

# Dr. Partha Pratim Nath – Curriculum Vitae

Updated: July 15, 2024

---

## Contact Address

Department of Physiology  
Government General Degree College, Kaliganj  
Vill- Debagram, P.O.- Kaliganj, PS- Kaliganj,  
Dist- Nadia, State- West Bengal, Pin- 741137  
Phone: 03474-267514  
Email: nath.partha3@gmail.com

---

## Current Position/Affiliations

Since 01.2019                      **Assistant Professor (W.B.E.S.)** Department of Physiology,  
Government General Degree College, Kaliganj, Nadia, West Bengal-  
741137

---

## Professional Career

Jan, 2014 - Dec, 2016            **Senior Research Fellow (DST-INSPIRE Fellow)**, Environmental  
Physiology Laboratory, Dept. of Physiology, University of Kalyani,  
Kalyani, Nadia, West Bengal - 741235  
Jan, 2012 - Dec, 2013            **Junior Research Fellow (DST-INSPIRE Fellow)**, Environmental  
Physiology Laboratory, Dept. of Physiology, University of Kalyani,  
Kalyani, Nadia, West Bengal - 741235

---

## Education

Jan, 2012 – April, 2017        **Ph.D. in Physiology**, Environmental Physiology Laboratory, Dept. of  
Physiology, University of Kalyani, West Bengal - 741235  
September, 2010                **M.Sc. in Physiology**, Department of Physiology, University of Kalyani,  
Nadia, West Bengal - 741235  
July, 2008                         **B.Sc. in Physiology**, University of Kalyani, Kalyani, Nadia, West  
Bengal - 741235

---

## Academic Specialization

Molecular, Cellular and Systemic Neurophysiology; Electrophysiology; Molecular Neurotoxicology;  
and Environmental Physiology including toxicology and microbiology.

---

## Area of Teaching

All branches of the system Physiology at the B.Sc. and M.Sc. level specially--

1. Neurophysiology including special senses
2. Cardiovascular Physiology

3. Respiratory Physiology
  4. Neuromuscular Physiology
  5. Gastrointestinal Physiology
  6. Molecular Neurophysiology
  7. Environmental Physiology including Toxicology
  8. Embryology
  9. Physiological Statistics
  10. Renal Physiology
- 

### **Life Membership of Scientific Associations/Societies:**

1. Life Member of Indian Science Congress Association (ISCA) (Membership. ID: L36257).
  2. Life Member of Physiological Society of India (PSI) (Membership ID: L36257)
- 

### **Academic Distinctions and Awards:**

1. Recipient of **Best Paper Award** in ASSOPICON 2016  
Awarded the '**Best Paper Award winner**' in ASSOPICON 2016, the 3rd annual conference of ASSOPI on 15th to 17th September, 2016 organized by Association of Physiologists of India and Dept. of Physiology, BLDE University's Shri B. M. Patil Medical College Hospital and Research Centre, Vijayapur, Karnataka.
  2. Recipient of the **DST INSPIRE Fellowship**, January 1, 2012  
Awarded the '**DST INSPIRE Fellowship**' (INSPIRE-Innovation in Scientific Pursuit for Inspired Research), a scheme of the **Department of Science & Technology (DST), Government of India** for pursuing full-time doctoral Research (PhD) Program at University of Kalyani in January 2012.
  3. Order of Merit at the M.Sc. (Physiology) Examination, 2010  
Stood First in aggregate in Class-I in order of Merit at the M.Sc. (Physiology) examination held in July, 2010 of the University of Kalyani and received the Rank Certificate from the Governor of West Bengal (**Hon'ble Shri M. K. Narayanan**).
- 

