First class first gold medalist in B.Sc (2001).

8. Achievements:

- A. Qualified NET for Lectureship, Dec.2004
- B. Qualified NET for Lectureship, June, 2005
- C. Qualified SLET for Lectureship, 2004
- D. Qualified GATE, 2004 with 85.48 percentile

9. Research Activities:

i. Pre Doctoral Research:

- More than Six Years during 2010 -July, 2016 for pursuing Ph.D in Zoology at Department of Zoology of Vidyasagar University under the joint supervision of Prof. Susanta Kumar Chakraborty and Dr. Sachchidananda Bhattacharya.
- Title of **Thesis**: Ecobiology of benthic nemerteans from the intertidal mudflats of Subarnarekha estuary, Talsari (Odisha), India
- Successfully completed **coursework** (pre-requisite for enrolment for PhD under Vidyasagar University).
- During this tenure I was well trained and acquainted with vast arrays of modern, cutting-edge techniques in <u>integrated taxonomy</u>. Parallelly, I was trained to design and plan research layout in most logistic and stream-lined manner keeping in mind the holistic nature of the experimental designs that should be applicable explore benthic micro and macrobenthos in a more scientific way.
- Successfully completed the project entitled 'Biochemical and enzymological characteristics of Salt stress induced Gastropods' during MPhil in Environmental Science, University of Kalyani in 2005.

ii. Post Doctoral Research:

- Completed the post doctoral research as SERB 'Teachers Associate ship in Research Excellence' (TARE) from 14th April, 2018-13th April, 2022 under the mentorship of Prof. Punyasloke Bhadury, IISER Kolkata. The title of the post doctoral research is 'Morphotaxonomy and DNA barcoding based identification of novel species of Nemerteans from coastal Bay of Bengal'.
- Continuing research after completion of Ph.D. in collaboration with 'Simultala Conservationists' in the field of <u>Herpetology</u> evidenced by publications in peer-reviewed International Journals.

iii. PhD Thesis Supervised:

Jointly supervised with Prof. Amiya Kumar Panda, Department of Chemistry, Vidyasagar University.

Name: Dr. Pritiranjan Maiti (Awarded, 2022)

Title: Physico-chemical investigation on the soils of vannamei shrimp farming areas of contai, Purba Medinipur, West Bengal, with reference to crop productivity and impact on food security.

iv. Area of research interest:

Dr. Ghorai is actively engaged in the taxonomic and molecular identification of benthic invertebrates of coastal Bengal. Identified a new species of benthic nemertean from the Subarnarekha estuary. The future plan is the identification, restoration and commercial production of the economically important fauna and flora in & around coast of Sundarban area.

10. Details of Teaching Experience:

S.No.	Position held	Name of	From	То
		the		
		Institute		
1.	Associate Professor & Head	Egra SSB	07/12/2019	Till now
	of the Dept. of Zoology	College		
2.	Coordinator of P.G, Dept.	Egra SSB	1/04/2017	Till now
	of Zoology	College		
3.	Assistant Professor & Head of the Dept. of Zoology	Egra SSB College	11/9/2006	06/12/2019

11. Details of Research Experience:

A. Publication of Journal Articles:

- [1] Mahapatra AD,Santra V, Jana S and Ghorai SK 'Cobras in peril: Reporting the death of two monocled cobra (Naja kaouthia) (Squamata: Elapidae) due to consumption of anthropogenic plastic debris' **Journal of Asia-Pacific Biodiversity**, https://doi.org/10.1016/j.japb.2023.01.008.
- [2] Das Mahapatra A, Patra A and Ghorai SK 'First report of melanism in Indian Flap shell turtle Lissemys punctata (Bonnaterre, 1789) from a turtle trading market of West Bengal, India' **Journal of Threatened Taxa**, 14(10): 22032-22035 (2022).

