

Resume

Dr.NANDINI CHAKRABARTI, M.Sc., Ph.D.



❖ Personal Details

Gender - Female

Nationality: Indian

Contact Details:

Mob No:+91 9903497961, Email ID:nandinichakraborti@gmail.com

❖ Current Position:Associate Professor, Department of Botany, City College, 102/1 Raja Rammohan Sarani, Kolkata-700009. (Under Calcutta University).

❖ Membership details:

Life Member:

- ❖ 1. Indian Science Congress Association.
- ❖ 2. Plant Physiology Forum.
- ❖ 3. Botanical Society of Bengal.

❖ Educational qualifications:

| Course | University |
|---|---------------------------|
| B.Sc. (Botany, Hons.), 1987 | University of Calcutta |
| M.Sc.in Botany, with (special paper:Plant Physiology and Biochemistry). 1989 | University of Calcutta |
| NET Qualified - 1991 | Under CSIR |
| Ph.D.in Botany (Research area – Stress Physiology and Plant Growth Regulators) | University of Calcutta |
| Post Doctoral Research Work – (Apoptosis and stress induced pollen embryogenesis in Tobacco.) | CIB,CSIC (MADRID) - Spain |

❖ Technical, workshop & Academic Training :

Orientation Programme – CU,1999
Refresher Course – CU , 2001
Refresher Course –CU , 2003
Refresher Course – CU, 2007

Seminars, Symposia, workshop etc, attended:

1. Seminar on “Role of Plants for Controlling Pollution”- 19th December, 2000; at Indian Institute of Chemical Biology, Calcutta.
2. UGC sponsored Workshop on “Orientation of Teachers of Environmental Studies at the Undergraduate Level”-February 17, 2001; at Heramba Chandra College, Calcutta.
3. Seminar on “Aspect and Prospects of Biotechnology”- April 21, 2001; at City College, Calcutta.
4. International Symposium of “Plant Biodiversity: Conservation and Evaluation”-December 17 to 20, 2002; at Bose Institute, Calcutta.
5. UGC sponsored seminar on “Energy Sources: Perspectives and Prospects, with Special Reference to Solar Energy”-January 31, 2003; at City College, Calcutta.
6. State level UGC-sponsored seminar on “New Frontiers in Plant Science”-February 28 and March 1, 2003; at Charuchandra College, Calcutta.
7. Poster presentation on “Phytohormone regulated changes in mung bean under salt stress” at National Seminar on “Recent Advances in Stress Physiology, Toxicology and Immunology”- November 27 and 28, 2003, at University of Kalyani.
8. UGC-sponsored National level seminar on “New Frontiers of Basic and Applied Sciences”- February 7, 2004; at Bethune College, Calcutta.
9. UGC-sponsored National Seminar on “Scarcity of potable water : Health, Management and Future”-March 13, 2004; at City College, Calcutta.
10. Seminar on “Understanding plant morphogenesis , the new insights”- April 5 , 2005; at CIB, CSIC, Madrid, Spain.
11. Seminar on “Frontiers in recombinant protein production in transgenic plants – an applied science perspective” – September 8 ,2005 ; at CIB , CSIC , Madrid, Spain.
12. Seminar on “Live cell imaging of the plant secretory pathway” – October 18, 2005; at CIB, CSIC, Madrid, Spain.
13. Seminar on “The biology of cell death : defying dogmas” – June 29, 2006; at CIB, CSIC, Madrid, Spain.
14. DST Sponsored State Level Seminar on “Biodiversity”- November 4, 2006; at Bethune College, Calcutta.
15. Seminar on “Aspects and Appraisal of Fossil Study” – January 5, 2007; at City College, Kolkata.
16. UGC-Sponsored National Seminar on “ Global warming- A challenge in 21st century” – 15th and 16th February , 2008; at Uluberia College , Howrah.
17. UGC-Sponsored National Seminar on “ Microbiology: An environmental perspective” – 4th March, 2008; at Ramakrishna Mission Vidyamandira, Howrah.