### **Academic Activities/Conferences:**

- **Oral Presentation** delivered on the topic of 'An extensive review of the historic developments of human surgical mechanisms in ancient India' in **International Seminar on Education in India: Vedic to modern era** held on 5<sup>th</sup> September, 2023, at Government General Degree College at Kaliganj, Debagram, Nadia, West Bengal, India.
- **Invited lectures** delivered on the topic of 'Effect of vitamin C in the mitigation of Metanil Yellow induced oxidative stress in ovarian tissues of rat' in **108<sup>th</sup> Indian Science Congress** in the section of Medical Science (Including Physiology) held on 3<sup>rd</sup> to 7<sup>th</sup> January, 2023 at RTM Nagpur University, Nagpur, India.
- **Invited talk** delivered on the topic of 'Metanil yellow impairs the estrous cycle physiology by oxidative stress-induced reduction in the secretion of reproductive hormones in rats' in **National Conference on Sustainable health science for future generations** held on 28<sup>th</sup> to 29<sup>th</sup> April, 2022 at University of Kalyani, West Bengal.
- **Oral presentation** delivered on the topic of 'Metanil yellow inhibits the contraction of uterine smooth muscle by inducing the production of nitric oxide, decreasing the availability of free Ca<sup>++</sup> and inducing the oxidative stress in smooth muscles cells' in **National Conference of Physiological Sciences (ASSOPICON 2016)** held on 14<sup>th</sup> to 17<sup>th</sup> September, 2016 at Karnataka, India.

- **Oral presentation** delivered on the topic of 'Metanil yellow impair the estrous cycle physiology in female rat' in **Annual International Conference on Advanced Research: Physiology (ARP 2014)** held on 21-22 July, 2014 at Singapore.
- Participated in the Seminar on Bioresource Management in the perspective of Eco-welfare and Productivity, organized by Krishnagar Government College with assistance from the Department of Science and Technology, Government of West Bengal on 27<sup>th</sup> March, 2007.
- Participated in the Dr. Sarada Subramanyam Workshop of XXVI Annual Conference of Indian Association of Biomedical Scientists on 25<sup>th</sup> November, 2005

## **Publications:**

### **Full Papers:**

1. **Partha Pratim Nath**, Kaushik Sarkar, Kamalesh Das, Goutam Paul. 2022. Vitamin C reduces the metanil yellow induced oxidative stress in ovarian tissues of rat. *Journal of Pharmaceutical Negative Results* 13 (7): 3439-3447. (ISSN: Print -0976-9234, Online - 2229-7723)
2. Ashma Khatun, **Partha P Nath**, Mukti Mondal, Sanghamitra Pal, Goutam Paul. 2022. Suppression of male reproductive function by brown ht in rat. *Asian Journal of Pharmaceutical and Clinical Research* 15 (5): 76-82. (ISSN: Online - 2455-3891, Print - 0974-2441)
3. Suraiya Parvin, **Partha Pratim Nath**, Mousumi Dutta, Mukti Mondal, Ashma Khatun, Sanghamitra Pal, Mahua Guha Roy, Goutam Paul. 2019. Monosodium glutamate potentiates the contraction of the visceral smooth muscle of duodenum by augmenting the activity of intrinsic cholinergic efferents, inducing oxidative stress and proliferating smooth muscle cells. *Asian Journal of Pharmaceutical and Clinical Research* 12(7):136-142.(ISSN: Online - 2455-3891, Print - 0974-2441)
4. Mukti Mondal, Kaushik Sarkar, **Partha Pratim Nath**, Ashma Khatun, Sanghamitra Pal, Goutam Paul. 2018. Monosodium glutamate impairs the contraction of uterine visceral smooth muscle ex vivo of rat through augmentation of acetylcholine and nitric oxide signaling pathways. *Reproductive Biology* 18: 83-93. (ISSN: 1642-431X)
5. Mukti Mondal, Kaushik Sarkar, **Partha Pratim Nath** and Goutam Paul. 2018. Monosodium glutamate suppresses the female reproductive function by impairing the functions of ovary and uterus in rat. *Environmental Toxicology* 33:198–208. (ISSN:1522-7278)
6. Sanghamitra Pal, Kaushik Sarkar, **Partha Pratim Nath**, Mukti Mondal, Ashma Khatun, Goutam Paul. 2017. Bisphenol S depresses blood functions and induces cardiovascular risks in rat. *Toxicology Reports* 4: 560-565. (ISSN: 2214-7500)
7. Ashma Khatun, Kaushik Sarkar, **Partha Pratim Nath**, Mukti Mondal, Sanghamitra Pal, and Goutam Paul. 2017. Chocolate brown HT impairs the function of the ovary by deressing the hypothalamic-hypophyseal-ovarian servomechanism in albino rat. *International Journal of Pharma and Bio Sciences* 8(3): (B) 344-350. (ISSN 0975-6299)
8. Mukti Mondal, Kaushik Sarkar, **Partha Pratim Nath**, Goutam Paul. 2017. Monosodium glutamate potentiates the force of contraction of uterine smooth muscle in rat by augmenting acetylcholine mediated neuromuscular transmission. *International Journal of Pharmaceutical Sciences Review and Research* 45(1): 238-241. (ISSN: 0976-044X)
9. Kamalesh Das, Kaushik Sarkar, **Partha Pratim Nath**, Mukti Mondal, Goutam Paul. 2017. CPF impairs the contraction of uterine smooth muscle by inhibiting the secretion of estradiol from ovary in rat. *International Journal of Current Research and Review* 9(16): 43-48. [ISSN: 2231-2196 (Print); ISSN: 0975-5241 (Online)]
10. **Partha Pratim Nath**, Kaushik Sarkar, Mukti Mondal, and Goutam Paul. 2016. Metanil yellow impairs the estrous cycle physiology and ovarian folliculogenesis in female rats. *Environmental Toxicology* 31(12): 2057-2067. (ISSN:1522-7278)
11. Mukti Mondal, Kaushik Sarkar, **Partha Pratim Nath**, Goutam Paul. 2016. Monosodium glutamate depresses the function of female reproductive system in rat by promoting oxidative stress induced changes in the structure of uterus. *International Journal of Pharma and Bio Sciences* 7(4): (B) 799-804. (ISSN 0975-6299)