- [3] Sarkar B, Biswas P, Acharya CK, Ghorai SK, Nahar N, Jana SK, Ghosh S, Sarkar D, Behera B, Madhu NR 'Knowledge of Traditional Indian Medicinal Plants for the Management of COPD' Chettinad Health City Medical Journal, 10(04): 184-189 (2021).
- [4] Das Mahapatra A., Santra B. & Ghorai SK 'Lycodon jara (Twin-spotted Wolf Snake) Death feigning' **Herpetological Review**, 52(03): 671-672. October 2021.
- [5] Sahoo D., Mandal B. & Ghorai SK 'Effects of Tobacco smoking on immune response: A Review' **VEETHIKA-An International Interdisciplinary Research Journal**, 8(1): 15-22. Jan-Mar 2022.
- [6] Sahoo D., Mandal B. & Ghorai SK 'Aphid seasonality and host plant relationship: A review' **VEETHIKA-An International Interdisciplinary Research Journal**, 8(1): 1-6. Jan-Mar 2022.
- [7] Sarkar B, **Ghorai SK**, Jana SK, Dasgupta D, Acharya CK, Nahar N, Ghosh S and Madhu NR 'Overweight and obesity in West Bengal: A serious public health issue' **Veethika- An international and interdisciplinary Research Journal**, Vol-07, Issue -04, pp-09-14, Nov-2021.
- [8] Khatua S, Dhara S, Sahu R, and **Ghorai SK** 'Burrowing adaptations and anthropogenic threats of a dune cricket *Schizodactylus monstrosus*(Drury): A case study from Champa river bank, West Bengal, India, **Int. J. Exp. Res. Rev.**, Vol. 23: 43-51(2020)
- [9] Maity P., Panda AK. And Ghorai SK 'Mapping the wider impact of brackish water shrimp culture on the local environment and economy: A brief review' International Journal of fisheries and Aquatic studies, 2021;9(2): 185-188. DOI: https://doi.org/10.22271/fish.2021.v9.i2c.2449
- [10] Maity P., Panda AK. And **Ghorai SK** 'Study of salinity infiltration in soil due to vannamei shrimp farming in the adjoining areas of Contai, Purba Medinipur, West Bengal, India and its immediate economic effect' **International Journal of fisheries and Aquatic studies**, 2021;9(1): 365-374.
- [11] Mahapatra, A.D., Pal, G., **Ghorai, S.K.** and Bera, S.K 'Lygosoma albopunctata(White-spotted Supple Skink). Predation' **Herpetological Review**. 51(2): 334, 2020.
- [12] Das Mahapatra A., **Ghorai SK**, Santra B.& Patra A 'Occurrence, conservation status and threats to Morenia petersi (Geoemydidae), in Purba Medinipur, West Bengal, India' **Herpetologial Bulletin**, 2019.
- [13] Das Mahapatra A. & **Ghorai SK** 'A new locality record of Orissa Cricket Frog, Fejervarya orissaensis (Dutta, 1997) from Purba Medinipur District, West Bengal State, India, **Int. J. Exp. Res. Rev**., Vol. 19: 18-21 (2019) 2319-314X, 2319-3158.

