

BIO-DATA

NAME: **SANJANA GHOSH**

DATE OF BIRTH: 21st January, 1993

ADDRESS: 7, Priyanath Ghosh Road

P.O Santoshpur, Kolkata 700075

Phone No: 8902227516

Email Id: sanjanaghosh@sxccal.edu , sanjana.ghosh2018@gmail.com

Education Profile:

Currently working as a PhD Research Scholar, under the guidance of Dr Sudeshna Shyam Choudhury, Dr Ayan Chandra and Dr Arup Kr Mitra at Department of Microbiology, St. Xavier's College (Autonomous), Kolkata.

ACADEMIC DETAILS:

EXAM PASSED	YEAR	INSTITUTION STUDIED	BOARD/ UNIVERSITY
B.Ed.(LIFE SCIENCE)	2018	SAMMILANI TEACHERS' TRAINING COLLEGE	WBUTTEPA
M.Sc BOTANY	2016	SCOTTISH CHURCH COLLEGE	CALCUTTA UNIVERSITY
B.Sc BOTANY	2014	SHRI SHIKSHAYATAN COLLEGE	CALCUTTA UNIVERSITY
ISC	2011	G.D BIRLA CENTRE FOR EDUCATION	Council for Indian School Certificate Examinations, New Delhi
ICSE	2009	G.D BIRLA CENTRE FOR EDUCATION	Council for Indian School Certificate Examinations, New Delhi

Special paper (M.sc): Cell biology, Molecular genetics and Plant biotechnology

Dissertation topic (M.sc): Study of callus induction media of few varieties of *Oryza Sativa*

TRAINING ACTIVITIES:

1. Teachers training internship (B.Ed. 3rd semester) from Andrews High School, Kolkata
2. A 90 days project training during M.Sc on PLANT TISSUE CULTURE under the guidance of Dr Aryadeep Roy Choudhury at St.Xavier's College,(Autonomous) Kolkata.
3. Basic computer course training from DOEACC SOCIETY publications.

WORK EXPERIENCE

- Presently working as a faculty in the department of Environmental Studies, B. Com (Morning) department of St. Xavier's College (Autonomous) Kolkata and of St. Xavier's College (Autonomous) Kolkata, Raghampur Campus
- Worked as a guest lecturer in the department of Botany, Shri Shikshayatan College, from July 2018- August,2022
- Worked as a resource person of the syllabus of Botany for the UGC Educational channel made by EMMRC, St. Xavier's College (Autonomous) Kolkata.

WORKSHOPS AND SEMINARS

- Organization of one day seminar and workshop on Green Environment and Sustainability on 20th April,2023 in collaboration with Switch On Foundation.
- Organized an International Seminar titled International Conference on Climate Change: Global Cooperation organized by St. Xavier's College (Autonomous), Kolkata on 26th and 27th August,2022
- Organized an International Webinar on "Climate Change and Forced Movement" at St. Xavier's College (Autonomous), Kolkata in October,2021
- Participated in Faculty Development Program under DBT Star College Scheme of St. Xavier's College (Autonomous), Kolkata in September,2021
- Organized a webinar on "Wasteland to Productive Land through Organic Amendment" at St Xavier's College (Autonomous), Kolkata, Raghampur Campus in March,2021
- Organized a seminar and workshop on "Potential use of solid waste in agriculture" at St Xavier's College (Autonomous), Kolkata, Raghampur Campus in February,2020
- Organized a webinar titled "Revisiting Epidemics and pandemics in India," at St Xavier's College (Autonomous), Kolkata, Raghampur Campus in July,2020

- Participated in workshop titled “Phenomenon of Religion,” conducted by Department of Inter religious studies (DIRS), St. Xavier’s College, Bombay, from 7th July -31st July, 2020

