Dr Amit Roy
Professor

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Date of joining V.B: 28 January 2002

Highest qualification: Ph.D.

Areas of expertise/interest: Plant bioactive compounds, Molecular biology of enzymes involved in carbohydrate metabolism of fungus.

Number of PhD scholars produced & currently working: 5 + 2

Education:

WB Higher Secondary (1975 batch)	Ram Krishna Mission, Narendrapur
B.Sc. Zoology (Hons.) (1978 batch)	(Presidency College, Kolkata; University of Calcutta)
M.Sc. Zoology (1980 batch)	University of Calcutta
PhD. (Science) (1988)	Indian Institute of Chemical Biology, CSIR, Kolkata (Degree awarded by University of Calcutta)
Post-doctoral training	USA (1986-1994, 2000-2002)
Visiting fellow	USA, 2003

Awards/Scholarship: National scholarship on the basis of Higher Secondary results.

Publications from Visva-Bharati:

1) Vinod Kumar Gupta, Amit Roy, Vikas K Nigam and Kalishankar Mukherjee. Antimicrobial activity of *Spondias pinnata* resin. Journal of Medicinal Plants Research. Volume 4(16), pages 1656 – 1661, 18 August 2010. DOI: 10.5897/JMPR10.182. Publisher: Academic Journals. ISSN 1996-0875.

2) Aritra Simlai and Amit Roy. Analysis of and correlation between phytochemical and antimicrobial constitutents of *Ceriops decandra*, a medicinal mangrove plant, from Sundarban estuary. Journal of Medicinal Plants Research. Volume 6(32), Pages 4755 – 4765, 31 August 2012. DOI: 10.5897/JMPR12.657. Publisher: Academic Journals. ISSN 1996-0875.

3) Vinod Kumar Gupta and Amit Roy. Comparative study of antimicrobial activities of some mangrove plants from Sundarban estuarine regions of India. Journal of Medicinal Plants Research. Volume 6(42), Pages 5480 – 5488, 03 November, 2012. DOI: 10.5897/JMPR12.121. Publisher: Academic Journals. ISSN 1996-0875.

4) Vinod Kumar Gupta, Charanjeet Kaur, Aritra Simlai and Amit Roy. Antimicrobial activity of *Pavetta indica* leaves. Journal of Applied Pharmaceutical Science. Volume 3(04), Pages 078 – 082, April 2013. DOI: 10.7324/JAPS.2013.3414. ISSN 2231-3354.

5) Aritra Simlai and Amit Roy. Biological activities and chemical constituents of some mangrove species from Sundarban estuary: An Overview. Pharmacognosy Reviews (July – December Issue, 2013; Online 25 October, 2013), Volume 7, Issue 14, Pages 170 - 178. DOI:10.4103/0973-7847.120518. Publisher: Medknow Publications (Wolters Kluwer). ISSN: Print 0973-7847, Online - 0976-2787.

6) Aritra Simlai, Kashinath Chatterjee and Amit Roy. A comparative study on antioxidant potentials of some leafy vegetables consumed widely in India. Journal of Food Biochemistry. Volume 38, Issue 3 (June 2014), Pages 365 - 373. Available online since 17 December, 2013. DOI:10.1111/jfbc.12062. Publisher: Wiley Online Library. Online ISSN: 1745-4514.

7) Vinod Kumar Gupta, Aritra Simlai, Manish Tiwari, Kashinath Bhattacharya and Amit Roy. Phytochemical contents, antimicrobial and antioxidative activities of *Solanum sisymbriifolium.* Journal of Applied Pharmaceutical Science. Volume 4(03), Pages 075 – 080, March 2014. DOI: 10.7324/JAPS.2014.40315. ISSN 2231-3354.

8) Prabuddha Sarkar and Amit Roy. Molecular cloning, characterization and expression of a gene encoding phosphoketolase from *Termitomyces clypeatus*. Biochemical and Biophysical Research Communications. Volume 447, Issue 4 (16 May, 2014), Pages 621 - 625. Available online since 18 April, 2014. Publisher: Elsevier. ISSN:0006-291X. DOI:10.1016/j.bbrc.2014.04.054.