12. **Partha Pratim Nath**, Kaushik Sarkar, Panchali Tarafder, Mukti Mondal, Kamalesh Das, and Goutam Paul, 2015. Practice of using metanil yellow as food colour to process food in unorganized sector of West Bengal - A case study. *International Food Research Journal* 22(4): 1424-1428. (ISSN (Online): 2231 754)
  13. **Partha Pratim Nath**, Kaushik Sarkar, Mukti Mondal, Goutam Paul. 2015. Metanil yellow depresses ovarian functions by inducing oxidative stress in follicular cells. *Journal of Environmental Physiology* 7(1 & 2): 25-33. (ISSN-0974-7036)
  14. Mukti Mondal, Kaushik Sarkar, **Partha Pratim Nath**, Goutam Paul. 2015. Monosodium glutamate depresses cardiac function by promoting the production of cardiovascular risk metabolites and causing hypoxia in cardiac tissues in female rats. *Journal of Environmental Physiology* 7(1 & 2): 9-15. (ISSN-0974-7036)
  15. Kaushik Sarkar, Panchali Tarafder, **Partha Pratim Nath**, Mukti Mondal, Goutam Paul. 2014. Bisphenol A inhibits the motor function of duodenal smooth muscle in rat. *GSTF Journal of Advances in Medical Research* 1(2): 34-38. DOI: 10.5176/2345-7201\_1.2.21. (ISSN: 2345-7201)
  16. Mukti Mondal, Panchali Tarafder, Kaushik Sarkar, **Partha Pratim Nath**, Goutam Paul. 2014. Monosodium glutamate induces physiological stress by promoting oxygen deficiency, cell mediated immunosuppression and production of cardiovascular risk metabolites in rat. *International Journal of Pharmaceutical Sciences Review and Research*. 27(1): 328-331. (ISSN: 0976-044X)
  17. Kamalesh Das, Kaushik Sarkar, Panchali Tarafder, **Partha Pratim Nath** and Goutam Paul. 2014. Chlorpyrifos suppresses female reproductive function in rat. *International Journal of Pharma and Bio Sciences* 4(2): (B) 810- 818. (ISSN 0975-6299)
  18. **Partha Pratim Nath**, Kaushik Sarkar, Panchali Tarafder and Goutam Paul. 2013. Development of a visible spectrophotometric method for the quantitative determination of metanil yellow in different food samples. *International Journal of Pharma and Bio Sciences* 4(2): (P) 685-692. (ISSN 0975-6299)
  19. Panchali Tarafder, Kaushik Sarkar, **Partha Pratim Nath** and Goutam Paul. 2013. Inhibition of heart ventricular function of rat by Bisphenol A through oxidative stress induced injury of ventricular tissue. *International Journal of Pharma and Bio Sciences* 4(2): (B) 811- 820. (ISSN 0975-6299)
  20. Kaushik Sarkar, Panchali Tarafder, **Partha Pratim Nath** and Goutam Paul. 2013. Bisphenol A inhibits duodenal movement in rat by increasing acetylcholinesterase activity and decreasing availability of free  $Ca^{2+}$  in smooth muscle cells. *International Journal of Pharma and Bio Sciences* 4(2): (B) 679-688. (ISSN 0975-6299)
- 

