# GURU NANAK INSTITUTE OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY (LIFE SCIENCE)

# FACULTY DETAILS

# 1. EXTRAMURAL RESEARCH PROJECTS: Dr. SWATI CHAKRABORTY

1.Dr Swati Chakraborty Principal Investigator 2015 ...Identification of heavy metal chromium Cr(VI) &Ni tolerance bacteria to develop microbial biosensor and role on secondary metabolite of medicinal plants *Baccopamonnieri*(L) in metal contaminated soil of East Kolkata wetland"18.98 lakhsWest Bengal DST

2. Dr Swati Chakraborty Principal Investigator..Screening of Plant Growth Promoting Cr Tolerant Cr (VI) Reducing Endophytes and Effects Chromium on Growth, Bacoside A, Bacopaside I of *Bacopamonieri*, a memory enhancing Herb: Bioremediation of Rs1,60,000/

3.Dr swatiChakraborty 5lakhs 2019 of Environment Department, GOVT of West Bengal,Development of Biological database of Microbes Diversity of East Kolkata Wetland Area

## 2. PAPERS PUBLISHED A. DR. SWATI CHAKRABORTY

- Dutta S and Chakraborty S: Estimation of phytochemical characteristics and antioxidant property of secondary metabolites of a memory enhancing medicinal herb Baccopamonnieri of East Kolkata Wetland. *Int J Pharm Sci & Res* 2020; 11(6): 2860-67. doi: 10.13040/IJPSR. 0975-8232.11(6).2860-67
- 2. Swati Chakraborty, 2 Swagata Roy and 3 Subhayan Dutta (2020) Isolation, optimization and characterization of protease producing bacteria from soil collected from East Kolkata *International Journal of Multidisciplinary Educational Research* Wetland ISSN:2277-7881; IMPACT FACTOR :6.514(2020); IC VALUE:5.16; ISI VALUE:2.286 Peer Reviewed:VOLUME:9, ISSUE:5(8), MAY:2020
- **3.** 3. Ekta Bhattacharya ,Rajashree Dutta , **Swati Chakraborty** , Suparna Mandal Biswas,. (2019)Phytochemical profiling of ArtocarpuslakoochaRoxb. leaf methanol extract and its antioxidant, antimicrobial and antioxidative activities. *Asian Pacific Journal of Tropical Biomedicine* 2019; 9(11): 484-492

- 4. Subhayandutta, swatichakraborty, R. C. Srivastava, (2018) Environmental Impact Assessment& Incidence of occurrence of Disease among the public health in East Kolkata wetland area, International Journal of Bioinformatics and Biological Science(Volume:6 P-55-63) December 2018
- 5. Firdous, K and Chakraborty, S.(2018). Correlation of different soil parameters and evaluation of its effect in a ramsar site East Kolkata Wetland. *International Journal of Scientific Research in Science and Technology*, 4:2 966-976.ISSN: 2395-6011
- The effect of pollution on hydrological parameters analysis of East Kolkata Wetland area. International Journal of Development Research, 7:9 15452-15458.Impact Factor 2017: 5.667; ORCID:orcid.org/0000-0002-3345-184XISSN 2230-9926 Thomson reuters research id:J-4025-2016
- Swati Chakraborty, SubhayanDutta ,(2017) Review on Genetic Regulation Reduction and resistance Mechanism of Chromium. *International Journal of Multidisciplinary Research Review* Print ISSN: 2395-1877 Pg-82-87
- Swati Chakraborty, Khaledafirodus,(2017), A Review : Naturally available sources of chitosan and analysis of chitosan derivatives for its antimicrobial activity ,*International Journal of Recent Scientific Research* Pg:15773-15776 ISSN:0976-3031K-7356-2016 Volume:8, Issue:3 March-2017
- 9. Swati Chakraborty, subhasreedas ,(2016) The role of Osmotin Protein Tolerance to Biotic and Abiotic Stress in Plants, *International Journal of Bioinformatics and Biological Sciences*. Vol. 4 No.1, June 2016
- 10. Chakraborty, Swati (2015) Environmental Sustainability in Waste Water Treatment by Phytoremediation With *Pistia Stratiotes*. (Water Lettuce) in East Kolkata Wetland. Int J Bioresource, Environment and Agricultural Sciences (IJBEAS) Vol. 1(4): 132-139 ISSN 2454-3551
- 11. (2013) Heavy Metal Association in Waste Water Irrigated Crop .*Int J Polution Research*, 32(3):599-602 (Accredited By NAAS:Jrn.I.D.: A198; NAAS Rating:3.4, SCOPUS index 16.00). ISSN 0257-8050.
- Nandi, Swati; Srivastava, R.C; Agarwal, K.M. (2013) Heavy Metal Concentration in Surface Water of East Kolkata Wetland. *Ind. J Public Health Research & Development*.
  4:244-247.(ISSN-0976-0245,Electronic ISSN-0976-5506,Accredited By Index

Copernicus{Poland} Indian citation index, Google scholar, CINHA Hil, EBSCO host(USA):Jrn.I.D.: A198; NAAS Rating:3.4, SCOPUS index 16.00)

