



**Name: Dr. Rini Roy**

**Designation: Assistant Professor**

**Subject: Microbiology**

**E-mail: [for\\_rini\\_roy@yahoo.co.in](mailto:for_rini_roy@yahoo.co.in)**

**Specialization: Biochemistry**

**Major interest Areas: Biochemistry, Neuro-biochemistry and Microbiology**

**Academic credentials: M.Sc., PhD**

- 2001-2008      **PhD, Biochemistry**  
Calcutta University  
Advisor: Dr. Aditi Nag Chaudhuri  
Associate Professor and Ex-HOD, Department of Microbiology  
Lady Brabourne College, University of Calcutta  
Title: Designing of Organophosphorous Pesticides with Low  
Non- target Nerve Damageable and High  
Phytoremediable Characteristics Using Quantitative  
Structure Activity Relationship'
- 1999-2001      **Master of Science, Biochemistry (Stood First in M.Sc.)**  
**University of Kalyani, Kalyani, India.**  
Review project: 'Mechanism of Arsenic Toxicity'.
- 1996-1999      **Bachelor of Science, University of Calcutta**  
Chemistry (Honors), Physics, Chemistry  
New Alipore College, Kolkata, India
- 2001              GATE in Life Sciences

**Teaching Experience:**

1. Lecturer (Part-Time) in the Department of Chemistry & Biochemistry (Aug 2004- Dec 2006) and Guest lecturer in postgraduate Department of Environmental Science, Asutosh College, Kolkata from Dec 2006 – July 2009.

2. Guest lecturer in postgraduate Department of Microbiology, Acharya Prafulla Chandra College, New Barrackpur, Kolkata from Dec 2004- Dec 2008.
3. Guest lecturer in postgraduate Department of Microbiology, Lady Brabourne College, Kolkata from Sept 2005- Dec 2008.
4. Assistant Professor in Microbiology at Maulana Azad College, University of Calcutta, Course: Biochemistry, Immunology, from July 2009- 27<sup>th</sup> Feb 2018. Acted as Head of the Department from 1<sup>st</sup> October, 2015 to 27<sup>th</sup> February, 2018.
5. Assistant Professor in Microbiology, Bidhannagar College, West Bengal State University, from 28<sup>th</sup> February, 2018- 9<sup>th</sup> January, 2025.
6. **Assistant Professor in Microbiology**, P. R. Thakur Govt College, West Bengal State University, from 10<sup>th</sup> January 2025-present.

**Courses taken:** Biochemistry, Immunology and Microbiology.

**Research Interest:** Biochemistry, Neuro-biochemistry and Microbiology (medical microbiology, bioremediation and nanobiotechnology)

**Research Grant Received:**

Jan' 11- Dec.'13: Co- Investigator Minor Research Project entitled "A comparison of the ameliorating effect of natural antioxidants from turmeric, grapes and tea against vanadium induced testicular toxicity" supported by **UGC, New Delhi, Sanction no. FPSW- 196/11-12 dated 25.01.2012.**  
Grant mobilized: 1lakh 92 thousand

**Research Experience:**

2001-2003                    **UGC Research Fellow**  
Project Title: Abatement of Pesticide pollution by aquatic plants and its mathematical modelling',  
Lady Brabourne College  
Advisor: Dr. Aditi Nag Chaudhuri

**Project Guidance: (Post Graduate Department of Lady Brabourne College and Bidhannagar College, BNC)**

1. Cupric engulfment by *Escherichia coli*
2. Antimicrobial effect of Vasaka
3. Comparison of some characteristics of halophilic bacteria of 3 different sea origin
4. Anti-inflammatory activity ayurvedic plant (*Kalanchoe crenata*) on mice
5. Interaction of jackfruit (*Artocarpus heterophyllus*) leaf extract with the fungal cell wall
6. Characteristics of chromium reducing bacteria isolated from East Kolkata Wetland
7. Comparison of organic acid production from microorganisms in aerobic & anaerobic condition isolated from wastewater
8. Isolation of soil bacteria from coal mining areas, detection of their metal tolerance activity and extraction of metallothionein
9. Isolation of bacteria from coal mine area: to study the effects of bacterial nitric oxide synthase on thiol and role of chromium reductase in the process of bioremediation
10. To study effects of metal stress on bacteria isolated from soil of coal mining area
11. *Acinetobacter* engulfing lead from industrial wastes

12. Preparation of silver nanoparticles and its effect on morphological character of bacteria. (BNC)
13. Preparation of Silver nanoparticles by different methods and effect of nanoparticles on the growth of bacteria. (BNC)
14. Comparative study of the effect of polymyxin B and silver nano particle on the membrane lipid of gram positive and gram-negative bacteria (BNC)
15. Isolation and partial characterisation of pigment-producing organism from soil (BNC)

### **Sequence submissions:**

- Jhunjhunwala, P., **Roy, R.**, Roy, S. and Nag Chaudhuri, A., *Proteus mirabilis* strain SPAR2012 16S ribosomal RNA gene, partial sequence, Accession no. KC480056, GenBank, 4th March, 2013.

### **List of Publications:**

#### **a) Research Publication (National):**

1. **Rini Roy (Pal)** and Aditi Nag Chaudhuri, 'Differential Acetylcholinesterase activity in rat Cerebrum, Cerebellum and Hypothalamus', *Indian Journal of Experimental Biology*, May 2006, 44(5): 381-386, ISSN: 0975-1009 (Online); 0019-5189 (Print). Impact factor 0.759
2. Shreya Bhattacharya, Santanu Roy and **Rini Roy**, 'Utilisation of cupric engulfment by Escherichia coli for PcoC (a superoxide dismutase) induction', paper published in Indian Journal of Chemical Sciences, Vol 87, August 2010, pp 975-979, ISSN No. 0019 4522.
3. **Rini Roy (Pal)** and Aditi Nag Chaudhuri, 'Towards Less Toxic organophosphorus pesticides: Predicting equation of Acetylcholinesterase activity', paper published in Journal of Indian Society of Toxicology, January-June 2011, 007 (001), 24-31, ISSN No. 0973-3558.
4. Sanmitra Basu and **Rini Roy**, 'Mode of action of killing of microorganisms with Vasaka leaf extract' paper published in Science and Culture, June 2011, 77 (5-6), 217-221, ISSN No. 0036-8156.
5. Natasa Dasgupta, **Rini Roy** and Aditi Nag Chaudhuri, Designing Less Toxic to Non-Target Organophosphorus Pesticides Using Phytoremediation, Lady Brabourne College Science Journal, Dec, 2012, Vol-3, pp 74-81, ISSN No. 2319-6858.
6. Soma Pal Saha, Anindita Halder, Mousam Roy, Mayukh Paul, Satakshi Hazra, Shabnam Jahan Ansari and **Rini Roy**, Production of thermostable amylase by the gram negative soil isolate BLY01, Journal of Mycopathological Research, 2013, 51(1) : 49-56, ISSN: 0971-3719.
7. **Rini Roy**, Neeru Joshi, Moutusi Das and Aditi Nag Chaudhuri, Antifungal properties of leaf extract of Jackfruit plant (*Artocarpus integrifolia*) paper for MAC journal of Basic and Applied Research, Vol 1 (1), 2013, 63-75, copyright Maulana Azad College, ISSN: 2347-5366.

