BIO-DATA

NAME: DR.ARUP KUMAR MITRA

FATHER'S NAME: Late Dr. Arun Kumar Mitra.

ADDRESS
RESIDENCE: Gyaner Abha, 1A Milan Park, 1st Floor, Kolkata 700 084.
62B Alipore Road, Kolkata 700 027.
E-mail: drakmitra01@sxccal.edu, drakmitra01@gmail.com
Mobile: 098310 41051
COLLEGE: St. Xavier's College, 30 Park Street, Kolkata 700 016.
Tel.: 91-33-22551276, 91-33-22551295
DATE OF BIRTH: 29th March 1966.

EDUCATIONAL QUALIFICATIONS:

SECONDARY: From South Point High School in 1981 in 1st Division.

H.S. : From Birla College of Science and Education in 1983 in 2nd Division.

B.Sc (Part I): From Scottish Church College in 1985 with 1Q.

B.Sc (PartII): From the same college (C.U) with Botany (Hons.) in 1986 in 1st Class.

M.Sc. : From University of Calcutta in Botany with special paper Mycology And Plant Pathology in 1988, in1st Class (IV).

Ph.D: Awarded from University of Calcutta in April 1995 under Prof.R. P. PurkayasthaPh.D (Lond), FNASC.F.A.A.S.F.N.A.
Title of thesis: Studies on the uptake of heavy metal pollutants and Its effect on their growth, productivity and mammalian system.

DIPLOMA: Environmental monitoring and Assessment from South Bank University, London.U.K. in 1997.

PROFESSIONAL QUALIFICATIONS:

- Passed German language course G I from Max Muller Bhavan, Kolkata in 1987.
- Passed 2 certificate courses in computer applications from L.C.C, Kolkata in 1992.
- Passed GATE examination (IIT) in 1991.
- Passed NET examination for UGC lectureship in Dec.90 and UGC fellowship in June 1991 conducted by CSIR-UGC.
- Participated in the Orientation programme for innovative teaching in Serampore College in 1995, sponsored by AIACHE.

- Participated in the Natl.Level workshop on Environmental pollution management at J.U. in 1997.
- Attended a UGC sponsored refresher course on Mathematics of Biomolecules at Sivatosh Mookerjee Science Centre, Kolkata between Dec.1998 to Jan.1999.
- Participated in a Natl. level workshop on Bio informatics and its applications in the Biotechnology Department of IIT Kharagpur in March 2000.
- Participated in 2 UGC sponsored seminars on environmental education at college level in Sept 2000 and Feb.2001.
- Completed a 4-month training programme on computer applications at St.Xavier's Computer Center in 2000.
- Attended a Natl. Symposium on Tropical Mycology at Calcutta University in Feb.2001.
- Attended a UGC sponsored orientation programme between July 2001 and August 2001. Organized by Academic Staff College, University of Calcutta.
- Attended a UGC sponsored refresher course on Environmental Studies between Oct.2002 and Nov.2002. at University of Calcutta.
- Attended a professional development programme for tertiary level teachers at Bangalore in May 2004 organised by All India Institute for Human Resource Development.
- Completed a training programme on Stem Cell Culture from Reliance Life Sciences, Navi Mumbai in Feb.2006.
- Completed a 6-month certificate programme in entrepreneurship teaching from ISB, Hyderabad in 2007.

AWARDS:

- Recipient of P.R.Das Memorial Medal and Book prize from Scottish Church College and the National Merit Scholarship from Govt.of India in 1986 for B.Sc. (Hons.) results.
- Recipient of best paper award in Mycology section of the21st conference of Indian Botanical Society at Ujjain in 1998.
- Received the Rotary International Citation for outstanding contributions towards community service in 2004 as President of Rotary Club of Calcutta South West.
- Recipient of special certificate on best e content on Cultivation of edible mushroom on behalf of EMMRC, St. Xavier's College, Kolkata in the annual competition, 2015-16 from UGC-CEC, MHRD, Govt. of India.
- Received the Award for Excellence for imparting Education from St. Xavier's College, Calcutta Alumnae Association in 2023.
- Received Swami Vivekananda National Award for Excellence Educator in the Field of Research at the Education Excellence Conclave in 2024.

PhD Guide:

Eight students have already been awarded Ph.D and six are presently registered for their PhD degree in the Department of Botany, University of Calcutta and Department of Microbiology, St. Xavier's College.

Ph.D Awarded:

1. Dr. Saurav Sett, Department of Marine Science, University of Calcutta in August, 2019. Title of the Thesis: Study on In vitro Antibacterial and anti-fungal activity of selected mangrove plant extracts from Indian Sundarbans.
2. Dr. Debanjana Sengupta, Department of Microbiology, St. Xavier's College, Kolkata in October,2021. Title of the Thesis: Studies on Arsenic sequestration by bacteria in arsenic contaminated soil.
3. Dr. Puja Agnihotri, Department of Microbiology, St. Xavier's College, Kolkata in April,2022. Title of the Thesis: Understanding Arsenic bioremediation through interaction between *Azolla microphylla* and bacterial consortia.
4. Dr. Suhana Datta, Depaetment of Botany, University of Calcutta in May, 2022. Title of the thesis: Evaluation of biochemical and biological activity of *Calocybe indica* P&C
5. Dr. Tamanna Sultana, Department of Microbiology, St. Xavier's College, Kolkata in June, 2022. Title of the thesis: Mangrove Plants: A solution to bacterial, fungal and cancerous growth.
6. Dr.Meenakshi Mukhopadhyay Department of Microbiology, St. Xavier's College, Kolkata in December, 2023. Title of the thesis: Microbial Augmentation of Low Productive Soil Towards Increased Productivity in Organic Farming of Soybean Plants.
7. Dr. Debjani Dutta, Department of Microbiology, St. Xavier's College, Kolkata in February, 2024. Title of the Thesis: Characterization and Prevention of Microbial Spoilage of Some Selected Indian Spices.
8. Dr. Bedaprana Roy, Department of Microbiology, St. Xavier's College, Kolkata in September,2024. Title of the Thesis: Studies on Himalayan Polyextremophilic Microbes and their relevance in Agriculture and Industry.
9. Dr. Debapriya Maitra, Department of Microbiology, St. Xavier's College, Kolkata on November' 2024. Title of the Thesis: Holistic management of tea pathogen using microbial consortium and upgradation of its therapeutic value

EXPERIENCE :

1. Assisted the Professor-in charge in conducting practical classes in Botany, C.U. for 4 yrs.
2. Joined St. Xavier's College in October 1994, presently working as Associate Professor & Head, Post Graduate Dept. of Microbiology
3. Experienced in counseling students at St. Xavier's College.
4. Conducted two 4-month training programmes in Ecology and Environmental Studies for I.S.C school teachers.
5. Served as resource person on student counseling in the Orientation programme of University of Calcutta.(2001-2003)
6. Served as a Guest lecturer in Environmental Management at I.M.T. (Gaziabad) Kolkata branch between 2002and 2009.

7. Worked as a consultant for Rasoi Vanaspaties Limited in 2004.

8. Organized a two day National Seminar on Pollution in Urban Industrial Environment in collaboration with Institute of Ecotoxicology and Environmental Sciences in December,2005
9. Acted as a resource person for ICFAI Resource Centre between 2006-2008.
10. Organized a National Seminar on Environmental Pollution of the Biosphere and its management in collaboration with ICFAI University and Government of West Bengal in June, 2008.
11. Served as a consultant for M/s Chemico process Pvt.Ltd and Calcutta Laminating industries from 2009 onwards.
12. Serving as the co-coordinator Entrepreneurship Development Cell, St.Xavier's College since 2009.
13. Participated in a two day training program in Environment Leadership development organized by the Science Association of Bengal in June, 2009.
14. Participated in the 2nd International Conference on Ecotoxicology and Environmental Sciences, organized by Institute of Ecotoxicology and Environmental Sciences during December 14-16, 2009.
15. Participated in UGC sponsored National Symposium entitled Recent Trends in Microbiological Research, organized by Barrackpore Rastraguru Surendranath College on February, 13th and 14th, 2010.
16. Started the Post Graduate Department of Microbiology since August,2010.
17. Participated in a symposium entitled Challenges of teaching Microbiology in Undergraduate Colleges organized by Centre for Modern Biology, University of Calcutta on September 25, 2010.
18. Participated in the Fourth International Conference on Plants and Environmental Pollution organized by NBRI, Lucknow in December8-11, 2010.

19. Participated in UGC sponsored National Seminar entitled Advances in Environmental Science and Technology organized by Vivekananda College in February 5th and 6th, 2011.
20. Reviewer in Saudi Journal of Biological Sciences (mmyaseen@ksu.edu.sa) elsevierscience in 2010.
21. Elected as a member of the Environment Science Committee of ISCA in 2011-12.
22. Selected as a mentor in the DST INSPIRE program from 2011.
23. Participated in a UGC sponsored seminar entitled Present scenario and future prospects of Microbiology and Plant Biotechnology at Ashutosh College, Kolkata on 9th and 10th March, 2011.
24. Organized the "St Xavier's Global Earth Summit, An International Conference on A Sustainable Earth, Nihil Ultra" on March 11th and 12th, 2011 at St.Xavier's College, Kolkata.
25. Participated in a UGC sponsored National Level Seminar, entitled Microbiology, Development and Challenges in Basic and Applied Research at Belur Ramakrishna Mission Vidyamandira in collaboration with Bose Institute, Kolkata on 6th and 7th April, 2011.
26. Participated and presented a paper inUGC sponsored National Seminar on Organic Agriculture and Bio-safety, organized by Gurudas College in collaboration with Bidhan Chandra Krishi Viswa vidyalaya, Kalyani on Nov.18th,2011.

27. Participated and presented a paper in 3rd International conference on Ecotoxicology and Environmental Sciences, Goa on Nov.28th-30th, 2011.

28. Participated in National Symposium on Plant diversity and resources: evolution, analyses, stress and challenges and paleophytodiversity:its: its aspects and prospects. Organized by Botanical Society of Bengal in collaboration with Department of Botany and CAS in Botany, University of Calcutta on Dec.20th-22nd,2011

29. Organized the "Second St Xavier's Global Earth Summit, An International Conference on "The Environmental Migrant-The Human face of climate change" on March 29th and 30th, 2012 at St.Xavier's College, Kolkata.

30. Editing the College Research Journal "Aviskaar-A Xaverian Journal of Science" (ISSN No. 2277 8411) since 2009, till date.
31. Chaired a technical session in the National Seminar on Plant and Microbial Resources: Utilization and Conservation held at Visva Bharati University on March 15-16, 2017.

32. Selected as a Resource Faculty by MHRD in the SAYAM program to deliver an e course on Introductory Microbiology through the SAYAM portal in September to November, 2017.
33. Chaired a session on Microbial Biotechnology, in an international seminar entitled BIOSPECTRUM organized by University of Engineering and Management on 25th August, 2017.
34. Selected as a Resource Faculty by MHRD in the SAYAM program to deliver an e course on Medical Microbiology through the SAYAM portal in March to May, 2018.
35. Selected as a Resource Faculty by MHRD in the SAYAM program to deliver an e course on Advanced Microbiology through the SAYAM portal in August to October, 2018.
36. Serving as Assistant Controller of Examinations since April, 2018, St. Xavier's College (Autonomous) under University of Calcutta.
37. Selected as a Resource Faculty by MHRD in the SAYAM program to deliver an e course on Food Microbiology through the SAYAM portal in February to April, 2019.
38. Served as Sectional Recorder of Environmental Science Section of Indian Science Congress Association 2021-2024.
39. Serving as Controller of Examinations, St. Xavier's College, Kolkata since May 10th till date.

RESOURCE PERSONS AND INVITED TALK:

1. Acted as a resource person in the preparation of electronic study material for Environmental Sciences for engineering student under West Bengal University of Technology in 2006.
2. Served as a resource person in a seminar entitled Journey of Microbiology: Evolution to its modern age application, organized byTDHCK Jalan College on 22nd January, 2011.
3. Delivered a lecture as an invited speaker in the Environmental Science section of the 99th section of the Indian Science Congress Association at Bhubaneswar in 2012.
4. Delivered a lecture as an invited speaker in the Environmental Science section of the 101st section of the Indian Science Congress Association at Jammu in 2014.
5. Acted as a key note speaker in the International Seminar on Sustainability in Gaedu College of Business Studies, Royal University of Bhutan in 2014.
6. Acted as a resource Person in the Refresher Course on Environmental Science at Academic Staff College, Ranchi University in 2014.
7. Delivered a lecture as an invited speaker in the Environmental Science section of the 102nd section of the Indian Science Congress Association at Mumbai in 2015.
8. Delivered a Plenary Lead lecture in the National Symposium organized jointly by the Department of Botany, Ranchi University and Indian Phytopathological Society at Ranchi in January, 2015.
9. Acted as a resource person and coordinator of a UGC lecture series program on the UGC model syllabus on Microbiology for the UGC Educational channel made by the EMMRC, St. Xavier's College between 2012 and 2015.
10. Delivered an invited lecture on Bio-entrepreneurship in the International Seminar entitled "Relooking at Nations: Reenergizing and Reforming Strategies for Sustainable Development" organized Gaeddu College of Business Studies, Bhutan, Institute of Management Studies, Kolkata and The Institute of Cost Accountants of India on August 18 and 19, 2015.
11. Delivered an invited talk entitled 'Characterization of novel bacterium causing degradation of complex organic substrate' in the 39th All India Conference of the Indian Botanical Society, held in Ranchi University between October 21 and 23, 2016.
12. Delivered an invited talk in the UGC sponsored National level conference on 'Conservation, cultivation,diseases and therapeutic importance of medicinal and aromatic plants' entitled " Antifungal activity……fungi *Mycovellosiella*" organized by TNB college and Bhagalpur University on November 21 and 23, 2016 at Bhagalpur.
13. Delivered an invited talk in the DBT sponsored National level conference on 'Airborne Bioaerosols: Impact on Human Health and agriculture' entitled " Interaction of airborne……Disease Development" organized by Indian Aerobiological Society and Bose Institute on December 9th to11th , 2016 at Bose institute, Kolkata.
14. Delivered a lecture entitled Plant fungi interaction….. from contaminated site as an invited speaker in the Environmental Science section of the 104th session of the Indian Science Congress Association at S.V. University, Tirupati in January, 2017.

15. Delivered an invited talk in the UGC sponsored National level seminar on 'Biotechnology: A remedy for Ecorestoration' entitled " Industrial effluent as a repository for bio-remediating bacteria" organized by the PG.Dept.of Zoology, Raja N.L.Khan Women's College and SBSS Mahavidyalaya, Paschim Medinipur, West Bengal on January 18th and 19th , 2017.
16. Delivered an invited talk entitled "Microbial degradation of common industrial dye" and chaired a technical session in a national seminar entitled " National conference on progresses in bioengineering and environmental management"(NCEPBM) organized by Techno University, Kolkata on April 20th and 21st, 2017.
17. Delivered a lecture on Mushroom as Nutraceuticals in Mushroom Cultivation Workshop in Scottish Church College during Feb.2018.
18. Acted as a resource person in a National Seminar entitled " Recent Trends in Plant Disease Management " organized by the Department of Botany, LN. Mithila University, Darbhanga, Bihar in March, 2019.
19. Acted as a resource person in the International Seminar entitled 'Climate Change, Precision Agriculture and innovative disease control strategies for sustainable agriculture at Bhagalpur University in February 2020.
20. Delivered an invited talk on 'Imact of sequential cyclones on the inhabitants of Sundarbans' organized by Shobit University on June 5, 2020.
21. Delivered an invited talk on ' Covid 19: Mitigation and Management' organized by Department of Botany, Pingla Thana Mahavidyalaya on June 19, 2020.
22. Delivered an invited talk in an Online Workshop ' MOOCOLLOQUIUM on challenges, prospects and Development of MOOC. On 27th September, 2020.
23. Acted as a Resource Person in a UGC sponsored Refresher Course on Environmental Science and Disaster Management organized by HRDC, Ranchi University, in December, 2020.
24. Delivered an invited talk on Wasteland to Productive land through organic amendment organized by th Department of Environmental Studies, Raghabpur Campus on March 9th, 2021.
25. Delivered an invited talk in a webinar on Loss of Biodiversity: Global Environment & Health Challenges, on "Induction of Post Covid Mycoses in West Bengal" on June 5, 2021.
26. Acted as a Panelist in an International Webinar entitled 'Climate Change and Mobility' organized by Global Fellows Consulting, New York on 21st September, 2021.
27. Delivered an invited talk on ' Adhar Periye Alor Khoje' in a webinar organized by Department of History, St. Xavier's College, Raghabpur Campus on 5th October, 2021.
28. Delivered an invited talk on ' Recent Applications of Bacteria and Fungi ' in a webinar entitled "Applications of Phycology, Mycology and Microbiology" organized by Department of Botany, Vidyasagar College.
29. Delivered an Invited Talk on Student based Projects in Microbiology in "Bio Nexus: A new axis for advanced Biological Sciences" organized by Department of Biotechnology, Neotia University on 27th April, 2022.