- 13. Nandi, Swati; Srivastava, R.C (2013) Health Hazard among the Fisherman and Farmers of East Kolkata Wetland. *J Advances in Medicine*.2,(1): 15-21; Print ISSN : 2277-9744. Online ISSN : 2319-4324
- 14. Nandi, Swati; Srivastava, R.C; Agarwal, K.M. (2012) Accumulation of Heavy Metals by *Solanum melongena* Irrigated with Waste Water. *Int J Agriculture, Environment* &*Biotechnology*, 5, 4 :329-332. (Accredited By NAAS: ISSN. NO.:0974-1712; NAAS Rating:3.9).
- 15. Nandi, Swati; Srivastava, R.C; Agarwal, K.M. (2012) Bioaccumulation of Heavy Metal in *Brassica oleracea* Effects on Human Health. *Int. J. Medical Sciences*,5: 21-23 ( ISSN: 0974-2654, Online ISSN: 0976-7932, Accredited By NAAS: Jrn.I.D.: A198; NAAS Rating:3.1).
- Nandi, Swati; Srivastava, R.C; Agarwal, K.M. (2012) Lead Cadmium accumulation in fresh water fishes *Labeorohita* and *Catlacatla*. J. Environment Research and Devlopment, 6, 3A: 748-752 (ISSN 0973-6921, Impact factor-0.157).

#### **B. DR. BHASKAR CHOWDHURY**

- Jayeeta Saha, Bhaskar Choudhury, Palin Sil and Asok K Biswas Influence of Phosphate on arsenic uptake and activities of different phosphatase enzymes in the seedlings of three rice (Oryza sativa L.) cultivars 71(1&2) : 9-16(2017) Journal of Botanical Society of Bengal, Kolkata, India ISSN No : 0971-2976, 2016:
- Bhaskar Choudhury, Supriyo Chowdhury and Asok K. Biswas Regulation of growth and metabolism in rice (Oryza sativa L.) by arsenic and its possible reversal by phosphate.6(1): 15-24 Journal of Plant Interaction UK, Taylor and Francis ISSN No: 1742-9145
- Bhaskar Choudhury, Souvik Mitra and Asok K. Biswas Regulation of sugar metabolism in rice (Oryza sativa L.) seedlings under arsenate toxicity and its improvement by phosphate16(1): 59-68 Physiology and Molecular Biology of Plants India, Springer ISSN No : 0971-5894

#### C. TAMALIKA CHAKRABORTY

- Ranjana Shaw, Tamalika Chakraborty, "Magnetic microsphere as novel drug delivery system": A Review, "International Journal of Advanced Research" Vol 8 (4), 150-159, April 2020.
- NeeldeepGanguly, Tamalika Chakraborty, "Establishment of Zebrafish model for screening of various drugs associated with neurological disorder and introduction to Chronotherapeutics": A Review, International Journal of Multidisciplinary Reserch Vol 9(5),45-54, May 2020.
- Camelia Roy, Tamalika Chakraborty, "A Review on Translational Perspective and efficacy of different engineered therapeutic antibodies" International Journal of Pharmaceutical Science and Research, Vol 11(6), 2604-2616, June 2020.
- Ranjana, Shaw, Tamalika Chakraborty, "Incidence of COVID -19 in diabetic patients and its valid intervention: A Review", International Journal of Multidisciplinary Research.
- Reshmi Chowdhury, Tamalika Chakraborty, "A Quest for better probiotic delivery and frontiers of Probiotic Application in medical science" A Critical Review, International Journal of Pharmaceutical Science and Research, Vol 10(9), 3993-4005, Sep 2019
- 6. Dr. SabnamZahir, Dr. TamalKanti Pal, Dr. Abhijit Sengupta, Dr. Shibendu Biswas, Dr. Debarshi Jana, Dr. Shyamal Bar, **Tamalika Chakraborty** and Dr. Vamshi Krishna Balla, "Creation and Evaluation of Microbial Biofilm induced microscopic enamel demineralization-An Invitro Study" International Journal of current Research, Vol 11, Issue 01, pp 618-622, January 2019
- Sumon Das, Tamalika Chakraborty," A review on Green synthesis of Silver Nanoparticles and zinc oxide nanoparticles from different plant extract and their antibacterial activity against multi-drug resistant bacteria"Journal of Innovation in Pharmaceutical and Biological Sciences Vol 5 (4), 63-73, 2018
- Nabodita Sinha, Tamalika Chakraborty, Abhijit Sengupta, "Synthesis of Silver nanoparticles using green sources and comparative analysis" *International Journal of Nanoparticles*, Vol.9, No 4, 265-286, 2017

### **3. BOOK CHAPTER PUBLISHED**

#### Dr. SWATI CHAKRABORTY

 Developing Microbial whole cell Biosensor for detection of heavy metal pollution in water. December 2018. Biotechnology and Nature. Publisher- Kabitika, Page-260. ISBN No.:- 978-93-87602-66-3

