DR. NANDITA NATH

M.Sc. and Ph.D. in Microbiology along with 2 years of hand-on Industrial Experience.

RESEARCH INTERESTS:

Fermentation & Industrial Microbiology: Specializing in the optimization of fermentation processes and industrial applications, focusing on enhancing product quality and yield through innovative microbiological techniques.

Yeast Genomics: Exploring the genetic makeup of yeast strains to understand their roles in fermentation, biofuel production, and industrial applications, aiming to uncover new strains with unique properties for diverse biotechnological uses.

RESEARCH PUBLICATIONS:

- Nandita Nath, Sushanta Ghosh, Lovely Rahaman, David Lalbhovika Kaipeng & BK Sharma, An overview of traditional rice beer of North-east India: ethnic preparation, challenges and prospects, Indian Journal of Traditional Knowledge, Vol 18 (4), October 2019, pp 744-757.
- Nandita Nath, Sushanta Ghosh, Lovely Rahaman, Senthil Kumar Nachimuthu and Bipin Kumar Sharma, *Pichia kudriavzeviia* NN/SG ll potential yeast strain isolated from Gora- a rice based fermented beer traditionally prepared by the indigenous Koloi tribe of Tripura; J Ecosys Ecograph 2018, Volume 8 DOI: 10.4172/2157-7625-C3-038.
- Nath N, Sharma BK, Traditional Medicines used in Respiratory Tract Infection by Some Ethnic Tribes of Tripura-Survey; Journal of Natural & Ayurvedic Medicine, ISSN: 2578-4986, Volume 4 Issue 4 DOI: 10.23880/16000272.
- Sushanta Ghosh, Surajit De Mandal, **Nandita Nath**, David L. Kaipeng, Lovely Rahaman, Senthil Kumar Nachimuthu and Bipin Kumar Sharma, Isolation and Partial Evaluation of a Potential Indigenous Yeast Strain Pichia kudriavzevii from a Traditional Rice Beer—"Gora" Prepared by the Koloi Tribes of Tripura. Advances in Microbiology, 2019, 9, 824-841.
- Lovely Rahaman, Sushanta Ghosh, **Nandita Nath**, Bipin Kumar Sharma; Pneumococcal Biofilms and Their Intervention Strategies, International Journal of Pharmacy and Pharmaceutical Sciences, ISSN-0975-14, Vol 10, Issue 3, Jan 2018.
- Lovely Rahaman, Sushanta Ghosh, **Nandita Nath**, Bipin Kumar Sharma; Antibiofilm effect of Adhadota vasica Nees. Extracts in comparison with commercial vesicine on *Streptococcus*

pneumoniae: IOSR Journal of Pharmacy and Biological Sciences, Vol.4, issue2, ver.2, March-Apr.2018.

- Lovely Rahaman, Sushanta Ghosh, **Nandita Nath**, Bipin Kumar Sharma; Extracts of Adhadota vasica Nees. And vasicine inhibits biofilm formation of *Klebsiella pneumonia*: IOSR Journal of Pharmacy and Biological Sciences, Vol.13, issue2, ver.1, March-Apr.2018.
- Sushanta Ghosh, Lovely Rahaman, David Lalvohbika Kaipeng, Dipankar Deb, **Nandita Nath**, Prosun Tribedi, Bipin Kumar Sharma, Community-wise evaluation of rice beer prepared by some ethnic tribes of Tripura; J Ethnic Foods 2016; 3: 251-256.
- D L Kaipeng, K Karmakar, S Ghosh, L Rahaman, N Nath, B K Sharma, Huanglongbing: Causal disease for decline of Citrus reticulata and Citrus macroptera production in Tripura, northeast India, DOI: 10.4454/jpp. v99i1.3834.
- Bipin Kumar Sharma, Ramashanker, Sushanta Ghosh, Lovely Rahaman, **Nandita Nath** and David Lalvohbika Kaipeng, Plant based folk treatments from Northeast India for jaundice. (An overview) ISSN 2320-3862, JMPS 2016; 4(5): 234-247.

BOOK CHAPTER:

Nandita Nath & Bipin Kumar Sharma, Ju-A Traditional Alcoholic Beverage of Halam Tribe of Tripura; Emerging Trends in Scientific Research, International Book of Multidisciplinary Studies, Akinik Publication, New Delhi, Volume-3, Page no.159-168.

SEMINAR/CONFERENCE/WORKSHOP/TRAINING PROGRAM PARTICIPATED:

- Presented a research paper in 2nd International Conference on Environmental Sustainability and Climate Change held on August 28-29, 2020, paper entitled "Wickerhamomyces anomalous NN/BKS/N1 high potential aboriginal yeast strain isolated from Chuwan- a starter culture cake of fermented rice beer of Noatia tribe of Tripura."
- Presented a research paper in 2nd International Conference on Microbial Ecology & Ecosystems. It was held in Toronto, Canada on 11-12th July 2018, paper entitled "Pichia kudriavzeviia NN/SG ll potential yeast strain isolated from Gora- a rice based fermented beer traditionally prepared by the indigenous Koloi tribe of Tripura."
- Presented a research paper on North East Regional Research Scholars' Meet 2017(March 17-18, 2017) entitled "Comparative Analysis of Traditional Rice Beer Prepared by Four Major tribes of Tripura" held in Assam University, Silchar, India.
- Presented a research paper on International Conference on Contemporary Antimicrobial Research 2016(ICCAR-2016, November 14-17, 2016) entitled "Isolation, Characterization and Screening of Yeast Strains having antimicrobial properties from Traditional Rice Beer of Tripura, North East India" held in Assam University, Silchar, India.

 Presented a research paper on National seminar on Biodiversity for Sustainable Development (May 25-26, 2015) entitled "Isolation and Characterization of Yeast Strains from Fermented Alcoholic Beverages of Some Ethnic Tribes of Tripura, North East India" held at Tripura University, Suryamaninagar, Agartala, Tripura, India.

SEQUENCE PUBLICATION

NCBI, Gene Bank Accession Number- MK386865, MK386886, MK386887, MK386890, MK395445, MN396841, MN795456, MN795457, MN795580, MN795587, MN795588, MN795589, MN795590, MN795591, MN803423, MN803439, MN807052, MN807440, MN809216, MN809217, OQ093456 and OQ121155

SCHOLARSHIP/AWARD/RECOGNITIONS:

- Represented Bharat as an **Indian Youth Delegate** in Youth exchange program in China. organized by Ministry of Youth Affairs & Sports, Govt. of India, 2016.
- Certificate of Excellence, RIO+20 INDIA Program (iarc.res.in/rio), IARC Education & Outreach Division, iarc.res.in/rio

MEMBERSHIP/POSITIONS IN LEARNED ACADEMIC BODIES/ORGANIZATIONS:

Indian Science Congress (2015-2018)

OTHER INFORMATION:

• **Reviewer:** Asian Journal of Cardiology Research.