30. Delivered an invited talk on Climate change migration in Ghoramara, organized by NYU Migration Network, NYU, USA on 4th May, 2022.
31. Delivered an invited Lecture on Medicinal Importance of Mangrove Plants in the Genetics, Biotechnology and Civilization Symposium organized by JIS Institute of Advanced Studies and Research, JIS University on 6th August, 2022.
32. Delivered an invited lecture on development of Biological Science in Independent India in a National Seminar entitled"Revisiting the Intellectual History of India's strugglefor Independence: Decoding the Debates and Discourses emphasizing the Importance of thoughts and Action" organized by Maulana Abul Kalam Azad Institute for Asian Studies and Department of Education, St. Xavier's College 0n August 13, 2022.
33. Delivered an invited talk on The Ghoramara Project in the International Conference on Climate Change: Global Cooperation organized by St. Xavier's College, on 27th August, 2022.
34. Delivered an invited talk on "Chances to fly: Project Funding Opportunities organized by Deparetment of Zoology and IQAC, Serampore College in association with Adamas University on 31st January,2023.
35. Delivered an invited talk in an International Seminar entitled Strategies and challenges in Agricultural and Life Sciences for food Security and Sustainable Environment on As pollution and its mitigation at Himachal Pradesh University.
36. Conducted a workshop in Durgapur Government College on August10th on Research and Development.
37. Delivered an Invited talk on Arsenic mitigation in Agricultural Fields of Lower Bengal in the ICEES, Amity University Jharkhand in October, 2024
38. Delivered a talk on Innovation in HEI at THK Jain college in April,2025

SEQUENCES SUBMITTED:

1. *Exiguobacterium indicum* Strain DSAM 62 NCBI Accession Number MH819520 Date of Submission 01.09.2018 (S6C2).
2. *Bacillus cereus* Strain DSAM01 NCBI Accession Number MH915673 Date of Submission 16.09.2018 (C-7).
3. *Bacillus subtilis* Strain DSAM 02 NCBI Accession Number MH978625 Date of Submission 26.09.2018 (A-2).
4. *Bacillus* sp NCBI Accession Number MH819519. Date of Submission: 07.09.2018.
5. *Bacillus cereus*. NCBI Accession Number SUB5434081 P1 MK774799. Date of Submission: 15.04.2019
6. *Enterobacter* sp.NCBI Accession Number SUB5434081 P2 MK774800. Date of Submission: 15.04.2019.
7. *Enterobacter tabaci*. NCBI Accession Number SUB5434081 P3 MK774801. Date of Submission: 15.04.2019.
8. Whole Geme Sequence submitted and published Exiguobacterium indicum Str. DSAM62; SRA SRS5131771. Accession No. PRJNA555453. ID 555453. Published on 19.07.2019.

9. *Exerohilum rostratum* BDAM_SXC. NCBI Accession Number SUB190421seq_48287 MN337265 Date of Publication: 26.08.2019.
10. ***Bacillus zhangzhouensis* MMAM strain** S3consensusseq 16S ribosomal RNA gene, partial sequence. GenBank: MT185655.1.Date of Publication: 17.03.2020.
11. *Enterobacter hormaechei* strain. NCBI. GenBank Accession No.: MT672707.1. Date of Publication: 03.07.2020
12. *Bacillus vallismortis* strain TR01K 16S ribosomal RNA gene, partial sequence. GenBank: MT672714.1. Date of Publication: 03.07.2020.
13. *Bacillus subtilis* strain BRAM_G1 16S ribosomal RNA gene, partial sequence GenBank: MW006633.1. Date of Publication 20.9.2020.
14. *Bacillus subtilis* strain BRAM_G2F 16S ribosomal RNA gene, partial sequence GenBank: MT998278.1. Date of Publication: 19.9.2020
15. *Bacillus subtilis* strain BRAM_G3 16S ribosomal RNA gene, partial sequence GenBank: MT998617. Date of Publication: 20.9.2020
16. *Mesobacillus subterraneus* strain BRAM_Y2 16S ribosomal RNA gene, partial sequence. GenBank: MW002419.1Date of Publication:20.9.2020.
17. *Brevibacillus parabrevis* strain BRAM_Y3 16S ribosomal RNA gene, partial sequence. GenBank: MW081864.1. Date of Publication: 13.10.2020.
18. *Bacillus paramycoides* strain BDBA_SXCM4 16S ribosomal RNA gene, partial sequence.Gene Bank: MW917244.1. Date of Publication: 13.04.2021.
19. *Bacillus paramycoides* strain DBBA_P1,16S ribosomal RNA gene, partial sequence.Gene Bank: MZ227489.1. Date of Publication: 24.05.2021.
20. *Bacillus paramycoides* strain DBBA_K1,16S ribosomal RNA gene, partial sequence.Gene Bank: MZ227495.1. Date of Publication: 24.05.2021.
21. *Bacillus wiedmannii* bv.*thuringiensis* strain BDBA_BM1,16S ribosomal RNA gene, partial sequence.Gene Bank: MZ229894.1. Date of Publication: 24.05.2021.
22. *Bacillus luti* strain DBBA_BT,16S ribosomal RNA gene, partial sequence.Gene Bank: MZ229975.1. Date of Publication: 24.05.2021.
23. *Acinetobacter baumanii* strain CHO2. Gene Bank No. MZ902933. Date of Publication: 30.08.2021.
24. Soil Metagenome of *Zea mays*. Data volume 284 Mbases. Accession: PRJNA764188 ID: 764188. Published on 16.10.2021.
25. Sample 1: Corn Field (Reclaimed Wetland of East Kolkata) Soil Metagenome, Submission Id: SUB10393473, BIOPROJECT ID: PRJNA764188, BIOSAMPLE: SAMN21474479, SRA: SRR15931637, SRX: 12221735, Published on: 16/10/2021
26. Soil Sample Metagenome: Pumpkin Field (Reclaimed Wetland of East Kolkata) Soil Metagenome, Submission Id: SUB10889729, BIOPROJECT ID: PRJNA793422, BIOSAMPLE: SAMN24537899, EXP.: SRR17395637, Release date: 31/01/2022.

27. Soil Sample Metagenome: Tea Rhizosphere, N.B.U. BIOPROJECT ID: PRJNA796758, TAXONOMIC ID: 939928, BIOSAMPLE: SAMN24911669, EXP. SRX13768407, =RUN: SRR17599596. Release Date: 14.01.2022.
28. *Aspergillus flavus* strain SpiceF_DDBA. Gene Bank Accession No.: ON159746. Published on April 12,2022.
29. *Bacillus subtilis* strain DWG1. Gene Bank Accession No. ON369373. Date of Publication: 03.05.2022.
30. *Bacillus anthracis* strain JWK_3. Gene Bank Accession No. ON375335. Date of Publication: 03.05.2022.
31. *Bacillus cereus* strain JPG_2. Gene Bank Accession No. ON369556. Date of Publication: 03.05.2022.
32. *Bacillus velezensis* strain DPPB_SGAM_SXC. Gene Bank Accession No. ON384543. Date of Publication: 05.05.2022.
33. *Cupriavidus necator* strain DCPA_SGAM_SXC. Gene Bank Accession No. ON384541. Date of Publication: 05.05.2022.
34. Soil Metagenome Project of Cucarbita maxima (Peak) SRA Accession ID. PRJNA839190. Accession No. SAMN28513088 Date of Publication: 18.05.2022.
35. *Priestia megaterium* strain No.SDBBA. Gene Bank Accession No. OP410984. Published on 10.9.2022.
36. *Bacillus subtilis* strain No. SBDBA. Gene Bank Accession No.OP410980. Published on 10.9.2022.
37. Soil metagenome of *Zea mays* (peak) Accession No. SAMN31008114. Published on 25.09.2022.
38. Soil metagenome of *Zea mays* (Intercrop) Accession No. SAMN31008163. Published on 25.09.2022.
39. Wastewater metagenome of municipal waste (Khardah) bio-sample. Accession No. SAMN31668062. Published on 15.11.2022.
40. *Bacillus altitudinis* strain OS1_BSSA_SXC. Gene Bank Accession No.OQ220312. Published on 16.01.2023.
41. *Bacillus albus* strain SF2_BSSA_SXC. Gene Bank Accession No.OQ220321. Published on 16.01.2023.
42. *Bacillus subtilis* strain TDS2_BSSA_SXC. Gene Bank Accession No. OQ217006.1. Published on 16.01.2023.
43. *Priestia megaterium* strain TDS3_BSSA_SXC. Gene Bank Accession No. OQ217022. Published on 16.01.2023.
44. *Glutamicibacter arilaitensis* strain CLS1_BSSA_SXC. Gene Bank Accession No. OQ216887. Published on 16.01.2023.
45. *Lasidodiplodia theobromae* strain SGSSAM_SXC. Gene Bank Accession No. OQ26879.1 Published on 16.01.2023.
46. *Bacillus cereus* strain DPP(A)_SGAM_SXC. Gene Bank Accession No. OQ216888. Published on 16.01.2023.
47. *Bacillus cereus* strain DCI(D)_SGAM_SXC. Gene Bank Accession No. OQ217005.1 Published on 16.01.2023.
48. *Stenotrophomonas maltophilia* strain DPP(C)_SGAM_SXC. Gene Bank Accession No. OQ217020.1. Published on 16.01.2023.
49. *Exophiala spinifera*. Gene Bank Accession No.OQ927326. Published on 05.05.2023.

50. Wastewater metagenome of municipal waste (Khardah) bio-sample. Accession No. SAMN35779353. Published on 05.07.2023.
51. *Curvularia aeria* strain MC1 18S ITS spacer, under GenBank accession number OR101252.1. Published on 11.08.2023
52. *Fusarium proliferatum* strain TP1 18S ITS spacer, under GenBank accession number OR101701.1. Published on 11.08.2023
53. *Fusarium proliferatum* isolate TP4 18S ITS spacer, under GenBank accession number OR426467.1 Published on 11.08.2023
54. *Fusarium fujikuroi* isolate TP2 18S ITS spacer, under GenBank accession number OR426452.1. Published on 11.08.2023
55. *Fusarium fujikuroi* isolate MC2 18S ITS spacer, under GenBank accession number OR426451.1. Published on 11.08.2023.
56. Rhizobacteria with Holistic Plant Growth Promoting Traits: *Bacillus vallismortis*. Accession No: PRJNA1018243 . Date of publication: 22.09.2023
57. Rhizobacteria with Holistic Plant Growth Promoting Traits: *Bacillus subtilis*. Accession No: SAMN37429407. Date of publication: 22.09.2023
58. Polyextremophilic bacteria *Bacillus subtilis*, whole genome. Accession No. SAMN37432400 BRAM_G1 Date of publication: 22.09.2023
59. Rhizobacteria with Holistic Plant Growth Promoting Traits: *Bacillus subtilis*. Accession No: PRJNA1018306. Date of publication: 22.09.2023
60. Polyextremophilic bacteria *Bacillus thuringiensis*. Whole Genome Accession No.SAMN37432401 BRAM_G2 Date of publication: 22.09.2023
61. Polyextremophilic bacteria *Bacillus tequeliensis.* BRAM G3, Whole Genome Accession No.SAMN37432402 Date of publication: 22.09.2023
62. Polyextremophilic Bacteria *Mesobacillus thioparans*. Whole Genome. Accession No. SAMN37432403 BRAM_Y2 Date of publication: 22.09.2023
63. Polyextremophilic Bacteria. *Brevibacillus parabrevis* Accession No. SAMN37432404 BRAM_Y3. Date of Publication. 22.09.2023
64. *Bacillus subtilis* Str. MP_3SAASS_SXC. Accession No. OR632649.1. Date of Publication. 09.10.2023
65. *Bacillus velezensis* Str. NMP_2 SAASS_SXC. Accession No. OR632694.1. Date of Publication. 09.10.2023
66. *Bacillus licheniformis* Str. NMP_3 SAASS_SXC. Accession No. OR632713.1. Date of Publication. 09.10.2023
67. *Bacillus altitudinis* Str. NMP_6 SAASS_SXC. Accession No. OR632997.1. Date of Publication. 09.10.2023
68. *Rosellomorea vietnamensis* Str. MP_6 SAASS_SXC. Accession No. OR633210.1. Date of Publication. 09.10.2023.
69. *Bacillus licheniformis.* Str.SGAKMRBAMAC_AC1. Accession No.PB658431.1. Date of Publication: 20.04.24.
70. *Alcaligenes faecalis.* Str.SGAKMRBAMAC_AC2. Accession No.PB658432.1. Date of Publication: 20.04.24.
71. *Bacillus subtilis.* Str.SGAKMRBAMAC_AM_N_SXC. Accession No.PB658445.1. Date of Publication: 20.04.24.
72. *Brucellapseudintermedia.* Str.SGAKMRBAMAC_AM_N2_SXC. Accession No.PB658447.1. Date of Publication: 20.04.24.

73. *Peribacillus frigoritolerans.* Str. SH2_SGAKMAC_SXC. Accession No. PB907788.1. Date of Publication. 19.06.2024.
74. *Bacillus pseudomycoides.* Str. SH1_SGAKMAC_SXC. Accession No. PB907755.1. Date of Publication. 19.06.2024.
75. *Micrococcus luteus.* Str. SSASAD_SXC3. Accession No. PV602793.1. Date of Publication. 11.05.2025.
76. *Lysinibacillus composti.* Str. SSASAD_SXC2. Accession No. PV602791.1. Date of Publication. 11.05.2025.
77. *Bacillus cereus.* Str. SSASAD_SXC. Accession No. PV602754.1. Date of Publication. 11.05.2025.
78.

PATENTS FILED/GRANTED:

1. PATENT APPLICATION PUBLICATION (21) Application No.201931008079 A, INDIA

Date of filing of Application :01/03/2019 (43) Publication Date : 29/03/2019
Title of the invention : HUMECTANT HAND AND SURFACE SANITIZER AND PROCESS OF PREPARING THE SAME
International classification :A01N25/22
Name of Applicant : Satwik Majumder, Arup Kumar Mitra
Name Of Inventor : Satwik Majumder,Arup Kumar Mitra, Aditi Das, Anish Pyne, Anwit Sadhukhan, Twisha Chatterjee, Vidhi Agarwal.

2. PATENT PUBLISHED: No. 202031029308.Dated 10.07.2020. Subject : Exocaria agallocha is a natural important source of Bergenin.Published on 14.01.2022. Name of the Inventor: Tamanna Sultana, Arup Kumar Mitra and Satadal Das.
3. PATENT PUBLISHED: No.202431005360A. Date: 02.02.2024. Subject: A Novel Plant-Microbial Consortium Combination for In-Situ Arsenic Remediation. Name of Inventor: Puja Agnihotri, Arup Kumar Mitra and Prashant Shukla.
4. PATENT PUBLISHED: No.202431016997. Date: 10.05.2024. Subject: A Bio-active Mechanized Aerobic Composter. Name of Inventor: Agnik Ghosl, Arup Kumar Mitra, Bikram Dhara, Sanjana Ghosh, Debapriya Maitra, Bedaprana Roy,Rishab Dugar, Sahil Choudhury, Prashant Toshniwal.
5. PATENT PUBLISHED: No.202431043575. Date: 05.07.2024. Subject: Design of a novel bacterial bio-fertilizer for enhancing crop productivity at varying agro-climatic conditions. Name of Inventor: Bikram Dhara, Arup Kumar Mitra, Debapriya Maitra, Bedaprana Roy.

PROJECTS:

1. Studies on Substrate… Polluted Mushroom, 1994-95, CSIR, Rs. 1, 00,000/-, completed.
2. Cultivation and Popularization…Edible Mushroom, 2003-04, UGC, Rs. 50,000/-, completed.
3. Metal Interaction, Disease Development… Control, 2006-08, UGC, Rs. 95,000/-, completed.

