

Shiksha Mandal's
Bajaj College of Science, Wardha (Autonomous)
Department of Microbiology

➤ **About the Department:**

Department of Microbiology started in 1980 for Under Graduate Course (B.Sc) and in 2007 Post Graduate Course (M.Sc) was started. Department now recognized as center of excellence in teaching and learning Microbiology with respect to undergraduate and post graduate studies in the central part of India. The department aims to stimulate an interest in the social and economic implications of Microbiology in society. The faculty in the department is well qualified with a pronounced academic and research experience. The research papers of faculty and students of the department published in peer reviewed national and international journals. The intake capacity of undergraduates is 100 and 22 for post-graduation. We have successfully completed five years UGC sponsored and R.T.M. Nagpur University, Nagpur recognized certificate course, career oriented programme in Clinical Laboratory Technology. The same course is restarted from 2016 on Self finance basis with intake capacity of 40. In 2021 Post Graduate Diploma in Clinical Research has been started in collaboration with IICRM, Nagpur. Presently 25 students have registered for the course. Recently the department has been recognized as research center by R.T.M. Nagpur University, Nagpur. Department has well- equipped spacious laboratories for UG and PG with sophisticated instruments set ups, computers and internet facility as well as departmental library.

National Level Best Department Award 2018-19

The most significant achievement of the Department of Microbiology is to get '**National Level Best Department Award**' by Microbiologist Society, India for the academic session 2018-2019. The award was given at the hands of Dr. S. P. Kane, Vice-Chancellor, RTM Nagpur University, Nagpur, Dr. Arvind Deshmukh (Chairman of Microbiologist Society, India) to Dr. Mrs. Suhas Khandare, Head of Dept. of Microbiology.





➤ **Highlights of the Department**



- Well qualified, skilled and dedicated faculty
- Advanced teaching and learning resources and methods
- Students qualifying CSIR-NET-JRF, SET, GATE, IIT-JAM exams and selected for Ph.D. programmes at National Institutes like NCCS, Pune, NEERI Nagpur and RTMNU Nagpur.
- Linking of the department with Microbiologists Society, India (MBSI)
- Execution of ‘Star College Scheme’ of DBT, Ministry of Science and Technology, Govt. of India
- Students participating in intercollegiate and National level essay, seminar, elocution competitions conferences.
- UG students executing experimental projects under CPE since 2010- 11
- Faculty participation in Refresher Courses and SWAYAM.
- Students’ participation in online SWAYAM courses organized by NPTEL.
- Organization of state level MicrobiOlympiad competition.
- Organization of state level seminar competition for students ‘Scintillation’ in every alternate year.
- Collaborations with Institute like NCCS, Pune
- Department has completed two research projects funded by UGC and one research project funded by DST New Delhi is ongoing.
- Internet Access to the students
- Separate departmental library
- Career guidance for students.
- Skill development course ‘Certificate Course in Clinical Laboratory Technology’ and Post graduate Diploma in Clinical Research.
- Well-equipped laboratories for academic and research activities
- Workshops, guest lectures, seminars, exhibition and quiz competition for overall development of the student.
- Most of the alumni of department has been placed in various sectors such as National institutes, Industries, Government sector etc.

➤ **Courses offered:**

1. B.Sc. Microbiology (CBS)
2. M.Sc. Microbiology (CBCS)
3. Certificate Course in Clinical Laboratory Technology (CLT)
4. Post Graduate Diploma in Clinical Research (PGDCL)

FACULTY PROFILE

Name	Designation	Qualification	Area of research	Teaching Experience (Years)	Contact No.	Email Id.
 Dr. S.S. Khandare	Associate Professor & Head	M.Sc. Ph.D.	Environmental, Industrial & Food Microbiology.	34	9822727622	ksuhas21@gmail.com
 Dr. U.A. Malode	Asst. Professor, Co-Ordinator: Biotechnology, Add on Course	M.Sc. Ph.D.	Agricultural & Environmental Microbiology.	18	9764996587	ulka9malode@gmail.com
 Mr. M.G. Ingale	Assistant Professor	M.Sc. NET	Medical Microbiology, Bioremediation & PGPR	7	7721915161	mayuringale7@gmail.com
 Dr. B.V. Mohite	Assistant Professor	M.Sc. M. Phil Ph.D. NET	Applied Microbiology, Microbial Biotechnology	13	9373444644	bhavnamohite1@gmail.com