8. **Rini Roy** and Aditi Nag Chaudhuri, 'Phytoremediation of organophosphorus pesticide- a cost effective and environment friendly method', full paper published in Journal of Environment and Sociobiology (ISSN 0973-0834), Vol. 11 (No. 1), 57-70, June, 2014.
9. Rituparna Ghosh & **Rini Roy**, Vanadium induces ROS and associated testicular toxicity in male Wistar rats, full paper published in Journal of Environment and Sociobiology (ISSN 0973-0834), Vol. 11 (No. 1), June, 2014, 101-109.
10. **Rini Roy**, Deboleena Ghosh and Aditi Nag Chaudhuri, Manipulation of Organic acid production in aerobic and anaerobic condition from microorganism isolated from waste water, paper published in MAC journal of Basic and Applied Research, 2013, 1 (1), copyright Maulana Azad College, ISSN: 2347-5366.
11. **Rini Roy**, Nabadita Bose, Feroza Begum, Shazia Parveen, Sulagna Mandal, Joyeeta Chatterjee, Priyanka Sengupta & Samudra Prosad Banik, Utilisation of agrowastes as substrates for Solid State Fermentation by *Penicillium chrysogenum* for simultaneous production of cellulolytic enzymes and glucose, paper published in MAC journal of Basic and Applied Research, 2015, 2 (1), copyright Maulana Azad College, ISSN: 2347-5366.
12. **Rini Roy** and Aditi Nag Chaudhuri, Study of Antimicrobial property of Nanoparticle on gram positive and gram negative microorganisms, paper published in MAC journal of Basic and Applied Research, 2016, 3 (1), copyright Maulana Azad College, ISSN: 2347-5366.
13. **Rini Roy** and Aditi Nag Chaudhuri, 'Bioremediation of lead and chromium by bacteria isolated from coal mining areas', Scientific Voyage, 2020, 1 (4), 24-27, ISSN: 2395-5546.
14. **Rini Roy** and Aditi Nag Chaudhuri, 'Silver nanoparticles: potential and promising means to combat pathogenic microorganisms', Scientific Voyage, 2021, 2 (8), 1-8, July-September, ISSN: 2395-5546.
15. **Rini Roy**, Report of the online Webinar and Panel Discussion on "Mental Health: Depression and Young Age Problems", Science and Culture, 87 (5-6), May-June 2021, ISSN 0036-8156.
16. **Rini Roy**, Report on 10th Prof. J. J. Ghosh Memorial Lecture, Science and Culture, 87 (9-10), 395-396, September- October 2021, ISSN 0036-8156.
17. Rini Roy, Celebration of World Health Day, Science and Culture, 90 (7-8), 330-331, July-August, 2024.

**b) Research Publications (International):**

1. **Rini Roy**, Madhulika Gupta and Aditi Nag Chaudhuri, Exploration of a metallothionein in cyanobacteria and bacteria for chromium remediation from industrial wastes, International Journal of Scientific Research, 4 (06), 11-16, June, 2015, ISSN No. : 2277-8179 **Impact factor 3.2416**.
2. Ruma Sarkar, **Rini Roy** and Aditi Nag Chaudhuri, Anti-inflammatory effect of *Kalanchoe crenata* extract in mice with experimentally induced inflammation, Vol 4

- (06), 95-102, International Journal of Current microbiology and applied sciences (IJCMAS) 2015. ISSN: 2319-7692 (Print) ISSN 2319-7706 (Online), **Impact factor 2.015**
3. **Rini Roy**, Amrita Pal and Aditi Nag Chaudhuri, Antimicrobial effect of Silver nanoparticle on pathogenic organisms isolated from East Kolkata Wetland, International Journal of Applied Research", 2015, 1 (12), 745-752, ISSN: 2394-5869, **Impact factor 5.2**
  4. Puja Jhunjhunwala, **Rini Roy**, Santanu Roy and Aditi Nag Chaudhuri, Bioremediation of chromium by unique chromium reductase activity in *Proteus* sp. isolated from waste water, International Journal of Applied Research", 2016, 2 (11), 249-256, ISSN: 2394-5869, **Impact factor 5.2.**
  5. **Rini Roy**, Garima Baid and Aditi Nag Chaudhuri, Metal Bioremediation by Bacteria Isolated from Industrial waste, Education, Research and Analysis, January 2018, 5 (1.1), UGC Journal No. 64674, ISSN: 2348-571X.
  6. Soma Pal Saha, Abhijit Biswas, Anirban Kool, Anusree Goswami, Arpita Kar, Moumita Saha, Nahid Sultana, Satavisha Ghosh, Sautrik Bhattacharya, Sayan Das, Soumyadeep Mukherjee, Souradip Paul, Souvik Nandy, Sujoy Halder, Suvamita Rout and **Rini Roy**, Physico-biochemical and microbiological status of the dry spices from Jan-bazaar, Kolkata, Global Journal of Bioscience and Biotechnology, 8 (1), 101-106, January 15, 2019.
  7. **Rini Roy**, Signal response between nitric oxide synthase and metallothionein in chromium and lead treated bacteria isolated from coal mine area, Journal of Advanced Scientific Research, 12 (2) Suppl 2, 147-153, July 2021, ISSN: 0976-9595.
  8. **Rini Roy**, Effect of cadmium and zinc heavy metals on the soil bacteria isolated from coal mine region, Journal of Advanced Scientific Research, 12 (4), 68-77, November 2021, ISSN: 0976-9595.
  9. Parama Das Gupta, Upal Das Ghosh and **Rini Roy**, Biofilm formation in Acute and Chronic and nosocomial infections. Defence Life Science Journal, 8 (2), 170-182, June 2023, <https://doi.org/10.14429/dlsj.8.1888431>

c) **Publication in Proceedings:**

1. **Rini Roy**, Natasha Das Gupta, Santanu Roy and Aditi Nag Chaudhuri, 'Mathematical Modeling of Organophosphorus Pesticide for Software Development', paper published in the proceedings of one day National Seminar on 'Logic: From Philosophy to Computer Science through Mathematics', organised by Departments of Mathematics and Philosophy, Vivekananda College for Women in association with Vivekananda College, Thakurpukur, Kolkata, December 11, 2010, pp 100-122.
2. Neelufar Ulfat, **Rini Roy** and Aditi Nag Chaudhuri, 'Analysis of Growth Curves of bacteria isolated from Bay of Bengal, Indian Ocean and Arabian Sea by the Spectrophotometric method', paper published in the proceedings of the UGC sponsored National Seminar on 'Recent Trends in Spectroscopy: Its application in Chemistry and Biology' organized by Departments of Microbiology and Chemistry, Maulana Azad College in collaboration with Indian Institute for the Cultivation of Science, Kolkata, February, 3-4, 2011, pp 178-196, ISBN-13-978-81-928246-1-1.
3. Puja Jhunjhunwala, **Rini Roy**, Aditi Nag Chaudhuri, Soumi Guha Polley, Santanu Roy, Characteristics of Chromium reducing bacteria isolated from East Kolkata Wetland

- (Full paper), paper published in the proceedings of National seminar on ‘Applied Sciences In Bioinformatics’, Netaji Nagar Day College, 16<sup>th</sup>&17<sup>th</sup> March, pp. 35-37, 2012.
4. Aditi Nag Chaudhuri, **Rini Roy**, Santanu Roy, Soumi Guha Polley, Madhulika Gupta Chaudhuri, Mahuya Mukhopadhyay and Sudipta Paul Bhattacharya, Studies on Microbial Ecology in East Kolkata Wetland- A Ramsar Site, Commemorative Volume of the UGC Sponsored State Level Seminar held on 14th and 15th December, 2013 on Biochemical Diversity Encompassing Advanced Sustainable Development organized by Department of Biochemistry, Vivekananda College in collaboration with Department of Biochemistry, Asutosh College, January 2015, pp 73-86. ISBN978-93-84923-03-7.
  5. **Rini Roy** and Aditi Nag Chaudhuri, Quantitative Structure Activity Relationship (QSAR) - a tool for designing of an Eco-friendly Organophosphorus Pesticide, popular article published in the proceedings of the National Symposium on ‘Eco-sustainability and Renewable energy: Challenges, Prospects and Ethics’ organized by Dr. A. P. J. Abdul Kalam Govt. College in collaboration with Power Grid Corporation of India Limited, January 19-20, 2019, pp 120-128. ISBN 978-81-955407-4-7.