4. Skill set Training in Advanced Lab. Technology and other Fields of Science and Technology,2007-09, DST NIMAT,Rs. 4,91,000/-,completed.
5. Disease Development in Leafy Vegetable and its Control (as a Co-Investigator), 2009-10, UGC, Rs. 1, 00,000/-, completed.
6. Impact of Sponge Iron Effluents… Statistical Modeling, 2011-2013, UGC, Rs. 1, 32,000/-, completed
7. EDI Grant (For running EAC) 2013– Rs 54,000/-
8. Skill set training in Science and Technology Grant. DST, Rs.5, 00,000/- DST. 2011-2013.
9. DBT star college grant for interdisciplinary research and project Rs.36 Lakhs 2015-2017.
10. WBDST sponsored project on 2017-2020, on plant microbe interaction on arsenic remediation (No.794 (Sanc.)ST/P/S&T/1G-7/2015), Rs.19 lakh six thousand.
11. WBDBT sponsored project on 2018 entitled Mangrove plants: A solution to bacterial, fungal and cancerous growth. No.71(Sanc.)-BT/ST/P/S&T/2G-45/2017 Sanctioned amount: 14 lakhs 44 thousand.
12. DBT Star College Grant: 2019-2022. Rs.62 Lakhs for the Department of Physics, Chemistry and Microbiology, St Xavier's College.
13. DBT, GOI, 2020-2023Development of Biological Control Technology for invasive species, *Polyalthia suberosa*, Hamjam, in Wild Life Sanctuary of Bethuadahari, West Bengal-(BT/PR39375/FCB/125/51/2020) as Co-investigator.
14. DBT,GOI (2021-2026) Biology and Applications of Polyextremophilic Micro-organisms under the DBT Builder –St. Xavier's College (Autonomous). Kolkata, Department of Microbiology &Biotechnology-Interdisciplinary Life Science Programme for Advanced Research and Education" Duration 5 years from 2021. Total Amount Sanctioned. Rs. 2 Crore 67 lakhs 26 thousand 826 only. Sanction No. BT/INF/22/SP41296/2020.
15. DST-GOI: (2020-2023) Estimation of the potential impact on human health of cyanobacteria..... a comparative assessment between India and Poland".
    Indo Polish Call for Proposal 2019 reg.
16. WBPCB: (2024-2026) Urban Bio-aerosol over lentic ecosystem in urban backdrop. Rs. 10 Lakh. No.0488/2024/UB/1/C.Lab.

MEMBERSHIP & FELLOWSHIP:

- Member and Past President – Rotary Club of Calcutta South West, R.I.District 3290 since 1994.
- Life Member - Indian Science Congress Association since 1992.
- Life Member – Indian Mycological Society since 1993.
- Life Member – National Botanical Society since 1994.
- Life Member – Indian Mushroom Society since 1995.
- Life Member – Indian Botanical Society since 1996.
- Life Member – International Society for conservation of Nature since 1998.
- Fellow of the INDIAN BOTANICAL SOCIETY (F.B.S) since 1998.

- Fellow of the INTERNATIONAL SOCIETY FOR CONSERVATION OF NATURE (F.N.R.S) since 2000.

- Fellow of the Society of Applied Biotechnology, Mangalore, Karnataka University (FSAB) since 2011.

- Fellow of Institute of Ecotoxicology and Environmental Sciences since 2022.

Consultant:

1. Rasoi Vanaspatis Ltd.
2. Chemico Process Ltd.
3. Analytics India Ltd.
4. Organic Agro India Ltd.
5. CMS Limited (Ongoing)
6. Hindustan Gums and Chemicals Ltd. (Ongoing)

PAPERS PRESENTED IN SEMINARS (ABSTRACTS PUBLISHED):

1. A.K.Mitra and R.P.Purkayastha (1993) Impact of heavy metal toxicity on edible mushroom. Proc. 80th session of ISCA, Goa.

2. A.K.Mitra and R.P.Purkayastha (1994) pH dependent Cd uptake by edible fungi under submerged growth. Proc. 81st session ISCA, Jaipur.

3. A.K.Mitra and R.P.Purkayastha (1995) Uptake and toxicity of metal contaminated edible mushrooms after oral administration to albino rats. Proc. 82nd session of ISCA, Kolkata.

4. A.K.Mitra (1996) Uptake of heavy metals and production of sporocarps by *Calocybe indica*-edible milk white mushroom.Proc.83rd session of ISCA, Patiala.

5. A.K.Mitra (1998) Uptake and subsequent displacement of lead in a Pb-tolerant fungal species from Kent, U.K.Proc. of the 85th session of ISCA,Hyderabad.

6. R.Chakraborti and A.K.Mitra (1998) Displacement of mycelial lead by other heavy metals in a lead tolerant fungal species from U.K. Proc.21st I.B.S conference, Ujjain.

7. A.K.Mitra (1999) Uptake and displacement of lead by other metals in *Poa annua* L. Proc.Natl.Symp. on Frontiers of research in Plant Sc. Natl Bot.Soc.Kolkata.

8. A.K.Mitra (2000) Perils of lead exposure to human beings.Proc.87th session of ISCA, Pune.

9. D.Banerjee and A.K.Mitra (2000) Impact of industrialization on the agricultural fields around Falta free export zone, West Bengal.Proc.23rd Botanical Conference of I.B.S, Meerut.

10. A.K.Mitra (2001) Comparison of industrial effluent and mixed sewage in the agricultural fields of South 24 Paraganas, West Bengal.Proc. 88th session of ISCA, New Delhi.

11. A.K.Mitra (2002) Uptake and subsequent displacement of lead in lead tolerant fungal species from Kent, U.K. Natl.Seminar cum workshop on Env.Pollution and its management, J.U. and I.E.E.S Kolkata.

12. A.K.Mitra (2003) Enhancement of biological efficiency of oyster mushrooms using non-conventional additives Proc. 90th session of ISCA, Bangalore.

13. A.K.Mitra (2003) Effect of zinc on uptake and biological efficiency of oyster mushrooms. Natl Symp.Current trends in res.on microorganism. Ind Mycol.Soc.

14. Mitra, A.K and Banerjee, D (2003) Impact of Industrial pollution in the agricultural fields around Falta Industrial Zone, West Bengal.Natl. Seminar on Pollution in Urban Industrial Environment organized by IEES and NML, Jamsedhpur.

15. A.K.Mitra (2005) Uptake of calcium and its interaction with other heavy metals on growth and productivity of *Pleurotus sajar-caju*. Proc. 92nd session of ISCA, Ahmedabad.

16. Himani,D,Chaudhuri,Chakrabarti,A,Saraogi,N, Banerjee,S.K and Mitra,A.K. (2007) Effect of Nicotine on the micro-organisms of the buccal cavity. 94th Session of the Indian Science Congress Association.Annamalainagar.

17. Basu,H.,Nath,C.,Ghosh,E.,Ganguly,S,Agarwal,P.and Mitra,A.K.(2008) Synergistic action of *Alternaria solani* and *Ralstonia solanacearum* in *Solanum tuberosum*. 95th Session of the Indian Science Congress Association, Vizag.

18. Chakraborty, A., Burman, S., Sinha, P. and Mitra, A.K (2008) Effect of PAHs and BTEX on petrol pump workers in Kolkata. National Conference on Environmental Pollution of Biosphere and its Management, Kolkata.

19. Saha, D and Mitra,A.K.(2008) Isolation and characterization of a metal tolerant bacteria growing in urban backdrop.31st All India Botanical Conference and International Symposium on Plant Biology and Environment: Changing Scenario. Organized by I.B.S and University of Allahabad Allahabad.

20. Pal,J, Lahiri,M,Mundhra,S,Basu,H and Mitra A.K.(2009) Novel water filtration units for removal of heavy metals and microbial contaminants. 96th Session of the Indian Science Congress Association at North Eastern Hill University, Shillong.

21. Bal, J., Rai, R., Chang, V and Mitra, A.K. (2009) Suppression of leaf blight infection by rust pathogen in roadside coffee plantations.2nd International Conference on Ecotoxicology and Environmental Sciences. at Jadavpur University, Kolkata.

22. Mukherjee; Das,B;Nandi,S;Saha,A;Sinharoy,S; Islam,R and Mitra, A.K.(2010)Impact of Banning old vehicles from the streets of Kolkata.97th Session of the Indian Science congress Association at Kerala University, Tiruvananthapuram.

23. Upadhyay,S.K;Mukherjee,I;Saha,G; Goswami,S;Naskar,P;Ghosh;A;Basu,S.M and Mitra,A.K. (2010) Isolation and Characterization of metal tolerant bacteria from heavy metal contaminated soil in the vicinity of a sponge iron plant 97th Session of the Indian Science congress Association at Kerala University, Tiruvananthapuram.

24. Sil,P,Dutta,S,Baishya,R,Basu,D,Saha,S and Mitra, A.K. (2011) Microbial removal of Hexavalent chromium from railway locomotive effluents in Liluah, West Bengal. 98th Session of Indian Science Congress Association at SRM University, Chennai.

25. De, P., Dhar, S., Vasan, V., and Mitra, A.K. (2011) Isolation and characterization of food grown contaminants isolated from packed food. UGC sponsored National Seminar on Advances in Environmental Science and Technology, Vivekananda College, Kolkata.

26. Halder,G.,Adhikari,A.,Gupta,A.K.,Dey,R.,Dhar,S. and Mitra,A.K.(2011) Sulphur dioxide sensitivity and antimicrobial role of a crustose lichen isolated from the bark of *Mangifera indica* L.In 3rd International conference on Ecotoxicology and Environmental Sciences, Goa .

27. Mukherjee,S.,Paul,I.,Mandal,S.,Chandra,D.,Shadhukhan,S.,Chatterjee,G.,Bhattacharya,A,Das,T.,Sen,P. and Mitra,A.K.(2011)Antagonistic action between phyllosphere organisms leading to the reduction of leaf spot disease in rice.InUGC sponsored National Seminar on Organic Agriculture and Bio-safety, organized by Gurudas College in collaboration with Bidhan Chandra Krishi Viswa vidyalaya, Kalyani.
28. Basu,A.,Bhattacharya,P.,Mishra,R.,Chatterjee,A.,Chatterjee,S.,Majumdar,T and Mitra,A.K.(2011)Microbial reduction of toxicity of sponge iron effluents from unorganized sector. In National Symposium on Plant diversity and resources: evolution, analyses, stress and challenges and paleophytodiversity: its aspects and

prospects. Organized by Botanical Society of Bengal in collaboration with Department of Botany and CAS in Botany, University of Calcutta.

29. Mitra Arup Kumar (2012) Co-ordinated action of macrophytes and microbes on bio-remediation of industrial effluents. Invited speech in the Section of Environmental Science at the 99th Session of the Indian Science Congress Association held at Bhubaneswar, Odisha.

30. Bannerjee,V, Mandal,A,Thomas,N, Mandal,S,Biswas,S,Ghosh,S and Mitra,A.K. (2013) Gall formation in Mango leaf in presence of associated pathogen. Proceedings of Environmental Science Section of the 100th session of the Indian Science Congress Association, Kolkata.

31. Sengupta,D, Shyamchoudhury,S and Mitra,A.K.(2013) Utilization of Microbes in mitigating arsenic menace. In a UGC sponsored National Conference on "Inclusive Growth, Business and Environment in India's Emerging Economy". Organized by St.Xavier's College (Autonomous) and Shri Shikshayatan College.

32. Sett,S, Kundu,S, Das,S,Mitra,A,Banerjee,A and Mitra,A.K.(2013)Phytochemical importance of some potential mangrove plants from the Indian Sundarbans. In a UGC sponsored State level seminar on "Biochemical diversity encompassing advanced sustainable development". Organized by Vivekananda College and Asutosh College.

33. Mitra, A.K.(2014) Impact of environmental stress on urban extremophilic bacteria. Invited speech in the Section of Environmental Science at the 101st Session of the Indian Science Congress Association held at Jammu, Jammu and Kashmir.

34. Chakrabarti,N, Kaur,P and Mitra,A.K (2014) Anthropogenic factors affecting the vegetation in and around the TajMahal. In the 4th International Conference on Ecotoxicology and Environmental Sciences. Organized by the Institute of Ecotoxicology and Environmental Sciences.

35. Mitra, A.K. and Chakraborty, R. (2014) Organic farming: A pathway towards environmental sustainability. Confluence: Master Minds Meet – 2014. Organized by Gaeddu College of Business Studies, Royal University of Bhutan in June,2014.

36. Mitra,A.K (2015) Dynamism of airborne *Aspergillus* sp. Invited speech in the Section of Environmental Science at the 102nd Session of the Indian Science Congress Association held at Mumbai University, Mumbai.

37. Mitra, A.K. (2015) *Calocybe indica*: A journey towards prominence. In the National Symposium "Advances in Phytopathological Research in Globalized Era with reference to Eastern Region" organized jointly by Department of Botany, University of Ranchi and Indian Phytopathological Society.

38. Upadhyay,R;Varghese,J.M; Chakraborty,A;Marathe,N;Pan.S;Gaine,R and Mitra,A.K. (2015) A unique phyllosphere interaction resulting in the control of lemon scab pathogen. 3rd India Biodiversity Meet: An International Conference organized by Agricultural and Ecological Research Unit, I.S.I, Kolkata and Biomathematical Society of India.

39. Mitra, A.K (2016) Decolourization of Azo dye by potential bacteria from industrial effluent Invited speech in the Section of Environmental Science at the 103rd Session of the Indian Science Congress Association held at Mysore University, Mysore.

40. Kar,D;Chakraborty,R;Maity,T;Datta,A;Kundu,S and Mitra,A.K.(2016)Study of phyllosphere interaction in disease incidence of Raphanus sativus. National Symposium on Microbial diversity and its impact. Organized by Indian Mycological Society and Department of Botany, University of Calcutta, Kolkata.

41. Nambier,A; Joshi,S; Datta,S; Ganguly, S and Mitra,A.K (2016) Antimicrobial activity of a unique synthetic Ni(II) Hydrazone complex and its ligand.National Symposium on Facets of Chemistry in Biology organized by Department of Chemistry, St. Xavier's College, Kolkata.

42. Mitra, A.K (2017) Plant –fungi interaction in the removal of heavy metal from contaminated site. Invited speech in the Section of Environmental Science at the 104th Session of the Indian Science Congress Association held at Tirupati University, Tirupati.

43. Giri, M, Mitra,M, Ghosh,A, Chakraborty, D,Angrish,R, Mal, S and Mitra,A.K. (2017) Study of phyllosphere interaction of microbes isolated from infected Taro leaves. RUSA funded International Level Seminar on Recent trends in Microbiology organized by Department of Microbiology, Ramakrishna Mission Vidyamandira, Belur math, Howrah, West Bengal.

44. Sengupta, D, Mitra, A.K and Shyamchowdhury,S (2017) Isolation, characterization and bio-sorption study of arsenophilic microbes from its contaminated zone at a two day national seminar on Scientific devices, Technology applications and community linkage organized by Centre for research in nanoscience and nanotechnology, University of Calcutta on March 18 and 19, 2017.

45. Mitra, A.K (2018) Treatment of tannery effluents by residual bacterial microflora. Invited speech in the Section of Environmental Science at the 105th Session of the Indian Science Congress Association held at Manipur University, Imphal.

46. Puja Agnihotri, Debanjana Sengupta, Bikram Dhara,Sudeshna Shyam Chowdhury, Madhumita Maitra and Arup Kumar Mitra (2018) Arsenic (As)

tolerant bacteria isolated from the rhizosphere of *Azolla microphylla*. International Conference entitled, Frontiers in Biological Sciences organized by Post Graduate Department of Microbiology, St. Xavier's College, Kolkata.

47. Mitra, A.K and Tamanna Sultana (2019) Multifaceted role of PGPR in reducing pollution and augmenting plant productivity. Invited speech in the Section of Environmental Science at the 106th Session of the Indian Science Congress Association held at Lovely Professional University, Jallandhar.

48. Mitra,A.K. (2020) Water quality and natural protective microbes in a holy water body in Punjab. Invited speech in the Section of Environmental Science at the 107th Session of the Indian Science Congress Association held at University of Agriculture, GKVK campus, Bangalore.

49. Mitra, A.K (2020) Multidimensional Role of Mycorrhizae in preventing soil degradation. Invited lecture in the International Conference entitled Climate Change, Precision Agriculture & Innovative Disease Control Strategies for Sustainable Agriculture at the Department of Botany, T.M. Bhagalpur University, Bhagalpur, Bihar.

50. Mitra,A.K. and Bidisha Chatterjee (2023) Environmental conflict of human surviving in the sinking island of Ghoramara. Invited speech in the Section of Environmental Science at the 108th Session of the Indian Science Congress Association held at RTM Nagpur University, Nagpur.

51. Mitra, A.K. (2024) presented an invited talk on Academic Innovation and beyond in a workshop entitled "Augmentation of Scientific Aptitude through Bioinnovation and Entrepreneurship" organized by the Departments of Botany, Chemistry and Zoology, Durgapur Government College under the DBT Star College Scheme.

52. Mitra, A.K. (2024) delivered an invited talk on Arsenic contamination in the Agricultural Fields of lower Bengal and its mitigation in the International Conference on Ecotoxicology and Environmental Sciences in Amity University, Ranchi.

53. Mitra, A.K. (2025) delivered a keynote address on Polyextremophiles in Agricultural Improvement in the 8th International Conference on Cutting – Edge Research Innovation in Sustainable Education, Environment and Agriculture at Goa University.

BOOKS WRITTEN/EDITED/CHAPTERS CONTRIBUTED:

1. A.K.Mitra (1999) Ed. Environmental Science-Question and Answers by S.Sanyal.Paramount Publishing, Calcutta.Pp.55.

2. A.K.Mitra, S.Guha and S.Chanda (2000) Higher Secondary Biology Vol-I Book Syndicate Pvt.Ltd, Kolkata Pp.1056.

3. A.K.Mitra and A.Chowdhury (2001) Eds.Sure Success in Life Science by Ten Teachers East west Publishing Pvt.Ltd.Kolkata.Pp.230.

