

FACULTY MEMBERS' ACADEMIC PROFILE

1. **Name of the Faculty member:** Dr. KAUSHIK SARKAR
2. **Designation:** Assistant Professor in Physiology (W.B.E.S.)
3. **Qualification:** M.Sc. (University of Kalyani), SET, Ph.D. (KU)
4. **Specialization:** Environmental Physiology, Environmental Toxicology
5. **E-mail address:** kaushik.sarkarku@gmail.com
6. **Date of Joining in W.B.E.S.:** 06.11.2015
7. **Date of Joining in this College:** 06.11.2015
8. **Total Teaching experience in College level:** 7+ years
9. **Research interests:** Gastrointestinal and Cardiovascular toxicology
10. **Title of thesis (Ph.D.) with year:** "Effect of Bisphenol A (BPA) on the function of intestinal smooth muscle in mammalian model: A molecular physiological study" (2014)
11. **Research guidance:** Nil
12. **Research Projects (Completed and ongoing):** Nil
13. **List of publications:**



A) Published papers in Journals:

1. "Isolation, Characterization and Molecular Identification of Esterolytic Thermophilic Bacteria from an Indian Hot Spring", A. Ghati, **K. Sarkar** and G. Paul, *Current Research in Microbiology and Biotechnology*, **2013**, 1(4), 196-202 [ISSN 2320-2246].
2. "Production and characterization of an alkalothermostable, organic solvent tolerant and surfactant tolerant esterase produced by a thermophilic bacterium *geobacillus sp.* AGP-04, isolated from bakreshwar hot spring, India", A. Ghati, **K. Sarkar** and G. Paul, *Journal of Microbiology, Biotechnology and Food Sciences*, **2013**, 3(2), 156-162 [ISSN 1338-5178].
3. "Bisphenol A Inhibits Duodenal Movement in Rat by Increasing Acetylcholinesterase Activity and Decreasing Availability of Free Ca²⁺ in Smooth Muscle Cells", **K. Sarkar**, P. Tarafder, P.P. Nath and G. Paul, *International Journal of Pharma and Bio Sciences*, **2013**, 4(2), (B) 679-688 [ISSN 0975-6299; **IF: 7.165 (SJIF)**].
4. "Inhibition of heart ventricular function of rat by Bisphenol A through oxidative stress induced injury of ventricular tissue", P. Tarafder, **K. Sarkar**, P.P. Nath and G. Paul, *International Journal of Pharma and Bio Sciences*, **2013**, 4(2), (B) 811-820 [ISSN 0975-6299; **IF: 7.165 (SJIF)**].
5. "Development of a visible spectrophotometric method for the Quantitative determination of metanil yellow in different food samples", P.P. Nath, **K. Sarkar**, P. Tarafder and G. Paul, *International Journal of Pharma and Bio Sciences*, **2013**, 4(2), (P) 685-692 [ISSN 0975-6299; **IF: 7.165 (SJIF)**].
6. "Bisphenol A depresses the duodenal and cardiac movement through nitric oxide mediated guanylyl cyclase pathway", G. Paul, **K. Sarkar** and P. Tarafder, *GSTF Journal of Advances in Medical Research (JAMR)*, **2014**, 1(2), 28-33 [Print ISSN: 2345-7201, E-periodical: 2345-721X].
7. "Bisphenol A inhibits the motor function of duodenal smooth muscle in rat", **K. Sarkar**, P. Tarafder, P.P. Nath, M. Mondal and G. Paul, *GSTF Journal of Advances in Medical Research (JAMR)*, **2014**, 1(2), 34-38 [Print ISSN: 2345-7201, E-periodical: 2345-721X].