**d) Popular Articles:**

1. ‘Our Love’, article (on glimpses on Biochemistry and Biotechnology) published in the souvenir of the 14<sup>th</sup> Annual Reunion (2001), titled ‘Genomix 2001’, of the Department of Biochemistry and Biophysics, University of Kalyani.
2. ‘*Juddha, Aami O Rasayanshastra*’ (‘War, Myself and Chemistry’), article on nerve gases written in Bengali in Lady Brabourne College magazine, 2002.
3. ‘Pesticide: From Yesterday to Tomorrow’, article in ‘Environews’, April - June, 2002, published by National Environmental Science Academy (NESA), West Bengal Chapter.
4. ‘Harry Potter in your kitchen’, article published in ‘The Telegraph KnowHOW’, Monday, December 2, 2002.
5. ‘Nanotechnology – An environment-friendly emerging technology’, article in ‘Environews’, special issue, January – March, 2003, published by National Environmental Science Academy (NESA), West Bengal Chapter.
6. Rini Pal, ‘The Small Revolution – Nanotechnology’, Science and Culture, November – December, 2003, 69(11-12): 424-426.
7. ‘*Mon Niye Amar Jato Bhabna*’ (‘All my worries about mind’), an article on neurological diseases written in Bengali in Lady Brabourne College magazine, 2003.
8. ‘For the students — By the students — Of the students’, article in ‘Environews’, pp. 6-7, April-June, 2004, published by National Environmental Science Academy (NESA), West Bengal Chapter.
9. ‘Huntington’ (on the Huntington’s disease), article written in Bengali in Lady Brabourne College magazine, 2005.
10. Rini Roy, Genetically modified food- a curse or a boon, The first edition of B-Hive, publication from Bidya Bharati Girls’ High School Ex-Students Association, 2013, pp 48-49.
11. Rini Roy and Aditi Nag Chaudhuri, Organophosphorus pesticide in ‘Environews’, pp. 5-6, January-March 2014, Vol 16 (4) in the Special issue by Dept. of Microbiology, Maulana Azad College published by National Environmental Science Academy (NESA), West Bengal Chapter.

12. Rini Roy, A remedy to Cervical Cancer, popular article published in 'Alokyatri', little magazine published by the students of Maulana Azad College, Kolkata, 15-18, November, 2014.
13. Rini Roy, Online webinar on "Global Challenges of Climate Change", a report published in Environews, 29 (4), 1-8, Jan-March 2022 published by National Environmental Science Academy (NESAs), West Bengal Chapter.
14. Rini Roy and Sandip Misra, "Celebration of World Environment Day 2023 at Bidhannagar College", a report published in Environews (Special issue by Department of Microbiology, Bidhannagar College), 36 (3), 1-8, Oct-Dec, 2023 published by National Environmental Science Academy (NESAs), West Bengal Chapter.

### List of Books/Book Chapters:

#### a) Publication in E Journals/ Book

1. Debashis Upadhaya, Rini Roy, Samudra Prosad Banik and Soma Pal Saha, Anti-bacterial potential of natural products, project manual done in the Department of Microbiology, Maulana Azad College, 2018 Life Sciences Protocol Manual (DBT e-manual), DBT Star College Scheme compiled by Dr. P. Hemalatha Reddy and Dr. Suman Govil, January 2018, published by Department of Biotechnology, Ministry of Science and Technology, Government of India.

#### b) Book Chapters:

1. **Rini Pal** and Aditi Nag Chaudhuri, 'Drinking water, Arsenic and Human Health' – a short review in Water: Elixir of Life, March, 2003, pp. 33-53, first edition, edited by Subhabrata Roy Chaudhuri and Saikat Kumar Basu from The Science Association of Bengal, Art Press, Kolkata.
2. S. Majumdar, **R. Pal (Roy)** and A. Nag Chaudhuri, 'Comparative studies on the effect of trivalent and pentavalent arsenic on the rat brain', Chapter 3 in the book titled 'Emerging Pollutants: Impact on Agriculture, Health and Environment', edited by Dr. Amit Krishna De, Allied Publishers, 2007, pp. 23-34.
3. **R. Pal (Roy)** and A. Nag Chaudhuri, 'QSAR for designing environment friendly organophosphorus pesticide utilizing abatement of pesticide by *Spirodelaoligorrhiza* L., under the heading Environmental Management and Bioindicators', in Section III in the book titled 'Emerging Pollutants: Impact on Agriculture, Health and Environment', edited by Dr. Amit Krishna De, Allied Publishers, 2007, pp. 235-25
4. P. Das Gupta and **R. Roy**, book chapter on 'Applications of Microalgae for Biofuels, Value-Added Products and Future Prospects in the book 'Microbial Niche Nexus Sustaining Environmental Biological Wastewater and Water-Energy-Environment Nexus' edited by K. Senthilkumar, Maulin P. Shah, S. Kavitha, and M. Naveenkumar, published by Springer Nature, Jan 2025, eBook ISBN 978-3-031-62660-9, Chapter 20, pp. 511-540.

### **List of Honours/Awards:**

1. Stood 1<sup>st</sup> class first in M.Sc. Biochemistry in 2001 from the Department of Biochemistry and Biophysics, University of Kalyani.
2. Ranked 3<sup>rd</sup> in Inter College Debate Competition on Nutrition held on September 25, 2002 organised by National Nutrition Monitoring Bureau, West Bengal Indian Council of Medical Research and International College of Nutrition Calcutta Chapter.
3. Awarded third prize in poster competition in XVI<sup>th</sup> Annual Conference of National Environmental Science Academy, March 7 – 8, 2003.
4. Selected as ‘The Best Student from Kolkata Chapter of ISCA (Indian Science Congress Association)’ in the 91<sup>st</sup> Session of the Indian Science Congress held at Chandigarh from January 3 – 7, 2004.
5. Nominated as Young Scientist contestant under Indian Science Congress Association Young Scientists (ISCA) Award Programme in the Section of Environmental Sciences at 93<sup>rd</sup> Indian Science Congress held at Hyderabad, January 3 – 7, 2006.
6. Acted as Resource person in the interactive session in the National Seminar on Aquaresources: Care and Concerns, organised by Social Environmental and Biological Association (SEBA) in collaboration with ENVIS Centre on Faunal Diversity, Zoological Survey of India and West Bengal Biodiversity Board, February 14, 2015.
7. Participated as resource person on two days workshop on ‘Preparation and antimicrobial action of silver nanoparticles and isolation and function of macrophages’ at Asutosh College organised by Department of Biochemistry and Microbiology on December 2-3, 2015
8. Acted as judge in the Quiz competition ‘Quizone’ in the Audio-visual room organised by the Department of Microbiology and Botany at Tara Devi Harakh Chand Kankaria Jain College, Kolkata, August 20, 2015.
9. Recipient of the 4th Science and Technology Award presented by Research and Branding Company, Bangalore, 2016.
10. Acted as judge for Quizone in a Quiz competition for 1st year students of Microbiology in the Audio-visual room organised by the Department of Microbiology and Botany Tara Devi Harakhchand Kankaria Jain College, affiliated to the University of Calcutta on 15<sup>th</sup> September, 2016.
11. Best Lecture Award on ‘Designing of an Eco-friendly Organophosphorus Pesticide through Multiple Regression Analysis (MRA)’ in the oral presentation in the National Symposium on ‘Eco-sustainability and Renewable energy: Challenges, Prospects and Ethics’ organized by Dr. A. P. J. Abdul Kalam Govt. College in collaboration with Power Grid Corporation of India Limited, January 19-20, 2019.
12. Acted as judge in the Oral presentation competition in 5th Annual Conference ‘Recent Perception in Nutrition and Dietetics for Combating Chronic Diseases’ of Society for Nutrition and Dietetics in collaboration with International College of Nutrition, Calcutta Chapter at Triguna Sen Auditorium, Jadavpur University, Kolkata, 3rd February 2019.
13. Acted as a judge in the Extempore competition in the celebration of National Science Day organised by the Department of Microbiology, Scottish Church College in collaboration with the Nature Club, SCC and the National Environmental Science Academy (NESA) West Bengal chapter, February 28, 2022.