4. A.K.Mitra and D.Mitra (2001) I.S.C Environmental ScienceVol I Books and Allied Pvt.Ltd.Kolkata Pp.181.

5. A.K.Mitra (2001) Bastumukhi Udvidbidya.Book Syndicate Pvt.Ltd.KolkataPp.235.

6. A.K.Mitra, S.Guha and S.chanda (2001) Higher Secondary Biology Vol.II Book Syndicate Pvt.Ltd.Kolkata.Pp1384.

7. A.K.Mitra, D.Mitra and R.Sen (2002) I.S.C.Environmental Science Vol.II Books and Allied Pvt.Ltd.Kolkata.Pp.286.
8. A.K.Mitra and D.Chattopadhyay (2002) Joint Entrance Biology. Book Syndicate Pvt.Ltd.Kolkata Pp.1130.

9. Datta,S.K; Mitra, A.K and Chattopadhyay,D (2003) Elements of General Science, Vol. I (For Class VI). Bengal Book Syndicate Pvt.Ltd. Pp.114.

10. Mitra, A.K. and Chattopadhyay, D (2003) Elements of Life Science. Vol. II(For Class VII). Bengal Book Syndicate Pvt.Ltd. Pp. 88.

11. Mitra, A.K. and Chattopadhyay, D (2003) Elements of Life Science. Vol. III (For Class VIII). Bengal Book Syndicate Pvt.Ltd. Pp. 89.

12. Mitra, A.K., Guha, S and Chanda, S (2004) A textbook of Biology (Vol.I). Book Syndicate Pvt.Ltd.Kolkata. Pp.638.

13. Mitra, A.K., Dutta, S and Rath, N.R. (2004). Elements of Life Science for Classes IX and X. Bengal Book Syndicate Pvt. Ltd., Kolkata. Pp. 294.

14. Dutta, S and Rath, N.R. and Mitra, A.K. (2004). Jiban Vigyan for Classes IX and X New Book Syndicate Pvt. Ltd., Kolkata. Pp. 294.

15. Mitra, A.K., Guha, S. and Chanda, S (2005) A Text Book of Biology (Vol.II). Book Syndicate Pvt.Ltd. Pp.1379.

16. Dutta, S., Rath, N.R and Mitra, A.K. (2005) Jiban Bigyan for Tripura Board of Secondary Education. (Class IX). New Book Syndicate.Kolkata. Pp.211

17. Mitra, A. K. (2006) Perils of Urban Pollution(Ed) St Xavier's College, Kolkata, Pp.202.

18. Mitra, A.K., Chattopadhyay, D and Datta, D (2007) Joint Entrance Biology. Book Syndicate, Kolkata. Pp.571.

19. Mitra, A.K., Chattopadhyay, D and Datta, D (2007) Joint Entrance Biology (In Bengali). Book Syndicate, Kolkata. Pp.590.

20. Mitra, A. K., Bhattacharya, S. and Saha, D (2007) Environmental Studies St . Xavier's College and Edutech Solutions Pvt. Ltd, Kolkata Pp.304.
21. Mitra, D and Mitra A.K. (2009) Environmental pollution on biosphere and its management. (Ed) Volume I. ICFAI University Press, Hyderabad. Pp.241.

22. Mitra, D and Mitra A.K. (2009) Environmental pollution on biosphere and its management. (Ed) Volume II. ICFAI University Press, Hyderabad. Pp.256.

23. Dutta, S.C, Rath, N.R. and Mitra, A.K. (2011) Jib Bigyan Parichay, Volume I Book Syndicate Pvt. Ltd. Kolkata, Pp.1450.

24. Mitra, A.K., Chattopadhyay, D and Chanda, S (2013) A Text Book of Biology. Book Syndicate Private Limited, Kolkata. Pp.2016.

25. Mitra,A.K. and Sarkar,K (2013) Practical Manual of Modern Microbiology. Himalaya Publishing House. New Delhi. Pp.221.

26. Mitra, A.K (2014) Better Orientation for Undergraduate Students. In Science Education Beyond High School, CARE publication, SINP, Kolkata.Pp.56.

27. Mitra,A.K. (2014) Applied Plant Physiology.Book Syndicate Pvt.Ltd, Kolkata. Pp.358. ISBN978-81-89019-79-2.

28. Mitra,A.K and Chattopadhyay,D (2014) Life Science and Environment for Class IX. New Book Syndicate Pvt.Ltd. Pg.144.

29. Dutta,S.C; Rath,N.R and Mitra, A.K. (2015) Jib Bigyan Parichay, Volume I Book Syndicate Pvt. Ltd. Kolkata, Pp.1438.ISBN978-81-89019-61-7.

30. Mitra,A.K, Chattopadhyay,Chandra,S.(2015) A Text Book of Biology,Volume II. Book Syndicate Pvt. Ltd. Kolkata, Pp.594.ISBN 978-81-89019-84-6.

31. Mitra,A.K and Chattopadhyay,D (2015) Life Science and Environment for Class X. New Book Syndicate Pvt.Ltd. Pp.135.

32. Mitra,A.K and Chattopadhyay,D (2016) Fundamentals of Life Science Life Science. New Book Syndicate Pvt.Ltd. Pp.285.

33. Sett,S; De,T.K; Mitra,A. K and Mondal, N. B (2016) Antifungal activity of purified *Aegialitis rotundifolia* extract against pathogenic fungi *Mycovellosiella*. In "Conservation, cultivation, diseases and therapeutic importance of medicinal and aromatic plants" Ed. H.K.Chourasia and A.K.Roy, published by Today & Tomorrow's Printers and Publishers, New Delhi. Pp510. ISBN81-7019-554-X (India); ISBN1-55528-409-4(USA).

34. Sultana,T and Mitra, A.K. (2018) PGPR in plant development: A biotechnological approach. In Plant Systematics and Biotechnology: Challenges and Opportunities. Ed.H.K Chourasia and D.P.Mishra, published by Today & Tomorrow's Printers and Publishers, New Delhi.Pp.604.ISBN 81-7019-608-9.

35. Mitra,A.K, Dutta, D and Roy, L (2018) Comprehensive Microbiology. Current Books International, Kolkata. Pp.822. ISBN: 978-93-85274-05-3.

36. Mitra A.K., Arpan Chatterjee Ujjyani Ghosh, Ishani Banerjee, Sreeja Saha, Monalisa Barman, Debjani Dutta (2018) On line 2019 Petroleum Biodegrading Property of Microbial Consortia from a Contaminated Site. In: Kumar V., Kumar M., Prasad R. (eds) Microbial Action on Hydrocarbons. Springer, Singapore **DOI** https://doi.org/10.1007/978-981-13-1840-5_24.

37. Mitra, A.K and Chattopadhyay , D (2020) Fundamentals of Life Science. Ed. J. Dasgupta . New Book Syndicate. Kolkata. Pp.372

38. Mukhopadhyay, M, Biswas, S, Ghosal,M, Basu, S, Ghosh,S.K, Shyamchowdhury,S and Mitra,A.K. (2020) Improvement of Soybean production in low productive soil by the utilization of native microbial flora. In Precision Agriculture and Sustainable Crop Production. Eds. H.K.Chourasia, K.Acharya and V.K.Singh.Today and Tomorrow's Printers and Publishers, New Delhi. Pp.631. ISBN 9788170196679.

39. Maitra, D, Dhara, B, Sultana, S, Chakraborty, Mitra, A.K and Shyamchowdhury, S. (2020) Mycorrhizal Association in Agriculture and their role in preventing climate change. In Precision Agriculture and Sustainable Crop Production. Eds. H.K.Chourasia, K.Acharya and V.K.Singh.Today and Tomorrow's Printers and Publishers, New Delhi. Pp.631. ISBN 9788170196679.

40. Dipankar Roy and Arup Kumar Mitra (2020) Bacterial Remediation of chromium from industrial sludge. Chapter 6; 97-125. In Recent Advancements of Bioremediation of Metal Contaminants. Ed. Satarupa Dey and Biswaranjan Acharya. IGI Global Pennsylvania. Pp.363. ISBN13: 9781799848882, ISBN10: 1799848884, EISBN13: 9781799848899, DOI: 10.4018/978-1-7998-4888-2.

41. Mitra, A.K., Das, S., Saha, T., Biswas, S., Datta, D., Sau, S., and Das, S.(2020) Study and Characterisation of Microenvironment of Prawn Culture Tanks and its Importance in Productivity. Pp.139 -147.In Current Status of Researches In Fish and Fisheries. Ed. P.C Joshi,A.K.Saxena,V.LSaxena and V.D. Joshi. Today and Tomorrow's Printers and Publishers, New Delhi. ISBN 10: 81-7019-659-3 ISBN 13: 9788170196594.Pp.299.

42. Roy, B, Maitra,D, Mitra, A.K.(2021) Methods of Sample preparation and assay of Bacterial biofilms with special reference to their significance in agriculture and extreme environments. Pp.39-65. In Analytical Methodologies for Biofilm Research, Ed. M. Nag and D. Lahiri Springer Protocols Handbook, Springer Nature, Switzerland .ISBN 978-1-0716-1377-1.

43. Sultana, S; Sultana,T; Mitra, A. K and Xavier, S. (2021) Organic farming with residual microbial consortia and its potential in sustainable agriculture production. Pp 15-30. In Go Green for Environmental Sustainability: An Interdisciplinary Exploration of Theory and Applications, Eds. S. Xavier, U. Rao and M.F. Reynolds. Routledge, CRC Press.Boca Raton. Pp. 276. ISBN 978-0-3675-1740-3.

44. Sultana, T; Maitra, D; Roy, B;; Mitra, A. K and Xavier, S. (2021) Dynamic Role of Specific microbes in Bioremediation of heavy metals and dyes from textile industry. Pp 31-46. In Go Green for Environmental Sustainability: An Interdisciplinary Exploration of Theory and Applications, Eds. S. Xavier, U. Rao and M.F. Reynolds. Routledge, CRC Press.Boca Raton. Pp. 276. ISBN 978-0-3675-1740-3.

45. Mitra, A.K and Chakraborty, R. (2021) An Introduction to Mycology and Phytopathology. Taurean Publications, New Delhi.ISBN No. 978-93-91074-31-9. Pp.308.

46. Mitra, A.K. (2021) Self Study Material on Mycology and Phytopathology based on new CBCS syllabus of Netaji Subhash Open University. Pp.394 Netaji Subhash Open University, Kolkata.

47. Bhattacharya, S. Ghosh, S and Mitra, A.K.(2022) Adhunik Udvid Bignan Vol. 1 Ed.: S. K. Chakraborty. Pp.631. Paschim Banga Rajya Pustak Parshad. Kolkata. ISBN: 978-81-956120-5-5.

48. Mahima Dey1,*, Soumi Chatterjee1,*, Bikram Dhara2,*, Ishita Roy3 and Arup Kumar Mitra2 (2022) Promoting crop growth with symbiotic microbes in agro-ecosystems—I. In Microbes and Microbial Biotechnology for Green Remediation. Ed. Junaid A. Malik DOI: https://doi.org/10.1016/B978-0-323-90452-0.00043-8. Pp. 922.Elsevier Inc. Amsterdam.

49. Swarnika Roy*, Suchandrima Bhowmik*, Ankita Dutta Chowdhury*, Bikram Dhara* and Arup Kumar Mitra (2022) Plant growth-promoting rhizobacteria: an alternative for NPK fertilizers. In Microbes and Microbial Biotechnology for Green Remediation. Ed. Junaid A. Malik DOI: https://doi.org/10.1016/B978-0-323-90452-0.00007-4. Pp. 922.Elsevier Inc. Amsterdam.

50. Bedaprana Roy, Debapriya Maitra, Jaydip Ghosh and Arup Kumar Mitra (2022) Unique extremophilic *Bacillus*: their application in plant growth promotion and sustainable agriculture. In Microbes and Microbial Biotechnology for Green Remediation. Ed. Junaid A. Malik. DOI: https://doi.org/10.1016/B978-0-323-90452-0.00021-9. Pp. 922.Elsevier Inc. Amsterdam.
51. Debapriya Maitra, Bedaprana Roy, Sudeshna Shyam Choudhury and Arup Kumar Mitra (2022) Dynamics of Soil Microbiome and its Role in Sustainable Agriculture. In: Microbial and Biotechnological Interventions in Bioremediation and Phytoremediation. Eds. Malik, J.A. Springer, Cham. Pp.27-55. DOI: https://doi.org/10.1007/978-3-031-08830-8_2.
52. Basu, Riddhi, Ghosh, Sanjana, Dhara, Bikram, Roy, Ishita, Basumatary, Elizabeth, Paul, Supriti and Kumar Mitra, Arup .(2023) "Extremophilic pigments in eukaryotic microbes: a tool for survivability". *Extremophiles: A Paradox of Nature with Biotechnological Implications*, edited by Maulin P. Shah and Satarupa Dey, Berlin, Boston: De Gruyter, pp. 149-170. https://doi.org/10.1515/9783110788488-008
53. Basu, Bashita, Roy, Camellia, Saha, Samayita, Selma Tirkey, Annie, Biswas, Rupanjana, Dey, Asmita, Dhara, Bikram and Kumar Mitra, Arup (2023). "Extremophiles to polyextremophiles: survival of the fittest". *Extremophiles: A Paradox of Nature with Biotechnological Implications*, edited by Maulin P. Shah and Satarupa Dey, Berlin, Boston: De Gruyter, 2023, pp. 221-244. https://doi.org/10.1515/9783110788488-011
54. Roy, Bedaprana, Maitra, Debapriya, Podder, Rajeshwari, Ghosh, Jaydip and Kumar Mitra, Arup.(2023) "Biotechnological applications extremophiles: the golden epoch ahead". *Extremophiles: A Paradox of Nature with Biotechnological Implications*, edited by Maulin P. Shah and Satarupa Dey, Berlin, Boston: De Gruyter, 2023, pp. 269-288. https://doi.org/10.1515/9783110788488-013
55. Sarkar, Atmeeya; Roy Bedaprana; Basu, Riddhi; Addy, Anindita and Mitra, Arup Kumar. (2023) Sustainable use of Blast Furnace Waste towards a better future. In Transforming our world together towards sustainable development. Eds. D. Savio, S. Roy and S. Chaudhuri. Cambridge Scholar Publishing, U.K. pp.306-316. P. 370 ISBN1-5275-8995-7.
56. Agnihotri, Puja; Shyam Chowdhury, Sudeshna; Maitra, Madhumita; Sengupta, Debanjana and Mitra, Arup Kumar (2023) Low cost Arsenic mitigation by plant-microbe Interaction. In Transforming our world together towards sustainable development. Eds. D. Savio, S. Roy and S. Chaudhuri. Cambridge Scholar Publishing, U.K. pp 317-333. P- 370 ISBN1-5275-8995-7.
57. Prattusha Khan, Ananya Datta, Medha Basu, Anwesha Chatterjee, Biswarup Banerjee and Arup Kumar Mitra (2023) Lantibiotics in antifungal therapy: a futuristic approach. P.205-220 In Lantibiotics as Alternative Therapeutics. Under the Series: Advances in Biotechnology and Bioengineering. Eds. Sanket Joshi, Rajiv K. Kar,

Dibyajit Lahiri, Moupriya Nag. Series Editor Sanket Joshi & Hemen Sarma. Pp. 524, .Elsevier and Academic Press, London. ISBN: 978-0-323-99141-4

58. Moitrayee Sarkar, Madhura Mondal, Dipabarna Bhattacharya, Souradip Basu, Arup Kumar Mitra and Sayak Ganguli (2023) Computational modeling for exploring the therapeutic repertoire of lantibiotics.P.337-352. In Lantibiotics as Alternative Therapeutics. Under the Series: Advances in Biotechnology and Bioengineering. Eds. Sanket Joshi, Rajiv K. Kar, Dibyajit Lahiri, Moupriya Nag. Series Editor Sanket Joshi & Hemen Sarma. Pp. 524, Elsevier and Academic Press, London. ISBN: 978-0-323-99141-4

59. Puja Agnihotri and Arup Kumar Mitra (2023) Understanding the Impact of Global Climate Change on Abiotic Stress in Plants and the Supportive Role of PGPR. In Abiotic Stress in Plants - Adaptations to Climate Change. Dr. Manuel T. T. Oliveira and Prof. Anabela Afonso A. Fernandes Silva.DOI: 10.5772/intechopen.109618

