


NAME	Dr. Archana Tiwari	
DESIGNATION	Professor	
RESEARCH INTERESTS	Diatom Biorefinery-Investigating the untapped potential of Diatoms as Nutraceuticals, bioactive compounds, antioxidative enzymes, aquaculture applications and high value products towards development of circular economy.	
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EDUCATIONAL QUALIFICATIONS

Name of College / University	Degree	Year
University of Allahabad	Ph.D.	2002-2006
Gauhati University	M.Sc.	1999-2001
Gauhati University	B.Sc. (Hon's)	1996-1999

Title of Ph.D. thesis: Molecular & Biochemical studies on Bloom forming Cyanobacteria

EXPERIENCE (in chronological order)

Designation	Type of post held	Name of the Institute	Year (From – To)
Professor	Teaching & Research	Amity Institute of Biotechnology	2022- Contd.
Associate Professor	Teaching & Research	Amity Institute of Biotechnology	2017- 2022
Head, School of Sci	Teaching & Research	NIU, Greater Noida	2014-2017
Head, CRS	Teaching & Research	NIU, Greater Noida	2014-2016
Assistant Professor	Teaching & Research	NIU, Greater Noida	2013-2014
Assistant Professor	Teaching & Research	GNGC, Panjab University	2010-2013
Assistant Professor	Teaching	RBCP, Bareilly, UPTU	2006-2010
Teaching Assistant	Research & Teaching	University of Allahabad	2002-2006

No. of Ph.D. students supervised	12 (Awarded); 2 (Ongoing)
No. of post-Doc	3
No. of M. Tech. Students supervised:	>50
No. of B.Tech. Students supervised:	>100
Publications	101
Patents	4
Books	12
Chapters in books	41
Papers Presented in Conferences	75

PUBLICATIONS

- [1]. Raunak Dhanker, Abhishek Saxena, **Archana Tiwari**, Pankaj Kumar Singh, Anil Kumar Patel, Hans-Uwe Dahms, Jiang-Shiou Hwang, Georgia Maria González-Meza, Elda M. Melchor-Martínez, Hafiz M.N. Iqbal, Roberto Parra-Saldívar (2024) Towards sustainable diatom biorefinery: Recent trends in cultivation and applications, *Bioresource Technology*, 391, 129905, <https://doi.org/10.1016/j.biortech.2023.129905>.
- [2]. Raya Bhattacharjya, Hina Bansal, Seneha Santoshi, Shubha Rastogi, **Archana Tiwari** (2024) Characterization of natural compounds derived from diatom *C. gracilis* as potential therapeutic agents: An in-silico networking and docking study, *Algal Research*, 103712, <https://doi.org/10.1016/j.algal.2024.103712>
- [3]. Pankaj Kumar Singh, Thomas Kiran Marella, Raya Bhattacharjya, Rashi Tyagi, Navdeep Singh Plaha, Nutan Kaushik, **Archana Tiwari** (2024) Marine diatom algae cultivation in simulated dairy wastewater and biomass valorization. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-023-31531-3>
- [4]. Pandian Nikhita, Chaurasia Radhika, Chatterjee Satyaki, Biswas Bhaskar, Patra Prabir, Tiwari Archana, Mukherjee Monalisa (2024) Roadmap of algal autotrophic tissue engineering in the avenue of regenerative wound therapy, *Materials Advances*, <http://dx.doi.org/10.1039/D4MA00492B>.
- [5]. Parikh, H.S., Singh, P.K., **Tiwari, Archana** (2024) Algal biorefinery: focus on cosmeceuticals. *Syst Microbiol and Biomanuf*. <https://doi.org/10.1007/s43393-024-00287-3>.
- [6]. Rinku, Abhishek Saxena, Pankaj Kumar Singh, Kalina Manoylov & **Archana Tiwari** (2024) Isolation and identification of marine diatoms based on frustules morphology using scanning electron microscopy. *Indian Journal of Experimental Biology* 62, 584-592 DOI: 10.56042/ijeb.v62i07.12070.
- [7]. Rashi Tyagi, Pankaj Kumar Singh, Abhishek Saxena, Raya Bhattacharjya, Hirak Parikh, Thomas Kiran Marella, Nutan Kaushik, Rajesh Prasad Rastogi, **Archana Tiwari** (2024) Exploring the nutraceutical potential of high-altitude freshwater diatom *Nitzschia* sp. in batch culture. *Systems Microbiology and Biomanufacturing*, DOI 10.1007/s43393-024-00299-z.
- [8]. Raya Bhattacharjya, Rashi Tyagi, Subha Rastogi, Lionel Ulmann, **Archana Tiwari** (2024) Response of varying combined nutrients on biomass and biochemical composition of marine diatoms *Chaetoceros gracilis* and *Thalassiosira weissflogii*, *Bioresource Technology*, 394, 130274, <https://doi.org/10.1016/j.biortech.2023.130274>.
- [9]. Pankaj Kumar Singh, Hirak Parikh, Abhishek Saxena, Bharti Mishra, Rashi Tyagi, Mukesh Kumar Awasthi, Aravind Madhavan, Raveendran Sindhu, **Archana Tiwari** (2024) Managing municipal wastewater remediation employing alginate immobilized marine diatoms and silver nanoparticles, *Energy & Environment*, <https://doi.org/10.1177/0958305X241246185>
- [10]. Raya Bhattacharjya, Pankaj Kumar Singh, Rashi Tyagi, Subha Rastogi, **Archana Tiwari** (2024) Sustainable strategy for enhancing growth of marine diatom and lipid production using RO and AC spent water. *Systems Microbiology and Biomanufacturing*.

<https://doi.org/10.1007/s43393-024-00242-2>.

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RESEARCH PROJECTS Completed: (total no.)2	Details: “Development of Diatom culture collection, segregation for nutraceuticals and application in aquaculture”. Department of Biotechnology, Ministry of Science and Technology.
RESEARCH PROJECTS Ongoing: (total no.)1	“Sustainable microalgal biorefinery for enhanced production of functional biomolecules” Science and Engineering Research Board (SERB), (AISTDF Secretariate)
AWARDS & HONOURS/ DISTINCTIONS	2022 ESDA Fellowship Award, ESDA, India 2021 Woman Scientist Award, Biotech Research Society, India 2016 Distinguished Scientist Award, Hi Tech Society, India 2015 Best Researcher Award 2002 Gold Medal M.Sc. Botany, Gauhati University, India 1999 Distinction in B.Sc. Honours, Gauhati University, India
MEMBERSHIP with Professional/ Academic bodies	International Society for Environmental Botanists Indian Science Congress Society for Biological Chemists Microbiology Society Biotech Research Society of India International Bioprocessing Association (IBA-IFIBiop)

	<p>GUEST EDITOR-Bioresource Technology (Elsevier) Reviewer-International Journal of Hydrogen Energy (Elsevier) Reviewer-Bioresource Technology (Elsevier) Reviewer-Science of Total Environment (Elsevier) Reviewer-Applied Energy (Elsevier) Reviewer- Marine Pollution Bulletin (Elsevier)</p>
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