

FACULTY MEMBER 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), 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:** 2+ 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; SJIF: 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].

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.:** Nil

15. **Patents:** Nil

16. **Awards:**

Received **IUPS Travel Award for Paper Presentation**, "Inhibition of duodenal movement in vitro of rat by Bisphenol A through nitric oxide mediated guanylyl cyclase and α -adrenergic signal pathways", in the **International Union of Physiological Sciences (IUPS) Congress 2013**, held at ICC, Birmingham, U.K., on 21-26th July, 2013.

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 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**.

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 Ca^{2+} 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)** held at University of Kalyani on **14-15th December, 2017**.

B) Participation in OP/RC:

Participated in UGC sponsored **Orientation Programme (32nd OP)**, organized by UGC-HRDC, University of North Bengal from **3rd - 30th November, 2017**.