### **Membership in scientific bodies:**

1. Life member of Indian Science Congress Association (ISCA), Kolkata.
2. Life member of National Environmental Science Academy (NESA).
3. Life member of Society for Biological Chemists (SBC)
4. Life member of Indian Chemical Society, Kolkata.
5. Annual member of Indian Society of Toxicology (2009-2010).
6. Life member of Prof. J.J. Ghosh Foundation
7. Life member of Alumni Association of Lady Brabourne College, Kolkata.

### **Editor/or Editorial Board Member/Reviewer:**

1. Member of Executive Body of National Environmental Science Academy involved in the publication of Environews, the newsletter for students and researchers in Environmental Sciences published by National Environmental Science Academy, West Bengal Chapter.

### **Lecture Presentations:**

#### **a) Platform presentations (National):**

1. **Rini Pal**, Srabanti Basu, Aditi Nag Chaudhuri, 'Protection of Arsenic Damaged Neuron by Vitamin', SBC Seminar at Shantiniketan, April 12 – 14, 2002, organised by the Society of Biological Chemists (India), Kolkata branch, in collaboration with the School of Life Sciences, Visvabharati.
2. **Rini Pal** and Aditi nag Chaudhuri, 'Designing of less toxic to non-target and highly phytoremediable Organophosphorus Pesticide', XXI Annual Conference of Society of Toxicology (STOX) India, December 3-5, 2002, organized by Regional Occupational Health Centre (Eastern), Kolkata.
3. **Rini Pal**, Manisha Mukherjee and Aditi Nag Chaudhuri, 'Quantitative Structure Activity Relationship (QSAR) for Environment Friendly Organophosphorous Pesticide', Proceedings of The 90<sup>th</sup> Indian Science Congress, January, 2003, held at Bangalore.
4. **Rini Roy (Pal)**, Natasha Das Gupta and Aditi Nag Chaudhuri, 'Designing of less toxic to non-targets organophosphorus pesticide through multiple correlation analysis (MRA) a part of QSAR', Fourth Indo-US Workshop on Mathematical Chemistry at Pune, Maharashtra, January 8 – 12, 2005, organised by Natural Resources Research Institute, University of Minnesota Duluth, Duluth, Minnesota, USA and University of Pune, Pune, Maharashtra, India.
5. **Rini Roy (Pal)** and Aditi Nag Chaudhuri, 'Prediction of environment friendly pesticide using Multiple Regression Analysis (MRA)', One Day Symposium on 'Excitements in Modern Biology' at Department of Biochemistry, Calcutta University, September 24, 2005, organised by Society of Biological Chemists (Kolkata Chapter), abstract, pp. 25.
6. **Rini Roy (Pal)** and Aditi Nag Chaudhuri, 'Designing of Less Toxic to Non-targets and high phytoremediableorganophosphorus pesticide using Multiple Regression Analysis', Proceedings of the 93<sup>rd</sup> Indian Science Congress under ISCA Young

**Scientists Award** Programme in the Section of Environmental Sciences, January, 2006, held at Hyderabad.

7. **Rini Roy (Pal)**, 'Designing of environment-friendly Organophosphorus Pesticide using Multiple Regression Analysis', National Symposium on "21<sup>st</sup> Century Research in Biochemistry and Biophysics" at University of Kalyani, February 1 – 3, 2007, organised by Department of Biochemistry and Biophysics, University of Kalyani, abstract no. O-07, pp. 87.
8. Shreya Bhattacharya, Santanu Roy and **Rini Roy**, 'Utilisation of cupric engulfment by *Escherichia coli* for PcoC (a superoxide dismutase) induction', one day UGC sponsored Symposium on 'Challenges of Teaching Microbiology in Under Graduate Colleges', Proceedings of the workshop, organized by Centre for Modern Biology and U G Board of Studies in Microbiology, University of Calcutta, September 25, 2010.
9. **Rini Roy**, Natasha Das Gupta, Santanu Roy and Aditi Nag Chaudhuri, 'Mathematical Modeling of Organophosphorus Pesticide for Software Development', one day National Seminar on 'Logic: From Philosophy to Computer Science through Mathematics', organised by Departments of Mathematics and Philosophy, Vivekananda College for Women in association with Vivekananda College, Thakurpukur, Kolkata, April 6 and 7, 2011.
10. Puja Jhunjhunwala, **Rini Roy** and Aditi Nag Chaudhuri, 'Characteristics of Chromium reducing bacteria isolated from East Kolkata Wetland', abstract (OI-23) published in the Journal of Cell and Tissue Research, ISSN: 0973-0028 as supplementary copy in the National conference on 'Interface of Science & Environment: Emerging Public Health Challenges & The 13<sup>th</sup> Annual Meeting of the Society for Science and Environment (Scienviron 2011)', organised by School of Tropical Medicine, Kolkata, All India Institute of Hygiene & Public Health and Indian Institute of Social Welfare & Business Management, 24th-26th November, 2011.
11. **Rini Roy**, Alzheimer's Disease-Recent aging problem, Proceedings of the programme, oral presentation in the 93rd Orientation Programme, organised by University Grants Commission, Academic Staff College, 7 February-5 March, 2012.
12. Ruma Sarkar, **Rini Roy** and Aditi Nag Chaudhuri, *Kalanchoe crenata* – Source of anti-inflammatory compound, presented invited oral presentation in the two day National Seminar on 'Microbiology: Development and Challenges in Basic and Applied Research' organised by the Department of Microbiology, Ramkrishna Mission Vidyamandira, in collaboration with the Bose Institute, Kolkata, April 6 and 7, 2011.
13. **Rini Roy**, Alzheimer's Disease-Recent aging problem, Proceedings of the programme, oral presentation in the 93rd Orientation Programme, organised by University Grants Commission, Academic Staff College, 7 February-5 March, 2012, abstract pp 70.
14. **Rini Roy** and Aditi Nag Chaudhuri, 'Phytoremediation of organophosphorus pesticide- a cost effective and environment friendly method', National seminar on Natural Resources and Heritage conservation issues in India, at Seminar Hall, West Bengal Pollution Control Board, Paribesh bhavan, Salt Lake, Kolkata organized by Social Environmental and Biological Association in collaboration with Zoological Survey of India, September 8, 2013, pp 19.
15. **Rini Roy**, talk delivered on 'In search of an organism for metal bioremediation' in the Refresher course in Environmental studies conducted by Academic Staff College (UGC), University of Calcutta from 3<sup>rd</sup> March to 22<sup>nd</sup> March, 2014.
16. **Rini Roy**, Anamika Sekhar, Ruchika Chorara and Aditi Nag Chaudhuri, Study on Expression of the metallothionein and nitric oxide synthase in bacteria isolated from coal mine area drained with heavy metals, in Programme & Abstracts in National Seminar on Aquaresources: Care and Concerns, organised by Social Environmental and

Biological Association (SEBA) in collaboration with ENVIS Centre on Faunal Diversity, Zoological Survey of India and West Bengal Biodiversity Board, February 14, 2015, pp 2.