### 4.CONFERENCE PROCEEDINGS

#### Dr. SWATI CHAKRABORTY

- P.Meghna Rao Swati Chakraborty "Compparative and efficacy study of Biodegradation of the petroleum diesel, and engine oil along with the production of Biosurfactants by the soil degrading bacteria isolated from oil contaminated soil"9th International Science Conference World Science Congress at Gandhi Bhawan, JU dated 28/2/2020 to29/2/2020 Stood 1st position in poster presentation
- 2. P.Meghna Rao, **Swati chakraborty** "Review on application of Rhamnolipid (Biosurfactant) in the formulation of Detergent"33rd Annual Convention of Indian Pharmacy graduates Association, Biswabangla dated 17th August 2019
- 3. Ankita Dey, **Swati Chakraborty** "Antibiofilm activity of ethanolic extract of betel leaf on oral biofilm"Algae, fungi, plant Systematics to application (AFPSA 2020) 24th January to 25th january 2020.
- 4. Rikparna Ghosh Dastidar, **Swati Chakraborty** "Heavy metal skin Diseas and its manifestations"International Conference on 'Present Scenario Of BIOAVAILABILITY and BIOEQUIVALENCE studies and its Regulatory Affairs"AtDr.TrigunasenAudirorium ,Jadavpur University 12th Feb 2020
- 5. Priyanka Singh, **Swati Chakraborty** "Household E waste management:A surveyReport"3rd international conference on waste management RECYCLE 2020 13th 14th feb 2020.
- 6. Ankita Dey. **Swati Chakraborty** "A review on Antibiofilm Effect of Phytocompounds on bacterial biofilm"33rd Annual Convention of Indian Pharmacy graduates Association ,Biswabangla 17th august 2019
- 7. ChaitiMukherjee ,**Swati Chakraborty** "Encapsulation of probiotic microsphere with antioxidnt property for imparting drug delivery to the colon"33rd Annual Convention of Indian Pharmacy graduates Association , Biswa bangla17th august 2019

- 8. ChaitiMukherjeee, **Swati Chakraborty**," Isolation of Different probiotic bacterial strains from human breast milk as well as from cow milk and to check there activity on human health"9th International Science Conference World Science Congress at Gandhi Bhawan, JU Stood 2nd position in poster presentation
- 9. Sumitasaha, **Swati Chakraborty**, "Comparative study of silver nanoparticles from different sources on the biofilm bacteria"9th International Science Conference World Science Congress at Gandhi Bhawan, JU 28th to 29th Feb 2019 3rd position in poster presentation
- 10. Oral Presentation 2019 Applications of Microbial Biosensor for using analysis of environmental pollutant and it's seasonal impact. International conference on 6<sup>th</sup> Biodiversity Meet. Organized by ISI Kolkata 14<sup>th</sup> February to 16<sup>th</sup>February, 2019
- 11. Dutta, S and Chakraborty, S. 2019 Isolation of Endophytic Bacteria and it's interaction with plants secondary metabolites. International conference on 6<sup>th</sup> Biodiversity Meet. Organized by ISI Kolkata 14<sup>th</sup> February to 16<sup>th</sup>February, 2019
- 12. Firdous, K and Chakraborty, S. 2019 Plant Diversity of East Kolkata Wetland and formulation of Bio pesticide : An approach to ecological balance..International conference on 6<sup>th</sup> Biodiversity Meet. Organized by ISI Kolkata 14<sup>th</sup> February to 16<sup>th</sup>February, 2019
- Oral Presentation on In climate change Carbon Sequestration roles of SunderbanMangrove.International conference Livelyhood Promotion, Biodiversity conservation and Social Security in Indian Sunderbans.Organized by Visva-BharatiPage-117, 7<sup>th</sup> December 2018.
- 14. .Dutta, S and Chakraborty, S. 2018 Determination of qualitative phytochemical properties of *Bacopamonnieri*leaves collected from a ramsar site, EKW,National seminar on 'Advancement in Green Technology for Controlling and Managing Current Environmental Pollution'. Organized by Kalayani University 22<sup>nd</sup> and 23<sup>rd</sup>March, 2018.
- 15. Firdous, K and Chakraborty, S. 2018 Optimization of Chitosan producing bacteria from the soil sample of East Kolkata Wetland area and it's antibacterial effect., National seminar on 'Advancement in Green Technology for Controlling and Managing Current Environmental Pollution'. Organized by Kalayani University 22<sup>nd</sup> and 23<sup>rd</sup>March, 2018.
- Dutta, S and Chakraborty, S. 2017. Isolation and purification of chromium and nickel resistant endophytic bacteria. Frontiers in Biotechnology, Chapter II, Department of Biotechnology, St. Xavier's College (Autonomous), Kolkata, 20 pp-17.

- Firdous, K and Chakraborty, S. 2017. Cheap sources of chitosan from bacterial species. Frontiers in Biotechnology, Chapter II, Department of Biotechnology, St. Xavier's College (Autonomous), Kolkata, 4 pp-8
- Oral presentation "Bioremediation Approach of Agricultural Soil: Kolkata Wetland Area". International Conference on Emerging technologies in Agricultural and food engineering (ETAE2016) IIT kharagpur, IIT kharagpur27<sup>th</sup>-30<sup>th</sup> December 2016
- 19. Khaledafirodus, Swati Chakraborty A Natural Polymer Chitosan Producing bacteria from plant Sources, International Conference on the Green Planet Past Present Future Organized by Department of Botany, University of Calcutta Dec 21<sup>st</sup>-23 2016
- 20. Subhayandutta, Swati Chakraborty Effect of Environmental Pollution on Chromium resistant Bacteria by Efflux Mechanism International Conference on the Green Planet Past Present Future, Organized by Department of Botany, University of Calcutta Dec 21<sup>st</sup>-23 2016
- 21. **Chakraborty Swati**, " Rhizosphere Microbes interaction in medicinal plants of East Kolkata Wetland" National Seminar on Plant and Microbe: Diversity and Utilization, March 19-20<sup>th</sup> 2016, Department of Botany, Visva-Bharati.
- 22. **Chakraborty Swati**; Srivastava. R.C,Agarwal , K.M. " Threat on natural sustainability of the ecosystem and integrated management of resource recovery practice in east Kolkata wetland area" International Conference on Social Issues and Social Work: Public and private 29<sup>th</sup> January 2016
- **23. Chakraborty Swati**, "Effect& Toxicity Relationships to Fish Production and Human health: Implication of management Waste water in East Kolkata Wetland" International conference Frontiers in Modern Biology 2015 IISER Kolkata
- 24. **Chakraborty Swati**; "Effect of heavy metal & potentiality for the Production of rice: A sustainable Development of East Kolkata Wetland" International Conference 3<sup>rd</sup> India Biodiversity Meet Nov 16-18, 2015
- 25. Chakraborty Swati; " Effect& Toxicity relationships to fish production and human