8. "Monosodium glutamate induces physiological stress by promoting and production of cardiovascular risk metabolites in rat", M. Mondal, P. Tarafder, **K. Sarkar**, P.P. Nath and G. Paul, *International Journal of Pharmaceutical Sciences Review and Research*, **2014**, 27(1), 328-331 [ISSN 0976-044X; **IF: 0.65**].
9. "Chlorpyrifos suppresses female reproductive function in rat", K. Das, **K. Sarkar**, P. Tarafder, P.P. Nath and G. Paul, *International Journal of Pharma and Bio Sciences*, **2014**,5(1), (B) 810-818 [ISSN 0975-6299; **IF: 7.165 (SJIF)**].
10. "Chlorpyrifos impairs haematological and hepatic tissue functions by producing oxidative stress", S. Baskey, M. Ghosh, P. Tarafder, **K. Sarkar** and G. Paul, *International Journal of Pharma and Bio Sciences*, **2014**, 5(2), (B) 829-834 [ISSN 0975-6299; **IF: 7.165 (SJIF)**].
11. "Metanil yellow depresses ovarian functions by inducing oxidative stress in follicular cells", P.P. Nath, **K. Sarkar**, M. Mondal and G. Paul. *Journal of Environmental Physiology*, **2015**, 7(1,2), 25-33 [ISSN-0974-7036].
12. "Monosodium glutamate depresses cardiac function by promoting the production of cardiovascular risk metabolites and causing hypoxia in cardiac tissues in female rats", M. Mondal, **K. Sarkar**, P.P. Nath and G. Paul, *Journal of Environmental Physiology*, **2015**, 7(1, 2). 9-15. [ISSN-0974-7036].
13. "Practice of using metanil yellow as food colour to process food in unorganized sector of West Bengal-A case study", P.P. Nath, **K. Sarkar**, P. Tarafder, M. Mondal, K. Das and G. Paul, *International Food Research Journal*, January, **2015**, 22(4), 1424-1428 [ISSN 19854668 (Print); ISSN 22317546 (Online)].
14. "Bisphenol A inhibits duodenal movement in vitro of rat through nitric oxide mediated soluble guanylyl cyclase and α -adrenergic signaling pathways", **K. Sarkar**, P. Tarafder and G. Paul, *Journal of Applied Toxicology*, January, **2016**, 36, 131-139 [Online ISSN 1099-1263; **IF 3.174**].
15. "Metanil yellow impairs the estrous cycle physiology and ovarian folliculogenesis in female rats", P.P. Nath, **K. Sarkar**, M. Mondal and G. Paul, *Environmental Toxicology*, Wiley & Sons, December, **2016**, 31(12), 2057-2067 [ISSN 1522-7278; **IF: 2.937**].
16. "Monosodium glutamate depresses the function of female reproductive system in rat by promoting oxidative stress induced changes in the structure of uterus", M. Mondal, **K. Sarkar**, P.P. Nath and G. Paul, *International Journal of Pharma and Bio Sciences*, October-December, **2016**, 7(4), (B) 799-804 [ISSN 0975-6299; **IF: 7.165 (SJIF)**].
17. "Bisphenol A depresses blood functions and induces cardiovascular risks in rat", S. Pal, **K. Sarkar**, P.P. Nath, M. Mondal, A. Khatun and G. Paul, *Toxicology Reports*, October, **2017**, 4, 560-564 [ISSN 2214-7500; **SNIP: 0.807, SCImago IF: 0.473**].
18. "Monosodium Glutamate Potentiates the Force of Contraction of Uterine Smooth Muscle in Rat by Augmenting Acetylcholine Mediated Neuromuscular Transmission", M. Mondal, **K. Sarkar**, P.P. Nath and G. Paul. *International Journal of Pharmaceutical Sciences Review and Research*. (July-August), **2017**, 45 (1), 238-241 [ISSN 0976-044X; **IF: 0.65**].
19. "Chlorpyrifos Produces Cardiovascular Risks by Shifting Set Point Lipid Metabolism and Diabetes mellitus by inhibiting the Insulin Secretion in Rat", S. Baskey, **K. Sarkar**, M. Mondal and G. Paul, *International Journal of Pharmaceutical Sciences Review and Research*, September-October, **2017**, 46 (2), 15-18 [ISSN 0976-044X; **IF: 0.65**].
20. "CPF impairs the contraction of uterine smooth muscle by inhibiting the secretion of estradiol from ovary in rat", K. Das, **K. Sarkar**, P.P. Nath, M. Mondal and G Paul, *International Journal of Current Research and Review*, August, **2017**, 9(16), 43-48 [ISSN: 2231-2196 (Print); eISSN: 0975-5241; **SJIF: 4.016**].
21. "Chocolate brown HT impairs the function of the ovary by depressing the hypothalamic-hypophyseal-ovarian servomechanism in albino rat", A. Khatun, **K. Sarkar**, P.P. Nath, M.