#### Conference Proceedings:

1. Panchali Tarafder, Kaushik Sarkar, **Partha Pratim Nath**, Mukti Mondal and Goutam Paul (2014). Bisphenol A induces cardiac risk by producing oxidative stress linked ventricular degeneration and altering lipid metabolism. Annual International Conference on Advanced Research: Physiology (ARP 2014) held on 21-22 July, 2014 at **Singapore**.
- 

#### Abstracts:

1. **Partha Pratim Nath**. 2023. An extensive review of the historic developments of human surgical mechanisms in ancient India. International Seminar on Education in India: Vedic to modern era held on 5<sup>th</sup> September, 2023, at Government General Degree College at Kaliganj, Debagram, Nadia, West Bengal, India.
2. **Partha Pratim Nath**, Kaushik Sarkar, Kamalesh Das, Goutam Paul. 2023. Effect of vitamin C in the mitigation of metanil yellow induced oxidative stress in ovarian tissues of rat. 108<sup>th</sup> Indian Science Congress in the section of Medical Science (Including Physiology) held on 3<sup>rd</sup> to 7<sup>th</sup> January, 2023, at RTM Nagpur University, Nagpur, India.

3. Kaushik Sarkar, Mukti Mondal, **Partha Pratim Nath**, Goutam Paul. 2023. Bisphenol A inhibits the motor function of small intestinal visceral smooth muscle by augmenting the nitrergic signaling pathway. 108<sup>th</sup> Indian Science Congress in the section of Medical Science (Including Physiology) held on 3<sup>rd</sup> to 7<sup>th</sup> January, 2023, at RTM Nagpur University, Nagpur, India.
4. Kamalesh Das, Kaushik Sarkar, **Partha Pratim Nath**, Goutam Paul. 2023. Garlic extract and ascorbic acid protect the chlorpyrifos induced testicular toxicity in cryptorchid rats. 108<sup>th</sup> Indian Science Congress in the section of Medical Science (Including Physiology) held on 3<sup>rd</sup> to 7<sup>th</sup> January, 2023, at RTM Nagpur University, Nagpur, India.
5. **Partha Pratim Nath**, Kaushik Sarkar, Goutam Paul. 2022. Metanil yellow impairs the estrous cycle physiology by oxidative stress-induced reduction in the secretion of reproductive hormones in rats. National Conference on Sustainable health science for future generations held on 28th to 29th April, 2022 at University of Kalyani, West Bengal, India.
6. Kaushik Sarkar, Mukti Mondal, **Partha Pratim Nath**, Goutam Paul. 2022. Vitamin C protects duodenal visceral smooth muscle from bisphenol A Induced Intoxicative injury. National Conference on Sustainable health science for future generations held on 28th to 29th April, 2022 at University of Kalyani, West Bengal, India.
7. Suraiya Parvin, **Partha P Nath**, Mukti Mondal, Ashma Khatun, Sanghamitra Pal, Mahua Guha Roy, Goutam Paul. 2018. Monosodium Glutamate Potentiates the Contraction of Duodenal Smooth Muscle by Augmenting the Activity of Intrinsic Cholinergic Efferents and Inducing Oxidative stress. 3<sup>rd</sup> Regional Science & Technology Congress, (Southern Region) held on 18-19<sup>th</sup> December, 2018 at Bidhannagar College, Govt. of West Bengal, Kolkata, India.