- [14] Das Mahapatra A. & **Ghorai SK** 'First report of Leech parasitism on Asian common toad *Duttaphrynus melanostictus* (Schneider, 1799) West Bengal, **Trends in Parasitology Research**.1(2019) ISSN: 2455-4855.
- [15] Das Mahapatra A., Santra B. & **Ghorai SK** 'New record of *Duttaphrynus scaber* (Schneider,1799) Schneider's Toad (Family: Bufonidae) from West Bengal, India" **Biological Forum An International Journal**.11(2): 56-60(2019)2249-3239.
- [16] Das Mahapatra A., Santra B. & **Ghorai SK** 'Albinism in *Xenochrophis piscator* (Checkered Keelback)' **Herpetological Review** 51(1), 2020.
- [17] Samaresh s Tapas d, Sudipta G, Susanta K C. Biocycling of Fractional Fatty Acid Components of Lipids in Mangrove-Benthic Systems, in Midnapore (East) Coast, India. **Examines Mar Biol Oceanogr**. 1(2).**EIMBO**. 000510. 2018.
- [18] Ghorai, S.K., Chakraborty, S.K. and Samanta, S. 2015. Biotransformation of fatty acids by *Cerebratulus sp* A study from the Eastern coast of India. *Elixir Appl. Zoology*. 87 (2015) 35561-35564, ISSN:2229-712X.
- [19] Ghorai, S.K., Chakraborty, S.K. and Bhattacharya, S. 2014. Laboratory observation on the feeding behavior of two intertidal benthic Nemertine of Subarnarekha estuaries, Odisha, India. *IJCRAR*. ISSN: 2347-3215. Vol-2. No-12.Pp-155-161.
- [20] Ghorai, S., Bera,S.K., Jana,D. and Mishra, S. 2014. Status of the largest dry fish market of East India: A study on Egra Regulated Dry Fish Market, Egra, Purba Medinipur, West Bengal, *IJCRAR*, ISSN: 2347-3215 volume.2 no.-5(May2014)pp.54-65.
- [21] Ghorai, S., Jana, D. and Jana, S. 2014. Determination of antimicrobial activity of novel synthesized N- Heterocyclic Carbene Silver complex. *IJCRAR*. ISSN: 2347-3215 volume.2no.-4(April2014) pp.106-113.
- [22] Samanta, T., Roy Mahapatra, G., Porto, W.F., Seth, S., Ghorai, S., Saha, S., Sengupta, J., Franco, O.L., Dinda, J. and Mandal, S.M. 2013. N, N"- Olefin functionalized Bis- Imidazolium Gold(I) salt Is an Efficient Candidate to Control Keratitis- Associated Eye Infection. *PLOS ONE*, e58346, March 2013, Volume 8, Issue3.

B. Articles/ Chapters Published in Edited Books:

 Madhu NR, Sarkar B, Salma P, Jha Nk, Ghorai SK, Jana SK, Govindasamy K, Massanyi P, Lukac N, Kumar D, Kalita JC, Kesari KK and Roychoudhury S 2021 'Effect of Environmental Stressors, Xenobiotics and Oxidative Stress on Male Reproductive and Sexual Health' Advances in Experimental Medicine and Biology, Vol I: 33-58, Published by **Springer**.

- 2. Dhara S, Mandal B and Ghorai SK 2022 'Let's cut the ribbon of ribbon worm conservation with special reference to India: a review' A basic overeview of environment and sustainable development. Vol I (5): 01-11.
- 3. Bishal Dhar, Apurba Ghosh, Sharbadeb Kundu, Amalesh Choudhry, Sudipta Ghorai, Subrata Trivedi, Joyobrata Nath & Sankar Ghosh,2016. DNA Barcoding of Primitive species-Nemartine from sundarbans Marine Bio-resource. Published by Springerlink.
- 4. Bishal Dhar, Apurba Ghosh, Sharbadeb Kundu, Sorokhaiban Malavika, Ningthoujam Nellam Devi, Amalesh Choudhry, Sudipta Ghorai, Subrata Trivedi, Sankar Ghosh, 2016. DNA Barcoding: Molecular positioning of Living Fossils (Horseshoe crab) published by Springerlink.

C. Research Projects Completed/Ongoing:

Sl. No	Title	Cost	Role	Agency	Status
1.	Morphotaxonomy and DNA barcoding based identification of novel species of Nemerteans from coastal Bay of Bengal	18,30,000	PI	DST SERB	Completed
2.	Community based survey and analysis of sea snake bite	4,48,000	PI	HOF/ GSI	Completed
3.	DST FIST Program	70,00,000	PC	DST	Ongoing
4.	DBT STAR college program for Strengthening Under Graduate studies	82,00,000	PC	DBT	Ongoing
5.	WB DST FIST program	9,00,000	PI	WBDST	Completed
6.	Eco Biology of Benthic Nemerteans in the Intertidal mud flats of Talsari, Odisha, India	1,96,000	PI	UGC	Completed
7.	Integrated fish farming in fresh water pond with special reference to <i>Macrobrachium rosenbergii</i> in the coastal belt of PurbaMedinipur.	1,04,052	Co- PI	UGC	Completed