 Miss.S.E. Banarse	Assistant Professor (Contract Basis)	M.Sc. NET	Bioenergy, Environmental Microbiology	1	7249074653	snehal.jaisingpure@gmail.com
 Miss. K.N. Pimpalkar	Assistant Professor (Contract Basis)	M.Sc. SET	Microbial fermentation	1	7709771976	kalyanipimpalkar114@gmail.com

➤ **Supporting Staff:**

Name	Qualification	Designation	Experience
Mr. R. K.Brahmankar	Diploma (ET), B.A.	Laboratory Assistant	14 yrs
Mrs. S.A. Karnake	B.Com., B.Ed., M.S.W.	Laboratory Attendant	17 yrs
Mrs. R.A. Zodpey	B.A., C.Lib, MSCIT	Laboratory Attendant	20yrs
Mr. M. R. Girde	M.Sc. B.Ed.	Laboratory Attendant	20yrs

➤ **Highlights of the syllabus (B. Sc. and M. Sc.) under Autonomy:**

The course is designed to ensure that the graduating and post graduating students with Microbiology subject will have the academic standard require to stand in many allied fields in India and abroad and to face any national competitive exams. The skill and practical's incorporated in autonomy syllabus will help them to get job opportunities in nearby industrial area.

UG Syllabus covers Microbial Physiology, Industrial Microbiology, Medical Microbiology, Immunology, Industrial microbiology, Agricultural and Environmental Microbiology, Food Microbiology, Genetic Engineering, Molecular Biology, Advance techniques in Microbiology. Syllabus includes innovative projects for B. Sc. students helps to inculcate research attitude among the students.

After completion of M. Sc., Students will get the knowledge of DNA cloning, Transformation, Restriction Digestion, PCR, Animal and Plant Tissue Culture, Fermentation Kinetics, Industrial

Production of Antibiotics, Single cell Proteins. Students will have sound skills in identification of bacteria and various techniques like Gel Electrophoresis, Ion Exchange Chromatography, Immunoelectrophoresis, SDS-PAGE.

➤ **Research:**

- **Research Guidance:**

Dr. Mrs. S. S. Khandare: P.hD Guide (Microbiology) RTM Nagpur University

- **Research Projects:**

Name of the Project	Name of the Principal Investigator	Name of the Funding agency	Type (Government/ Non-Government)	Funds provided (INR in Rs)	Duration of the project
Use of lactic acid bacteria as a biopreservative and their role in elimination of human intestinal pathogens	Dr. S. S. Khandare	UGC, NEW DELHI	Government	0.45	2002-2003
Isolation and characterization of exopolysaccharide producing lactobacilli from probiotics	Dr. U. A. Malode	UGC, WRO PUNE	Government	4.2	2014-2016
Development of agro waste Based mycopesticide formulation for controlling mosquito population: a scientific effort for rural women empowerment	Dr. B.V. Mohite	Department of Science and Technology, New Delhi	Government	13.44	2020-2023

- **Papers in journals:**

Dr. S. S. Khandare:

1. Antibacterial Activity of Bacteriocinogenic Lactic Acid Bacteria Isolated from Idli Batter. **S.S. Khandare** and Patil S. D, International Journal of Researches in Biosciences, Agriculture and Technology, vol.II (3): 98-103. ISSN 2347 – 517X, 2014.
2. Inhibitory Activities Of Lactic Acid Bacteria On Gram Positive And Gram Negative Food Borne Pathogens And Spoilage Organisms Associated With Fish. **S.S. Khandare** and Patil S. D, International Journal of Researches in Biosciences, Agriculture and Technology, vol.II (3): 98-103. ISSN 2347 – 517X, 2015.
3. Inhibitory activity of Lactic acid bacteria against isolated pathogens and spoilage organisms associated with fresh meat. **S.S. Khandare** and Patil S. D, International Journal of Current Microbiology and Applied Sciences (IJCMAS) ISSN: 2319-7706, 128-135, 2015.
4. Encapsulation of Lactic acid bacteria in calcium alginate beads for higher bacteriocin production. **S.S. Khandare** and Patil S. D, International Journal of Life Science (IJLSCI) vol.4 (4): 539-546. ISSN: 2320 – 7817/eISSN 2320-964 X. 2016.
5. Partial characterization and purification of a novel class II A Pediocin produced by *Pediococcus parvulus* strain MF233 isolated from batter of idli a traditional fermented food of south India for management of food borne pathogens. **S.S. Khandare** and Patil S. D, International Journal of Pharmacy and Biological Sciences, Volume 8, Special Issue 1- ICMTBT, 57-65. ISSN: 2321-3272, 2018
6. Isolation and Screening of Pesticide Resistant Rhizobacteria from Wheat (*Triticum aestivum*) rhizosphere soil. S.B. Waghmare, **S.S. Khandare** and M.G. Ingale, International archive of applied sciences and technology, 9(4), 62-69, December 2018. (IF: 3.95)
7. Studies on Isolation and Characterization of Phosphate Solubilizing Bacteria Isolated From Wheat Plant Rhizosphere (*Triticum aestivum*) of Pipri Region of Wardha District, Maharashtra. T. Bhoyar, **S.S. Khandare** and M.G. Ingale. Journal of Soils and Crops, 28 (2) 331-336, December, 2018. (IF: 6.7)
8. Production, Extraction & Quantification of Prodigiosin, A Biopigment produced from *Serratia Marcescens* & Its Antibacterial activity against pathogenic organisms. A.P. Sakharkar, **S. S. Khandare**, M. G. Ingale. Research directions journal, 242-2510, February 2019. (IF: 5.7).
9. Isolation and Identification of Natural Compounds with Anti-Bacterial Potential from *Ocimum basilicum* against Some Food Borne Pathogens. **S. S. Khandare**, S. A. Wankhede , M. G. Ingale, P. G. Borkar. IJRAR (2019) 6 (2): 60-72. (IF: 5.75)
10. Studies on Isolation and Characterization of Plant Growth Promoting Endophytic *Azospirillum* from Roots of Wheat Plant (*Triticum aestivum*) of Semiarid Soil of Wardha District, Maharashtra. **S. S. Khandare**, K. A. Dhumane, M.G. Ingale. JETIR (2019) 6 (6): 990-1000. (IF: 5.87).
11. Heavy Metal Tolerance Potential of Fungi Isolated from Effluent Dumping Sites of Iloyds Steel Industrial Area of Wardha City, Maharashtra. **S. S. Khandare**, A. P. Kale, M.G. Ingale. IJARIE (2019) 5 (6): 1433-1438. (IF: 4.06).

12. Decolourization and Degradation of textile dye “Direct Blue15” by Bacterial Cultures Screened from Textile Industry. **S. S. Khandare**, K. C. Sadrani, M.G. Ingale.Parishodh Journal (2020) IX (III): 4321-4326. (IF: 6.3).
13. Studies on characterization and antifungal activity of plant growth promoting rhizobacteria isolated from semiarid soil against plant fungal pathogens. **S. S. Khandare**, P. D. Bhoge, M.G. Ingale. Juni Khyat (2020) X (X) 3: 1-8.
14. Green Synthesis of Silver Nanoparticles Using Apple and Banana Peel Extract, Their Characterization and Optimization. **S. S. Khandare**, M. M. Shukla, M. G. Ingale. International Journal of Scientific Research in Science and Technology (2021) 2395- 6011.
15. Presumptive Identification of Candida spp. from Clinical Isolates and Anticandidal Effect of Essential Oils. **S. S. Khandare**, A. P. Moon, M. G. Ingale.YMER (2021) 20 (11) 254-261