8. Mahua Guha Roy, **Partha P. Nath**, Mukti Mondal, Ashma Khatun, Sanghamitra Pal, Suraiya Parvin, Goutam Paul. 2018. Fluoride augments contraction of duodenal smooth muscle by inhibiting the activity of acetylcholinesterase at neuromuscular synapse in rat. 3<sup>rd</sup> Regional Science & Technology Congress, (Southern Region) held on 18-19<sup>th</sup> December, 2018 at Bidhannagar College, Govt. of West Bengal, Kolkata, India.
9. Ashma Khatun, **Partha P. Nath**, Mukti Mondal, , Sanghamitra Pal, Suraiya Parvin, Mahua Guha Roy, Goutam Paul. 2018. Chocolate brown HT impairs sperm production in albino rats by depressing the pituitary-gonadal hormonal axis. 3<sup>rd</sup> Regional Science & Technology Congress, (Southern Region) held on 18-19<sup>th</sup> December, 2018 at Bidhannagar College, Govt. of West Bengal, Kolkata, India.
10. Sanghamitra Pal, **Partha Pratim Nath**, Mukti Mondal, , Ashma Khatun, Suraiya Parvin, Mahua Guha Roy, Goutam Paul. 2018. Bisphenol S depresses heart movement by augmenting the cholinergic autonomic efferents. 3<sup>rd</sup> Regional Science & Technology Congress, (Southern Region) held on 18-19<sup>th</sup> December, 2018 at Bidhannagar College, Govt. of West Bengal, Kolkata, India.
11. Sanghamitra Pal, Mukti Mondal, Kaushik Sarkar, **Partha Pratim Nath**, Ashma Khatun, Goutam Paul. 2018. Bisphenol S induces oxidative stress in cardiac tissue in rat model. 25<sup>th</sup> West Bengal State Science & Technology Congress held on 4th and 5th March, 2018 at Science City Auditorium, Kolkata, India organized by the Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal.
12. Sanghamitra Pal, Mukti Mondal, Kaushik Sarkar, **Partha Pratim Nath**, Ashma Khatun, Goutam Paul. 2017. Bisphenol S induces oxidative stress in cardiac tissue in rat model. 2<sup>nd</sup> Regional Science and Technology Congress (Southern Region) held on 14-15<sup>th</sup> December, 2017 at University of Kalyani, Kalyani, West Bengal, India.
13. Ashma Khatun, Kaushik Sarkar, **Partha Pratim Nath**, Mukti Mondal, Sanghamitra Pal, Goutam Paul. 2017. Chocolate Brown HT depresses uterine smooth muscle activity through induction of oxidative stress in rat. 2<sup>nd</sup> Regional Science and Technology Congress (Southern Region) held on 14-15<sup>th</sup> December, 2017 at University of Kalyani, Kalyani, West Bengal, India.
14. Goutam Paul, Amit Ghati, Kaushik Sarkar, **Partha Pratim Nath**, Mukti Mondal. Understanding of efferent endocrine mechanisms in inorganic arsenicals induced intrinsic regulation of the activity of duodenal visceral smooth muscle. VII Congress of Federation of Indian Physiological Society (FIPS) & XXIX Annual Conference of Physiological Society of India (PSI) held on 5-7<sup>th</sup> November, 2017 at Defence Institute of Physiology & Allied Sciences, Lucknow Road, Timarpur, Delhi- 110054, India.

