

# Summary

I have 4 years of experience in research in the field of ecotoxicology and two and half years of experience in clinical research and human sample bio-banking (processing and cryopreservation) in hematologic cancers at Tata Medical Center, Kolkata. At present, I am working as an Assistant Professor in Zoology, Department of Biological Sciences, Midnapore City College. My research interests are studying the effects of different chemical toxicants on soil organisms especially earthworms different morphological, physiological and biochemical aspects. My career objectives are to pass on my academic and research knowledge for the generations to come.

# Teaching Interest\_

UG and PG: Classical Zoology, Evolutionary Biology, Ecology, Taxonomy, Insect Biology

# Dr. Somanka Sanyal

M.Sc., Ph.D



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**Date of Birth:** 8<sup>th</sup> November, 1988

Sex: Male Nationality: Indian

# Academic Details

Sl No	Degree	Specialization	Year of passing	Institution	Board/ University	% of Marks
1	Ph.D	Zoology	2018	Raja Narendra Lal Khan Women's College, Midnapore	Kalyani University	-
2	M.Sc.	Zoology	2012	Maulana Azad College, Kolkata	Calcutta University	65
3	B.Sc.	Zoology (H)	2010	Charuchandra College, Kolkata	Calcutta University	64.8
4	H.S. (10+2)	Bio-Science	2007	Patha Bhavan, Kolkata	W.B.C.H.S.E.	74.2
5	Madhyamik (10 <sup>th</sup> )		2005	South Point High School, Kolkata	W.B.B.S.E.	78.8

## PhD Details

**Ph.D Thesis Title:** Biomonitoring of pesticide pollution in soil using epigeic earthworms

Guide's Name: Principal Investigator- Professor Anilava Kaviraj

P.G. Department of Zoology, University of Kalyani, Nadia, West Bengal,

India.

Co- Investigator- Dr. Partha Pratim Chakravorty, Associate Professor P.G. Department of Zoology, Raja Narendra Lal Khan Women's College,

Midnapore, Paschim Medinipur, West Bengal, India.

University: University of Kalyani

Kalyani, Nadia, West Bengal, India.

**Date of Award:** 1st November, 2018

# Teaching/ Research/Job Experience \_\_\_\_\_

- As a UGC Project Fellow in P.G. Department of Zoology, Raja Narendra Lal Khan Women's College, Midnapore, West Bengal, India from 24<sup>th</sup> August, 2012 to 30<sup>th</sup> November, 2016.
- 2. As a Bio-banking Technologist, Department of Clinical Hematology, Tata Medical Center, Rajarhat, New Town, Kolkata from 21<sup>th</sup> August, 2017 to 18<sup>th</sup> March, 2020.
- 3. As an Assistant Professor of Zoology, Department of Biological Sciences, MIDNAPORE CITY COLLEGE, Kuturiya, Bhadutala, Paschim Medinipur 721129, West Bengal from 1<sup>st</sup> December, 2020 to till date.

# Workshop, training, project and seminar (participation 8 presentations)

- 1. **Project Fellow** under UGC Major Research Project entitled "Studies on the usefulness of some physiological, histological and biochemical parameters of selected species of epigeic earthworm in the biomonitoring of pesticides pollution in agro ecosystem" at Raja Narendra Lal Khan Women's College, Midnapore from **2012 to 2016**.
- 2. **Oral Presentation** at national seminar on Climate change, Environment & Sustainable Development, December **2013**, National Environmental Science Academy and Jamia Hamdard University, New Delhi.
- 3. **Poster presentation** at Tropical Ecology Congress, December, **2014**, Jawaharlal Nehru University, New Delhi.

- 4. **Oral Presentation** at national seminar on Biotechnology: A Remedy for Eco-restoration, January, **2017**, Raja Narendra Lal Khan Women's College, Midnapore and SBSS Mahavidyalaya, Midnapore.
- 5. A certificate course on Research Methodologies, February, 2019, Tata Medical Center, Newtown, Rajarhat, Kolkata.
- 6. **Oral Presentation** at international e-conference on Environment & Sustainability, October, **2020**, Raja Narendra Lal Khan Women's College, Midnapore and West Bengal Biodiversity Board, Kolkata.
- 7. **Participated** at international webinar on Current trends in Neuroimmune Pharmacology, August, 2021, Midnapore City College, Paschim Medinipur, West Bengal.