17. **Rini Roy**, Amrita Pal and Aditi Nag Chaudhuri, Study of Antimicrobial property of Nanoparticle on pathogenic microorganisms isolated from East Kolkata Wetland, DST sponsored National Seminar on 'New Horizons in Biotechnology' organized by Department of Biotechnology, Haldia Institute of Technology, Haldia, October 14 and 15, 2015.
18. **Rini Roy**, Garima Baid and Aditi Nag Chaudhuri, Immobilisation of metallothionein for metal bioremediation from industrial wastes, Oral presentation on in the National Seminar SERB sponsored National Seminar on 'New Horizons in Biotechnology' organized by the Department of Biotechnology, Haldia Institute of Technology, Haldia on 17<sup>th</sup> -18<sup>th</sup> February, 2017.
19. Delivered invited lecture on 'Future Prospects of Biochemistry' in one day seminar on 'Concept of newer approach to build healthier India organised by Department of Biochemistry and Health Care Unit, Asutosh College, August 31, 2018.
20. Nausheen Khanam, **Rini Roy** and Aditi Nag Chaudhuri, Oral presentation on 'Induction of Metallothionein upon metal stress on bacteria isolated from soil of coal mining area' under Environmental Science section in the 3<sup>rd</sup> Regional Science and Technology Congress (Southern Region), 2018 jointly organised by Bidhannagar College, Government of West Bengal and the Department of Science and Technology and Biotechnology (DSJB), Government of West Bengal at Bidhannagar College, December 18-19, 2018.
21. **Rini Roy** and Aditi Nag Chaudhuri, 'Designing of an Eco-friendly Organophosphorus Pesticide through Multiple Regression Analysis (MRA)', oral presentation in the National Symposium on 'Eco-sustainability and Renewable energy: Challenges, Prospects and Ethics' organized by Dr. A. P. J. Abdul Kalam Govt. College in collaboration with Power Grid Corporation of India Limited, January 19-20, 2019, abstract book, pp 30.
22. **Rini Roy**, Madhulika Gupta and Aditi Nag Chaudhuri, 'Heavy metal bioremediation with Metallothionein protein in Cyanobacteria and Bacteria - A Comparative Approach', oral presentation in the UGC-SAP (DRS-II)-Sponsored National Symposium on 'Modern Perspectives of Research & Development in Biochemistry & Biophysics' organized by Department of Biochemistry and Biophysics, University of Kalyani, March 14-15, 2019, abstract book, pp. 52, OP 06.

**b) Platform presentation (International):**

1. **Rini Roy (Pal)**, Natasha Das Gupta and Aditi Nag Chaudhuri, 'Designing of less toxic to non targets organophosphorus pesticide through multiple correlation analysis (MRA) a part of QSAR', Fourth Indo-US Workshop on Mathematical Chemistry at Pune, Maharashtra, January 8 – 12, 2005, organised by Natural Resources Research Institute, University of Minnesota Duluth, Duluth, Minnesota, USA and University of Pune, Pune, Maharashtra, India, pp. 17, abstract no. 012.

2. Participated in oral presentation on 'Metal Bioremediation by bacteria from industrial wastes' in International Seminar on Multidisciplinary Research organised by Vijaygarh Jyotish Ray College in collaboration with Kalyani Foundation for Media Science & Community Research at Vijaygarh Jyotish Ray College, January 29, 2018.

c) **Poster presentations (International):**

1. **Rini Pal**, Srabanti Basu, Aditi Nag Chaudhuri, 'GSH Independent Lipid Peroxidation and NOS Activation in Rat Brain by Sodium Arsenate', XIX Annual Meeting of Indian Academy of Neuroscience and International Symposium on Neurodegeneration and Neuroprotection, March 18 – 20, 2002, held at Indian Institute of Chemical Biology, Kolkata.
2. Garima Baid, **Rini Roy**, Aditi Nag Chaudhuri, "Reduction of heavy metal load in industrial waste by immobilised protein: Lab to industrial application" in the One-Day International Seminar on 'Frontiers in Regenerative and Translational Biology' at Centre for Research for Nanoscience and Nanotechnology (CRNN), University of Calcutta, Salt Lake, Kolkata, January 31, 2016.
3. **Rini Roy** and Aditi Nag Chaudhuri, "Heavy Metal Bioremediation by Soil Bacteria isolated from coal mine area" in the One-Day International Symposium on 'Environment and Climate Crises' at St. Xavier's College (Autonomous), Kolkata in collaboration with The Blue Patch and The Biome, December 20, 2019.

d) **Poster presentations (National):**

1. **Rini Pal** and Aditi Nag Chaudhuri, 'QSAR for Designing Environment Friendly Organophosphorous Pesticide Utilising Abatement of Pesticide by *Spirodela oligorrhiza L.*', XVI<sup>th</sup> Annual Conference of National Environmental Science Academy on Emerging Pollutants: Impact on Health, Agriculture and Environment, March 7 – 8, 2003, held at Lady Brabourne College, Kolkata.
2. S. Majumdar, **Rini Pal (Roy)** and A. Nag Chaudhuri, 'Comparative studies on the effect of trivalent and pentavalent arsenic on the rat brain', XVI<sup>th</sup> Annual Conference of National Environmental Science Academy on Emerging Pollutants: Impact on Health, Agriculture and Environment, March 7 – 8, 2003, held at Lady Brabourne College, Kolkata.
3. **Rini Roy (Pal)** and Aditi Nag Chaudhuri, 'Designing of Environment Friendly Model Pesticide by Quantitative Structure Activity Relationship (QSAR)', Proceedings of The 91<sup>st</sup> Indian Science Congress, January, 2004, held at Chandigarh.
4. Neelufar Ulfat, **Rini Roy**, Aditi Nag Chaudhuri, 'Study of the salt tolerance and the Na<sup>+</sup>-K<sup>+</sup> ATPase activity of halophiles isolated from on-shore water of Arabian Sea, Indian Ocean and Bay of Bengal', National Symposium on 'Acharya Prafulla Chandra Ray Memorial Symposium on Chemistry Today (2010)' in commemoration of the 150<sup>th</sup> Birthday of Acharya Prafulla Chandra Roy, organised by the Indian Chemical Society at MeghnadSaha Hall at Rajabajar Science College, Kolkata, August 2-4, 2010.
5. Sanmitra Basu and **Rini Roy**, 'Mode of Killing of Microorganisms with Vasaka leaf extract', XXIV National Conference of Indian Association of Medical Microbiologists, MICROCON 2010, held at Swabhumi, Kolkata, organised by Indian Association of Medical Microbiologists, November 26-28, 2010, abstract no. AMP 38, pp 283.

