



St. Edmund's College

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Affiliated to North Eastern Hill University

Recognized by the University Grant Commission under 2 (f) and 12 (B) of the UGC Act 1956

Awarded STAR STATUS COLLEGE (DBT, Govt. of India)

Profile

1. NAME Sibange Paul
2. CONTACT DETAILS (EMAIL) sibange.paul@gmail.com
3. DEPARTMENT Advanced Biotechnology Research Lab
4. QUALIFICATION MSc. Biotechnology
5. CURRENT POSITION Technical Assistant
6. SPECIALIZATION Microbiology, Molecular Biology
7. RESEARCH EXPERIENCE 5 years
8. ORCID ID: 0009-0003-8006-7446
9. PROJECTS



Sl	Name of the Project	Funding Agency	Duration	Current Status
	A study on utilization of Cyanobacteria for bioremediation of crude oil, hydrocarbon storage tank bottom sludge, ETP (Effluent Treatment plant) hydrocarbon sludge and its environmental biotechnology implications.	Numaligarh Refinery, Dist, Project, Numaligarh, Numaligarh Refinery Twp, Assam	3 Years	Complete

10. HONOURS/AWARDS/SCHOLARSHIPS

University topper in MSc Biotechnology, 2019-21.

“Best Poster Presentation: Junior Category”, 1st International e-Conference on Agro-Environmental Sustainability (ICAGENS 2024) organized during 19-20 October 2024.

11. PUBLICATIONS (YEAR WISE)

YEAR	Journal (Details)	Book Chapter (Details)
2026	Paul Sibange, Thyrniang Barihun, Koch Rangraj, Lyngdoh Dominic, Challam Shekinah, Deb Sumit, Adhikari Samrat, Identification of Anti-cancer Lead Compounds from crocus sativus: A Comprehensive Molecular Docking and QSAR Investigation, Veritas Edmundian Journal Multidisciplinary Research (EJMR),2026.	
2026	Thyrniang Barihun, Paul Sibange, Lyngdoh Dominic, Manners Baiakmenlang, Deb Sumit, Adhikari Samrat, Identification of Anti-cancer Lead Compounds from crocus sativus: A Comprehensive Molecular Docking and QSAR Investigation, Veritas Edmundian Journal Multidisciplinary Research (EJMR),2026.	



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- 2026 Thyrnang Barihun, Paul Sibange, Deb Sumit, Adhikari Samrat, Impact of petroleum Hydrocarbons on Algal Enzyme Activity and Hydrocarbon Degradation: Comparing Crude Oil, Effluent Treatment Plant Sludge, and Tank Bottom Sludge, Current World Environment, Volume 21 (1), 2026, ISSN 0973-4929, <http://dx.doi.org/10.12944/CWE.21.1.22>
- 2026 Paul Sibange, Thyrnang Barihun, Deb Sumit, Adhikari Samrat, A multidimensional study of enzyme activity and hydrocarbon reduction for bioremediation of refinery waste by free living cyanobacteria, Journal of Applied Biology and Biotechnology, Volume 14(1), 2026, <http://dx.doi.org/10.7324/jabb.2025.244611>
- 2025 Paul S., Thyrnang B., Deb S., Adhikari S. Harnessing the ability of cyanobacterium *Anabaena variabilis* for bioremediation of waste generated from oil refineries. In: Joshi S. R., Verma P., Banerjee S., eds. Mineral Transformation and Bioremediation by Geo-Microbes. Interdisciplinary Biotechnological Advances. Singapore, Springer, 2025, rr.525-543. https://doi.org/10.1007/978-981-96-3033-2_21
- 2024 Paul Sibange, Thyrnang Barihun, Deb Sumit, Adhikari Samrat, Impact of Effluent Treatment Plant Sludge on growth, Physiology, and Biodegradation Potential of Cyanobacteria: *Anabaena variabilis*, *Nostoc muscorum*, and *Nostoc* sp., International Journal of Ecology and environmental Sciences, Volume 50 (6), 2024, <https://doi.org/10.55863/ijees.2024.0289>
- 2022 Paul Sibange, Thomas Shiny C, *Thujopsis dolabrata* and its potential to undergo biotransformation: A review, International Journal of Botany Studies, Volume 7, Issue 1, 2022, Page No. 547-556, 2022, ISSN: 2455-541X
- 2021 Patrick Z Lawlor, Priya Chauhan, Sibange Paul, Indrani Mazumdar, Roy Anthony, Gonsalo Sumer, Nazneen Hussain and Jayanti Datta Roy. 2021. Pandemic crisis: Scientific strategies and approaches for combating COVID-19, Research in Microbiology, Journal of Safety Science and Resilience, AkiNik Publications. Volume 6. (Book Chapter) (Current status: Accepted for publication).



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12. ORAL/POSTER Presentation (YEAR WISE)

Sl	Name of the Conference	Name of the Paper Presented	National /International	Mode of Presentation	Organized by	Dates
1.	1st International e-Conference on Agro-Environmental Sustainability (ICAGENS 2024)	“Quantification of bioremediation potential of <i>Anabaena variabilis</i> on effluent treatment plant (ETP) hydrocarbon sludge using GC-FID and GC-MS”	International	Oral	University of Zagreb Faculty of Agriculture, Zagreb, Croatia In association with: Society for Agro Environmental Sustainability, Dehradun, India	19-20 October 2024.
2.	Webinar on "Strategies and Scientific Approaches on COVID-19" https://www.youtube.com/watch?v=KWsOzLzOwyQ	“Strategic and Scientific approaches on COVID-19”	National	Poster	Department of Biosciences, Assam Don Bosco University	27th October 2020

13. Any Other Information (if any)

MSc. Biotechnology, Thesis: “Biochemical conversion of essential oil extracted from *Thujopsis dolabrata* by lactobacillus strain”. (2020-2021)

Add-on Courses Conducted

- Research Methodology and Analytical Instrumentation
31 Participants
Conducted on :15th September to 15th November, 2025
- Analytical and Extraction Techniques in Bioscience
35 Participants
Conducted on :11th December to 20th December, 2025
- Advanced Analytical Techniques in Life Sciences
18 Participants
Started on :13th March 2026, 16th May 2026
- Gene Cloning technology
10 Participants
Started on :18th March 2026, 8th May 2026

Workshops conducted

- Gas Chromatography Flame Ionization Detection Technique
20 Participants



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Conducted on :8th to 10th May, 2025

- ii. Gas Chromatography Flame Ionization Detection Technique

21 Participants

Conducted on :12th to 13th May, 2025

- i. Molecular Cloning Techniques

24 Participants

Conducted on :28th July to 18th August, 2025