

## Department of Microbiology

### Faculty-wise Research Publications

#### Mr. N. C. Vadnere

1. Vadnere N.C. (2012-13). Proceeding. Evaluation of Antimicrobial properties of Piper betel leaf. National conference on New Insights of Microbial Biotechnology (NIMB). SSVPS's Late. Kmr. Dr. P.R. Ghogrey Science college, Dhule, 8/02/2013 to 9/02/2013. ISBN: 978-93-82528-81-4, Pp : 82-88. Microbiology
2. Dandi, Navin & Vadnere, Nilesh & Dandi, Bhagyashri & Chaudhari, AB. (2012). Fermentative performance of thermo- and osmotolerant ethanologenic yeasts from compost for bioethanol production using high gravity wort. Conference: XIX ISAF– International Symposium on Alcoholic Fuels
3. Vadnere N.C., Bhise D.A., Ravaya J.S. (2013). Isolation of a halophilic *Azotobacter* spp. from mangrove ecosystem for use as a biofertilizer in saline soils. Proceedings of New insights of microbial biotechnol. 146-152. ISBN 978-93-85828-81-4
4. Vadnere N.C. (2014). Awareness about Adverse Effect of Plastic among Residents of Khanda Colony. *Anugoonj*, Issue No. 03, Pp: 36-39 ISSN: 2345-9731
5. Vadnere N. C., Parab V.A., Vemula A.N. (2014). Isolation of Probiotic Microbe with Anti-gastrointestinal pathogen activity from fermented food sample. Proceedings of National Seminar on Expanding Panorama of Microbiology. ISBN- 978-93-83342-05-1
6. Vadnere N.C. (2015). Awareness about Biodiesel Production from Used Cooking Oil among Restaurant Owners in Panvel. *Anugoonj*, Issue No. 04. Pp: 35-38. ISSN: 2345-9731.
7. Vadnere N.C. (2015). Use of internet in higher education. Proceedings of national seminar on Role of best practices in quality enhancement and sustenance in higher education institution. 37-40. ISBN: 978-93-83342-14-3.

8. Vadnere N.C. (2016). Carbon Dioxide Sequestration by Palm Trees of C.K. Thakur Arts Commerce and Science College, New Panvel. *Anugoonj*, Issue No. 05, 2016 Pp: 41-44
9. Vadnere N.C., Mishra D.U. (2016). Microbiological solution to the problem of harmful algal bloom. Proceedings of National Seminar on Environmental Hazards and Problems: Issues and solutions. 53-56. ISBN: 978-93-89942-26-6
10. Vadnere N.C., Dutta R.B., Yagnik M.M., Devkar L.C., (2018). Actinomycetes rich cooked-food-waste compost for reclamation of saline and drought affected soil. *Scholarly res. J. for interdisciplinary studies*. V-7 (41), 119-123. ISSN 2278-8808
11. Vadnere N.C. (2017). Study of Digital Payment Methods and its Awareness among the citizens. Issue No. 06, ISSN: 2345-9731
12. Mhavarkar, S. R., & Vadnere, N. C. (2022). Use of silver nanoparticles for detection of arsenic trioxide contamination of water. *International Journal of Advanced Research in Science, Communication and Technology*. 2(4), 97-102. ISSN (Online) 2581-9429. <https://doi.org/10.48175/IJARSCT-3419>
13. Vadnere, N. C. (2023). Accounting for the ecological impacts of Navi Mumbai airport development and its effects on ecosystem assessment. *Utkal Historical Research Journal*. Vol.-36, No.1(III), 367-371. ISSN : 0976-2132
14. Vadnere, N. C., Vemula, A. N., & Subramanian, P. (2023). Exopolysaccharide (EPS) production and characterization from aquatic isolates. *JAC: A Journal of Composition Theory*, Vol.-16(7), 14-17. ISSN: 0731-6755.
15. Vadnere, N. C. (2023) Accounting for the ecological impacts of Navi Mumbai airport development and its effects on ecosystem assessment. *Utkal Historical Research Journal*. 0976-2132

**Mrs. N. P. Tidar**

1. N. P. Tidar. (2021). A study on detection of Adulteration in Milk sample collected from various regions of Panvel and its awareness among the residents. *Akshar Wangmay International Research Journal*. 2229-4949.
2. Nilima Tidar, Saloni Mhavarkar. (2023). Effect of Plant Growth Promoting Actinomycetes on Wheat Plants under Abiotic Stress. *Bioinfolet*. 0976-4755.
3. N.P Tidar, K.R Chavan, R.P Ghorpade. (2023). Neurotoxic Acrylamide Mitigation by L-Asparaginase Enzyme Extracted From Actinomycetes Species. *Journal of Advanced Zoology*. 0253-7214.