6. Neelufar Ulfat, **Rini Roy** and Aditi Nag Chaudhuri, 'Analysis of Growth Curves of bacteria isolated from Bay of Bengal, Indian Ocean and Arabian Sea by the Spectrophotometric method', paper published in the proceedings of the UGC sponsored National Seminar on 'Recent Trends in Spectroscopy: Its application in Chemistry and Biology' organized by Departments of Microbiology and Chemistry, Maulana Azad College in collaboration with Indian Institute for the Cultivation of Science, Kolkata, February, 3-4, 2011.
7. **Rini Roy**, Deboleena Ghosh and Aditi Nag Chaudhuri, Comparison of Organic acid production from microorganism in aerobic and anaerobic condition isolated from waste water, under Biochemistry of New Biology section, 100th Indian Science Congress, Kolkata, 3-7 January, 2013.
8. Amrita Pal, **Rini Roy** and Aditi Nag Chaudhuri, Antimicrobial effect of Silver nanoparticle on pathogenic organisms isolated from East Kolkata Wetland, under Biochemistry of New Biology section, 100th Indian Science Congress, Kolkata, 3-7 January, 2013.
9. Soma Pal Saha, Anirban Kool, Abhijit Biswas, Anusree Goswami, Arpita Kar, Moumita Saha, Nahid Sultana, Prakash Mondal, Samrat Mitra, Satavisha Ghosh, Sautrik Bhattacharya, Sayan Das, Soumyadeep Mukherjee, Souradip Paul, Souvik Nandy, Subhodeep Pal, Sujoy Halder, Suvamita Rout and **Rini Roy**, Poster presentation on 'A survey on dry spices of Jan-Bazar, Kolkata: Its physico-biochemical and microbiological status' in the National Conference on Current Research in Microbiology' organized by centenary Celebration Committee, Department of Botany, University of Calcutta in Collaboration with Prof. A. K. Chandra Memorial Committee and Prof. R. P. Purakayastha Memorial Committee, April 4, 2014.
11. **Rini Roy**, Nabodita Bose, Feroza Begum, Shazia Parveen, Sulagna Mandal, Joyita Chatterjee, Priyanka Sengupta & Samudra Prosad Banik 'Utilisation of agrowaste for cellobiase production through solid state fermentation in *Penicillium chrysogenum*' in the National level Seminar entitled 'Frontiers of Microbiology: Prospects and challenges' organized by Department of Microbiology, Ramkrishna Mission Vidyamandira, in collaboration with the CSIR-IICB, Kolkata, during 20-21 November, 2014.
12. Ria Aich, Madhulika Gupta, **Rini Roy** and Aditi Nag Chaudhuri, Metallothionein expression for heavy metal remediation in cyanobacteria and bacteria studied by Western Blotting and FTIR, poster presented in National Seminar organized by BRSI Kolkata Chapter On "Recent Advances in Biotechnology" at CSIR-Indian Institute of Chemical Biology, Kolkata, India, 17th April 2015.
13. **Rini Roy**, Nausheen Khanam, Aditi Nag Chaudhuri, Effects of metal stress on bacteria isolated from soil of coal mining area, Poster presentation at UGC sponsored National Seminar on "Chemistry in Human Life-Current Aspects" organized by Departments of Chemistry and Microbiology at Gurudas College, Kolkata in collaboration with IISER Kolkata on December 9<sup>th</sup> and 10<sup>th</sup>, 2016, Abstract in Proceedings, P-20.
14. **Rini Roy**, Anamika Sekhar, Ruchika Chorara and Aditi Nag Chaudhuri, Cross talk between Nitric Oxide Synthase and Metallothionein in bioremediation of heavy metals by bacteria isolated from coal mine area, Poster presentation in the International level Seminar entitled 'Recent Trends in Microbiology' organized by the Department of Microbiology, Ramkrishna Mission Vidyamandira on 14<sup>th</sup> January, 2017, Abstract in Proceedings, pp 140.
15. Satavisha Ghosh, Soumyadeep Mukherjee, Arpita Kar, Sautrik Bhattacharya, Samrat Mitra, Souradip Paul, Anusree Goswami, Anirban Kool, Abhijit Biswas, Sayan Das, Souvik Nandy, Moumita Saha, Nahid Sultana, Uma De, Ahana Das, Debadrita Pal, Sakuntala Ghorai, Suchitra Sarkar, Arpan Das, Avishek Ghosh, Samudra Prosad Banik, **Rini Roy** and Soma Pal Saha, Immobilization of fungal amylase and its characterization, Poster presentation in the

International level Seminar entitled 'Recent Trends in Microbiology' organised by the Department of Microbiology, Ramkrishna Mission Vidyamandira on 14<sup>th</sup> January, 2017, Abstract in Proceedings, pp 148.

16. Kanad Sur, Abhishek Dey, Meghna Majumder, Hena Bar, Zarafshan Neyaz, Aymen Parwez, Akshay Paul, Tanmoy Ray, Aashique Tarek Rahaman, Sabyasachi Chakrabarty, Susmita Ghosh, Soumita Sarkar, Sayantani Rudra, Kh. Sahariar Alam, **Rini Roy** and Soma Pal Saha, Diversity of microbes isolated from kitchens of Kolkata residents. Poster presentation at the UGC sponsored National level seminar on Modern trends in Environmental Microbiology organised by Department of Microbiology, Scottish Church College in collaboration with Bose Institute, Kolkata on 30<sup>th</sup> and 31<sup>st</sup> January, 2017, Abstract in Proceedings, pp 22.

17. Nausheen Khanam, **Rini Roy** and Aditi Nag Chaudhuri, 'Induction of Metallothionein upon metal stress on bacteria isolated from soil of coal mining area' in the 3<sup>rd</sup> Regional Science and Technology Congress (Southern Region), 2018 jointly organised by Bidhannagar College, Government of West Bengal and the Department of Science and Technology and Biotechnology (DSJB), Government of West Bengal at Bidhannagar College, December 18-19, 2018, abstract book, pp 196.

18. **Rini Roy** and Aditi Nag Chaudhuri, 'Designing of an Eco-friendly Organophosphorus Pesticide through Multiple Regression Analysis (MRA)', National Symposium on 'Eco-sustainability and Renewable energy: Challenges, Prospects and Ethics' organized by Dr. A. P. J. Abdul Kalam Govt. College in collaboration with Power Grid Corporation of India Limited, January 19-20, 2019, abstract book, pp 30.

19. Suparna Roy, Alam Chakma and **Rini Roy**, 'Effect of silver nanoparticles on morphological character of bacteria' National Seminar on 'Diversity in the era of Globalization Challenges and Management' organized by Bidhannagar College, Government of West Bengal sponsored by Department of Higher Education, Government of West Bengal and Department of Science & Technology and Biotechnology, Government of West Bengal, February 22-23, 2020.

### **Workshops Attended**

1. Participated in One Day Colloquium on 'Environmental Science and Technology in Present Day Indian Context', March 9, 2002, organised by M.Phil. Programme in Environmental Science, Jadavpur University, Kolkata.
2. Attended and completed the workshop on 'Polymerase Chain Reaction in Medical and Biological Sciences' organised by the University Science Instrumentation Centre (USIC) in collaboration with the Department of Biophysics, Molecular Biology and Genetics, University of Calcutta, from September 11 – 13, 2002.
3. Participated in the short-term course on 'Bioinformatics in Genomics and Proteomics' offered by the Indian Institute of Technology, Kharagpur, from September 24 – 25, 2004.
4. Attended National Workshop on 'Macromolecule-Ligand Interaction & Drug Design' organised by Bioinformatics Infrastructure Facility at the Department of Biochemistry and Biophysics, University of Kalyani, Kalyani, January 2 – 4, 2008.