18. UGC-Sponsored National Seminar on “Global Warming – a Threat to the World” – 25th March, 2008; at Muralidhar Girls’ College, Kolkata.
19. International Symposium on “A journey from Plant Physiology to Plant Biology” – 24th-28th November, 2008; at Bose Institute, Kolkata.
20. UGC-Sponsored National Seminar on “Stress, Drug Development and Nanotechnology” – 5th and 6th March, 2009; at Bethune College, Kolkata.
21. UGC-Sponsored State-Level Workshop on “Plant genomic DNA” – 5th and 6th May, 2009; at Scottish Church College, Kolkata.
22. UGC-Sponsored State-Level Seminar on “Playing God: Expanding Frontiers of Biotechnology” – 6th and 7th November, 2009; at Gurudas College, Kolkata.
23. UGC-Sponsored National Seminar on “Sustainable Resource Management: Myth or Reality” – 18th and 19th November, 2011; at Uluberia College, Howrah.
24. National Symposium on “Plant diversity and resources : Evolution, analysis, stress and challenges and Palaeophytodiversity : Its aspects and prospects” – 20th – 22nd December, 2011; at University of Calcutta, Kolkata
25. Workshop on B.Sc Botany Hons. Part III Practical for College teachers ; Acted as resource person - 24th and 25th October, 2013; at University of Calcutta, Kolkata.
26. International Symposium on “Trends in Plant Science Research”- 15th and 16th February, 2014; at university of Calcutta, Kolkata.
27. UGC-Sponsored State-Level Seminar on “Sundarbans – The endangered ecosystem”- 6th February, 2016; at Muralidhar Girls’ College, Kolkata.
28. National Conference on “Future India – Science and Technology” – 27th and 28th February, 2019; at City College, Kolkata.
29. International Conference on “Algae, Fungi and Plants : Systematics to Applications” – 24th and 25th January, 2020; at university of Calcutta, Kolkata.
30. International Webinar on “ Covid – 19: Pathogen, immunity and Hope” – 20th and 21st June, 2020; at City College, Kolkata.
31. National on-line seminar on “ Covid-19 Pandemic – Challenges and Conquest for Students” – 26th June, 2020; at City College , Kolkata.
32. National Webinar on “Covid – 19” – 29th June, 2020; at City College, Kolkata.
33. Webinar on “Recent advances in Biology” – 30th June, 2020; at Lady Brabourne College, Kolkata.
34. Webinar on “Coastal areas of West Bengal: Botany and Beyond” – 18th July, 2020; at Bethune College, Kolkata.

35. Webinar on “The race to Survival: Indian Economy in Turmoil and a struggling sports sector” – 5th August, 2020; at City College, Kolkata.

36. Seminar on “ Blood donation : Understanding, awareness and camp” - 17th February, 2022; at City College, Kolkata.

37. Seminar on the occasion of National Science Day – 25th February, 2022; at City College, Kolkata.

38. State Level Workshop on Basic Cell Biology Techniques – 25th and 26th November , 2022; at City College, Kolkata.

❖ Previous working experience:

| Sl. No. | Post | College, University and Organisation | Department | Duration |
|---------|--------------------|--|------------|------------------|
| 1 | Part time lecturer | Vidyasagar College for Women, (Under CU) | Botany | Aug. – Oct. 1997 |
| 2 | | . | | |

❖ Publication:

Papers:

1.Chakrabarti, N. and Mukherji, S.(1994). Effect of Indole-3-acetic acid, Gibberellic acid and Kinetin pretreatment as foliar spray on chlorophyll content, chlorophyllase enzyme activity, photosynthetic non-cyclic electron transport and CO₂ uptake in C₃ glycophyte *Vigna radiata* (L.) Wilczek under salt stress. *Plant Physiology and Biochemistry*, **21**: 59-64.

2.Chakrabarti, N. and Mukherji, S.(1994). Effect of Indole-3-acetic acid, Gibberellic acid and Kinetin on osmotic stress affected photoconversion of protochlorophyll to chlorophyll and new chlorophyll synthesis in *Vigna radiata* (L.) Wilczek. *Indian Biologist*, **26**: 54-58.