### **Mr. G. S. Sathe**

1. Sathe G.S. “Isolation, Identification and Characterization of beta Gluconase producing *Aspergillus and Penicillium* Species from the garden soil” in UGC sponsored National Level Conference- Environmental Biotechnology organized by Department of Zoology, L.B.S. College, Satara held on 29th December 2014.
2. Sathe G. S. “Studies on some non-symbiotic N<sub>2</sub> fixers from the alkaline environment (Lonar Lake, Buldhana)” in the proceeding of National Level Conference on Mangroves Of Kokan Coast ,organized by Department of Zoology ,Gogate-Jogalekar College, Ratnagiri held on 2nd-3rd February 2015.
3. Sathe G. S. “Isolation and characterization of Lactobacillus species obtained from the Idli batter and its application in Soya milk fermentation” in the proceeding of National Level Seminar on Contemporary Issues in Biological Sciences” organized by Department of Microbiology, Changu Kana Thakur ACS College, New Panvel on 4th-5th February 2020.
4. Sathe G.S., “Isolation and characterization of Laccase producing bacteria from soil used for the Degradation of Malachite Green”. *International Journal of Science and Research (IJSR)*. Volume 9, Issue 12, December 2020 with Science Journal Impact Factor (SJIF) 7.583
5. Sathe Ganesh S. “Baseline house hold survey of some villages of the Panvel tehsil under Unnat Bharat Abhiyan”, *Anugoonj*, 2019.
6. Pandey Alok R, Sathe Ganesh S. (2020) Isolation and Characterization of Laccase Producing Bacteria from Soil Used for the Degradation of Malachite Green. *International Journal of Science and Research* . 2319-7064.
7. M. Narayani, M. Johnson, Sunil Tulshiram Hajare, Shrikant B. Bhosale, Vijay Upadhye, Sathe Ganesh Sadashiv, Babsaheb Surwase. (2024) A study on molecular taxonomy of South Indian species *Selaginella swared* by DNA barcoding using rbcL. *Ecological Genetics and Genomics*. 2405-9854.

**Mrs. A. N. Gandharkar**

1. Gandhrakar A.N., (2012-2013), Survey on Fertilizers/Pesticides. *Anugoonj* Issue 2, Pp 49-51, ISSN 2348-9731.
2. Gandhrakar A.N., (2013-2014), Effect of industrial effluent on water quality of Kashedi River at Taloja M.I.D.C., Maharashtra. *Anugoonj* Issue 3, Pp 46-54, ISSN 2348-9731.
3. Gandhrakar A.N., (2014-2015), The Microbial Evaluation of contact surfaces of hotels from Panvel region. *Anugoonj* Issue 3, Pp.42-47, ISSN 2348-9731.
4. Gandhrakar A.N., (2015-2016), Isolation and Characterization of bacterial flora from Indian Currency circulating in Panvel city, Raigad. *Anugoonj* Issue 5, Pp 49-53, ISSN 2348-9731.
5. Gandhrakar A.N., (2016-2017), Survey on consumer attitudes and knowledge towards use of antibiotics among the citizen of Panvel. *Anugoonj* Issue 6, Pp 40-48, ISSN 2348-9731.
6. Gandhrakar A.N., (2020--2021), Microbial Analysis of Drinking Water in Villages Near to M.I.D.C. Panvel Region. *Anugoonj* Issue 9, Pp 11-17, ISSN 2348-9731.
7. Gandharkar A.N. (2022), Titanium dioxide: Advances in research and Application, International Journal of Science and Research, Vol-15,110-115, ISSN 2319-7064.
8. Gandharkar A.N. (2023), Comparative analysis of pipe-borne water and other sources of water within Panvel city for human consumption. *Phallanx: A Quarterly review for Continuing Debate*, Vol 18, No-1Jan-March, PP-216-227, ISSN 2320-7698.
9. Shinde Sayali, Gandharkar A.N., Tidar N.P., (2023), Isolation, characterization, and identification of pesticide-degrading bacteria from a soil sample” *A Journal of Composition Theory*. 16 (7): 18-23.
10. Gandhrakar A.N., (2022--2023), Survey on microbial analysis of Mask. *Anugoonj* Issue 11, Pp 1-8, ISSN 2348-9731.
11. Patil S.A., Gandharkar A.N., (2017), Isolation, Identification and Characterizations of Bacteriocin-Producing Bacteria and its antimicrobial activity. *Frontiers in Applied Biological and Chemical Sciences*. Smt. Chabdibai Himathmal Mansukhani College, Ulhasnagar.