D. Paper Presented in Seminars:

Sl. No	Title of the paper presented	Title of Seminar	Organized by	Whether international/ national/ level
1.	A new speciesof Zygonemertes sp from Subarnarekha estuary, Odisha, India 18-19 May, 2023	Bioactive natural .and wildlife	Dept. Of Zoology & Chemistry, ESSBC	National
2.	Bioactive compounds from Lingula anatina- A potential source of therapeutic agents 18-19 May, 2023	Bioactive natural .and wildlife	Dept. Of Zoology & Chemistry, ESSBC	National
3.	Bioactive compounds from cephalopods 18-19 May, 2023	Bioactive natural .and wildlife	Dept. Of Zoology & Chemistry, ESSBC	National
4.	Control strategy of parasitic nematodes using secondary metabolitesof mangroves	Bioactive natural .and wildlife	Dept. Of Zoology & Chemistry, ESSBC	National
5.	Nemertean toxin and their phermaceutical applications 18-19 May, 2023	Bioactive natural .and wildlife	Dept. Of Zoology & Chemistry, ESSBC	National
6.	Bioactive potential of Bellamya bengalensis 18-19 May, 2023	Bioactive natural .and wildlife	Dept. Of Zoology & Chemistry, ESSBC	National

7.	Morphotaxonomy and molecular identification of an inter-tidal benthic Nemertean from costal Sundarbans with anemphasis on its fishery potential 22nd Dec,2019	ICSEH	Dr. Taraknath Poddar Memorial Foundation	International
8.	Burrowing adaptation and behavior of <i>Schizodactylus monstrosus</i> in Champa river sand bed. 26th Jan 2020	ICWOA	IISERK	International
9.	Aquaculture potential of Lingula sp, a Precambrianbrachiopod as novel bioresource from Bay of Bengal Coast 27 th Jan 2020	ICWOA	IISERK	International
10.	Rhynchonema ghormanii sp nov: a new species of free living marine nematode fromBay of Bengal Coast 28th Jan 2020	ICWOA	IISERK	International
11.	Morphotaxonomy and molecular identification of Nemerteans from Bay of Bengal with an emphasis on itsfishery potential 29th Jan 2020	ICWOA	IISERK	International
12.	Factors influencing a least concern species to be extinct: acase study on Indian flapshell turtle (<i>Lissemys punctata</i>) 11 th Dec,2019	4 th State science Conference	WBDST	State Level

13.	Salinity Infiltration on the soils	4 th State	WBDST	State Level
	of Vannamei Shrimp Farming Areas of Contai, Purba Medinipur, West Bengal With Reference To CropProductivity and Impact on Food Security 11th Dec,2019	science Conference		
14.	Turtles of Purba Medinipur district are in trouble 5 th Jan,2020	Biodiversity and its Sustainable development	Bajkul College	State Level
15.	Threats and challenges of fish biodiversity of West Bengal 8 th April,2019	Coastal zone of ecosystem is in peril: Needs immediate conservation effort	Department of Zoology	National Level
16.	Salinity infiltration due to Vannamei Shrimp farming a Contai, Purba Medinipur, West Bengal with reference to loss in Biodiversity as well as crisis in sustainable development. 5th January,2020	and its Sustainable development	Bajkul College	State Level
17.	Marine biotechnology: Status and prospects in discovering novel functional foods 12 th April,2019	Anthropogenic impact on riverine ecosystem in costal belt of West Bengal	Department of Zoology, ESSBC	National Level
18.	Molecular excellence of Cerebratulus bengalensis from West Bengal coast with an emphasis on its fishery potential 20th March,2019	Climate change and its effect on environment	Department of Geography	National Level
19.	Ecomolecular excellence of nemerteans from Talsari,Odisha 5th -7th Feb, 2019	Environment al history and sustainabilit y	Bajkul College	International Level
20.	Status of the largest dry fish market of East India: A study on Egra Regulated Dry Fish Market 14th - 17th November, 2014	Geomorphology and Geospatial Technology in Environment management and social development	Dept. of Geography and environment management & Dept. of remote sensing and GIS,	International Level