# **Expertise**

- Zoology
- Ecotoxicology
- Soil ecology and biological carbon sequestration
- Entomology
- Ecology

### **Techniques and instruments**

- 1. Handling instruments like homogenizer, cold centrifuge, UV Spectrophotometer, electronic balance, Infrared Torsion balance, Environmental Chamber, vortex mixer, microtomy etc.
- 2. Handling of human samples like blood, tissues etc.
- 3. To perform all laboratory-based work like biochemical assays of enzymes, tissue nutrients, protein estimation, plasma and serum separation, isolation of mononuclear cells, DNA and RNA pellets from human blood, PCR, Western blotting technique etc.
- 4. Basic computer knowledge on Microsoft Word, Excel, Power point and have a knowledge of SPSS (statistics) software, Probit analysis software.

#### Achievements

- 1. UGC Major Research Project Fellowship in 2012.
- 2. Awarded  $2^{nd}$  position in "Best Oral Presentation" competition in National Conference in 2017.

#### **Publications**

#### **Total Number of Publications: 08**

# Journal Articles

Published-

- Sanyal, S., Dasgupta, R., Kaviraj, A. and Chakraborty, P.P. (2015). Comparative toxicity studies of four pesticides on the epigeic earthworm *Perionyx excavatus* in two different soil media. *Poll. Res.* 34(1) 47-51. (ISSN- 0257-8050)
- Dasgupta, R., **Sanyal, S** and Chakraborty, P.P. (2015). Chronic toxicity of cypermethrin, a pyrethroid insecticide to epigeic earthworm *Eisenia fetida*. *Int. J. Curr. Res.* 7(7): 17693-17696. (ISSN-0975-833X)
- Chakraborty, P.P., Haque, A., **Sanyal, S.,** Dasgupta, R. (2015). Effect of herbicides on Cyphoderus javanus (Hexapoda: Collembola) under laboratory conditions. *J. Entom. Zool. Studies*. 3(1): 220-223. (ISSN-2320-7078)
- Sanyal, S., Kaviraj, A. and Chakraborty, P.P. (2017). Response of enzyme biomarker and life-history parameters of epigeic earthworm *Perionyx excavatus* exposed to organophosphate pesticide. *J. Entom. Zool. Studies*. 5(3): 774-778. (ISSN- 2320-7078)
- Sanyal, S. and Chakraborty, P.P. (2019). Application of physiological and biochemical assays as ecotoxicological tools for the detection and monitoring of pesticide pollution in earthworms and agroecosystem-A review. *Int. Res. J. Bas. Appl. Sc.* 4: 3-17. (ISSN: 2455-6718)
- Sanyal, S. and Chakraborty, P.P. (2020). Response of Life History and Enzyme Biomarkers in Oligochaete Earthworm Due to Synthetic Pyrethroid Contamination: An Ecotoxicological Study. *Int. Res. J. Mult. Sc.* 1(4): 29-37. (ISSN- 2582-631X)

#### Communicated-

Sanyal, S and Chakraborty, P.P. 2021 Detection and interpretation of changes in reproductive and biochemical parameters in indigenous earthworm *Perioxyx excavatus* against selected pesticides. *Air Water Soil Pollut.* (ISSN-1573-2932)

## Conference Abstract

Radhakrishnan, V.S., Bhaduri, A., Arora, N., Nair, R., Bhattacharya, S., **Sanyal, S.**, Veldore, V., Parihar, M., Bhave, S.J., Kumar, J., Ramprasad, V.L., Mishra, D.K. and Chandy, M. (2020). Genomic profile at diagnosis by targeted high throughput sequencing, and real-world clinical outcomes in patients diagnosed with acute myeloid leukemia at a tertiary care cancer center. *J. Clin. Onc.* 38(15): e19515. (ISSN: 0732-183X)

#### **Book Chapter**

Chakravorty, P.P. and **Sanyal, S.** (2017). Conservation of the Pygmy Hog in India. In: Defaunation and Conservation. Eds: Pratihar, S and Howard, O.C. Jr. Tucson Herpetological Society, Tucson, Arizona, USA., 95-104 pp. (**ISBN-978-93-85248-79-5**)

# Ambitions & objective \_\_\_\_\_

I aspire for a career which helps enhancement of academic as well as hands on practical knowledge and offers new challenges every day encouraging innovative thinking thereby bringing out the best in me.

#### Hobbies \_

I love reading books, listening to music and painting.

#### Declaration \_

I, hereby declare that all statement stated above are correct to the best of my knowledge and belief.

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