12. Jogalekar P. P., Gandharkar A.N., (2020), Assessment of in vitro Antimicrobial and Antioxidants Activity of *Tamarindus indica* and *Pithecellobium dulce* Leaf extract., Expanding Panorama of Microbiology, C. K. Thakur ACS College, New Panvel.
13. Hotti U,P. Gandharkar A.N., (2021), Study of Biodegradation of Dye-Based Industrial Effluent Using Efficient Microbial Isolates. *Frontiers in Industrial Biotechnology*, St. Joseph College of Engineering, OMR, Chennai.
14. Gandharkar A.N, Bhosale P. D., Madhdeshiya S. C., Mahadik S.M., Mahagavker Y.N. (2023). Nanobiotics against Antibiotics Resistance; Promote the power of nanoparticles derived from Indian borage plant to prevent Upcoming pandemic. International Conference on Advanced Materials for Physical, Chemical and Biological Applications (ICAMPCBA-23), (ISBN – 977-81-19175-78-4).
15. Gandharkar A. N., Tidar N. P., Shinde S. S. (2023). Isolation, Characterization, and Identification of Pesticide-degrading Bacteria from a Soil Sample. *A Journal of Composition Theory*. 0731-6755.
16. A.N. Gandharkar, V. V. Gujar. (2023). Microbial Degradation of Calcium Oxalate and Its Potential Application. *Journal of Advanced Zoology*. 0253-7214.

**Dr. A. N. Vemula**

1. Vadnere N. C., Viresh A. Parab, Vemula A. N. Isolation of Probiotic Microbe with Anti-gastrointestinal Pathogen activity from fermented food samples. EPOM: Conference proceedings.
2. Vemula A. N. Microbiological Analysis of Milk in Panvel Area. *Anugoonj*, Issue – 4: 48- 25.
3. Vemula A. N. Environmental Monitoring of Air Conditioned Offices in Khanda Colony Area. *Anugoonj*, Issue – 5: 56-59.
4. Vemula A. N. Efficacy testing of preservatives in ophthalmics. *Anugoonj*, Issue -6: 59-52.
5. <sup>1</sup>Garude N. R., <sup>2</sup>Vemula A. N.\*, <sup>3</sup>Sagalgile R. M. Seed Priming with Chitosan for Enhanced Plant Growth under Salt Stress. *International Journal of Pharmacy and Biological Sciences-IJPBSTM* (2019) 9 (3): 06-11 Online ISSN: 2230-7605, Print ISSN: 2321-3272. Received: 10 Mar 2019 / Accepted: 9 Apr 2019 / Published online: 1 Jul 2019
6. Mahadik A. K.<sup>1</sup>, Vemula A. N.<sup>2</sup>. Probiotics: Potential Bio-Therapeutics for Lowering Cholesterol. *International Journal of Pharmacy and Biological Sciences-IJPBSTM* (2019) 9 (3): 70-73 Online ISSN: 2230-7605, Print ISSN: 2321-3272. Received: 10 Mar 2019 / Accepted: 9 Apr 2019 / Published online: 1 Jul 2019
7. Jadye V. V.<sup>1</sup> and Vemula A. N.<sup>2</sup> Extraction, Characterization and Formulation of Lactobacillus Derived Bio-Surfactant Inhibiting Biofilm Formation of Human Opportunistic *Candida albicans*. *International Journal of Pharmacy and Biological Sciences* ISSN: 2321-3272 (Print), ISSN: 2230-7605 (Online) IJPBS | Volume 8 | Special Issue 1- ICMTBT | 2018 | 92-97
8. Sagalgile R. M, Khanna Simran S, Pandey Alok R and Vemula A. N. 2019. Isolation and Characterization of Xylanase Producing Bacteria and Optimization of Parameters for Xylanase Production. *International Journal of Pharmacy and Biological Sciences*. 9(3): 1382-1390.
9. Mane SS., Vemula AN. "Chitosan Bionanocomposite: A Potential Approach for Sustainable Agriculture". *Medicon Agriculture & Environmental Sciences*. 2.2 (2022): 41-46.
10. Patil S. P., Vemula A. N. 2022. Heavy Metal Free Potable Water: Application of Bio-Emulsifier Produced by *Acinetobacter* Species Isolated from Soil in Lead Removal. *World Journal of Pharmacy*

*and Pharmaceutical Sciences*. 11 (6) 1858-1871. ISSN 2278 – 4357. DOI : [10.20959/wjpps20226-22358](https://doi.org/10.20959/wjpps20226-22358)