21.	Psychology and brain mind interaction 15th January, 2015	Contribution of Humanity to Develop society and culture workshop: developing creative potential through theatre and performance	Vidyasagar University Department of zoology, Egra SSB College	International Level
22.	Cardiac tumors: Pathophysiology, Diagnosis and Managementofa rarebut fatal disease May,2015	Food habit and cancer.	Dept. of Zoology, Egra SSB College	National Level
	Identification of Nemertines from the coastal tracts of Bengal and its potential for alternative food source in poultry and aquaculture system 5th and 6th February, 2016	Research Innovations is biotechnology- an Indian perspective	The Zoological Society , Kolkata and Department of Zoology, University of Calcutta	National Level Young Scientist meet
24.	Feeding pattern of Nemertines- Probocis worms or ribbon worms – A case study from the Talsari, Odisha, India 19th January,2016	Role of biodiversity and natural resources in sustainable development	Dept. of Zoology, Bajkul Milani Mahavidyalaya	National Level
25.	On feeding behavior of Nemertines-A case study from Subarnarekha estuary, Odisha, India, 23rd& 24th Nov,2015	Perspectives in animal sciences: Research and Application	Dept. of Zoology, Midnapore College	National Level
26.	Presence of antimicrobial substance on tribal health drink Handia, 14th & 15th March, 2012	Modern trends in research on medicinal plants and phytochemicals	Dept. of Chemistry, Egra SSB College	National Level

27.	Feeding behavior	of	Recent trends	PG Department	International
	Lineid Nemertine of		in Zoology	of Zoology,	Level
	Talsari mudflat,			Jhargram	
	8th March,2011			College	
	·				

E. Refresher course/ Training program/Summer research fellowship program attended:

- [1] International Workshop on 'Methods in Molecular Ecology' 22nd September to 26th September, 2019 at Department of Zoology, Egra SSB College.
- [2] National brainstorming workshop on conservation of horseshoe crab and their habitats, 26th April, 2019 at IISER Kolkata.
- [3] National Workshop on DNA Barcoding: A newer trend in molecular taxonomy, 9th April to 11th April, 2019 at Department of Zoology, Egra SSB College.
- [4] International Workshop on Land- Ocean- Atmosphere Interaction, Greenhouse Gases and Coastal Processes (LOA 2018), From 24th July to 5th August, 2018 at IISER Kolkata.
- [5] 21 days winter school on Geospatial Technologies from 16thNovember to 06th December, 2016 sponsored by Natural Resources data management system (NRDMS), Department of Science and technology (DST) and Ministry of Science and Technology, Govt. of India.
- [6] National Workshop on Molecular Biology and Bioinformatics tools on DNA Barcoding and Genomic diversity of biosciences, from 27th to 31st January, 2012 at Department of Biotechnology, Assam University, Silchar, Assam,India.
- [7] 21 days Refresher course on Application of Bioinformatics on Modern Biology, from 8th March to 31st March, 2010 at BIF Centre, Department of Microbiology, Viyasagar University.
- [8] 21days Orientationcoursefrom16thMayto12thJune 2009 at Academic Staff College, The University of Burwan, Burwan.