60. Atmeeya Sarkar, Bedaprana roy, Riddhi Basu, Anindita Auddy and Arup Kumar Mitra (2023) Sustainable use of blast furnace waste towards a better future.Pp.306-316. In Transforming our world together towards sustainable development. Eds. Dominic Savio, Samrat Roy and Saswati Chowdhury. Cambridge Scholar Publishing. U.K. P. 350.
61. Puja Agnihotri, Sudeshna Shyam Choudhury,Madhumita Maitra, Debanjana sengupta and Arup Kumar Mitra (2023) Low cost arsenic mitigation by plant-microbe interaction. Pp. 317-333. In Transforming our world together towards sustainable development. Eds. Dominic Savio, Samrat Roy and Saswati Chowdhury. Cambridge Scholar Publishing. U.K. P. 350.
62. Dipankar Roy, Sreyashi Paul, Medha Basu and Arup Kumar Mitra (2023) Removal of heavy metal pollutant from electroplating industry through bioaugmentation. Pp159-188. In Microbial Degradation and Detoxification of Pollutants.Vol 2 of the Series Sustainable Water and Waste Water Treatment. Ed. Maulin P. Shah. De Gruyter, Leck, Germany p.305 ISBN 978-3-11-074327-2. https://doi.org/10.1515/9783110743623-008.
63. Juhita Dhar, Anupriya Das, Soumyadip Biswas,Talaha Nishat Ahmed, Sanjana Ghosh and Arup Kumar Mitra (2023) Strategies to reduce microbial biofilm in medical prosthesis and other devices.Pp.289-314. In Microbial Biofilms Challenges and Advances in Metabolomic Study. P.434 Eds. Sanket Joshi, Dibyajit Lahiri, Rina Rani Ray and Mubarakali Davoodbasha. In the Series Advances in Biotechnology and Bioengineering. Series Editor. Hemen Sarma. Published by Elsevier, Academic Press, U.K. ISBN-978-0-323-95715-1

64. Sylvia Denis, Suhana Sultana, Ankita Banerjee and Arup Kumar Mitra (2023) Metabolomic study of biofilmforming natural microbiota of oral biofilm.Pp.49-60. In Microbial Biofilms Challenges and Advances In Metabolomic Study. P.434 Eds. Sanket Joshi, Dibyajit Lahiri, Rina Rani Ray and Mubarakali Davoodbasha. In the Series Advances in Biotechnology and Bio-engineering . Series Editor. Hemen Sarma. Published by Elsevier, Academic Press, U.K. ISBN-978-0-323-95715-1

65. Bedaprana Roy, Debapriya Maitra , Bidisha Chatterjee, Pallab Ghosh, Jaydip Ghosh and Arup Kumar Mitra(2023) The Need for Auto-Tailored Wetlands for the Treatment of Untampered Wastes of Wineries and Breweries. Pp. 197-212. In Recent Trends in Constructed Wetlands for Industrial Wastewater Treatment. Ed. Maulin P. Shah. Springer Nature, Singapore. Pp. 264. ISBN 978-981-99-2563-6.ISBN 978-981-99-2564-3 (eBook) https://doi.org/10.1007/978-981-99-2564-3

66. Bedaprana Roy, Riddhi Chakraborty, Niti Choudhury, Aindri Ghosh, Rajeswari Chakraborty, Jaydip Ghosh, Arup Kumar Mitra (2023) Metagenomic Analysis of Acid Mine Drainage, Presence of Acidometallophiles, and Their Possible Role in Biomining. In Bio Metallurgical Process, Ed. Satarupa Dey. CRC Press, Boca Raton.Pp 322 https://doi.org/10.1201/9781003451457 e Book ISBN No. 9781003451457

67. Debanjana Sengupta, Arup Kumar Mitra, Arunima Bhattacharya (2023) Mechanism of Long-Term Arsenic Remediation by Microbial Intervention. In Bio Metallurgical Process, Ed. Satarupa Dey. CRC Press, Boca Raton.Pp 322 https://doi.org/10.1201/9781003451457 e Book ISBN No. 9781003451457.

68. Tanusree Sengupta and Arup Kumar Mitra (2023) Bioremediation: role of zooplankton in urban waters **In** Clean Technologies Toward the Development of a Sustainable Environment and Future: Physicochemical, Biochemical, and Biotechnological approachesEdited by Pradeep Verma and Maulin P. Shah. IWA Publishing. U.K. DOI: https://doi.org/10.2166/9781789063783_033

69. Mitra,A.K and Chattopadhyay,D (2024) Life Science and Environment for Class IX. New Book Syndicate Pvt.Ltd. Pg.146.

70. Mitra,A.K and Chattopadhyay,D (2024) Life Science and Environment for Class X. New Book Syndicate Pvt.Ltd. Pp.144.

71. Bedaprana Ror, Bidisha Chatterjee, Tamanna Sultana and Arup Kumar Mitra (2024) Health Impacts of common flavouring agents in Indian Cuisine Pp.163-191.In Sustainable and Functional Foods from Plants: Health Impacts, Bio-active compounds and Production Technologies. Ed. Goyal, Nath and Kovacs. CRC Press, Taylor and Francis Group Apple Academic Press. USA. ISBN No. 978-1-00341-576-3 (Ebk) Pp.462.

72. Debdatta Das, Arup Kumar Mitra, (2024) Microbial intervention in the management of refractory wastes. In Development in Wastewater Treatment Research and Processes,Elsevier, Editor(s): Maulin P. Shah, Nidhi Shah,Pages 187-202,ISBN 9780443138843, https://doi.org/10.1016/B978-0-443-13884-3.00015-9.

73. Riddhi Chakraborty, Sarah Diwan and Arup Kumar Mitra (2024) Extremophiles: How smart are the cells to cope with the environment. Pp.77-102. In Trends in Biotechnology of Polyextremophiles. Eds. Maulin P. Shah and Satarupa Dey. Springer Nature, Switzerland. Pp.485. ISBN 978-3-031-55032-4. https://doi.org/10.1007/978-3-031-55032-4.

74. Sanjana Ghosh, Debalina Saha, Stootee Baruah, Aniket Mookerjee, Arup Kumar Mitra, Sudeshna Shyam Choudhury, Ayan Chandra (2024) Harnessing Carbon Nanomaterials: Applications and Innovations. (Pp.1-36) In Carbon-Based Materials and Environmental Remediation: Graphene, Biochar, and More. Ed. N. Nirmala, Jayaseelan Arun, S. S. Dawn. Pp. 434 IGI Global. DOI: 10.4018/979-8-3693-8257-8.ch001. ISBN13: 9798369382578|ISBN13 Softcover: 9798369382585

75. Shewantika Das and Arup Kumar Mitra (2024) Biochar Amendment with Bio Compost for Improving Plant Growth. Pp. 409-434. DOI: 10.4018/979-8-3693-8257-8.ch014. ISBN13: 9798369382578|ISBN13 Softcover: 9798369382585

76. SwarnaprovaBiswas,BijetaRoy,DebapriyaMaitra,BedapranaRoy,SudeshnaShyamChoudhuryand Arup Kumar Mitra (2024) Role of rhizobacteria in rapid growth and phytopathogenic mitigation of Arecales.In Applied Technologies for clean upof Environmental Contaminants. Series: Development in Waste Water Research and Process. Ed. M.P.Shah. Elsevier, USA ISBN: 978-0-443-13615-3. Pp.762.

77. RonitDey,SylviaDenis,TanishaChakraborty,BedapranaRoy,DebapriyaMaitra,JaydipGhoshand Arup Kumar Mitra (2024) Role of biofilms in control of heavy metal pollution and subsequent control of algal blooms. In Applied Technologies for clean upof Environmental Contaminants. Series: Development in Waste Water Research and Process. Ed. M.P.Shah. Elsevier, USA ISBN: 978-0-443-13615-3. Pp.762.

78. Arup Kumar Mitra, Arindam Dasgupta and Sumantra Chanda (2024) Higher Secondary Biology. Sem.1. New Book Syndicate. TB. No. WBCHSE/BIOS-XI 1 (E)-01/2024. Dt. 28.09.2024. Pp.322

79. Arup Kumar Mitra, Arindam Dasgupta and Sumantra Chanda (2024) Higher Secondary Biology. Sem.2. New Book Syndicate. TB. No. WBCHSE/BIOS-XI 2(E) -01/2024. Dt. 19.11.2024. Pp.226

80. Debapriya Maitra, Bedaprana Roy, Sanjana Ghosh, Sanjana Lahiri, Gorky Guha, Sudeshna Shyam Choudhury, Arup Kumar Mitra (2025) Autotrophic nitrogen removal technology: A boon for Kolkata Ramsar sites, Editor(s): Maulin P. Shah, Anammox Process, Elsevier, Pages 143-166. Pp 266. ISBN 9780443192098, https://doi.org/10.1016/B978-0-443-19209-8.00009-0.

81. Swarnaprova Biswas, Bijeta Roy, Debapriya Maitra, Bedaprana Roy, Sudeshna Shyam Choudhury, Arup Kumar Mitra, (2025) Chapter 17 - Role of rhizobacteria in rapid growth and phytopathogenic mitigation of Arecales, Editor(s): Maulin P. Shah, Development in Waste Water Treatment Research and Processes, Elsevier, Pages 387-407. Pp 762. ISBN 9780443136153, https://doi.org/10.1016/B978-0-443-13615-3.00028-5.

82. Ronit Dey, Sylvia Denis, Tanisha Chakraborty, Bedaprana Roy, Debapriya Maitra, Jaydip Ghosh, Arup Kumar Mitra, (2025) Chapter 18 - Role of biofilms in control of heavy metal pollution and subsequent control of algal blooms, Editor(s): Maulin P. Shah, Development in Waste Water Treatment Research and Processes, Elsevier, Pages 411-426, (Pp.726. ISBN 9780443136153, https://doi.org/10.1016/B978-0-443-13615-3.27001-5.

83. Arup Kumar Mitra, Arindam Dasgupta and Sumantra Chanda (2025) Higher Secondary Biology. Sem.3. New Book Syndicate. Pp.236.

84. Sultana, T., Mitra, A.K., Das, S. (2025). Phytochemicals and Biological Activities of *Excoecaria agallocha* L.. In: Murthy, H.N. (eds) Bioactive Compounds in Mangroves and their Associates. Reference Series in Phytochemistry. Springer, Cham. Online ISBN978-3-031-63920-3 https://doi.org/10.1007/978-3-031-63920-3_11-1.

85. Maitra, D., Roy, B., Duttachaudhury,A, Rathod,D,Guha, U, Majhi,S, Shyamchowdhury, S, Mitra, A.K. (2025). Bioflavonoids: A Detailed Take on Their Extraction Methods, Stability, and Applications. In: Lahiri, D., Nag, M., Bhattacharya, D., Pati, S., Sarkar, T. (eds) Bioactive Ingredients for Healthcare Industry Volume 1. Springer, Singapore. https://doi.org/10.1007/978-981-96-3663-1_14.

86. Smritikana Paul, Sitanshu Das, Srijani Maity, Aratrik Banerjee, Sambodhi Roy, Sinchani Chandra, Pijush Basak, and Arup Kumar Mitra (2025) Treatment of Osteoarthritis with Novel Biologicals from Plants and Microbial Sources. P.297-321 In Bioactive Ingredients for Healthcare Industry Volume 2: Advances in Therapeutic Applications. Eds. Dibyajit Lahiri • Moupriya Nag Debasmita Bhattacharya Siddhartha Pati • Tanmay Sarkar. Springer. Singapore. Pp. 321 ISBN 978-981-96-4378-3 https://doi.org/10.1007/978-981-96-4379-0.

87. Sanjana Ghosh, Stootee Baruah, Suranjana Ray Chaudhuri, Shoham Ghosh, Arup Kumar Mitra, and Sudeshna Shyam Choudhury (2025) A Holistic Treatise on Nature Driven Solution to Cancer. P.261-296. In Bioactive Ingredients for Healthcare Industry Volume 2: Advances in Therapeutic Applications. Eds. Dibyajit Lahiri • Moupriya Nag Debasmita Bhattacharya Siddhartha Pati • Tanmay Sarkar. Springer. Singapore. Pp. 321 ISBN 978-981-96-4378-3 https://doi.org/10.1007/978-981-96-4379-0.

88. Dutta, D., Chakrabarti, S., Nandy, A., Sengupta, S., Mitra, A.K. (2025). Algal Nanoparticles in Reducing the Menace of Bio-Inorganic Pollution. In: Kumar, L., Bharadvaja, N., Khare, S., Anand, R. (eds) Phyconanotechnology: Current Research, Challenges, and Prospects. Sustainable Landscape Planning and Natural Resources Management. Springer, Cham. https://doi.org/10.1007/978-3-031-82186-8_8
89.

LIST OF PUBLICATIONS:

1. R.P.Purkayastha and A.K.Mitra (1992) Metal uptake by mycelia during submerged growth and by sporocarps of an edible fungus *Volvariella volvacea*. Ind.J.Exp.Biol **302**: 1184-1187.

2. R.P.Purakayastha, A.K.Mitra and B.Bhattacharyya (1994) Uptake and toxicological effects of some heavy metals on *Pleurotus sajor-caju* (Fr.) Singer. Ecotoxicol. & Environ.Safe.**27** (1): 7-13. (Academic Press.USA).

3. R.P.Purkayastha and A.K.Mitra (1994) Uptake and transport of heavy metal pollutants by edible fungi and its impact on mammalian system. Proc. Natl. Symp.of mushrooms, Solan, H.P. in Mushroom Res**.3** (2): 97.

4. A.K.Mitra and R.P.Purkayastha (1995) Uptake of heavy metals by edible mushrooms and its impact on mammalian system after oral exposure.J.Natl.Bot.Soc.**49**: 27-33.

5. A.K.Mitra, R.P.Purkayastha, N.B.Chatterjee and B.Bhattacharyya (1995) Uptake and tissue distribution of cadmium contaminated edible mushrooms and its effect on blood.Curr.Sc.**68** (10): 1050-1053.

6. A.K.Mitra and R.P.Purkayastha (1995) Recent improvement in biological efficiency of an edible mushroom *Calocybe indica* P&C for commercial cultivation in the plains of India. Indian Farming.**45** (8): 25-26.

7. A.K.Mitra and R.P.Purkayastha (1995) Heavy metals and mushrooms. Mush.Res.4 (2): 43-48.

8. A.K.Mitra and R.P.Purkayastha (1998) Metal uptake by edible mushrooms and its impact on growth and cellular proteins. Fronteirs in Mushroom Research Eds. T.K.Abraham, N.S.Pradeep and P.Pushpangadan. TBGRI.Pp.40-55.

9. M.Basu and A.K.Mitra (2002) Concentration of industrial effluents on the polluted sites of Damodar River in Burdwan and its impact on pH and C.O.D level.Nat.Environ and Poll.Tech.1 (4) 397-399.

10. Mitra, A.K. (2004) Effect of zinc on biological efficiency of oyster mushrooms, Jour.Mycopath.Res.**42** (1): 101-103.

11. Pore, D and Mitra, A.K. (2005) Effect of Interaction of heavy metals on pathogenic fungi of *Oryza sativa* L.in "Pollution in Urban Industrial Environment" Ed.S.N.Das, Y.V.Swamy, K.K.Rao, V.N.Misra.Allied Publishers Pvt.Ltd. Pp.296

12. Mitra.A.K. (2005) Uptake and subsequent displacement of lead in lead-tolerant fungal species from Kent, U.K. in "Applied Botany", Ed.P.C.Trivedi, Aavishkar Publishers, Rajasthan, India Pp.360.

13. Nath,A.,Sen,S.,Nath,C.,Ghosh,E.,Agarwal,P and Mitra,A.K.(2008) Use of low calorific fast food from fruit pulp and Betel leaf extract in the treatment of Diabetes Mellitus. The ICFAI Jour.Life Sc.2 (1):15-23.

14. Sett,S.,Bhattacharjee,D.,Mookerji,R.,Rakib,T.,Sarkar,K and Mitra, A.K.(2008) Effect of heavy metal contaminated maize on mammalian system. Nature Environ. and pollution tech.**7** (2):345-350.

15. Mitra, A.K. and Calcuttawala, F (2009) Effect of Heavy Metal Contamination on Rice Pathogenic Fungi in Reclaimed wetland of East Kolkata. In "Phytoremediation and Environmental Biotechnology", Ed.P.C.Trivedi Pointer Publisher, Jaipur. Pp.214.

16. R.Sen, Dattaroy, Gupta, R, Barman, P, Basu, Bhattacharya, S and Mitra, A.K. (2009) Antiglycemic and antioxidant effect of mushroom diet. Aviskaar: A Xav.Jour.Res. 1: 68-74.

17. Mitra Arup (2009) Ecofeminism in U.S.A: Its past, present and future. In Ecofeminism: An Overview. Ed. Debamitra Mitra and Kasturi Basu. ICFAI University Press. Hyderabad, Pp.230.

18. Bal, J., Rai, R., Chang, V; Banerjee; Malakar, D and Mitra, A.K. (2010) Characterization of pathogenic bacteria isolated from rust infected coffee leaves. Aviskaar: A Xav.Jour.Res. 2: 95-99.

19. Mitra,A.K.,Banerjee,P.,Saha, G, Lahiri,P,Mukherjee,I,Bhattacharya,A(2010) Agonistic association of Lepidoptera and fungus in the development of leaf spot disease in high altitude mango and its control. Jour.of Phytology, **2**(7):28-36.

20. Soumi Sinha Roy, Anwesha Saha, Gaurav Saha, Pritam Naskar, Arindam Ghatak and Arup Kumar Mitra (2011) Role of saline tolerant *Aspergillus* spp. in calcium recycling from sea urchin shell. Aviskaar: A Xav.Jour.Res. 3: 17-27.