Dr. Ulka. A. Malode

1. Bacteriological Analysis of Ice-cream Available in Amravati. **U.A.Bidwai**. and D.H.TambekarAsian Jr. of Microbiol. Biotech. Env. Sc., Vol. 5, No. (4): 2003: 599-600.
2. Assessment of Bacteriological Quality of Khoa Sold in Amravati. D.H.Tambekar.R.N.Mantri and **U.A. Bidwai**. Asian Jr. of Microbiol. Biotech.Env. Sc., vol.9, No. (3):2007:615-619.
3. Potential Rhizobium and Phosphate Solubilisers as a Biofertilisers from saline belt of Akola and Buldana district (India). D.H.Tambekar, S.R.Gulhane, **U.A.Bidwai** andS.D.Tambekar.Research Journal of Agriculture and Biological Sciences.2008, INSInet Publication.
4. Biodiversity of Phosphate Solubilizing *Bacillus subtilis* Isolated from Saline Tract of Vidarbha. D.H.Tambekar and **U.A. Bidwai** PKV Research Journal. Vol.30 No. 2 July, 2006. 181-184.
5. Effect of meteorological parameters on evaporation from small reservoir in Anand Sagar, Shegaon. S.G.Gawande,S.S.Gawande and **U.A. Bidwai**.PKV Research Journal. Vol.33 No. 1 July, 2009. 109-113.
6. Isolation and identification of bacteria causing urinary tract infections in pregnant women in Wardha and their drug susceptibility patterns in them. Poonam U. Sharma & **Ulka Bidwai**. 2013 International Journal of Current Microbiology & Applied Sciences 2319-7706.
7. Production of Biosurfactant from Strain isolated from oil spill soil in Deoli region,Wardha district. **Malode, U. A .** Satone,N.T, Ingale M.G. and Kombe,S.V. International Journal of Current Research in Life Sciences Volume 09,No.06 pp 3292-3296 June,2020.ISSN:23119-9490.
8. Studies on Biodegradation of Synthetic Polyethylene By Microorganisms Isolated from Waste Disposal Site at M.I.D.C area of Wardha City. **U. A. Malode**, O.A. Mahodaya, R.Kewate.Juni Khyat(UGC Care Group I listed Journal) Vol -10 Issue -6 No.15 June 2020 ISSN:2278-4632 Copyright c2020 authors

9. DNA Fingerprinting and Phylogenetic relationship of the Genus *Chlorophytum* Ker-Gawl from India using AFLP. Kale, K.A., **Malode, U.A.**, Pohekar, P.v., Lakhe, M.B. International Journal of Trend in Scientific Research and Development. Volume 05 Issue 03 March-april 2021. e ISSN: 2456-6470. pp 871-877.

Mr. M. G. Ingale

1. Isolation and Molecular Detection of Methylophile from Lonar Lake. Tambekar D H, **Ingale M G** and Rajgire A V, Bioscience Discovery, 4 (2): 176-181, July 2013. (IF: 3.42)
2. Isolation and Screening of Pesticide Resistant Rhizobacteria from Wheat (*Triticum aestivum*) rhizosphere soil. S.B. Waghmare, S.S. Khandare and **M.G. Ingale**, International archive of applied sciences and technology, 9(4), 62-69, December 2018. (IF: 3.95)
3. Studies on Isolation and Characterization of Phosphate Solubilizing Bacteria Isolated From Wheat Plant Rhizosphere (*Triticum aestivum*) of Pipri Region of Wardha District, Maharashtra. T. Bhoyar, S.S. Khandare & **M.G. Ingale**. Journal of Soils and Crops, 28 (2) 331-336, December, 2018. (IF: 6.7)
4. Production, Extraction & Quantification of Prodigiosin, A Biopigment produced from *Serratia Marcescens* & Its Antibacterial activity against pathogenic organisms. A.P. Sakharkar, S. S. Khandare, **M. G. Ingale**. Research directions journal, 242-2510, February 2019. (IF: 5.7).
5. Study of Nitrifying Bacteria from Arid Soil of Purna Basin of Vidarbha Region, Maharashtra, India. **M. G. Ingale**, Phirke N.V. Emer Life Sci Res (2017) 3(1): 32-37, 2017. (IF: 4.5). Basic Computer Knowledge.
6. Evaluation of Drinking Water Pollution by Bacteriological Analysis of Water Used For Drinking Purpose. N.W. Bagalkar & **M.G. Ingale**. AIP Conf. Proc. 2018.
7. Assessment of Physico-Chemical Pollution of Drinking Water In Daryapur and Anjangao Tahsil of Amravati District, Maharashtra, India. **M.G. Ingale** & N.W. Bagalkar. AIP Conf. Proc. 2018.
8. Isolation and Identification of Natural Compounds with Anti-Bacterial Potential from *Ocimum basilicum* against Some Food Borne Pathogens. S. S. Khandare, S. A. Wankhede, **M. G. Ingale**, P. G. Borkar. IJRAR (2019) 6 (2): 60-72. (IF: 5.75)
9. Studies on Isolation and Characterization of Plant Growth Promoting Endophytic *Azospirillum* from Roots of Wheat Plant (*Triticum aestivum*) of Semiarid Soil of Wardha District, Maharashtra. S. S. Khandare, K. A. Dhumane, **M.G. Ingale**. JETIR (2019) 6 (6): 990-1000. (IF: 5.87).
10. Heavy Metal Tolerance Potential of Fungi Isolated from Effluent Dumping Sites of Lloyds Steel Industrial Area of Wardha City, Maharashtra. S. S. Khandare, A. P. Kale, **M.G. Ingale**. IJARIE (2019) 5 (6): 1433-1438. (IF: 4.06).
11. Decolourization and Degradation of textile dye "Direct Blue15" by Bacterial Cultures