F. Seminar/Workshop/Symposium organization:

- a) Joint Organizing secretary of Two day national seminar on 'Bioactive natural compounds and their effects on animal function, health and welfare' 18th Maj & 19th May, 2023 at Department of Zoology & Chemistry, Egra SSB College.
- b) Joint Organizing secretary of Five day international webinar on 'Cross roads in interdisciplinary sciences in higher education' 18th Aug & 22nd Aug, 2020 at Department of Zoology & Chemistry, Egra SSB College.
- c) Co-Organizing secretary of State Level Seminar on 'Coastal Biodiversity and its management' 29th February, 2020 at Department of Zoology, Egra SSB College
- d) Organizing secretary of Two day nonresidential science camp on 'Monitoring of biodiversity and its conservation' 27th Feb & 28th Feb, 2020 at Department of Zoology, Egra SSB College.
- e) Co-Organizing secretary of Two day workshop on 'Genome editing CRISPR' 27th Feb & 28th Feb, 2020 at Department of Zoology, Egra SSB College
- f) Organizing secretary of International Workshop on 'Methods in Molecular Ecology' 22nd September to 26th September, 2019 at Department of Zoology, Egra SSB College.
- g) Organizing secretary of National Level Workshop on 'Methods in Molecular Ecology' 22nd September to 26th September, 2019 at Department of Zoology, Egra SSB College
- h) Co-Organizing secretary of State Level Seminar on 'Urbanization, changing daily life and prevalence of Lifestyle diseases: An Emerging issue' 18nd April, 2019 at Department of Zoology, Egra SSB College
- i) Organizing secretary of National Level Seminar on 'Coastal zone of ecosystem is in peril: Need immediate conservation effort' at Egra SSB College, 8th April, 2019.
- j) Organizing secretary of National Level Workshop on DNA Barcoding: A newer trend in molecular taxonomy, 9thApril to11thApril,2019 at Department of Zoology, Egra SSB College
- k) Organizing secretary of National Level Workshop on Snake human conflict mitigation, taxonomy, snakebite and conservation, at Egra SSB College, 11th April,2019
 - 1) Organizing secretary of National Level Seminar on Anthropogenic impact on

riverine ecosystem in costal belt of West Bengal, at Egra SSB College, 12th March, 2019.

- m) Organizing secretary of National Level Seminar on Global warming and biodiversity loss, at Egra SSB College, 14th and 15th March, 2017.
- n) Organizing secretary of National Level Seminar on Food habit and cancer at Egra SSB College, 07th and 08th March,2015.
- Co-Organizing secretary of National Level Seminar on Island biodiversity at Egra SSB College, 1stJune, 2014
- p) Organizing secretary of National Level Seminar on Prospect of ornamental fish culture in West Bengal, at Egra SSB College, 12th October, 2012.
- q) Organizing secretary of National Level Seminar on Coastal and marine ecology of West Bengal, at Egra SSB College, 21st December, 2011.

G. Research Guidance (M.Phil./Ph.D.):

Dr. Ghorai acted as Ph.D. supervisor jointly with Prof. Amiya Kumar Panda, Department of Chemistry, Vidyasagar University (Pritiranjan Maity, Regn No:012/PhD/Sc Dated: 09/10/2018). Another two students Mr. Soumik Dhara, (CSIR JRF) and Mr. Amalendu Giri, (NET) are working under his supervision jointly with Dr. Biplab Mandal, Associate Professor, Vidyasagar University.(Completed PhD Coursework in the department of Zoology, Vidyasagar University). At present three PhD scholars namely Miss Jhumpa Maji (UGC Fellow), Mr Sujit Das (UGC Fellow) and Mr Saantosh Bera are pursuing their research in the Coastal Environmental Studies Research Laboratory of Egra SSB Collegeunder his supervision.

12. Award/Recognition:

- A. Perennial Assistance Award 2020, Unnat Bharat Abhiyan, Govt. of India.
- B. National Environmental Science Academy Distinguished Award, 2021.
- C. National Environmental Science Academy Fellowship Award, 2023
- D.Outstanding Achievement Award, The SAID Society, 2023

13. Members of Professional bodies:

- A. Life member of the National Environmental Science Academy (L/M No: 2303)
- B. Secretary of Biodiversity Management Committee, Egra Municipality, Under West Bengal Biodiversity Board.
- C. Life Member of the Ocean Society of India, CMLRE, Kochi (L/M No: 682)
- D. Life Member of the Zoological Society of India, Bodhgaya, india (LM/RC/05),2023
- E. Life Member of the SAID Society, Ranchi, 2023