health: Implication for management Waste water in East Kolkata Wetland" Frontiers in Modern Biology Dec 5-6<sup>th</sup>, 2015

- 26. Nandi, Swati; Srivastava, R.C; Agarwal, K.M. "Approach of modeling to assess the long term effect of climate change ability on water quality and algae in east kolkata wetland" in National conference on Frontiers in Algology and Algal Biotechnology[NCFAAB], on 15<sup>th</sup> -17<sup>th</sup> Nov 2013.
- 27. Nandi, Swati; Srivastava, R.C; Agarwal, K.M. "Sustainable development and demographic assessment of east kolkata wetland ecosystem" in the 11<sup>th</sup> Seminar on Wetlands & Biodiversity Conservation and Role of Education for Sustainable Development by Indian Environmental Society. 2013
- 28. Nandi, Swati "Sustainability & productivity in thrust on natural ecosystem due to urbanization in the context of east kolkata wetland" in conference India Biodiversity Meet in Indian Stastical Institute, kolkata, on 14<sup>th</sup>-16<sup>th</sup> March 2013.
- 29. Nandi, Swati; Srivastava, R.C ,Agriculture practice at east kolkata wetland: environmental assessment" National seminar on 'Echos of Silent Spring: Human Impact on Environment" to be held at Department of Environmental Studies, Visva –Bharati University, Santiniketan on 9<sup>th</sup> March, 2013.
- 30. Nandi, Swati; Srivastava, R.C; Agarwal, K.M. Heavy metal contamination in soils and paddy crop in &around east kolkata wetland: implication on human health", Seminar of National academy of Sciences, Nov 2012 in 82<sup>nd</sup> Annual session & National symposium on Nano-Science & Technology, at BHU Varanasi.
- 31. Nandi, Swati; Sarkar, Amitava ,"Heavy metals accumulation in soil and distribution pattern in *Brassica Oleracea*" National Symposium attend on "Plant Microbe Interactions and Crop Health Management" at Visva Bharati on October 2012,
- 32. Nandi, Swati; Srivastava, R.C "Heavy metal accumulation in irrigation water, soil and bioaccumulation in human through vegetables as daily intake" in National Academy of Sciences.2011
- 33. Nandi, Swati "Prospect of waste water management by duckweed based fish pond system" 2<sup>nd</sup> International Conference on Soild Waste Management at Jadavpur University, Nov, 2011

- 34. Srivastava, R.C ; **Nandi, Swati** "Performance evaluation of certain STPs in kolkata metropolitan area & challenges in waste water management" at the National Seminar, IPHE&IWWA, Kolkata, 2011.
- 35. Nandi, Swati; Roy P "Endophytic association with plant and it's resistant to heavy metal", Department of Botany, UGC Centre for Advanced study. Burdwan University, March 19<sup>th</sup> 20<sup>th</sup>, 2010, P-110
- 36. Nandi, S, "Bioremediation by aquatic macrophytes clean up the heavy metals in Water Ecosystems" International Conference, Department of Env Sc, Burdwan University, Gr VI, 6.11, P.127.
- Nandi, Swati; Sarkar, Amitava"Reduction of hazardous substance of E-Waste resist ecological disaster", Recent Advances in Environmental Science & Technology, BHU, Pg-75, 2009
- 38. Nandi, Swati; Sarkar, Amitava ;Agarwal,K.M "E-Waste scenario : come up with biotechnological solution" – UGC Sponsored National Seminar on Biotechnology for the 21<sup>st</sup> Century : New Horizons, Bhopal, Pg-89, 2009
- 39. Nandi, Swati; Sarkar, Amitava"E-Waste a growing challenge to ecological and human health", ICONSWM, P-36, 2009
- 40. **S Nandi**, Swati; Sarkar, Amitava ;Agarwal,K.M ,"Phytoremediation of toxic metal of E-Waste clean up the environment", FOSET, DST, Govt. of West Bengal, Department of Higher Education, Department of IT, Govt. of West Bengal, Pg-63, 2009.
- 41. **Nandi, S**"Persistent organic pollutant consequences on biodiversity" DBT Sponsored. National Conference Biodiversity & Agribiotechnology JIIT, Pg -56, 25<sup>th</sup>April, 2009.
- 42. Nandi, Swati; Sarkar, Amitava"E-Waste a emerging pollutants of present world" International conference – emerging Technologies in Environmental Science and Engineering, by A.M.U. and The University of Toledo Ohi O, U.S.A. 19 -21<sup>st</sup> October, 2009.