21. Ganguly,S,Sinharoy,S,Acharya,D,Sengupta,M,Shome,D,Baidya,M and Mitra,A.K. (2011) Possible invasion of terrestrial bacteria into marine algal consortium. The IUP Journal of Life Sciences. **5**(2):7-14**.**

22. Acharya, D,Baishya,R,Saha,S,Sil,P,Majumdar,S and Mitra,A.K.(2011)Agonistic phyllosphere consortium of microbes in the development of leaf spot disease of high altitude fern. In "Plant diseases and their biological control" Ed.A.Singh.Avishkar Publishers, Jaipur, India Pp.276.

23. Chandra,A,Saha,G,Goswami,S,Saha,A,SinhaRoy,S,Ganguly,P,Ghosh,A,Banerjee,K,Saraf,R, Banerjee and Mitra,A.K(2011)Effectivity of vehicular banning and its reflection in Disease incidence in Kolkata. Nature Environment and Pollution Technology.**10** (3):491-496.

24. Mandal,A.,Ali,A.,Mitra,A.K.,Ghosh.,and Chandra, A. (2011) Effect of Sponge iron effluent on common roadside weeds in Durgapur, West Bengal. Proceedings of the 3rd International Conference on Ecotoxicology and Environmental Sciences. Organized by IEES in Panaji, Goa Ed.B.Bhattacharya, A.Ghosh and S.K.Majumdar. Mudrakar, KolkataPp.292.

25. J.Bal, Rai, R., Chang, V and Mitra, A.K. (2011) Suppression of leaf blight infection by *Hemileia vastatrix* in roadside coffee plantations. In Environmental Pollution and Ecological Impacts, Health Issues and Management. Ed.B.Bhattacharya, A.Ghosh and S.K.Majumdar. Mudrakar, KolkataPp.152.

26. Mukherjee,A.,Islam,R.,Bhattacharya,A.,Bose, S,Matharu,S.K.,Mukherjee,S. and Mitra, A.K.(2011) Identification and characterization of zinc solubilizing bacteria isolated from mixed sewage of East Kolkata wetlands. Nature Environment and Pollution Technology**10** (4):657-660.

27. Datta,R, Ghosh,A.,Sengupta,D, Ghosh,M,Mal,A.,Dey,S and Mitra,A.K.(2011)Molecular Identification of a bacterial pathogen reducing shelf life of *Agaricus bisporus* and its prevention.Jour.Mycopathol.Res.**49**(2):301-307

28. Mitra, A.K., Banerjee, A., Sinha, S. and Chakraborty (2012) Characterization of a Cyanobacterial colony from an artificially illuminated speleothem cave in Andhra Pradesh. Plant Sciences Feed. **2**(2):11-14.

29. Mitra, A.K., Majumder,R,Adhikari,A,Banerjee,K,Sen,N, Barman,P and Datta,R(2012) Possible threat to sandbinders from dual action of airborne pathogen and pollutant. . Plant Sciences Feed. **2**(8):112-115.

30. Sen,S,Mandal,S,Mullick,A,Kundu,S,Goswamy,D,Mukerjee,S,Das,M and Mitra,A.K (2012)Isolation of unique Gram positive rods from diseased rice leaves.Int.Jour.Scientific and Res.Pub.**2**(10):1-7.

31. Mukherjee,S, Saha,A,Ram,A.K, RoyChowdhury,A and Mitra,A.K.(2012) Identification and Characterization of a green pigment producing bacteria isolated from Bakreshwar Hot Spring, West Bengal,India.International Journal of Environmental Science and Research.**2**(1):126-129.

32. Chakraborty,R, Mitra,A.K.,Sinharoy,K, Mukherjee,S and Kumar,S. (2012) Isolation and Characterization of Cr (VI) Tolerant bacteria from tannery waste and its bioremediation potential. J.Environ. Sc and Engg.**54** (2): 294-305.(I.F:0.9)

33. Ray,S,Datta,R, Bhadra,P,Chowdhury,B and Mitra,A.K(2012)From Space to Earth:*Bacillus aryabhattai* found in the Indian sub-continent. Bioscience Discovery.3(1):138-145.(I.F.0.388)

34. Saha,I,Mitra,A.K.Shyam Chowdhury,S and Mitra,B(2013) Chromium uptake by a bacteria isolated from *Lemna* rhizosphere in a lentic ecosystem.International Multidisciplinary e-Journal **2**(1):67-73.

35. Nandy,D,Chowdhury,P, Poddar,S, Jha,S and Mitra,A.K (2013) Interactive effect of Phyllosphere organism on disease development in *Syzygium samarangense*.International Journal of Advanced and Innovative Research.Feb.133—138.

36. Mal,A;Sengupta,D;Ghosh,M;Dasgupta,P; Dey,P;Shyamchowdhury,S and Mitra,A.K.(2013) Protective algal consortium in the sporocarp of wood rotting fungus from bacterial chitinase activity. J.Mycopathol.Res. **51**(1): 145-149.(I.F.0.4)

37. Sengupta, D; Mitra,A.K and Shyamchowdhury,S (2013) Identification and Characterization of effectively arsenic tolerant bacterial strains from the potential arsenic contaminated site in 24-Parganas (North) District of West Bengal, India. Nature Environment and Pollution Technology**.12**(2):303-308.(I.F:0.45)

38. Chakraborty,R, Mitra,A.K. and Mukherjee,S (2013) Synergistic chromium bioremediation by water lettuce (*Pistia*) and bacteria (*Bacillus cereus* GXBC-1) interaction. J.Biol.Chem.Research.**30** (2): 421-431.(I.F:0.58)

39. Anirban Mullick, Arunima Seal, Sreejata Bandopadhyay, Durba Mukherjee, Mithun Das, Arup Kumar Mitra (2013) In Vitro Antibiotic Susceptibility Of Gram Positive Rod Isolated From Soil In The Vicinity Of A Dumping Site .Int.Jour.Curr.Res.Review.5(13):1-13.(Pending)

40. P.Dasgupta, Bishnu,A,Talukdar,P, Daw,S, Maitra,M and Mitra,A.K, Chandra, A, Mitra,D and Banerjee,M. (2013) Microbial diversity in specific areas of skin and their antibiotic sensitivity.Aviskaar: A Xaverian Jour.of Research.5: 11-22.

41. Sharmistha Biswas1,2, Nivya Thomas1,2, Anamika Mandal1,2, Anirban Mullick1,2, Deepanwita Chandra2 , Swati Mukherjee2, Saurav Sett and Arup Kumar Mitra*(2013) *In Vitro* Analysis Of Antibacterial Activity Of Vitamin C Alone And In Combination With Antibiotics On Gram Positive Rod Isolated From Soil Of A Dumping Site Of Kolkata Int.Jour. Of Pharmacy and Biological Sciences. **3** (3): 101-110. (I.F:0.4)

42. Anumeha Saha*, Chandan Mahish, Indrajit Poirah, Atreyee Ghosh, Arkajyoti Mukherjee, Arup Kumar Mitra (2013) Antagonistic Relationship between *Bacillus cereus* And *Bipolaris* sp in the Leaf Spot Disease of *Basella alba*: A Novel Finding. International Journal of Pharmacy and Biological Sciences. **3**(4):30-41.(IF:0.4)

43. Sett,S, Mahish,C,Poirah,I, Dutta,D, Mitra,A and Mitra,A.K(2014) Antifungal activity of *Aegialitis rotundifolia* extract against pathogenic fungi *Mycovellosiella*. World Journal of Pharmaceutical Research. 3(1):403-417. (IF:0.652) .

44. Banerjee,V.,Mandal,A,Thomas,N,Mandal,S,Biswas,SGhosh,S and Mitra,A.K.(2014) Gall formation in Mango leaf in presence of associated pathogen.Aviskaar:A Xaverian Journal of Research.**6**: 11-17.

45. Sett,S, Kundu,S, Das,S, Mitra,A, Banerjee,A and Mitra,A.K. (2014) Screening for the total phenolic content of selected mangrove species collected from Sundarban mangrove forest. International Journal of Pharma and Bio Sciences. **5**(1):(B)1157-1163. I.F.0.67.

46. Sengupta, D, Mitra, A.K, Shyam Choudhury, S and Chandra, A (2014) Isotherm Study in Arsenic tolerant bacteria isolated from Arsenic affected area in West Bengal. IOSR Journal of Environmental Science, Toxicology and Food Technology.**8** (1) Ver.II: 08-19.I.F.1.325.

47. Saha,A, Chakraborty,S,Dutta,S, Chakraborty,S, Pal,S, Mitra,A.K.(2014) Isolation and Characterization of Pathogenic fungi from *Vitis vinifera* from the historical site Agra Fort. Jour.Applied and Environmental Microbiology. **2**(1):28-30.

48. Saurov Sett1*, Jaylakshmi Hazra2, Suhana Datta3, Abhijit Mitra1, Arup Kumar Mitra4 (2014) Screening The Indian Sundarban Mangrove For Antimicrobial Activity.Int.Jour.Sc. Inovations and Discoveries.4(1): 1-9.

49. Sutapa Som Chaudhury*, Tamalika Sen, Anasuya Moitra, Soumi Chaudhuri, Sudeshna Shyam Choudhury, Arup Kr Mitra.(2014) Induction of Productivity in *Cicer arientinum* By Phosphate Solubilizing *Pseudomonas*.World Journal of Pharmacy And Pharmaceutical Sciences. **3**(4):1481-1493. (I.F.Pending).

50. Nilanjana Chakrabarti and Arup Kumar Mitra (2014) Possible Pollution Threat to the Green Buffer Zone around TAJ MAHAL. IOSR. Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT) 8 (4) Ver. I : 68-72 (I.F.1.325)

51. Choudhury,S.S and Mitra,A.K (2014) Oxidative stress and its protection in rice (*Oryza sativa*) seed during storage.International Journal of Biology and Allied Sciences(IJBPAS) **3** (5): 740-760. (Impact Factor-1.09).

52. Sharma,J, Gurung,T, Upadhyay,A,Nandy,K, Agnihotri,P and Mitra, A.K.(2014) Isolation and Characterization of plastic degrading bacteria from soil collected from the dumping grounds of an industrial area. International Journal of Advanced and Innovative Research. **3**(3):225-232.(I.F-0.349).

53. Hazra,J and Mitra,A.K (2014) Dynamism of Rhizosphere organism in the enhancement of Agricultural Productivity. WJPR.3(6):1156-1165.(I.F:5.045)

54. S.Datta*, S.Shyam Choudhuri and A.K.Mitra (2014) Increased Biomedical Potential of *Pleurotus ostreatus* through the usage of Effective Substrate. Int J Pharm Bio Sci. 5(4): (B) 882 – 894.(IF.2.958).

55. Saha,A,Das,R,Dasgupta,M,Dutta,S,Haque,G and Mitra,A.K. (2014)Isolation and Characterization of Multidrug resistant pathogen from soil samples collected from Hospital Disposal site. IOSR Jour. Of Env.Sc.Toxicol. and Food Tech.(IOSR-JESTFT).8(5)Ver.IV:74-80.(I.F.1.325)

56. Adrika Raybarman, Kazi Atikur Rahman, Russel Miranda Vincent, Sayantani Chatterjee, Upasana Sen, Arup Kumar Mitra, SudeshnaShyam Choudhury, Riddhi Majumder (2014) Isolation and characterisation of lignin-degrading fungus from coir. *IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT).Volume 8, Issue 10 Ver. II PP 07-11*(I.F.1.325).

57. Nilika Bhattacharya, Apala Pal, Preeti Khan, Moumita Basu , Sohini Chakraborty, Nayanika Sengupta and Dr. Arup Kumar Mitra (2014) Heavy Metal Leaching By A Novel *Aspergillus* sp. isolated from a Polluted Site. World Journal of Pharmaceutical Research. Volume 3, Issue 8, 597-611. (I.F.5.045).

58. Sharma,J, Gurung,T, Nandy,K, Mitra, A.K. (2014)Efficiency of different nitrogen fixing bacteria with respect to growth and development of legumes. Int.Jour.Curr.Microbiol. App.Sc. **3** (10):799-809. (I.F.1.5)

59. B. Mitra*,A. Chaterjee, T. Mookherjee, M. Basu, S. Das, A. K. Mitra. (2014) Study of Host (*Michelia champaca*) and Pathogen (*Phomopsis micheliae*) interaction. International Journal of Advances in Pharmacy, Biology and Chemistry (IJAPBC) **3** (4): 884-900.

60. A.Mitra,Roy,D, Roy,P, Bor,A.M, Sarkar,B and Mitra,A.K. (2014) Sustainability of *Aspergillus* spp.in metal enriched substrate aiming towards increasing bioremediation potential. World Jour.of Pharmacy and Pharmaceutical Sciences (WJPPS) **3** (11): 864-878.
61. Dasgupta,M, Das,R,Haque,G, Banerjee,I,Nandy,S, Mitra,A.K and Roy,L (2014) Modification of Asphalt texture by heavy metal tolerant bacteria isolated from industrial effluent. Nature Environment and Pollution Technology. **13** (4): 787-790.

62. Das,A, Chattopadhyay, Kundu,D, Mandal,R,Roy,P and Mitra,A.K. (2014) Isolation and Characterization of a dye degrading bacteria from textile effluents. World Journal of Pharmaceutical Research. Volume 3, Issue 10, 570-582. (I.F.5.045).

63. Roy,P, Afrin,S, Mitra, A, Nazar,R, Nandi, T and Mitra, A.K.(2014) Enterobacter mediated chromium remediation from tannery effluent in East Kolkata. Jour. Bot.Soc.Bengal 68(2):105-110.ISSN 0971-2976.

64. Sett, S, Kundu,S, Das, S and Mitra, A.K. (2014) Sundarban mangroves: Study of phytochemistry,antioxidant and antimicrobial properties of selected species from the Indian Deltaic region. Jour. Bot.Soc.Bengal 68(2):111-116.ISSN 0971-2976.

65. Pramita Chowdhury, Saheli Podder, Debdyuti Nandy, Sushmita Jha, Anuradha Roy, Nilika Bhattacharya, Soumanetra Chandra, Arup Kumar Mitra (2015) Bio remedial Activity of a Moderate Extremophile from Pharmaceutical Effluent. Aviskaar-A Xaverian Journal of Research. Vol.VII : 42-49.

66. Islam,S, Mullick,A,Sarkar,R,Das,A,Halder,S and Mitra,A.K. (2015) Microbial Bioleaching and tolerance of copper from gold plating effluent.Proceedings of the International Coference on Climate Change and the Developing World, Kottayam.Edition 1 Vidyanikshepam,CMS College.Pp.384-392.

67. Prateeka Borar1, Kushan Chowdhury1, Neeraja Marathe1, Parijat Das1, Sowptika Pal1, Arup Kumar Mitra1, Sudeshna Shyam Choudhury1(2015) Isolation and characterization of *Aeromonas aquariorum* from a dye effluent and its effect in bioaugmentation. IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT) e-ISSN: 2319-2402,p- ISSN: 2319-2399.Volume 9, Issue 2 Ver. III (Feb 2015), PP 10-16.(I.F. 1.325)

68. Mrinalini Ghoshal, Debarpan Dhar, Sanjit Chakraborty, Sayanti Majumdar, Swagata Majumder, Dr. Arup Kr. Mitra (2015) Modifications in the biochemical properties of *Helianthus annus* due to infection by *Pseudomonas syringae*, *Alternaria* spp and *Cercospora* spp.*IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT) e-ISSN: 2319-2402,p- ISSN: 2319-2399.Volume 9, Issue 4 Ver. I (Apr. 2015), PP 44-50.*(I.F.1.325).

69. Datta,S, Mullick, A, Paul, S, Kundu,R, and Mitra,A.K.(2015) Evaluation of antimicrobial, antioxidant and anticancerous activity of *Calocybe indica* P&C. . J.Botan.Soc.Bengal **69** (1):19-25

70. Mullick,A, Shah,A, Datta,S, Shyam Choudhury and Mitra, A.K (2015) Antimicrobial activity of cell free extract of *Pseudomonas aeruginosa* MTCC741 towards human pathogens. J.Botan.Soc.Bengal **69** (2):153-157.

71. Ranita Dutta and Arup Kumar Mitra (2016) Induced Biological changes in *Channa* sp. Aviskaar: A Xaverian Journal of Research. Vol.8: Pg.61-66.

72. Sarkar,B; Ghosal,M; Das,A and Mitra,A.K.(2016)Bioremediation of arsenic by a three tier composite system and characterization of Gram negative short rods from pesticide contaminated wastewater. Int. J .of Engineering Associates.5 (1):61-66. (I.F.0.23).

73. Chakraborty, A, Varghese,J.M, Gaine, R, Upadhyay,R, Marathe,N, Pan,S and Mitra, A.K. (2017) RIsolation and Characterisation of a potential dye degrading microbe. Aviskaar,A Xaverian Journal of Research. Vol.IX.Pp.69-85.