Paper Presentation

- Presented a paper entitled Agriculture post India’s Independence: A journey towards self-sufficiency at Maulana Abul Kalam Azad Institute of Asian Studies (MAKAIS) on 14th August,2022.
- Isolation and characterization of lead tolerant pgp bacteria from rhizosphere of *Cucurbita maxima* of reclaimed wetland soil at Neotia University on April,2022
- Presented a poster entitled MICROBIAL METAGENOME ANALYSIS OF *Cucurbita* sp RHIZOSPHERE FOR A SUSTAINABLE AGRICULTURE IN EAST KOLKATA WETLANDS in an International Seminar titled International Conference on Climate Change: Global Cooperation organized by St. Xavier’s College (Autonomous),Kolkata on 26th and 27th August,2022
- Presented a paper entitled “Invincible duo in mitigation of lead in the *Cucurbita maxima* rhizosphere in east kolkata wetland backdrop” in Bangladesh on 19th and 20th October, organized by Khulna University, Bangladesh.
- Presented a paper entitled “COMPARATIVE METAGENOMIC ANALYSIS OF *Cucurbita maxima* and *Zea mays* in RECLAIMED WETLAND SOIL OF EAST KOLKATA WETLAND” in Calcutta University on 28th and 29th December,2022,
- Presented a paper entitled “LINGERING EFFECT OF PGPR AND NUTRIENT RECYCLING IN AGRICULTURAL CONGENIALITY OF EAST KOLKATA WETLANDS” in Indian Science Congress on 2nd-5th Jauary,2023.
- Presented a paper entitled “ISOLATION OF A NOVEL BACTERIAL STRAIN AND ITS CORRELATION WITH COVID DISSEMINATION IN EAST KOLKATA WETLANDS” in Botanical Science Congress on 23rd-25th March,2023, organized by Calcutta University.
- Presented a paper entitled “Deterministic plant growth activities of keystone microbes in reclaimed agricultural regions of East Kolkata Wetlands” at 6th International Conference on Strategies and Challenges in Agricultural Life Science for Food Security and Sustainable Environment (SCALFE-2023) on 28th and 29th April,2023.
- Presented by paper entitled “BIOREMEDIATION OF LEAD USING THE PGPR OF MAIZE RHIZOSPHERE IN EAST KOLKATA WETLANDS.” At Biospectrum, UEM.
- Presented a paper entitled: A solution to lead Pollution: Wetland Story” at Regional State Science Congress on 22nd December,2023.
- Presented a paper entitled: A solution to lead Pollution: Wetland Story” at State Science Congress on 28th and 29th February,2024,

Resource Person

- Presented a paper entitled Agriculture post India's Independence: A journey towards self-sufficiency at Maulana Abul Kalam Azad Institute of Asian Studies (MAKAIS) on 14th August,2022.
- Delivered MOOC Lectures on Environment Sociology,2023
- Worked as a resource person in DST Nidhi sponsored program (Technology Entrepreneurship Development Program)

PUBLICATIONS

- ❖ Communicated a book chapter entitled “An Insight To Microbial Metagenome in Wetland Ecosystem. “ for the book Bacterial Metagenomics in Industrial Wastewater Treatment by DE Gruyter
- ❖ Communicated a book chapter entitled “Autotrophic nitrogen removal technology: A boon for Kolkata Ramsar Sites” for the book Annamox process: Technological advancement and application in Industrial Waste water plant(Elsevier)
- ❖ Published a book chapter entitled “ Extremophilic pigments in Eukaryotic microbes: A tool for survivability” for the book “ Extremophiles: A Paradox of Nature with Biotechnological Implications by DE Gruyter
- ❖ Published a book chapter entitled “ Prevention and control of microbial biofilms on medical devices “
- ❖ Communicated a paper entitled “Microbial metagenome analysis of *Cucurbita* sp rhizosphere for a sustainable agriculture in EAST KOLKATA WETLANDS” in Journal of Environment and Socio-biology