- 43. **Nandi Swati**, Trends in Cellular and Molecular Biology Journal, JNU: Compare the efficacy of different serological & serum protein profile study for diagnosis of viral disease peste des petitis ruminants (PPR) in goats
- 44. Chakraborty, j L; Nandi S.2007. Sustainable dairy development needs technology upgradation ICFOST Indian institute of Technology (IIT)
- 45. Nandi, Swati ; Agarwal K.M The E-waste: Threat to biodiversity ,Indian Stastical Institute,Kolkata2007
- 46. Published article on E-waste in Saturday Times Date: 24th March, 2007
- 47. Nandi, S;Agarwal K.M ;Sarkar A; Dutta K. Ashoke.2007.E-waste managementbiotechnological

### DR. BHASKAR CHOWDHURY

1. Antioxidant and Electrochemical Properties of Edible Mushroom by Meghna Dhara, **Bhaskar Chowdhury** in an International Conerence AFPSA 2020 ON 24-25th Jan 2020 organized by Dept of Botany, CU

2. Effect of drought stress on growth and metabolism in Tomato seedling by Debapriya Bhattacharjee, **Bhaskar Chowdhury** in an International Conerence AFPSA 2020 ON 24-25th Jan 2020 organized by Dept of Botany, CU

3. Effect of arsenic toxicity on wheat and its possible melioration by selenium by Arijit Sankar Mondal, **Bhaskar Chowdhury** in an International Conerence AFPSA 2020 ON 24-25th Jan 2020 organized by Dept of Botany, CU

4. Effect of salinity stress on growth and metabolism in mungbean and its ameloration by hardening techniques by Ritu Sharma, **Bhaskar Chowdhury** in an International Conerence AFPSA 2020 ON 24-25th Jan 2020 organized by Dept of Botany, CU

5. Bioplastic- an important tool to combat environmental pollution by Suparna Ghosh, **Bhaskar Chowdhury** in an International Conerence on Waste Management 2020 on 13-14th Feb 2020 organized by IIT, Guwahati.

6. How cyanide fishing and aquarium trade are devastating coral reefs and tropical fish by Arka Mondal, **Bhaskar Chowdhury** in a National Conference on Conservation of Biodiversity and Sustainable use of Biological resources 7. Using marine algae as bioindicator for anthropogenic nutrient pollution in Hawaiin coastal areas by Mouli Bisws, **Bhaskar Chowdhury** in a National Conference on Conservation of Biodiversity and Sustainable use of Biological resources

8. Dengue in a changing Climate by Tania Mukherjee, **Bhaskar Chowdhury** in a National Conference on Conservation of Biodiversity and Sustainable use of Biological resources

### TAMALIKA CHAKRABORTY

- 1. **Tamalika Chakraborty**, Zebra fish Model: A new approach towards research in Autism Spectrum of Disorder, Sammilit 2020, 10<sup>th</sup> to 12<sup>th</sup> January 2020
- Sayoni Jana, Tamalika Chakraborty, Genome analysis in the treatment of neuro developmental disorder, International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- **3.** Sohini Sinha, **Tamalika Chakraborty**,Recent advancement of drug delivery system for drug resistant cancer,International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- 4. Sharmishtha Bhandari, Tamalika Chakraborty, Formation of Dental Enamel and Implication Of Oral Health and Disease. International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- 5. Shagufa Sheikh, Tamalika Chakraborty, Review on Antibacterial Peptides Isolated from Marine Archaebacteria and their characterisation. International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- **6.** Rimita Roy, **Tamalika Chakraborty**,Origin & Proliferation of Multiple Drug Resistant Microorganisms.International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- Swarupa Dey, Tamalika Chakraborty, Prospect of plastic eating bacteria in efficient bioremediation process. International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- Aheli Mukherjee, Tamalika Chakraborty, Recent Progress on Nanoparticle based Drug Delivery Systems for Cancer Treatment. International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- ManjarimaGanguly, Tamalika Chakraborty,Gene Therapy in Cardiovascular DiseaseInternational Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- Md Afridi Faisal, Tamalika Chakraborty, Stem cell therapy for neurodevelopmental disordersInternational Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University

- 11. Chanda Malakar, Tamalika Chakraborty, Application of CRISPR/CAS9 FOR CANCER THERAPY International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- 12. Ramandeep Kaur, **Tamalika Chakraborty**,Recent Advancement in GENE THERAPY for the treatment of cancerInternational Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- Moumita Das, Tamalika Chakraborty, Plant Diseases Management Facilitate by modern technologyInternational Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- 14. Anjali Singh, **Tamalika Chakraborty**, Enhance delivery of DNA based vaccines and immunotherapeuticInternational Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- 15. Olivia Paul, Tamalika Chakraborty,Drug targeting to infectious diseases by nanoparticlesunotherapeuticInternational Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- 16. MonaliSaha, Tamalika Chakraborty, Review on Antibacterial soap preparation by using probiotic bacteria, International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- 17. Rishyani Mukherjee, **Tamalika Chakraborty**, Review on the survey of anti-dandruff activity of herbal zinc oxide nanoparticle, International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- 18. NeeldipGanguly, Tamalika Chakraborty, Review of zebrafish model as a robust tool for screening of drugs with anti-psycotic activity. International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- Nilanjan Ray, Tamalika Chakraborty, Different Approaches to increase the rate of Biodiversity in Drought Facilitated area using Genetic Methodologies.27<sup>th</sup> West Bengal State Science and Technology Congress 2020, 28<sup>th</sup> -29<sup>th</sup> Feb 2020.
- 20. Nilanjan Ray, **Tamalika Chakraborty**, Review on different approaches to increase biodiversity using genetic technologies. STEM 2020, 5<sup>th</sup> Feb 2020
- 21. DebomitraBasu, TamalikaChakraborty,Recent Advancement in Biomimetic nanosystem in the treatment and diagnosis of tumor, International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University
- 22. Megha Poddar, **TamalikaChakraborty**, Review on application of NAC transcription factor , International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University