15. Goutam Paul, **Partha Pratim Nath**, Kaushik Sarkar, Mukti Mondal. 2017. Metanil yellow inhibits uterine contraction ex vivo of rat through  $\alpha$ -adrenergic and nitric oxide mediated soluble guanylyl cyclase signaling pathways. XXXV Annual Meet of Indian Academy of Neurosciences (IAN 2017) and International Conference on 'Translational Neurosciences and its Application in Protection of Mental Health' held on 29-31<sup>st</sup> October, 2017 at Department of Zoology, School of Life Sciences, Ravenshaw University, Cuttack, Odisha, India.
  16. **Partha Pratim Nath**, Kaushik Sarkar, Mukti Mondal, Goutam Paul. 2016. Metanil yellow inhibits the contraction of uterine smooth muscle by promoting the production of nitric oxide, decreasing the availability of free  $\text{Ca}^{2+}$  and inducing the oxidative stress in smooth. National Conference of Physiological Sciences (ASSOPICON 2016) held on 14-17<sup>th</sup> September, 2016 at BLDE University's Shri B M Patil Medical College Hospital & Research Center, Vijayapura, Karnataka, India.
  17. Kaushik Sarkar, Mukti Mondal, **Partha Pratim Nath**, Goutam Paul. Role of vitamin C in the mitigation of BPA induced inhibition of the motor function of duodenum in rat. National Conference of Physiological Sciences (ASSOPICON 2016) held on 14-17<sup>th</sup> September, 2016 at BLDE University's Shri B M Patil Medical College Hospital & Research Center, Vijayapura, Karnataka, India.
  18. Mukti Mondal, Kaushik Sarkar, **Partha Pratim Nath**, Goutam Paul. Monosodium Glutamate Impairs the Function of Uterus in Rats by Promoting Oxidative Stress Induced Changes in the Wall Structure. National Conference of Physiological Sciences (ASSOPICON 2016) held on 14-17<sup>th</sup> September, 2016 at BLDE University's Shri B M Patil Medical College Hospital & Research Center, Vijayapura, Karnataka, India.
  19. Suban Baskey, Kaushik Sarkar, Mukti Mondal, **Partha Pratim Nath**, Kamalesh Das, Goutam Paul. Chlorpyrifos produces cardiovascular risks and diabetes mellitus in rat. National Conference of Physiological Sciences (ASSOPICON 2016) held on 14-17<sup>th</sup> September, 2016 at BLDE University's Shri B M Patil Medical College Hospital & Research Center, Vijayapura, Karnataka, India.
  20. Kamalesh Das, Kaushik Sarkar, **Partha Pratim Nath**, Mukti Mondal, Suban Baskey, Goutam Paul. Chlorpyrifos inhibits the contraction of myometrial smooth muscles of uterus by inhibiting the release of female reproductive hormones in estrus phase and during parturition by blocking the action of oxytocin in rats. National Conference of Physiological Sciences (ASSOPICON 2016) held on 14-17<sup>th</sup> September, 2016 at BLDE University's Shri B M Patil Medical College Hospital & Research Center, Vijayapura, Karnataka, India.
  21. **Partha Pratim Nath**, Kaushik Sarkar, Panchali Tarafder and Goutam Paul. Metanil yellow impair the estrous cycle physiology in female rat. Annual International Conference on Advanced Research: Physiology (ARP 2014) held on 21-22 July, 2014 at **Singapore**.
  22. Panchali Tarafder, Kaushik Sarkar, **Partha Pratim Nath**, Mukti Mondal and Goutam Paul (2014). Bisphenol A induces cardiac risk by producing oxidative stress linked ventricular degeneration and altering lipid metabolism. Annual International Conference on Advanced Research: Physiology (ARP 2014) held on 21-22 July, 2014 at **Singapore**.
- 

#### **Book/Book Chapter Published**

1. **Partha Pratim Nath** (March, 2018), Human Anatomy & Physiology, 1st Edn., Bihar, Bihar College of Pharmacy, (for UG students).