74. Chatterjee,A, Ghosh,U, Bannerjee I, Saha,S, Barman,M,Haque,A and Mitra A.K. (2017) A study on the biodegradation of Petroleum by a novel microbial consortia. IOSR Journal of Environmental Science, Toxicology and Food Technology(IOSR-JESTFT) e-ISSN 2319-2402, p-ISSN2319-2399. Vol.11 (3).Ver.III:50-58.(DOI: 10.9790/2402-1103035058. (I.F.1.03)

75. Chatterjee,A, Bhattacharjee,A and Mitra A.K. (2017) A study on the bioremediation ability of the common microflora isolated from tannery effluents. IOSR Journal of Environmental Science, Toxicology and Food Technology(IOSR-JESTFT) e-ISSN 2319-2402, p-ISSN2319-2399. Vol.11 (3).Ver.III:104-114.(DOI:10.9790/2402-110303104114.(I.F.1.03)

76. Bharitkar,Y.P, Datta,S, Sett,S, Marathe,N, Khan,P, Hazra,A, Singh,M,Sahoo,A, Ghosh,S, Mondal,S, Mitra,A.K, Ravichandran,V and Mondal,N.B. (2017) In vitro antimicrobial, antiproliferative and antioxidant activities of Bis pyrrolizidine fused dispiro oxindolo curcuminoids. Chemistry and Biology Interface. 7(1): 19-31.(I.F.2.8).

77. Shuvam Pramanik,[a] Suhana Dutta,[b] Sima Roy,[a] Soumitra Dinda,[ab] Tapas Ghorui,[a] Arup Kumar Mitra,[b] Kausikisankar Pramanik *[a] and Sanjib Ganguly *[b] (2017) Luminescent closed shell nickel(II) pyridyl-azo-oximates and the open shell anion radical congener: molecular and electronic structure, ligand redox behaviour and biological activity ***New J. Chem.***,**41**, 4157-4164. **https://doi.org/10.1039/C7NJ00402H**. I.F. 3.07

78. Arghyadeep Bhattacharjee1* , Maitrayee Mondal1 , Krishanu Dutta1 , Krittika Rao1 Monmita Bhar2 , Nafizul Haque Kazi2 , Aritra Dutta2 , Vinayak Ghosh,Arup Kumar Mitra (2017) Role of Common Primer as an Antifungal Agent in Timber. IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT) e-ISSN: 2319-2402,p- ISSN: 2319-2399.Volume 11, Issue 3 Ver. III (Mar. 2017), PP 96-103. DOI: 10.9790/2402-11030396103. (I.F.1.03).

79. Jakubowski H[1], Xie J[2], Kumar Mitra A[3], Ghooi R[4], Hosseinkhani S[5], Alipour M[6], Hajipour B[7], Obiero G[8].(2017) The Global Ethics Corner: foundations, beliefs, and the teaching of biomedical and scientific ethics around the world. Biochem Mol Biol Educ. **45** (5) : 385-395. doi: 10.1002/bmb.21059.

80. Ranjana Shee1*, Adrija Chakraborty1, Ankita Chakraborty1, Krittika Rao1, Ritu Upadhyay1, Arup Kumar Mitra (2017) Differential Resistance of Soil Borne Microbes to Commonly Used Antibiotics. International Journal of Pharmaceutical Research and Applications www.ijprajournal.com ISSN: 2456-4494 Volume 2, Issue2, PP. 01-10.

81. A.Bhattacharyya, Chatterjee,A and Mitra, A.K. (2017) Tannery effluents as a source of effective bio-remediation. In Recent Advances In Biological Sciences Ed. Dr.K. Sau and P.R.Ghosh. Pp. 140-154. Power Publishers. Kolkata. Pp.180.

82. Sultana,T, Sarkhel, S, Mitra,P,Ghosh,T,Bose,A,Das,A and Mitra,A.K. (2017) Role of Plant Growth Promoting Rhizobacteria(PGPR) in the reduction of heavy metal contamination and bio-augmentation of legume productivity. J. Bot. Soc.Bengal. 71 (1&2):23-31. ISSN0971-2976.

83. Tamanna Sultana, Sayanti Majumdar and Arup Kumar Mitra (2018) Phytoremediation potential of nickel by *Cyperus rotundus* along with its rhizospheric fungi. J. Mycopathol. Res. **55(4)** : 383-389, 2018; (ISSN 0971-3719).

84. Tamojit Chatterjee, Purban Ganguly and Arup Kumar Mitra (2018) A community based study to assess the microbiological profile and antibiotic sensitivity pattern of conjunctival flora among street children in a city in Eastern India. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 17, Issue 5 Ver. 5 (May. 2018), PP 01-04. DOI: 10.9790/0853-1705050104.

85. Arnab Kundu, Deyasini Chakraborty, Shivranjani Baruah, Aditi Mukherjee, Ankita Bose, Arup Kumar Mitra (2018) Development of a Novel Microbial Consortia to Preserve and Protect the Rhizosphere of Soil and Facilitate Organic Agriculture. IJCRT Volume 6, Issue 1, ISSN: 2320-2882. I.F. 5.97.

86. Nilanjan Bose*, Rajarshi Chaudhuri , Sourik Dey and Arup Kumar Mitra (2018)

Extra-terrestrial Phosphate: the sole source of nourishment for Terrestrial Microbes. Bioscience Discovery, 9(3):371-380, ISSN: 2229-3469 (Print); ISSN: 2231-024X (Online) I.F.0.092.

87. Arghyadeep Bhattacharjee, Abhishek Pal and Arup Kumar Mitra (2018) Effect of Plant growth Regulator fungicide and Abscisic acid on the growth and biochemical properties of *Basella alba* as a model system. JETIR November 2018, Volume 5, Issue 11. (ISSN-2349-5162). I.F.4.14. **JETIR1811189**
88. Angela Perris, Anindita Bhattacharya, Monika Naskar, Tulika Biswas, 1Noyonika Mukherjee, Subhankhi Pal, Arup Kumar Mitra (2019) An Analytical Study of the Air Quality, Microbial Index And Metal-Microbial Interactions Using Leaf as an Assessment Tool. JETIR 6(3): 241-249. (ISSN-2349-5162). I.F.5.87. **JETIR1903739**
89. Tamanna Sultana, Arup Kumar Mitra and Satadal Das (2019) A Preliminary Observation On an Explicit Antimicrobial Action Of Mangrove Plants On *Pseudomonas aeruginosa*. Asian Jour. Pharma. and Clinical Res. 12(5): 226-230. Online - 2455-3891 , Print - 0974-2441. I.F 0.588.
90. Arpita Dutta, 1Sayani Kundu, 1 Anjali Yadav, 1Arighnee Mitra, 1Aparajita Dutta, 2Arup Kumar Mitra (2019) Detection of coliforms from drinking water sources, their characterisation and checking their susceptibility against different common drinking water disinfectants. **JETIR 6(4):494-507**(ISSN-2349-5162). I.F.5.87. **JETIR1903739**
91. Aishita Chakraborty1, Debmalya Banerjee1, Sameer1, Anirban Chakrabarty1 Meghna Majumder1, Sayan Dey, Arup Kumar Mitra(2019) Comparative efficacy between Branded and Generic antibiotics against common pathogenic bacteria. JETIR 6(6):219-221. (ISSN-2349-5162). I.F.5.87. **JETIR1903739.**
92. S. Datta*, G. Banerjee and A.K. Mitra (2019) Effect of Different Agricultural Waste Substrates on the Biological Efficiency and Therapeutic Value of Calocybe indica (P and C) International Journal of Pharmacy and Biological Sciences-IJPBSTM (2019) 9 (2): 1157-1168 Online ISSN: 2230-7605, Print ISSN: 2321-3272. [IC value : 4.72] [Doi No:10.21276/ijpbs.2019.9.2.139]
93. Debapriya Roy*, Srijan Bhattacharya, Antara Biswas, Arpan Banerjee, Shinjini Ghosh and Arup Kumar Mitra (2019) In vitro synergism between algae and bacteria isolated from bio-diversity hotspot for better environmental sustainability. **Bioscience Discovery** 10(3): 134-141. I. F. 0.09. (ISSN-2231-024X).
94. B. Roy, Bhattacharya,S, Chakraborty,S,Banerjee,S, Ekram.S, Chakraborty, A and Mitra, A.K. (2019) Isolation and characterization of extremophillic organisms from a hot spring at Yamunotri, Uttarakhand. Indian J.Aerbiology. 32 (1&2): 25-32. ISSN No. 0971-146.
95. Nandy, D., Maity, A. & Mitra, A.K. (2020) Target-specific gene delivery in plant systems and their expression:Insights into recent developments.

    Journal of Bioscinces 45: 30. https://doi.org/10.1007/s12038-020-0008-y (Impact Factor-1.82)
96. Bikram Dhara1 & Amrita Maity1 & Poushali Mondal1 & Arup Kumar Mitra1(2020) First report of Exserohilum leaf spot: a unique halophilic pathogen in *Cucumis sativus*

in the South Bengal area of India. Australasian Plant Pathology . 49:257–266. https://doi.org/10.1007/s13313-020-00705-9.(Impact Factor: 0.9).

97. Suhana Datta,* Jyoti Dubey, Shweta Gupta, Ayoshi Paul, Payel Gupta, & Arup Kumar Mitra (2020) Tropical Milky White Mushroom, *Calocybe indica* (Agaricomycetes): An Effective Antimicrobial Agent Working in Synergism with Standard Antibiotics. *International Journal of Medicinal Mushrooms*, 22(4):335 – 346. (Impact Factor: 1.39).
98. Soumitra Dinda, Tamanna Sultana, Suhana Sultana, Sarat Chandra Patra, Arup Kumar Mitra, Subhadip Roy, Kausikisankar Pramanik and Sanjib Ganguly (2020) Ruthenocycles of benzothiazolyl and pyridyl hydrazones with ancillary PAHs: synthesis, structure, electrochemistry and antimicrobial activity. ***New J. Chem.***, **44**, 11022-11034 https://doi.org/10.1039/D0NJ01447H Impact Factor: 3.288
99. Debanjana Sengupta1,*, Siddhartha Chakraborty1 , Sudeshna Shyam Choudhury1 , Sayak Ganguli2 , Arup Kumar Mitra (2020) Isolation and Identification of Unique Arsenotolerant Exiguobacterium indicum DSAM62 from Arsenic Rich Environment. Advances in Zoology and Botany 8(4): 298-325, http://www.hrpub.org DOI: 10.13189/azb.2020.080403.
100. Sharan Sarawgi[1]*, Shrey Sarawgi[1], Jyoti Dubey[1], Shweta Gupta[1], Anish Chakraborty[1], Tamanna Sultana[1] and Arup Kumar Mitra[1] (2020) Isolation, Identification and Resistance of *Salmonella* spp. in Eggs for Human Consumption. *Asian Food Science Journal18(3):Article no.AFSJ.61255 ISSN: 2581-7752.*
101. Soumi Chatterjee1 , Bikram Dhara2*, Dattatreya Mukherjee3 , Debraj Mukhopadhyay4 , Arup Kumar Mitra2 (2021) A Review on the SARS-CoV-2 Mediated Global Pandemic: Proximal Origin, Pathogenicity and Therapeutic Approaches. J Antivir Antiretrovir, Vol.13 Iss.3 No:1000220. Pg.1-9. ISSN: 1948-5964. Impact Factor 1.17.
102. Meenakshi Mukhopadhyay, Arup Kumar Mitra, Sudeshna Shyam Choudhury, Sayak Ganguli (2021) Metagenome dataset of lateritic soil microbiota from Sadaipur, Birbhum, West Bengal, India. Data in Brief. 36. Article 107041. doi.org/10.1016/j. Impact Factor 1.7. ISSN: 2352-3409.
103. Puja Agnihotri1,* , Sharanya Banerjee1 , Madhumita Maitra1 and Arup K. Mitra1(2021) Isolation, characterization and identification of an As(V)-resistant plant growth promoting bacteria for potential use in bioremediation. Asia-Pacific Journal of Science and Technology https//:www.tci-thaijo.org/index.php/APST/index. :Volume:26 .Issue :02(1-11). **Online ISSN**: 2539-6293Article ID :.APST-26-02-19. Impact Factor 0.68.
104. Tamanna Sultana, Arup Kumar Mitra and Satadal Das (2021) Antimicrobial Action of Mangrove Plant Extracts Against *Salmonella Typhi* and *Candida Parapsilosis* Characterised by Their Antioxidant Potentials and Bioactive Compounds. IJPSR,; Vol. 12(9): 4774-4789. E-ISSN: 0975-8232(IF: 0.68).

105. Bhattacharya,A, Chowdhury,P, , Bose, S and Mitra,A (2021) Spread of Covid19 and its control-Comparing trends in 10 Latin American Countries. Preprint. SSRN-Elsevier-3921996

106. Bhattacharjee,A.,Chaudhuri, R., Pandey, P. and Mitra, A.K. Mitra (2021) Bioremediation of Chromium (VI) by a microbial Consortium isolated from Tannery Effluents and their industrial applications. Journal of Environmental Engineering and Landscape Management. Volume 29 Issue 4: 418–429. ISSN1648-6897. eISSN 1822-4199. https://doi.org/10.3846/jeelm.2021.15762. IF 2.1

107. Tamanna Sultana, Arup Kumar Mitra and Satadal Das (2021) An in vitro approach to combat multidrug resistance in Salmonella typhi and human colon cancer with *Excoecaria agallocha* L. extract. Bulletin of the National Research Centre. Springer 45:210 https://doi.org/10.1186/s42269-021-00668. eISSN 2522-8307.

108. Rishav Mukherjee1 , Dharitri Chaudhuri2 , Arup Kumar Mitra1 , Partha Guchhait3 , Subhrojyoti Bhowmick 4 , Satadal Das3 , Bhaskar Narayan Chaudhuri (2021) Demographic Features of COVID-19 in Two Waves in A Single Center. Journal of Microbiology and Infectious Diseases ; 11 (4):174-182. doi: 10.5799/jmid.1036705. eISSN : 2146-9369 IF: 2.05.

109. Puja Agnihotri1 · Suchismita Sikdar1 · Madhumita Maitra1 · Sudeshna Shyam Choudhury1 Arup Kumar Mitra1(2022) Effect of combination of *Azolla microphylla* and As(V)-resistant bacterial consortium on growth, oxidative stress and arsenic accumulation in rice plant under As(V) stress. Vegetos (Springer) https://doi.org/10.1007/s42535-022-00345-y (I.F.1.34)

110. Tamanna Sultana , Arup Kumar Mitra and Satadal Das(2022) Evaluation of anti-cancer potential of *Excoecaria agallocha* (L.) leaf extract on human cervical cancer (SiHa) cell line and assessing the underlying mechanism of action. *Future Journal of Pharmaceutical Sciences (2022) 8:3*. https://doi.org/10.1186/s43094-021-00389-y. ISSN:2314-7253. IF: Under Processing.

111. Majumder S1,2*, Mazumdar S[3], Pyne A2, Das A2, Sadhukhan A2 and Mitra, AK[2] (2022) Antimicrobial Assessment of a Novel Humectant-Hand-Sanitizer against Microbes Transferred to Human Palms from Mobile Phones with/without Flip Covers. Annals of Advanced Biomedical Sciences. MEDWIN PUBLISHERS Volume 5 Issue 1 DOI: 10.23880/aabsc-16000176. ISSN: 2641-9459. Impact Factor 0.96.

112. Agnihotri, P., Maitra, M. & Mitra, A.K. (2022) Effect of an As(V)-Resistant Plant Growth Promoting Bacterial Consortium on Growth, Antioxidant Content and Arsenic Accumulation in *Azolla microphylla* Kaulf. Under As(V) Stress. *Russ J Plant Physiol* (Springer) **69,** 15. https://doi.org/10.1134/S1021443722010022.

113. Pramita Chowdhury1, Arunima Bhattacharya2, Sohini Bose3 and Arup Kumar Mitra4* (2022) A Comparative Analysis of COVID-19 Outbreak, Heterogeneous Vaccine Dissemination and Effectiveness of Public Health Strategies in African Countries". Acta Scientific Microbiology 5.2 : 104-115. DOI: 10.31080/ASMI.2022.05.1008. I.F. 1.4

114. Arup Kumar Mitra[1], Meenakshi Mukhopadhyay[2]*, Sampurna Mondal[3], Pallab Ghosh[1], Sohini Chattopadhyay[1], Ritushree Ganguly[1], Pritam Kanjilal[1], Sharanya Kundu[1], Bedaprana Roy[1], Debapriya Maitra[1] and Sucharita Roy (2022) Statistical Analysis of the Effect of Bacterial Consortia in Soybean Production". *Acta Scientific Microbiology* 5.5 (2022): 31-43.IF -1.41 ISSN No.2581-3226.