23. RushiParmar, **TamalikaChakraborty**, Review on impact of Genetically Modified Food on Human Health, International Conference on Present Scenario of Bioavailability & Bioequivalence Studies & its Regular Affairs, 12<sup>th</sup> Feb 2020, Jadavpur University

24. Rumela mete, **Tamalika Chakraborty**, "Review on the Advancement of the design of Microbial fuel cell (MFC)" Pharma Techoies Need Transformation, IPGA Bengal Branch & IPGA Welfare Trust.17<sup>th</sup> August 2019.

25. Sudeshna Chattopadhyay, **Tamalika Chakraborty**, "Review on Therapeutic Application of Monoclonal Antibody and Antibody Engineering in Cancer Treatment")" Pharma Techoies Need Transformation, IPGA Bengal Branch & IPGA Welfare Trust.17<sup>th</sup> August 2019.

26. Ananya Das, **Tamalika Chakraborty**, Nanoparticles: A New Era Approach for Food Preservation Pharma Techies Need Transformation, IPGA Bengal Branch & IPGA Welfare Trust.17<sup>th</sup> August 2019.

27. Ananya Das, **Tamalika Chakraborty**, Recent Advancement in Implication of Nanoparticles in Preservation of Food, 9<sup>th</sup> International Science Conference (World Science Congress) 28<sup>th</sup> -29<sup>th</sup> February, 2019

**28.** Dalia Banerjee, **Tamalika Chakraborty**, Phage Therapy; battle against multi drug resistant bacteria: goes on Pharma Techies Need Transformation, IPGA Bengal Branch & IPGA Welfare Trust.17<sup>th</sup> August 2019.

**29.** Dalia Banerjee, **Tamalika Chakraborty**, Isolation of Indole Acetic acid Producing Bacteria From Rhizospheric soil and its effect on plant growth, 9<sup>th</sup> International Science Conference (World Science Congress), 28<sup>th</sup> -29<sup>th</sup> February, 2019

30. Sudeshna Chattopadhyay, **Tamalika Chakraborty**, Plant Derived Silver Nano; a weapon against phytopathogenic fungi, 9<sup>th</sup> International Science Conference (World Science Congress): 28<sup>th</sup> -29<sup>th</sup> February, 2019.

31. Sujoy Sarkar, **Tamalika Chakraborty**, Isolation, Characterization of Rhizobium and Mesorhizobium of pea (*Pisum sativum*) and Brownchickpea (*Cicer arietinum*) and stress response and Biofertilizer production.

32. Sujoy Sarkar, **Tamalika Chakraborty**, Isolation, Characterization of Rhizobium and Mesorhizobium associated with Pisum sativum L. Pea and Ciceraeritinium L. Chick pea and their stress response to heavy metals and high salt concentration. Conference on Drug Design and Technology, Royal Society of Chemistry.

33. Kanchan Chetri, **Tamalika Chakraborty**, Isolation of Multi Drug Resistant Bacteria, and Determination of Antibacterial Activity of *Terminalia chebula* against *Staphylococus* 

*aureus*, Pharma Techies Need Transformation, IPGA Bengal Branch & IPGA Welfare Trust.17<sup>th</sup> August 2019.

34. Nilanjan Ray, **Tamalika Chakraborty**, Different Approaches to increase the rate of Biodiversity in Drought Facilitated area using Genetic Methodologies, 4<sup>th</sup> Regional Science and Technology Congress, 23<sup>rd</sup> -24<sup>th</sup> Dec 2019

35.Ipshita Choudhury, **Tamalika Chakraborty**, Review on Phage Therapy on Multi Drug Resistant Tuberculosis National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques. 14<sup>th</sup> September 2019

36. Koyena Majumder, **Tamalika Chakraborty**, Review on the manufacturing of artificial human prions to cure brain disorders. National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques

37. Sudeshna Datta, **Tamalika Chakraborty**, Review on the impact of Nanotechnology in overcoming multi drug resistance National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques, 14<sup>th</sup> September 2019.

38.Shreya Saha, **Tamalika Chakraborty**, Review on emerging technologies of nonmaterials to enhance water security, National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques, 14<sup>th</sup> September 2019

39. .Dona Roy, **Tamalika Chakraborty**, Genome Editing Tool could Increase Cancer Risk, National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques, 14<sup>th</sup> September 2019

40. Camellia Roy,**Tamalika Chakraborty**, National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques, A Review on Translational Perspective of Different human derived cancer cell lines on different anticancer drugs., 14<sup>th</sup> September 2019.

41. Kanchan Chetri,**Tamalika Chakraborty**, Review on lectin activity against Human Immuno deficiency Virus National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques, 14<sup>th</sup> September 2019.