9) Vinod K Gupta, Kalishankar Mukherjee, Amit Roy. Two novel antifungals, acornine 1 and acornine 2, from the bark of mangrove plant *Aegiceras corniculatum* (Linn.) Blanco from Sundarban Estuary. Pharmacognosy Magazine, 2014 Apr-Jun; 10 (Suppl 2): S342–S349. doi: 10.4103/0973-1296.133293. Wolters Kluwer-Medknow Publications. PMCID: PMC4078352. PMID: 24991113.

10) Aritra Simlai, Archana Rai, Saumya Mishra, Kalishankar Mukherjee, Amit Roy. Antimicrobial and antioxidative activities in the bark extracts of *Sonneratia caseolaris*, a mangrove plant. EXCLI J. 2014; 13: 997–1010. Published online 29 August 2014. PMCID: PMC4464296. PMID: 26417316. ISSN 1611-2156.

11) Anand Patwardhan, Samit Ray, Amit Roy. Molecular Markers in Phylogenetic Studies - A Review.. J Phylogenetics & Evolutionary Biol. 2014, 2:2. OMICS International. ISSN: 2329-9002 JPGEB, an open access journal. http://dx.doi.org/10.4172/2329-9002.1000131

12) Aritra Simlai, Kalishankar Mukherjee, Anurup Mandal, Kashinath Bhattacharya, Amalesh Samanta, Amit Roy. Partial purification and characterization of an antimicrobial activity from the wood extract of mangrove plant *Ceriops decandra*. EXCLI J. ; 15: 103–112. Published online 2016 Feb 9. doi: 10.17179/excli2015-741. PMCID: PMC4822046. PMID: 27065777.

13) Aritra Simlai, Anjali Gangwar, Sarthaki Avinash Ghonge, Amit Roy. Antimicrobial and Antioxidative Activities in the Stem Extracts of *Derris trifoliata*, a Mangrove Shrub. *J*ournal of Pharmaceutical Research International, 17(3), Page 1-10. Published**:** 22 June 2017. DOI: 10.9734/JPRI/2017/34455

14) Protyusha Dey, Amit Roy. Molecular structure and catalytic mechanism of fungal family G acidophilic xylanases. Review article. 3 Biotech. 8(2) Pages 1-13, Article number: 78 (15 January 2018). Springer Berlin Heidelberg. https://doi.org/10.1007/s13205-018-1091-8

15) Protyusha Dey, Hridoy R Bairagya, Amit Roy. Putative role of invariant water molecules in the X-ray structures of family G fungal endoxylanases. J. Biosci. 43(2), pages 339–349 (26 April, 2018). Springer India. https://doi.org/10.1007/s12038-018-9752-7

16) Sanchita Banerjee, Gargi Mishra, Amit Roy. Metabolic Engineering of Bacteria for Renewable Bioethanol Production from Cellulosic Biomass. Biotechnology & Bioprocess Engg. 24, 713–733 (25 October 2019). Springer Link. https://doi.org/10.1007/s12257-019-0134-2

17) Sanchita Banerjee, Ankit Roy, MS Madhusudhan, Hridoy R Bairagya, Amit Roy. Structural insights of a cellobiose dehydrogenase enzyme from the basidiomycetes fungus *Termitomyces clypeatus.* J. Computational biology and chemistry. Volume 82, Pages 65-73, Available online 30 May 2019. Elsevier. https://doi.org/10.1016/j. compbiolchem. 2019.05. 013

18) Moumita Choudhury, Kalishankar Mukherjee, Arnab De, Amalesh Samanta, Amit Roy. Partial Purification and Characterization of Albain 1, a Triterpene with Antimicrobial Activity, from the Wood Extract of *Avicennia alba* Blume. Journal of Pharmaceutical Research International. Volume 32(2) Pages 38-48. 10 March 2020. DOI: 10.9734/jpri/2020/v32i230402

19) Sanchita Banerjee, Amit Roy. Molecular cloning, characterisation and expression of a gene encoding cellobiose dehydrogenase from *Termitomyces clypeatus.* Gene reports. Volume 23, 101063.Available online 25 February 2021. Elsevier. https://doi.org/10.1016/j.genrep. 2021. 101063

20) Protyusha Dey, Amit Roy. Cloning, characterization and expression of a gene encoding endo-1, 4- β-xylanase from the fungus *Termitomyces clypeatus.* Carbohydrate Research. Volume 505, 108333. (Online 07 May 2021). Elsevier. https://doi.org/10.1016/j.carres. 2021.108333