- Mondal, S. Pal and G. Paul, *International Journal of Pharma and Bio Sciences*, July, **2017**, 8(3), (B) 344-350 [ISSN 0975-6299;SJJF: 7.165].
22. "Monosodium glutamate impairs the contraction of uterine visceral smooth muscle ex vivo of rat through augmentation of acetylcholine and nitric oxide signaling pathways", M. Mondal, **K. Sarkar**, P.P. Nath, A. Khatun, S. Pal and G. Paul, *Reproductive Biology*, January, **2018**, 18, 83-93 [ISSN 1642-431X; IF: 1.513].
 23. "Monosodium glutamate suppresses the female reproductive function by impairing the functions of ovary and uterus in rat", M. Mondal, **K. Sarkar**, P.P. Nath and G. Paul, *Environmental Toxicology*, Wiley & Sons, February, **2018**, 33, 198-208 [ISSN 1522-7278; IF: 2.937].
 24. "Potentiation of the contraction of duodenal visceral smooth muscle in rat through oxidative stress induced inhibition of AChE activity by methylparaben", R. Ghosh, S. Mukherjee, **K. Sarkar**, G. Paul. *Science Archives*, **2021**, 2 (3), 194-200 [ISSN- 2582-6697].
 25. "Effect of Bisphenol S (BPS) on the contraction of duodenal visceral smooth muscle ex vivo in rat", D. Roy, M. Dutta, M. Mondal, **K. Sarkar**, G Paul. 2021. *Science Archives*, 2(2), 99-108 [ISSN- 2582-6697].
 26. "Fluoride Facilitates Contraction of Duodenal Smooth Muscle in Rat by Inhibiting the Enzymatic Activity of Acetylcholinesterase and Promoting Oxidative Stress", M.G.Roy, S. Pal, **K Sarkar**, M. Mondal, G.Paul. *International Journal of Pharmaceutical Sciences Review and Research*, **2022**, 73(1), 69-76 [ISSN 0976-044X;IF: 0.65].
 27. "Vitamin C reduces the metanil yellow induced oxidative stress in ovarian tissues of rat", P.P. Nath, **K. Sarkar**, K. Das, G. Paul. *Journal of Pharmaceutical Negative Results*, **2022**, 13(7), 3439-3447. DOI: 10.47750/pnr.2022.13.S07.443, [ISSN: Print -0976-9234, Online - 2229-7723].

B) Conference Proceedings:

1. "Bisphenol A Induces Cardiac Risk By Producing Oxidative Stress Linked Ventricular Degeneration And Altering Lipid Metabolism", P. Tarafder, **K. Sarkar**, P. P. Nath, M. Mondal and G. Paul, *Proceedings of the 1st Annual International Conference on Advanced Research: Physiology' (ARP 2014), Singapore*, GSTF, 21st -22nd July, **2014**, 62-64.

14. Membership of Learned Societies/ Editorial Boards, etc.:

- Life Member of Indian Science Congress Association (ISCA)
- Life Member of Physiological Society of India (PSI)

15. Patents: Nil

16. Awards: Nil

17. Other notable activities:

GenBank Submissions:

1. "Bacillus cereus strain AGP-03 16S ribosomal RNA gene, partial sequence", Amit Ghati, Panchali Tarafder, **Kaushik Sarkar** and Goutam Paul, **GenBank: JN858965**, National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA, **2011**.
2. "Acinobacter sp. AGP-02 16S ribosomal RNA gene, partial sequence", Amit Ghati, Panchali Tarafder, **Kaushik Sarkar**, Mouri Ghosh and Goutam Paul, **GenBank: JN639876**, National Centre for Biotechnology Information (NCBI), U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda MD, 20894 USA, **2011**.

Departmental/College Excursions

1. Supervised departmental **Excursion** of **11 students** of **3rd Year (Hons)** to visit **Bidi Industry of Krishnagar** in **March, 2016**.
2. Supervised departmental **Excursion** of **12 students** of **3rd Year (Hons)** to **Dooars and adjacent area**, West Bengal in **February, 2017**.
3. Participated in NSS programme organized by our NSS Unit of our College.