42. Suman Das,**Tamalika Chakraborty**, Green synthesis of zinc oxide nanaoparticles and its anti bacterial activity against pathogenic bacteria. National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques, 14<sup>th</sup> September 2019

43. Prajna Mukhopadhyay, **Tamalika Chakraborty**, Review on the utilization of Paneer Whey in cultured buttermilk, National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques, 14<sup>th</sup> September 2019

44. Gargi Mosha**, Tamalika Chakraborty**, Review on comparative study on native TPA and Engineered TPA against Myocardial infaraction, National seminar on Pharmacy and health care, Traditional Knowledge to Modern Techniques, 14<sup>th</sup> September 2019

45. Debleena Seal,**Tamalika Chakraborty**, Isolation of bacteriocin from *Lactobacillus*sp and its antibacterial activity at different temperature, Science without boundaries, organized by HiralalMazumder Memorial College for Women, 29<sup>th</sup> January 2019.

46. Koyena Banerjee, **Tamalika Chakraborty**, Use of some chemicals and drugs in live ornamental fish transportation, Science without boundaries, organized by HiralalMazumder Memorial College for Women, 29<sup>th</sup> January 2019.

47.Purbashree Banerjee,**TamalikaChakrborty**, Review on extraction of silver by Chemical and Microbiological Method, Science without boundaries, organized by HiralalMazumder Memorial College for Women, 29<sup>th</sup> January 2019

48.Shramana Sen,**Tamalika Chakraborty**, Recent Advancement in the application of Natural Pigment, Science without boundaries, organized by HiralalMazumder Memorial College for Women, 29<sup>th</sup> January 2019.

49. Sujoy Sarkar, **Tamalika Chakraborty**, Review on Isolation, Characterization of Rhizobia from Rhizosphere of Pea and Brown Cheak Pea and stress response in Rhizobia, Science without boundaries, organized by HiralalMazumder Memorial College for Women, 29<sup>th</sup> January 2019

50. **Tamalika Chakraborty**, Sumana Chatterjee, Lopamudra Datta, Abhijit Sengupta, Antimicrobial activity of Terminalia bellerica (Gaertn.)Roxb. Against Multi Drug Resistant *Staphylococcus aureus*, International Conference on Medical Ethics and Professionalism,NIER, 3<sup>rd</sup> November 2018

51. **Tamalika Chakraborty**, Sumana Chatterjee, Lopamudra Datta and Abhijit Sengupta, Antibacterial activity and chemical evaluation of *Terminalia bellerica*Roxb against Multi Drug Resistant *Staphylococcus aureus*, 8<sup>th</sup> International Science Conference, Jadavpur University, 21<sup>st</sup> to 23<sup>rd</sup> November 2018

**52.** Jeenatara Begum, **Tamalika Chakraborty**, Abhijit Sengupta, Review on recent advancement of current technologies for decolorisation of textile waste water: Perspective for Environmental Biotechnology, "2<sup>nd</sup> Conference on "World Earth Day"" 22.04.17-24.04.17, JADAVPUR UNIVERSITY.

53. Production of Microbial Fuel cell: A Promising Technology for Bioenergy and Waste water Treatment" **Tamalika Chakraborty**, Arindam Ganguly , Jeenatara Begum, Abhijit Sengupta, 2<sup>nd</sup> World Earth Conference , World Science Congress. 22-24<sup>th</sup> April 2017

54. Flavonoid and alkaloid enriched fractions of *Terminalia bellerica*(Gaertn.) Roxb as Antimicrobial agents against Multi Drug Resistant *Staphylococcus aureus*, **Tamalika Chakraborty**. Sumana Chatterjee, Lopamudra Datta, Abhijit Sengupta., National Symposium on Ashwagandha and Ethno pharmacology conclave. 9<sup>th</sup>-10<sup>th</sup> September 2017.

55. "Antimicrobial activity of flavonoid enriched fractions from *Terminalia bellerica* against Multi Drug Resistant*Staphylococcus aureus*, **Tamalika Chakraborty**, Sumana Chatterjee, Lopamudra Datta, Abhijit Sengupta, World congress on Drug discovery and Development Summit 2017, 20<sup>th</sup>-22<sup>nd</sup>September 2017.

56. Review on phytoremediation of ewaste Indrila Mukherjee, Tamalika **Chakraborty**, Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

57. Review on various medicinal plants with Anti-Tumorigenic and anti-leukemic properties Reshmi Chowdhury, **Tamalika Chakraborty**, Conservation of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

58. Review on the expression of secondary metabolites from medicinal plants by micro propagation. Sushmita Nandy, **Tamalika Chakraborty**. Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

59. Marine viruses discovered via metagenomics; why we need to know more. Renu Kumari Sha, **Tamalika Chakraborty**, Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

60. Green synthesis of metallic nanoparticles and its applications: A Critical Review Abhishek Chakraborty, **Tamalika Chakraborty**, Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup>September 2017.

61. Review on organization of cis-acting regulatory elements in osmotic and cold-stress responsive promoters: Simona Basack, **Tamalika Chakraborty**, Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

62. Advanced use of molecular tools in Identification and analysis of Biodiversity Arijit Paul, **TamalikaChakroborty**, Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

63. Review on the Isolation and Identification of Dye-degrading Bacteria Adrija Bhattacharjee, **Tamalika Chakraborty**, Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

64. Use of in silico tools for management, analysis and better understanding of Biodiversity Subha Mukherjee, **Tamalika Chakraborty**, Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

65. Review on different approaches to increase the rate of biodiversity in drought facilitated areas using Genetic Methodologies Nilanjan Ray, **Tamalika Chakraborty**, Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

66. Review on different approaches to increase the rate of biodiversity in drought facilitated areas using Genetic Methodologies, Nilanjan Ray, **Tamalika Chakraborty**, Conservation of biodiversity and sustainable use of biological resources, Guru Nanak Institute of Pharmaceutical Science and Technology, 1<sup>st</sup> September 2017.