3.Chakrabarti, N. and Mukherji, S.(2002). Effect of phytohormone pretreatment on metabolic changes in *Vigna radiata* under salt stress. *Journal of Environmental Biology*, **23**: 295-300.

4.Chakrabarti, N. and Mukherji, S.(2002). Role of GA₃ on amino acid and protein content and on electrophoretic profile of leaf protein in mung bean under salt stress. *Research Journal of Chemistry and Environment*, **6**: 33-36.

5.Chakrabarti, N. and Mukherji, S.(2002).Growth regulator mediated changes in leaf area and metabolic activity in mung bean under salt stress condition. *Indian Journal of Plant Physiology*, **7**: 256-263.

6.Chakrabarti, N. and Mukherji, S.(2003). Effect of Kinetin on leaf protein content and its profile in mung bean under salt stress. *Journal of Environmental Biology*, **24**: 289-294.

- 7.Chakrabarti, N. and Mukherji, S.(2003). Effect of phytohormone pretreatment on nitrogen metabolism in *Vigna radiata* under salt stress. *Biologia Plantarum*, **46**: 63-66.
- 8.Chakrabarti, N. and Mukherji, S.(2003). Alleviation of NaCl stress by pretreatment with phytohormones in *Vigna radiata*.*Biologia Plantarum*, **46**: 589-594.
- 9.Chakrabarti, N. and Mukherji, S.(2003). Effect of phytohormone pretreatment on DNA, RNA, amino acid and protein content in different plant parts of *Vigna radiata* under salt stress. *Indian Agriculturist*, **47**: 57-78.
- 10.Chakrabarti, N.(2003). Role of IAA on amino acid, protein and electrophoretic profile of leaf protein in *Vigna radiata* under salt stress. *Journal of Botanical Society of Bengal*,**57**: 25-29.
11. Chakrabarti, N.(2004). Effect of phytohormone treatment on growth and yield of *Vigna radiata* under salt stress. *Indian Biologist*, **36** (2): 35-41. .
- 12.Chakrabarti, N.(2004).Effect of phytohormone pretreatment on pigment and sugar content in *Vigna radiata* under salt stress. *Journal of Botanical Society of Bengal*, **58** (1 and 2) : 17-25.
13. Solis M T, Chakrabarti N. et al. (2014). Epigenetic changes accompany developmental programmed cell death in tapetum cells. *Plant cell Physiol.*, 55(1) : 16-29.

Abstracts :

- 1.Chakrabarti, N. and Mukherji, S.(1993). Effect of IAA,GA₃ and Kinetin on osmotic stress affected photoconversion of protochlorophyll to chlorophyll and new chlorophyll synthesis in *Vigna radiata*(L.) Wilczek.-Abstract published in the proceedings of the eightieth session of the Indian Science Congress, Goa.
- 2.Chakrabarti, N. and Mukherji, S.(1996). Role of phytohormones in reversal of salt stress induced altered metabolism in *Vigna radiata*(L.) Wilczek.- Abstract published at Symposium on Plant Physiology for National Development Organized by “Plant Physiology Forum” (From December 17 to 19).
- 3.Chakrabarti, N. and Mukherji, S.(1997). Changes in *Vigna radiata* due to the presence of excess salt in soil and role of phytohormones in reversal of altered metabolism -Abstract published at Fourth Session of West Bengal State Science Congress (From February 28 to March 02).
- 4.Chakrabarti, N. (2001). Salt stress – A serious agroeconomical problem of global scale – Abstract published at Proceedings of the 13th Refresher Course in Botany , by UGC-Academic Staff College, University of Calcutta (27th February – 21st March).
- 5.Chakrabarti, N. (2003). Phytohormone regulated changes in mung bean under salt stress-Abstract published at National Seminar on “Recent Advances in Stress Physiology, Toxicology and Immunology” organized by University of Kalyani (November 27 and 28).