11. Ms. Bhagyashree A Debnath<sup>1</sup>, Mr. Anvesh N. Vemula<sup>2</sup>. 2021. Immobilization of Titanium Dioxide based Nanoformulation for Enhancement of Plant Growth under environmental Stress condition. *International Journal of Innovative Research in Technology*. Volume 8 Issue 6: 283-288| ISSN: 2349-6002.
12. Testing Mutagenicity Potential of Food Additives by Ames test from Panvel Area (2022). *Anugoonj*. 10: 43- 46
13. Mr. Vemula Anvesh Narshimlu\* and Dr. Malik Nagesh Narayan. 2023. Isolation, Characterization and Screening of Marine *Pseudomonas* Sp. for Bioactive Compounds and their Potential Use as Anti-Microbial and Anti-Oxidant Agent. *Bull. Env. Pharmacol. Life Sci.*, Spl Issue [1] January 2023: 198-205. Online ISSN 2277-1808.
14. Vadnere, N. C., Vemula A. N., Subramanian, P. (2023). Exopolysaccharide (EPS) Production and Characterization from Aquatic Isolates. *A Journal of Composition Theory*. 16 (7): 14-17.
15. Govilkar, B. M., & Vemula, A. N. (2023). Isolation and Characterization of Bacterial Lipids and its Application as Antioxidant Agent. *Journal of Advanced Zoology*. 44(S-8): 133-140. DOI: <https://doi.org/10.53555/jaz.v44iS8.3525>.
16. Vemula A. N., Bhosale P. D., Madhdeshiya S. C., Lanke O., Mishra K. (2023). Production of Cellulose by Isolating Efficient Bacterium & Study its Suitable Application. *International Conference on Advanced Materials for Physical, Chemical and Biological Applications (ICAMPCBA-23)*, (ISBN – 977-81-19175-78-4).

**Ms. N. R. Garude**

1. Seed Priming with Chitosan for Enhanced Plant Growth under Salt Stress (2019). *International Journal of Pharmacy and Biological Sciences-IJPBSTM*. ISSN: 2230-7605. 9 (3): 06-11.
2. Enrichment, Isolation & Screening of *Pseudomonas* spp. & its Encapsulation Techniques to Study Effect on Plant Growth (2023). *International journal of innovative research in technology*. 2349-6002. 9: (10): 6-10.
3. Isolation, Characterization and Screening of Microbial Melanin for its role in Protection of Plant Growth Promoting Bacteria (2023). *Journal of Advanced Zoology* ISSN: 0253-7214. 44:S-8: 188-193.

### **Mrs. S. V. Humbarwadi**

1. Shweta Humbarwadi, Shubham Jalgaokar, Sakshi Alzende, Poonam Raut (2023), Exploring dye degradation potential of the isolated fungal species from the spent mushroom substrate (SMS), *Mukt Shabd Journal*, ISSN : 2347-3150 , Vol.10,Issue 4, Impact Factor : 4.6, 534-544 , DOI:10.0014.MSJ.2023.V11I04.0086781.114255
2. SV Humbarwadi, A Hatey, S Chaudhary (2022), The capability of Soil enzymes (biostimulants) in sustainable crop production, *Journal of International Journal of Enhanced Research in Science, Technology & Engineering*, ISSN: 2319-7463, Vol. 11, Issue 3, M, Impact Factor: 7.957.
3. Shubhangi Rajguru Kirubha Pauldas, Shweta Humbarwadi (2020), Exploring the potential of prodigiosin as an antimicrobial agent in textiles, *Journal of Emerging Technologies and Innovative Research*, ISSN-2349-5162, Volume 7, Issue 11, 51-56.
4. Shweta Humbarwadi and *et.al.* (2020), Physico-chemical and Microbial Quality Assessment of Khadan lake,Ambernath, Thane District, *Journal of Emerging Technologies and Innovative Research*, ISSN-2349-5162, Volume 7,Issue 11,1-7.
5. KP Rajguru Shubhangi, Humbarwadi Shweta, Kirubha Pauldas (2019),Green synthesis of silver nanoparticles from *Punica granatum* and study of its antimicrobial and antioxidant activity, *Journal of Emerging Technologies and Innovative Research (JETIR)*,6 (5), 569-577
6. Humbarwadi, S. V., & Patel, A. K. (2018). Green synthesis and study on antimicrobial activity of nanoparticles from floral extract of *Chrysanthemum indicum*. *Int J Pharm Biol Sci*, 8(4), 1121-1126.
7. Shweta, H., Joshi, P., & Valmiki, S. (2016). Wine production from over ripened banana. *World J. Pharma. Pharmaceu. Sci*, 5(6), 1461-1466.
8. Shweta V H, Shilpa valmiki, Pooja Sawant (2015), Physicochemical parameters of pond water from Kalyan, Ambernath and Badlapur city, *World Journal of Pharmacy and Pharmaceutical science*, SJIF Impact Factor 5.210, ISSN 2278 – 4357 , Volume 4, Issue 11, 1366-1370.
9. Nasir Shaikh, Shweta Patil (2015), Study of alkaline lipase producer from bacteria and its use in detergent, *Life Science*.