67. Antimicrobial activity of *Terminalia bellerica* against Multi Drug Resistant *Staphylococcus aureus*, **Tamalika Chakraborty**, Sumana Chatterjee, Lopamudra Datta, Abhijit Sengupta, "Drug and disease: Role of Pharmacists and doctors" Jointly organized by Centre for Advance Research, Department of Pharmaceutical Technology JU & IAPST, 16<sup>th</sup> January 2016

68. "Silver and Gold Nanoparticles as potential antibacterial agents." Monami Ghosh, **Tamalika Chakraborty** "Current innovation in Biotechnology for Human welfare" GNIPST sponsored by West Bengal State Council of Science and Technology and catalysed by DST New Delhi., 2016

69. Strain improvement of Industrial Lactic acid bacteria without use of Recombinant DNA Technology, Sujoy Das, **Tamalika Chakraborty**, "Current innovation in Biotechnology for Human welfare" GNIPST sponsored by West Bengal State Council of Science and Technology and catalysed by DST New Delhi, 2016

70. Antimicrobial activity of *Terminalia bellerica* against Multi Drug Resistant *Staphylococcus aureus*, **Tamalika Chakraborty**. Sumana Chatterjee, Lopamudra Datta, Abhijit Sengupta, "Drug and disease: Role of Pharmacists and doctors" Jointly organized by

Centre for Advance Research, Department of Pharmaceutical Technology JU & IAPST, 16<sup>th</sup> January 2016

71.Bacterial Protein Quest for Cancer treatment, Shatabisha Bhattacharya, AsisBala, **Tamalika Chakraborty**, Abhijit Sengupta, National Seminar on Scientific Validation of Traditional Application of Natural Products, Indira Gandhi Institute Of Pharmaceutical Sciences, Bhubaneshwar, 2014

72. Antimicrobial activity of Indian Medicinal Plant on Multi Drug Resistant Bacteria, **Tamalika Chakraborty**, Dr Sumana Chatterjee, Dr Lopamudra Datta, Dr Abhijit Sengupta, 1<sup>st</sup> convention: Society for Ethnopharmacology, India 2014, Nov 29-30, 2014, SNPS- JU, Kolkata

73. Extracellular bacterial protein(s): A new target for the prevention of Ehrlich's Ascites carcinoma. Shatabisha Bhattacharya, AsisBala, **Tamalika Chakraborty**, Abhijit Sengupta. 5<sup>th</sup> International Conference on Stem cells and Cancer (ICSS-2014), 8-10 Nov., 2014. JNU, New Delhi,2014

# **5. AWARDS AND RECOGNITION**

## Dr. SWATI CHAKRABORTY

- 1. Acting as Principal Investigator under the project of Environment Department, GOVT of West Bengal Development of Biological database of Microbes Diversity of East Kolkata Wetland Area.
- 2. Acted as Principal Investigator under the project Identification of heavy metal chromium Cr(VI) & Ni Nickel tolerance bacteria to develop microbial biosensor and Role on Secondary Metabolic of medicinal plant *Bacoapamonnieri* in metal contaminated soil of East Kolkata wetland under Department of Science &Technology
- **3.** Theme Speaker World Environment day Organized by BNCCI & NEERI on Air Pollution, 2019
- 4. Invited as a Speaker in a Seminar on Beating the Plastic pollution on World Environment Day 2018 Under SwachhataAbhijanAwarness Drive organized by NSIC 2018
- Organized as Convener one day National Seminar on Biodiversity Conservation and Sustainable use of Biological Resources jointly with West Bengal Biodiversity Board.
- 6. Received Best Faculty Award 2015 in JIS SAMMAN
- 7. Organized as **Convener** National Science Day with **Department of Science** & **Technology**, Current Innovations in Biotechnology in Human welfare.
- 1<sup>st</sup>prize awarded for the oral presentation in India Biodiversity Meet'2014, ISI Kolkata

#### Dr. BHASKAR CHOWDHURY

1. Qualified **State Eligibility Test (SET)** for Assistant Professorship at College and University conducted by West Bengal College Service Commission.

#### TAMALIKA CHAKRABORTY

1. Appreciation Award for making New Forays in the area of Research and Development by JIS GROUP OCT 2019.

2. Certificate of Appreciation in Teacher Innovation Award, Zero investment innovations for education Initiatives Sri Aurobindo Society New Delhi, Sept 2019.

3. One of the finalists of SMART TEACHER AWARD 2018 organized by JIS GROUP.

4. Achieved best speaker award of Kolkata Health Care Summit-2017 Organized by Raytheon Health Care

5. Achieved first prize in Poster Presentation held in the 2<sup>nd</sup> International World Earth Conference, organized by World Science Congress

6. Achieved award for best Report among the participants in AICTE sponsored QIP Refresher course on the theme " Direction of Pharm Research to achieve Pharma excellence by 2025" organized by QIP NODAL CELL JADAVPUR UNIVERSITY)

7. Achieved First Class First in B.Sc. Microbiology from Burdwan University in the year 2008