115. Soumitra Dinda, Debapriya Maitra, Bedaprana Roy, Prattusha Khan, Aratrika Samajdar, Dr. Arup Kumar Mitra, Dr. Subhadip Roy, Dr. Arpan Mondal, Prof. Kausikisankar Pramanik, Dr. Sanjib Ganguly (2022) Molecular and Electronic Structures, Spectra, Electrochemistry and Anti-bacterial Efficacy of Novel Heterocyclic Hydrazones of Phenanthrenequinone and Their Nickel(II) Complexes. Chemistry Select. **https://doi.org/10.1002/slct.202202151**
116. Kundu, A., Paul, S., Biswas, S.J. *et al.* Nature to lab transfer story of the nutritious alga *Catenella*: a comprehensive review. *Vegetos* (2022). https://doi.org/10.1007/s42535-022-00475-3. I.F. 1.34.
117. Debjani Dutta, Debapriya Maitra, Bedaprana Roy, Bijeta Roy, Swarnaprova Biswas and Arup Kumar Mitra (2022) Unique microbial association in Cumin and Coriander. *J. Mycopathol. Res.* 60(3) : 335-343, 2022; (ISSN 0971-3719)
118. Debapriya Maitra, Bedaprana Roy, Ayan Chandra, Sudeshna Shyam Choudhury, Arup Kumar Mitra (2022) Biofilm producing Bacillus vallismortis TR01K from tea rhizosphere acting as plant growth promoting agent. Biocatalysis and Agricultural Biotechnology, 45, 102507. ISSN 1878-8181. doi.org/10.1016/j.bcab.2022.102507. I.F.3.28.
119. Bedaprana Roy, Debapriya Maitra, Ayan Chandra, Jaydip Ghosh, Arup Kumar Mitra (2022) Biofilm production in a novel polyextremophilic Bacillus subtilis: A strategic maneuver for survival. Biocatalysis and Agricultural Biotechnology, 45, 102517, ISSN 1878-8181. https://doi.org/10.1016/j.bcab.2022.102517. I.F.3.28
120. **Sayan Kamila, Soumya Mondal, Bidisha Chatterjee, Bedaprana Roy and Arup Kumar Mitra (2022**) Isolation of saline tolerant PGPR (ST-PGPR) from sinking island of Ghoramara. Journal of Environment and Sociobiology. 19(2):125-135. Print : ISSN : 0973-0834. (I.F.0.34).
121. Debjani Dutta, Debdatta Das, Debapriya Maitra, Bedaprana Roy and Arup Kumar Mitra (2022) Role of residual microflora from Indian spices in increasing their shelf life. Journal of Environment and Sociobiology. 19(2):171-181. Print : ISSN : 0973-0834. (I.F.0.34).
122. Sylvia Denis, Ronit Dey, Tanisha Chakraborty, Sharanya Sreemani, Paranjita Raha and Arup Kumar Mitra (2022) Street food: Harmful it is, but not for us. Journal of Environment and Sociobiology. 19(2):209-220. Print : ISSN : 0973-0834. (I.F.0.34).
123. Meenakshi Mukhopadhyay, Arup Kumar Mitra, Debapriya Maitra, Bedaprana Roy, Archisman Chakraborty, Sudeshna Shyam Choudhury and Indranath Chaudhuri (2022) Development of a novel consortium using bacteria with multiple plant beneficial traits from over-exploited agricultural soil. Journal of Environment and Sociobiology. 19(2): 245-256. Print : ISSN : 0973-0834. (I.F.0.34).
124. Shivashis Bikram Banerjee, Debapriya Maitra, Bedaprana Roy, Bikram Dhara, Ramalakshmi Datta, Sanjay Haldar and Arup Kumar Mitra (2022) Isolation and

characterization of prospective salt tolerant bacteria with plant growth promoting properties from mangroves of Sundarban, West Bengal, India. Journal of Environment and Sociobiology. 19(2): 271-281. Print : ISSN : 0973-0834. (I.F.0.34).

125. Arunima Bhattacharya, Pragyasree Bhowmick, Sayak Ganguli, Arup Kumar Mitra (2023) Evolutionary Insights into the Enzymes involved in the Biosynthesis of the Volatile Organic Compounds Isoprene and Pinene in Plants.Plant Science today. ISSN 2348-1900 (online). https://doi.org/10.14719/pst.2115. IF: 0.89

126. Satwik Majumder1 · Bikram Dhara2 · Arup Kumar Mitra2 · Satarupa Dey3(2023) Applications and implications of carbon nanotubes for the sequestration of organic and inorganic pollutants from wastewater. Environmental Science and Pollution Research https://doi.org/10.1007/s11356-023-25431-9. (I.F.5.19).

127. Bedaprana Roy1 · Debapriya Maitra1 · Abhik Biswas2 · Niti Chowdhury1 · Saswata Ganguly1 · Mainak Bera1 · Shijini Dutta1 · Samriddhi Golder1 · Sucharita Roy2 · Jaydip Ghosh1 · Arup Kumar Mitra (2023) Efcacy of HighAltitude BioflmForming Novel Bacillus subtilis Species as Plant GrowthPromoting Rhizobacteria on *Zea mays* L Applied Biochemistry and Biotechnology https://doi.org/10.1007/s12010-023-04563-1. (I.F.3.1)

128. Rupa Chakraborty and Arup Kumar Mitra (2023) *Calocybe indica* Cultivation: Potential and Benefits.The Management Accountant. **58**(5): 42-46. ISSN: 0972-3528. (IF:0.563).

129. R. Sengupta,,A. Kundu, B.Dhara, A.K.Mitra and S.S.Das (2023) Antimicrobial activity and phytoconstituents screening of noxious invasive alien plants Ageratina adenophora and Chromolaena odorata from Mizoram, a part of of Indo-Burma Biodiversity hotspot in India. Explor. Anim.Med. Res. Vol. 13. https://doi.org/1052635/13S133-140. ISSN (online)2319-247X. IF. 0.2.

130. Bedaprana Roy, Debapriya Maitra, Subham Sarkar, Rajeshwari Podder, Tannishtha Das, Jaydip Ghosh, Arup Kumar Mitra (2023) Biofilm and metallothioneins: A dual approach to bioremediate the heavy metal menace. Environment Quality Management. https://doi.org/10.1002/tqem.22139 (IF. 1.091)

131. Meenakshi Mukhopadhyay1 *, Ashutosh Mukherjee1 , Sayak Ganguli2 , Archisman Chakraborti3 , Samrat Roy4 , Sudeshna Shyam Choudhury5 , Vetriselvan Subramaniyan6,7 , Vinoth Kumarasamy8 *, Amany A. Sayed9 , Fatma M. El-Demerdash10, Mikhlid H. Almutairi11, Anca Şuţan12, Bikram Dhara5,13* and Arup Kumar Mitra5 (2023) Marvels of Bacilli in soil amendment for plant-growth promotion toward sustainable development having futuristic socio-economic implications. Frontiers in Microbiology. Sec. Systems Microbiology.Volume 14 | https://doi.org/10.3389/fmicb.2023.1293302. IF. 6.06.

132. 1Bidisha Chatterjee, 1Arup Kumar Mitra and 2Sharadia Dey (2023) Diversity and Seasonal Variation of Aquatic Microbes and Micro-Flora of an Urban Lake of Kolkata. Journal of Environment and Sociobiology. 20(2):113-123. Print : ISSN : 0973-0834. (I.F.0.34).

133. Dipankar Roy1 and Arup Kumar Mitra1(2023) Characterization of Sludge Samples from Different MSME Units in Kolkata. Journal of Environment and Sociobiology. 20(2):125-133. Print: ISSN : 0973-0834. (I.F.0.34).

134. Juhita Dhar 1†, Aishee Hazra 1†, Riddhisha Patra 1, Varun Kumar 2, Vetriselvan Subramaniyan 3,4, Vinoth Kumarasamy 5*, Arup Kumar Mitra 1, Amany A. Sayed 6, Lotfi Aleya 7, Fatma M. El-Demerdash 8, Mikhlid H. Almutairi 9, Shopnil Akash 10, Mohamed M. Abdel-Daim 11, Achal Kant 12 and Bikram Dhara 13,1*(2024) Unveiling *Curvularia tuberculata*-induced leaf anomalies in *Rhododendron ferrugineum*: implications in cultural-ecological conservation and harnessing microbial intervention in socio-economic advancement. Frontiers in Microbiology Vol. 14:1280120. doi: 10.33891280120 IF. 6.06.

135. Tirthankar Saha**1** · Sagnik Das**1** · Snigdha Sau**1** · Debarpita Datta**1** · Sourima Kundu**1** · Subham Saha**1** · Shreya Chakraborty**1** · Bikram Dhara**1,2** · Arup Kumar Mitra**1 (2024)** Toxic heavy metal bioremediation potential of *Pleurotus ostreatus* fruit bodies grown in sugarcane bagasse supplemented substrate. Vegetos https://doi.org/10.1007/s42535-023-00808-wISSN0970-4078. IF 1.1

136. Debapriya Maitra1 Bedaprana Roy1 Debdatta Das1 Archisman Chakraborti2 Anirban Das1 Indranath Chaudhuri2 Sudeshna Shyam Choudhury1 Arup Kumar Mitra (2024) Organic farming in the improvement of soil health and productivity of tea cultivation: A pilot study.Environ. Qual Management.Wiley. DOI: 10.1002/tqem.22193. I.F.1.09.

137. 1Adrija Banerjee, 1Shreenanda De, 1Pritam Kanjilal, 1Subhrodeep Paul, 1Sohini Rana 1Moubani Dutta, 2Ritama Panda, 1Bidisha Chatterjee, 1*Bedaprana Roy, 2Ayan Chandra and 1Arup Kumar Mitra (2024) Unveiling the potential of Halotolerant bacteria as PGPR with an ANOVA and Time-Series enhanced study for sustainable agriculture. J.Mycopathol.Res. 62(1) : 137-142, 2024, ISSN : 0971-3719 (Print), 2583-6315 (Online) doi.10.57023/JMycR.62.1.2024.137.

138. Suhana Datta1 | Preeti Verma2 | Bikram Dhara3,4 | Rita Kundu2 | Swastika Maitra3 | Arup Kumar Mitra1 | Mohd Shahnawaz Khan5 | Torki A. Zughaibi6,7 | Shams Tabrez6,7 Ajoy Kumer (2024) Interplay of precision therapeutics and MD study: *Calocybe indica*'s potentials against cervical cancer and its interaction with VEGF via octadecanoic acid. *Cell Mol Med.*;28:e18302. https://doi.org/10.1111/jcmm.18302 I.F.5.3.

139. Sanjana Ghosh1 Arup KumarMitra1 Sudeshna Shyam Choudhury1 Ayan Chandra2 (2024) Unleaded agriculture: Myth to reality by wetland microbial flora. Env. Qual. Management. Wiley online. DOI: 10.1002/tqem.22259. If. 1.09.

140. Stootee Baruah a, Jenifer Rajak a, Arup Kumar Mitra a, Bikram Dhara (2024) Advancements in precision oncology: Investigating the function of circulating DNA in the advancement of liquid biopsy technologies. The Journal of Liquid Biopsy. Elsevier. https://doi.org/10.1016/j.jlb.2024.100157. IF. Pending

141. Bedaprana Roy a,*, Debapriya Maitra a, Ayush Bhattacharya b,1, Anuvhab Mondal b,1, Nilratan Pal b,1, Ahana Nandy a,1, Barsha Bakshi a,1, Jaydip Ghosh a, Arup Kumar Mitra a(2024) Alleviation of abiotic stress in *Oryza sativa* by the application of novel polyextremophilic plant growth promoting *Bacillus*. Biocatalysis and Agricultural Biotechnology 60. https://doi.org/10.1016/j.bcab.2024.103272. I.F. 4.0.

142. Bikram Dhara1 · Sulagna Banerjee2 · Amrita Maity3 · Upasana Ghosh1 · Aishee Hazra1 · Arup Kumar Mitra1(2024) First report of *Alternaria aungustiovoidea*

mediated leaf anomalies in *Abelmoschus esculentus* in Greater Kolkata, India. Vegetos. https://doi.org/10.1007/s42535-024-00968-3. I.F.2.00

143. Paul, S., Dey, M., Roy, B., Dhara, B, Mitra,A.K.(2024) Potentiality of Marine Microbial Metabolites in the Remedy of Alzheimer's Disease: A Comprehensive Review. *Proc Zool Soc*. https://doi.org/10.1007/s12595-024-00542-4. I.F.0.72.

144. Sharadia Dey a, Kinga Areta Wi´sniewska b, Sylwia ´Sliwi´nska-Wilczewska c,d, Arup Mitra a,e,.Agata Błaszczyk f, Bidisha Chatterjee e, Sagnik Dey g,h, Anita Urszula Lewandowska (2024) Deposition of airborne cyanobacteria and microalgae in the human respiratory tract (Baltic Sea coastal zone, Poland) Marine Pollution Bulletin 207 (2024) 116883. doi.org/10.1016/j.marpolbul.2024.116883. IF. 5.3.

145. Kundu,R, Dhar,J, Paul, S., Sengupta,R.,Prakash,V.,Mitra,A.K.and Dhara, B. (2024) Investigatingthe function of mangrove mycorrhizalfungi with special emphasis on arbuscular mycorrhizae (AMF)symbiosis in promoting ecosystem health and sustainability. Vegetos. . https://doi.org/10.1007/s42535-024-01029-5. I.F.2.00

146. Subham Sarkar1 Samraggi Chakraborty2 Soubhagya Ghosh3 Ekanansha Roy Chowdhury4 Jenifer Rajak3 Arup Kumar Mitra3 Ajoy Kumer5 Bikram Dhara (2024) Liquid biopsy—A biomarker-based revolutionising technique in cancer therapy.Clinical and Translational Discovery, Wiley. DOI: 10.1002/ctd2.70006. I.F 2.1.

147. Subham Sarkar1 | Soubhagya Ghosh2 | Samraggi Chakraborty3 | Jenifer Rajak2 | Ekanansha R. Chowdhury4 | Arup K. Mitra2 | Ajoy Kumer5 | Bikram Dhara (2024) From photonic technologies to microfluidics—A review on the techniques which revolutionize liquid biopsy, opening a new era in cancer therapy. Health Science Reports. Wiley. DOI: 10.1002/hsr2.70147. I.F. 2.3

148. Sanjana Ghosh1 · Rahul Rautela2,3 · Arup Kumar Mitra1 · Sudeshna Shyam Choudhury1 · Ayan Chandra4 · Sunil Kumar2 · Bikram Dhara (2024) Exploring soil fertility dynamics and microbial flora in the east kolkata wetlands: implications for sustainable agriculture and ecosystem conservation. Vegetos. https://doi.org/10.1007/s42535-024-01079-9. I.F. 2.0

149. Bidisha Chatterjee, Stootee Baruah, Deepsikha Chatterjee, Sharadia Dey, Arup Kumar Mitra (2024) Holistic Management of Wastewater Pollution Through Biological Treatment: A Sustainable Future. Clean Soil, Air, Water. Wiley **https://doi.org/10.1002/clen.202400059**

150. SrijitaNaskar1 KoushikSarkar2 SupriyoHalder1 BidishaChatterjee3 DebjeetChakraborty3 ArkaLaha3 RahulSharma2 ArupKumarMitra3 KausikisankarPramanik1 Sanjib Ganguly (2025) Designed Synthesis of Amino-Azo-QuinolineandTheir Nickel(II) Complexes: Molecular Structure, Electrochemistry and an Insight into their in Vitro Anti-Cancer Activities. Chemistry&Biodiversity. Wiley-VCH. https://doi.org/10.1002/cbdv.202402436. IF: 2.5

151. Debapriya Maitra, Bedaprana Roy, Sejuti Ray, Sony Choubey, Bishista DasGupta, Suman Deb, Ankur Chattopadyay7, Biswanath Ganguly8, Arup Kumar Mitra9 and Sudeshna Shyam Choudhury (2025) Characterization of Tea Metabolites and Soil of Different Origins in Northeastern India.
Nutrition and Food Science Journal. Juniper Publishers. ISSN 2474-767X. http://dx. doi.org/10.19080/NFSIJ.2025.14.555881.

152. Banerjee, Debmalya, Sengupta, Sreshtha, Sahu, Deblu, Ghosh, Sampurna, Neelapu, Bala Chakravarthy, Mitra, Arup Kumar, Sarkar, Preetam, Dutta, Debjani, Demina, Tatiana S, Pal, Kunal (2025) Optical and Structural Modifications in Stearyl Alcohol Oleogels Induced by Soy Lecithin. Crystal Growth & Design, American Chemical Society doi: 10.1021/acs.cgd.4c01638. I.F. 3.2.

153. Swapneel Saha, Sanjana Ghosh, Ashim Chandra Roy, Krishna Ray, Sandip Kumar Basak, Rabishankar Sengupta, Bikram Dhara, Arup Kumar Mitra & Ilora Ghosh (2025) Potential of Lasiodiplodia theobromae in mitigating Polyalthia suberosa invasion in a semi-urban sanctuary. Plant Biosystems. Official Journal of the Societa Botanica Italiana. https://doi.org/10.1080/11263504.2025.2500387 IF.1.6

154.