Sequences submitted to NCBI

- Soil sample Metagenome of *Zea mays* (Reclaimed Wetland of East Kolkata) Soil Metagenome, Submission Id: SUB10393473, BIOPROJECT ID: PRJNA764188, BIOSAMPLE: SAMN21474479, SRA: SRR15931637, SRX: 12221735, Published on: 16/10/2021
- Soil Sample Metagenome of *Cucurbita maxima* (Reclaimed Wetland of East Kolkata) Soil Metagenome, Submission Id: SUB10889729, BIOPROJECT ID: PRJNA793422, BIOSAMPLE: SAMN24537899, EXP.: SRR17395637, Release date: 31/01/2022.
- Soil sample Metagenome of *Zea mays* (Intercrop) (Reclaimed Wetland of East Kolkata) Soil Metagenome, Submission Id: SUB11488432, BIOPROJECT ID: PRJNA838768, BIOSAMPLE: SAMN28462514, SRA: SRR19239528. Published on 17/5/2022.
- Soil Sample Metagenome of *Cucurbita maxima* (Peak) (Reclaimed Wetland of East Kolkata) Soil Metagenome, Submission Id: SUB11494487, BIOPROJECT ID: PRJNA839190, BIOSAMPLE: SAMN24537899, EXP.: SRR19261839, Published on: 18/5/2022
- Soil sample Metagenome of *Zea mays* (Peak) (Year 2)(Reclaimed Wetland of East Kolkata) Soil Metagenome, Submission Id: SUB12099395, BIOPROJECT ID: PRJNA884094, BIOSAMPLE: SAMN31008114, SRA: SRR21700514. Published on 27/9/2022
- Soil sample Metagenome of *Zea mays* (Intercrop) (Year 2)(Reclaimed Wetland of East Kolkata) Soil Metagenome, Submission Id: SUB12099435, BIOPROJECT ID: PRJNA884095, BIOSAMPLE: SAMN31008163, SRA: SRR21700543. Published on 27/9/2022
- *Bacillus velezensis* strain DPPB_SGAM_SXC 16S ribosomal RNA gene, partial sequence. ACCESSION ON384543. Published on 30/4/2022
- *Cupriavidus necator* strain DCPA_SGAM_SXC 16S ribosomal RNA gene, partial sequence. ACCESSION ON384541. Published on : 30/4/2022
- *Bacillus velezensis* clone SH-3_SAASSERBSB_SXC 16S ribosomal RNA gene, partial sequence. ACCESSION OR554389. Published on:15/9/2023
- *Bacillus amyloliquefaciens* clone SH-5_SAASSERBSB_SXC 16S ribosomal RNA gene, partial sequence. ACCESSION OR554391. Published on:15/9/2023
- *Bacillus subtilis* strain MP_3 SAASS_SXC 16S ribosomal RNA gene, partial sequence. ACCESSION OR632649. Published on:9/10/2023
- *Bacillus velezensis* strain NMP_2 SAASS_SXC 16S ribosomal RNA gene, partial sequence. ACCESSION OR632694. Published on:9/10/2023

- *Bacillus licheniformis* strain NMP_3 SAASS_SXC 16S ribosomal RNA gene, partial sequence. ACCESSION OR632713. Published on:9/10/2023
- *Bacillus altitudinis* strain NMP_6 SAASS_SXC 16S ribosomal RNA gene, partial sequence. ACCESSION OR632997. Published on:9/10/2023
- *Rosellomorea vietnamensis* strain MP_6 SAASS_SXC 16S ribosomal RNA gene, partial sequence. ACCESSION OR633210. Published on:9/10/2023.

AWARDS

- Won the best paper presentation award in Research scholar category in Khulna University, Bangladesh.
- Won the best paper award in Calcutta University, 2022
- Won the best paper award in Microbiology section of 1st Botanical Congress, held at Calcutta University, 2023
- Won the second prize in oral presentation at SCALFE, Himachal Pradesh University, 2023
- Won the best paper award at Biospectrum, UEM, 2023.
- Won the best paper award at Regional State Science Congress, 2023 in Environmental Science Section.

ACHIEVEMENTS:

- Qualified RET Examination, 2020 conducted by St. Xavier's College (Autonomous), Kolkata
- First class first in M.Sc. in 3rd semester and overall 2nd in rank
- Received medal and certificate of merit from Shri Shikshayatan College
- Several subject awards in school.