6. Risueño MC, Bárány I, Chakrabarti N, Long H, Seguí-Simarro JM, Suárez R, Coronado MJ, Testillano PS. (2005). El dominio nuclear de cuerpos de cajal cambia con la reprogramación del polen a embriogénesis- Abstract published at "XI Congreso de la Sociedad Española de Biología Celular", Ponencias y comunicaciones, held in Cádiz, Spain (3 a 6 de Noviembre).
7. Risueño MC, Bárány I, Chakrabarti N, Long H, Seguí-Simarro JM, Suárez R, Coronado MJ, Testillano PS. (2006). Cajal bodies nuclear domain changes after microspore reprogramming to embryogenesis- Abstract published at "European cooperation in the field of scientific and technical research (Final meeting of Cost Action 851 on gametic embryogenesis)", held in Vienna, Austria (February 10 and 11).
8. Coronado MJ, Chakrabarti N, Cortes-Eslava J, Risueno MC, Testillano PS (2006). Stress-induced PCD in plant cells involves apoptotic nuclear domain rearrangements and expression of caspase 3-like proteins – Abstract published at "48th Symposium of the Society for Histochemistry" Università delgitudi di Pavia, Stresa – Lake Maggiore, Italy (September 7 – 10).
9. M.C. Risueno, J.M. Segui-Simarro, I. Barany, N. Chakrabarti, H. Long, R. Suarez, M. J. Coronado and P.S. Testillano (2006). Los cuerpos de cajal como marcadores en la reprogramacion a embriogenesis de la microspora – Abstract published at "XV International A.P.L.E. Symposium of Palynology"; Dept. Plant Biology, University of Malaga, Asociacion de Palinologos de Lengua Espanola (A.P.L.E.); Benalmadena, Malaga, Spain (18-21 September).
10. Chakrabarti N, Cortes-Eslava J., Rodriguez-Huete A, Testillano PS, Risueno MC (2006). Cambios apoptoticos y expression de "caspasa-3-like" en la muerte celular del tapetum durante el desarrollo del polen – Abstract published at "Quinto Congreso de la Sociedad Espanola de Biologia del Desarrollo"; Instituto de Bioingenieria, Universidad Miguel Hernandez de Elche; Alicante, Spain (21-23 de Septiembre).
11. Coronado MJ, Chakrabarti N, Cortés-Eslava J, Rodríguez-Huete A, Risueno MC, Testillano PS (2007). Programmed cell death as an integrated plant cell response to stress treatments which induce changes of developmental programmes- "3rd International Symposium on Plant Neurobiology"; Štrbské pleso, Slovakia (14-18 May).
12. Testillano P., Corredor E., Solís M., Chakrabarti N., Raska I., Risueno M (2007). Changes in nuclear architecture and DNA methylation pattern accompany the developmental programmed cell death of the tapetum – Abstract published at "Plant Genomics European Meetings"; 6. Plant GEM Tenerife, Spain (3-6 October).
13. Solis MT., Corredor E., Chakrabarti N., Risueno M and Testillano PS (2008). Cambios en la metilacion del DNA genomico y la arquitectura nuclear durante el desarrollo y embriogenesis del polen – Abstract published at IX Reunion de Biologia Molecular de Plantas, Santiago; Julio de 2008.
14. Nandini Chakrabarti, Eduardo Corredor, Josefina Cortés Eslava, María C. Risueño, Pilar S. Testillano (2008). "Apoptotic changes in tapetal cells during pollen development"- Abstract Published at "A Journey from Plant Physiology to Plant Biology"; An International

Symposium Organised by Bose Institute, Plant Physiology Forum and Calcutta University, Kolkata, India (24-28 November).

15. Nandini Chakrabarti (2011). "Importance of wetlands" – Abstract published at Proceedings of UGC Sponsored State Level Seminar on "Wetland Ecosystem and Its Faunal Diversity" Organised by Uluberia College, Howrah (7th January).

16. Nandini Chakrabarti (2011). "Sustainable Forest Management – Biodiversity and Challenges" – Abstract published at Proceedings of UGC Sponsored National Seminar on "Sustainable Resource Management : Myth or Reality" Organised by Uluberia College, Howrah (18th and 19th November).