5. Attended Autumn School for Young Biochemists at Lady Brabourne College, Kolkata, October 29 – November 7, 2007, 2008 and 2009.
6. Attended UGC sponsored Workshop on ‘Statistical Methodologies in Modern Biology’ for undergraduate colleges organised by Centre for Modern Biology, University of Calcutta at Prof. A. N. Bhaduri Memorial Hall, Prof. B. C. Guha Centre for Genetic Engineering and Biotechnology at University College of Science, August 25 - 26, 2011.
7. Participated in the 1st National Workshop for College Teachers on Application of Flow Cytometry, Cell Sorting & Imaging in Biological Research, organised by Centre for Modern Biology & Centre for Research in Nanoscience and Nanotechnology, University of Calcutta, December, 18-24, 2011.
8. Participated in the DBT Star college sponsored Workshop on Protein Purification at Maulana Azad College in the Department of Microbiology for the undergraduate 3<sup>rd</sup> year Microbiology Honours students, November, 2011.
9. Participated in the DBT Star college sponsored Hands on Training on ‘Separation of pigments from plants by thin layer chromatography and determination of their absorption spectra’ at Maulana Azad College in the Department of Microbiology for the undergraduate 3<sup>rd</sup> year and 2<sup>nd</sup> year Honours students from science departments, 22<sup>nd</sup> and 23<sup>rd</sup> October, 2013.
10. Participated in the DBT Star college sponsored project on ‘Studies on Physico-biochemical and Microbiological status of dried spices of Jan-Bazaar, Kolkata’ at Maulana Azad College in the Department of Microbiology for the undergraduate 1<sup>st</sup> year Microbiology Honours students, 24<sup>th</sup> November – 3<sup>rd</sup> December, 2013.
11. Participated in the DBT Star college sponsored faculty improvement programme for 3 days at Lady Brabourne College on Western Blotting, June, 2013.
12. Participated in the DBT Star college sponsored workshop on ‘Antimicrobial Activity of Natural Products’ at Maulana Azad College in the Department of Microbiology for the undergraduate 3<sup>rd</sup> year Honours students from science departments, 25<sup>th</sup> to 26<sup>th</sup> August, 2014.
13. Participated in One day Seminar cum Workshop on ‘Microbial structuring and its role in marine and other ecosystems functioning’ at Prof. B. C. Guha Hall, Department of Biochemistry, University of Calcutta on November 15, 2014.
14. Participated in the DBT Star college sponsored Workshop on ‘Kitchen Microbes’ for 1<sup>st</sup> year Microbiology Honours at Maulana Azad College in the Department of Microbiology, 5<sup>th</sup> January-10<sup>th</sup> January, 2015.
15. Participated in the DBT Star college sponsored Science Day Celebration on the Outreach Programme for School students of Taltala High School on ‘World of Microbes’ on 26<sup>th</sup> February, 2015 at Department of Microbiology, Maulana Azad College.
16. Participated in the DBT Star college sponsored Science Day Celebration on the Outreach Programme for the M.Sc. students of Nutrition of All India Institute of Public Health and Hygiene on 26<sup>th</sup> May, 2015 at Department of Microbiology, Maulana Azad College.
17. Participated in the on two days’ DBT Star college sponsored interdepartmental Hands on Training on ‘Application of statistical methods & mathematical models in biology’ in the department of Microbiology for the undergraduate 2<sup>nd</sup> and 3<sup>rd</sup> year students from Science departments, 26<sup>th</sup> and 27<sup>th</sup> October, 2015.
18. Participated in the one day DBT Star college sponsored workshop on ‘Isolation and observation of macrophages from mouse peritoneum’ in the department of

- Microbiology for the undergraduate 1<sup>st</sup> and 2<sup>nd</sup> year Microbiology Hons. Students, 5<sup>th</sup> April, 2016.
19. Participated in One week short term course titled “Soft Skill, Stress and Well-being” jointly organized by internal Quality Assurance Cell(IQAC) of Vijaygarh Jyotish Ray College and Centre for Counselling Services and Studies in Self – development (CCSSS), Jadavpur University in Vijaygarh Jyotish Ray College from 20<sup>th</sup> September to 26<sup>th</sup> September 2016.
  20. Participated in the short term course in Bioinformatics from 25<sup>th</sup> January, 2017 to 31<sup>st</sup> January, 2017.
  21. Participated in the one day DBT Star college sponsored workshop on ‘Effect of various waves on growth of bacteria’ in the department of Microbiology for the undergraduate 1<sup>st</sup> and 2<sup>nd</sup> year Microbiology Hons. Students, 28<sup>th</sup> March, 2017.
  22. Participated in one day workshop on ‘Train the Trainer’ by Dr. Graham Walker and Dr. Stuart Kolhagen at Birla Industrial and Technological Museum, Kolkata jointly organized by National Council of Science Museums (Ministry of Culture, Govt. of India) and Australian National University supported by The Australian Government, 22 June, 2017.
  23. Participated in the one day workshop on Introduction of CBCS in Microbiology at the Undergraduate level organized by Department of Microbiology, West Bengal State University held on 18 May, 2018.
  24. Participated in the NPTEL Awareness Workshop at Government Girls’ General Degree College, Kolkata, organised by Government Girls’ General Degree College in collaboration with IIT Kharagpur, October 12, 2018.
  25. Participated in Online Workshop on MOOC’s organised by at UGC-HRDC of Jadavpur University from 23.02.2021 to 01.03.2021
  26. Participated in the one-day Mentorship Workshop Programme on DBT-STAR College Scheme organised by Lady Brabourne College, Kolkata on 29<sup>th</sup> November, 2022.
  27. Participated in the one-day NEP 2020 workshop in Microbiology organized by UG Board of Studies, Department of Microbiology, West Bengal State University on 7<sup>th</sup> December, 2023.
  28. Completed the NEP 2020 Orientation & Sensitization Programme under the Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission organized by the Indian Institute of Technology (Indian school of Mines), Dhanbad from 17.01.2024 to 31.01.2024.
  29. Completed NPTEL-AICTE Faculty Development Programme on Host-Pathogen Interaction (Immunology) organized by IISER, Bhopal and funded by MoE, Government of India, Jan-April, 2024.

## **Others**

1. Attended the University Grants Commission sponsored seminar on ‘Impact of Research on Microbial World on the Economy of Developing Countries’, held at Lady Brabourne College, Kolkata, November 27 – 29, 2002.



2. Attended the seminar on 'Ideal Body weight – How To Achieve?' organised by International College of Nutrition, Calcutta Chapter and Federation Hall Society on December 6, 2003.
3. Attended UGC sponsored seminar on 'Recent Trends in Plant Science' organised by Department of Botany, Asutosh College, March 4, 2005.
4. Attended the seminar on 'Awareness Programme on Tuberculosis: Rerun of Nineteenth Century or more Alarming' organised by the Department of Microbiology, Lady Brabourne College, held at Lady Brabourne College, Kolkata, April 26, 2005.
5. Attended the seminar on 'Save Water Before It Is Too Late' organised by National Environmental Science Academy (NESAs), West Bengal Chapter and National Bureau of Soil Survey & Land Use Planning (NBSS&LUP), ICAR, Regional Centre, Kolkata at NBSS&LUP, ICAR, Regional Centre, Kolkata, February 25, 2006.
6. Attended Symposium on " Acharya Prafulla Chandra Ray and Chemistry Today (2007)" [In commemoration of the 147<sup>th</sup> birthday of Acharya Prafulla Chandra Ray, organised jointly by the Indian Chemical Society and the Department of Chemistry, University of Calcutta, at University of Calcutta, Rajabazar campus, August 2 – 3, 2007.
7. Selected as resource person in the Workshop on Young Biochemists, for hands-on experiments on nucleic acid chemistry of 2<sup>nd</sup> year B.Sc students, organised by Department of Microbiology, Lady Brabourne College, Kolkata, October 9, 2009.
8. Attended One Day Symposium on 'Current Trends in Biological Sciences' at Department of Biochemistry, Calcutta University, jointly organised by Society of Biological Chemists (India), Kolkata Chapter and National Academy of Sciences India, Kolkata Chapter, June 11, 2010.
9. Attended a one day discussion session on 'Journey of Microbiology: Evaluation to its Modern Age Application' organised by Department of Microbiology, Tara Devi Harakh Chand Kankaria Jain College, January, 22, 2011.
10. Attended Youth Parliament at Maulana Azad College organized by Departments of Political Science and Sociology, Maulana Azad College, January 10 and 11, 2012.
17. Participated in the Care Science Education Meet (Discussion meeting on Post High School science teaching on educational and research institute of India) at main auditorium of Saha Institute of Nuclear Physics on 20th August, 2013.
18. Attended as college representative of the Placement Cell in the Training and Placement Officer's (TPO) meet organised by IBS Kolkata at the IBS Kolkata campus on 7th September, 2013.
19. Attended Prof. J. J. Ghosh Memorial lecture on " Drug resistance in Leishmaniasis : newer approaches for cure" by Professor Subrata Majumder, Bose Institute, Kolkata organised by Prof. J. J. Ghosh Memorial Foundation at Department of Biochemistry, Ballygunge Science College on 9<sup>th</sup> January, 2017.
20. Attended 6th Memorial Birthday celebration of Prof. J. J. Memorial through a lecture delivered by Prof. Ambika Charan Banerjee organised by Prof. J. J. Ghosh Foundation at Department of Biochemistry, Ballygunge Science College, July 19, 2017.