18. A) Participation in Seminars/Symposia/Conferences/Workshops:

1. **Presented paper (oral presentation)** entitled "*Bisphenol A Inhibits Duodenal Motility in Rat by Increasing Acetylcholinesterase Activity and Decreasing Availability of Free Ca²⁺ in Smooth Muscle*" in The **XXIV Annual Conference of Physiological Society of India-‘Physicon-2012’**, organized by Andhra Medical College, Visakhapatnam, AP, on **12-14th December, 2012**.
2. **Presented paper (oral presentation)** entitled "*Role of vitamin C in the mitigation of BPA induced inhibition of the motor function of duodenum in rat*" in the **Physiology National Conference-ASSOPICON 2016’**, held at BLDE University, Vijayapur, Karnataka, during **15-17th September, 2016**.
3. **Presented paper (oral presentation)** entitled "*Bisphenol A inhibits the motor function of duodenal smooth muscle in rat by inducing oxidative stress and stimulating nitric oxide synthase synthesis*" in the **2nd Regional Science & Technology Congress (Southern Region) (West Bengal Science & Technology Congress)** held at University of Kalyani on **14-15th December, 2017**.
4. **Presented paper (oral presentation)** entitled "*Inhibition of Small Intestinal Smooth Muscle Contraction by Bisphenol A in Rat Model*" in the **3rd Regional Science & Technology Congress (Southern Region) (West Bengal Science & Technology Congress)** held at Bidhannagar Government College, Kolkata on **18-19th December, 2018**.
5. Delivered an **INVITED TALK** entitled "*Bisphenol A (BPA) Augments Adrenergic and Nitroergic Signaling Pathways in Inhibiting the Contraction of Intestinal Visceral Smooth Muscle*" in **XXXIST Annual Conference of The Physiological Society of India (PHYSICON-2019)** held at Department of Physiology, Bankura Christian College, Bankura, West Bengal, India during **15-17 November 2019**.
6. Delivered an **INVITED TALK** entitled "*Inhibition of the contraction of small intestinal visceral smooth muscle by Bisphenol A: Role of nitric oxide synthase and free calcium*" in **XXXIInd Annual Conference of The Physiological Society of India (PHYSICON-2021)** held at Department of Physiology, Berhampore Girls’ College, Berhampore, Murshidabad, West Bengal, India during **14-16 March 2022**.
7. Delivered an **INVITED TALK** entitled "*Vitamin C Protects Duodenal Visceral Smooth Muscle from Bisphenol A Induced Intoxicative Injury*" in **Two-Day National Conference on Sustainable Health Science for Future Generations** held at Department of Physiology, Kalyani University, West Bengal, India in collaboration with Indian Science Congress Association (ISCA), Kolkata Chapter during **28-29 April 2022**.
8. Delivered an **INVITED TALK** entitled "*Neurocrine mechanism involved in bisphenol a induced inhibition of motor function of small intestinal visceral smooth muscle*" in **XXXIST Annual Conference of The Physiological Society of India (PHYSICON-2019), An extension programme** held at Department of Physiology, Bankura Christian College, Bankura, West Bengal, India during **18-20 November 2022**.

9. Act as a *Joint Secretary* in the **One-Day Seminar on Emerging Prospects of Biosciences and Clinical Research** organized by the Department of Physiology, Krishnagar Government College, Nadia on 9th December 2022.
10. Act as a *Joint Secretary* in the **One-Day Seminar on Ergonomics: Application in Health and Safety** organized by the Department of Physiology, Krishnagar Government College, Nadia on 14th December 2022.