21. Students of 1<sup>st</sup> year Microbiology Hons attended Prof. J. J. Ghosh Memorial Lecture delivered by Prof. Pranab Roy, Haldia Institute of Technology, in the special winter meeting of the Prof. J. J. Ghosh Memorial Foundation at Prof. J. J. Ghosh Memorial Hall, Department of Biochemistry, Ballygunge Science College, January 10, 2018.
22. Attended Prof. J. J. Memorial lecture delivered by Prof. Pratap Das organised by Prof. J. J. Ghosh Memorial Foundation, Department of Mathematics, Ballygunge Science College, August 3, 2018.
23. Attended 3-day ISRO-Space Exhibition organised by Dr. B. C. Roy memorial Committee in collaboration with Space Applications Centre, Ahmedabad (ISRO) Vikram Sarabhai Space Exhibition and Bidhan Shishu Udyan from 27<sup>th</sup> September to 29<sup>th</sup> September, 2018.
24. Attended Prof. J. J. Ghosh Memorial lecture delivered by Prof. Debabrata Mukhopadhyay, Department of Biochemistry and Molecular Biology, Mayo Clinic, Jacksonville, Florida, USA organised by Prof. J. J. Ghosh Memorial Foundation, Department of Biochemistry, Ballygunge Science College, January 17, 2019.
25. Attended Prof. J. J. Ghosh Memorial Lecture delivered by Prof. Kunal Ray, Retired Scientist, IICB organised by Prof. J. J. Ghosh Memorial Foundation, Department of Biochemistry, Ballygunge Science College, July 19, 2022.
26. Participated in the deliberations of the Twelfth Memorial lecture given by Dr. Samit Adhya, Emeritus Scientist, IICB organised by Prof. J. J. Ghosh Memorial Foundation, Department of Biochemistry, Ballygunge Science College on July 19, 2023.
27. Participated in the deliberations of the Thirteenth Memorial lecture given by Prof. Sujoy Das Gupta, Emeritus Scientist, Bose Institute, Kolkata, organised by Prof. J. J. Ghosh Memorial Foundation, Department of Biochemistry, Ballygunge Science College on July 19, 2024.
30. Participated in the deliberations of the lecture given by Prof. Anirban Siddhanta, Department of Biochemistry, University of Calcutta at Vidyasagar College organised by Prof. J. J. Ghosh Foundation and Department of Biochemistry, University of Calcutta in association with Vidyasagar College, Kolkata on August 31, 2024.
31. Participated in the deliberations of the lecture given by Prof. Sanjoy Ghosh, Department of Biochemistry, University of Calcutta at Vivekananda College organised by Prof. J. J. Ghosh Foundation and Department of Biochemistry, University of Calcutta in association with Vivekananda College, Kolkata on September 30, 2024.
32. Participated in the deliberations of the lecture given by Prof. Sanghamitra Sengupta, Department of Biochemistry, University of Calcutta at Asutosh College organised by Prof. J. J. Ghosh Foundation and Department of Biochemistry, University of Calcutta in association with Asutosh College, Kolkata on November 30, 2024.
33. Participated in the one day International seminar: 'Biochemistry: Then and Now' held at the Department of Biochemistry, University of Calcutta organised by Prof. J. J. Ghosh Foundation and Department of Biochemistry, University of Calcutta on January 6, 2025.

## **Webinars Attended**

1. Rini Roy, "International webinar on COVID-19 Pandemic : Vaccine Development and Future Therapies" organised by the Department of Microbiology, Dinabandhu Andrews College, Kolkata on 14th & 16th June, 2020.
2. Rini Roy, National Webinar on "Exploring the COVID 19 pandemic: an Indian Perspective", organized By the Department of Microbiology, Acharya Prafulla Chandra College in collaboration with its Internal Quality Assurance Cell. 13th June, 2020.
3. Rini Roy, National level Webinar Series on "Science amidst Covid Pandemic: Life Goes On....." first lecture of the Webinar series, entitled "Regulation of eukaryotic gene at post-transcriptional level" organized by Department of Microbiology & IQAC of Raidighi College and Department of Microbiology & IQAC of Sammilani Mahavidyalaya July 16, 2020.
4. Rini Roy, National level Webinar Series on "Science amidst Covid Pandemic: Life Goes On....." second lecture of the Webinar series, entitled "Microbial Technology for clean and green environment with nutritious food for masses", organized by Department of Microbiology & IQAC of Raidighi College and Department of Microbiology & IQAC of Sammilani Mahavidyalaya July 17, 2020.
5. Rini Roy, National level Webinar Series on "Science amidst Covid Pandemic: Life Goes On....." third lecture of the Webinar series, entitled "Gene Interactions that Control Longevity", organized by Department of Microbiology & IQAC of Raidighi College and Department of Microbiology & IQAC of Sammilani Mahavidyalaya July 21, 2020.
6. Rini Roy, International webinar, in the deliberations of the Ninth Memorial Lecture held on Prof. Sankar Adhya, National Institute of Cancer, USA spoke on the topic: "The physical structure of the Chromosome and its relation with Gene expression"organized by Prof. J. J. Ghosh Foundation, July, 19, 2020.
7. Rini Roy, one day webinar on "Covid-19: medical challenges & social impact" jointly organized by Department of Anthropology (UG & PG) & Internal Quality Assurance Cell (IQAC), July 14, 2020.
8. Rini Roy, National Webinar on 'Emergence of New Pandemics: New Challenges to Microbiologists' jointly organized by Post Graduate Department of Microbiology and IQAC, Bidhannagar College, Government of West Bengal, August 5, 2020.
9. Rini Roy, State level Webinar 'Journey to the Solar System and Beyond' by Debiprasad Duari organized by PG Department of Botany & Internal Quality Assurance Cell (IQAC), Bidhannagar College, August 21, 2020.
10. Rini Roy, International webinar on "Science, Biology and the World's Future" organized by the Department of Microbiology in collaboration with IQAC, Dinabandhu Andrews College, Kolkata, August 25, 2020.
11. 'Microbiology: Industrial Applications and Sustainable Development' Organized by Department of Microbiology jointly with IQAC, T.H.K. Jain College, August 24, 28 and 29, 2020.

12. Rini Roy, State level Webinar on “How Much Does A Kilogram of Flour Weigh?” organized by Department of Statistics, Bidhannagar College, September 4, 2020.
13. Rini Roy, Webinar on Vidyasagar organized by Department of Bengali and IQAC, Bidhannagar College, September 25, 2020.
14. Rini Roy, Two-Day National Webinar on ‘Intriguing Concepts and Applications in Zoology’ organized by Department of Zoology (UG & PG) and IQAC, Bidhannagar College, September 27-28, 2020.
15. Rini Roy, National level Webinar on World Immunization Week, organized by Dept. of Microbiology, Raidighi College, West Bengal and Microbiologists Society, India, April 27, 2021.
16. Rini Roy, International webinar on Biotechnology for Human Welfare organized by Department of Biotechnology, Heritage Institute of Technology, Kolkata, April 4-5, 2021.
17. Rini Roy, International webinar on 10th Memorial Lecture on the occasion of birthday celebration of Prof. J. J. Ghosh held on July 19, 2021.