List of Participation in Webinars

Sl. No.	Name of the Webinar	Organizing Department	Date	State/National/International level	Role in Webinar
1.	STATE LEVEL WEBINAR ON "ROLE OF MOTIVATION AND YOGA ON HEALTH: IN THE TIME OF COVID19 PANDEMIC"	The Institute of Chartered Accountants of India (ICAI), Kolkata and IQAC	3 rd July 2020	State Level	Act as a Technical Advisor and organized the webinar online platform
2.	One Day State Level Webinar on PHYSIOLOGICAL WELL-BEING DURING THE COVID19 PANDEMIC	Physiology & IQAC	10 th July 2020	State Level	Act as a Technical Advisor and organized the webinar online platform
3.	One Day International Webinar on Immunological and Psychosocial Spectrum of COVID19	Physiology & IQAC	23 rd August 2020	International Level	Act as a Technical Advisor and organized the webinar online platform
4.	One Day National Webinar on "THE ENIGMA OF COVID-19: FEATURES, GENOMIC PLASTICITY AND TREATMENT MODALITIES"	Botany & IQAC	22 nd July 2020	National Level	Act as a Technical Advisor and organized the webinar online platform
5.	One Day INTERNATIONAL WEBINAR on "THE COVID-19 PANDEMIC : MYTHS, SCIENCE AND HOPE"	Botany & IQAC	26 th July 2020	International Level	Act as a Technical Advisor and organized the webinar online platform
6.	One-Day State Level Webinar on "A VOYAGE TO THE INDUSTRIAL & ENVIRONMENTAL MICROBIOLOGY" –Lecture Series-I	Botany & IQAC	20 th September 2020	State Level	Act as a Technical Advisor and organized the webinar online platform
7.	One-Day National Level Webinar on "INDUSTRIAL & ENVIRONMENTAL MICROBIOLOGY: PROSPECTS AND POTENTIAL" –Lecture Series-II	Botany & IQAC	26 th September 2020	National Level	Act as a Technical Advisor and organized the webinar online platform
8.	One-Day National Level Webinar on "AN EXCURSION TO THE INDUSTRIAL & ENVIRONMENTAL MICROBIOLOGY" –Lecture Series-III	Botany & IQAC	27 th September 2020	National Level	Act as a Technical Advisor and organized the webinar online platform
9.	One-Day State Level Webinar on "PLANT BREEDING AND CROP PLANT IMPROVEMENT: A GLIMPSE AFTER HALF CENTURY OF GREEN REVOLUTION" –Lecture Series-IV	Botany & IQAC	08 th October 2020	State Level	Act as a Technical Advisor and organized the webinar online platform

10.	দু'দিন ব্যাপী রাজ্যস্তরের অন্তর্জাল-নির্ভর আলোচনাচক্র “বাংলা বিদ্যাচর্চার পেশাগত অভিমুখ : সমস্যা ও সম্ভাবনা “	Bengali & IQAC	4 th & 5 th August 2020	State Level	Act as a Technical Advisor and organized the webinar online platform
11.	ONE DAY STATE LEVEL WEBINAR ON “MACROECONOMICS OF COVID-19 PANDEMIC AND LOCKDOWN: THE INDIAN CASE”	Economics & IQAC	9 th September 2020	State Level	Act as a Technical Advisor and organized the webinar online platform
12.	ONE DAY STATE LEVEL WEBINAR ON WELL-BEING DURING COVID-19 PANDEMIC: PSYCHO-PHILOSOPHICAL PERSPECTIVES	Philosophy & IQAC	30 th July 2020	State Level	Act as a Technical Advisor and organized the webinar online platform
13.	একদিনের রাজ্যস্তরের অন্তর্জাল-নির্ভর আলোচনাচক্র প্রসঙ্গ: অতিমারী	History & IQAC	17 th August 2020	State Level	Act as a Technical Advisor and organized the webinar online platform
14.	ONE DAY STATE LEVEL WEBINAR ON Samskritavyākaraṇe Kāraṭratrayam (संस्कृतव्याकरणे कारकत्रयम्)	Sanskrit & IQAC	18 th August 2020	State Level	Act as a Technical Advisor and organized the webinar online platform
15.	National Webinar on “Interface of Chemistry & Biology: A Molecular Approach”	Chemistry & IQAC	14 th July 2020	National Level	Act as a Technical Advisor and organized the webinar online platform
16.	One Day International Webinar on ‘Discovering the Fascinating World of Physics’ Chapter 04: ‘Playing with LASER’	Physics & IQAC	14 th September 2020	International Level	Act as a Technical Advisor and organized the webinar online platform
17.	One-Day State Level Webinar on “Impact of Virus and Vector on Human Health”	Zoology & IQAC	5 th August 2020	State Level	Act as a Technical Advisor
18.	One-Day State Level Webinar on "Plant Breeding and Crop Plant Improvement Strategies: An Overview"	Botany & IQAC	7 th November 2020	State Level	Act as a Technical Advisor and organized the webinar online platform

B) Participation in OP/RC:

1. Participated in UGC sponsored **Orientation Programme** (32nd OP), organized by UGC-HRDC, University of North Bengal from 3rd - 30th November, 2017.
2. Participated in UGC sponsored **Refresher Course** (Interdisciplinary), organized by UGC-HRDC, University of North Bengal from 14th November, 2018 to 4th Dec, 2018.
3. Participated in UGC sponsored **Refresher Course** (Inter/multidisciplinary) in MOOCs development and delivery, organized by the UGC-HRDC, Ranchi University, Ranchi, Jharkhand from 10th to 23rd August, 2022.