Screened from Textile Industry. S. S. Khandare, K. C. Sadrani, **M.G. Ingale**. Parishodh Journal (2020) IX (III): 4321-4326. (IF: 6.3).

12. Production of Biosurfactant From Potent Strain Isolated From Oil Spill Soil In Deoli Region, Wardha District. Malode, U.A., Satone, N. T., **Ingale M.G.** and Kombe, S.V. International Journal of Current Research in Life Sciences (2020) 9 (6) 3292-3296 (IF: 5.3).

13. Studies on characterization and antifungal activity of plant growth promoting rhizobacteria isolated from semiarid soil against plant fungal pathogens. S. S. Khandare, P. D. Bhoge, **M.G. Ingale**. Juni Khyat (2020) X (X) 3: 1-8.

14. Green Synthesis of Silver Nanoparticles Using Apple and Banana Peel Extract, Their Characterization and Optimization. S. S. Khandare, M. M. Shukla, **M. G. Ingale**. International Journal of Scientific Research in Science and Technology (2021) 2395- 6011.

15. Presumptive Identification of Candida spp. from Clinical Isolates and Anticandidal Effect of Essential Oils. S. S. Khandare, A. P. Moon, **M. G. Ingale**. YMER (2021) 20 (11) 254-261

Dr. B. V. Mohite

1. NS Salunkhe , SH Koli, **BV Mohite**, VS Patil, SV Patil (2022) Xanthomonadin mediated synthesis of biocidal and photo-protective silver nanoparticles (XP-AgNPs). Results in Chemistry, <https://doi.org/10.1016/j.rechem.2022.100663> Springer Nature Switzerland AG. (IF 2.21)
2. SV Patil, **BV Mohite**, KR Marathe, NS Salunkhe, V Marathe, VS Patil (2022) Moringa Tree Gift of Nature:a Review on Nutritional and Industrial Potential. **Current Pharmacology Reports**, <https://doi.org/10.1007/s40495-022-00288-7> Springer Nature Switzerland AG.
3. **BV Mohite**, A. Theng, SV Patil (2021) Screening and exploration of microbe based bio attractant for mosquito: One step towards novel mosquito control method. **Proceedings of ICN3IC-21(2nd Virtual International Conference on Naturopathy, Nanotechnology, Neutraceuticals and Immunotherapy Cancer Research- 2021)**, Virtual, 11 June – 12 June 2021, p.211 ISBN: 978-81-950236-5-3
4. SV Patil, VS Patil, KR Marathe, **BV Mohite** (2021) Moringa leaves preparations as miraculous weapon to fight Against malnutrition in tribal during covid19 background. **Proceedings of ICN3IC-21(2nd Virtual International Conference on Naturopathy, Nanotechnology, Neutraceuticals and Immunotherapy Cancer Research- 2021)**, Virtual, 11 June – 12 June 2021, p.204 ISBN: 978-81-950236-5-3
5. JD Salunke, **BV Mohite**, SV Patil (2021) Screening of naringin biotransforming microbes and its Application. **Proceedings of ICN3IC-21(2nd Virtual International Conference on Naturopathy, Nanotechnology, Neutraceuticals and Immunotherapy**

- Cancer Research- 2021**), Virtual, 11 June – 12 June 2021, p.208, ISBN: 978-81-950236-5-3
6. P Nikam, **BV Mohite**, SV Patil (2021) Screening and exploration rhizospheric selenobacters for Nanoselenium synthesis and its various applications. **Proceedings of ICN3IC-21(2nd Virtual International Conference on Naturopathy, Nanotechnology, Neutraceuticals and Immunotherapy Cancer Research- 2021)**, Virtual, 11 June – 12 June 2021, p.209, ISBN: 978-81-950236-5-3
 7. **BV Mohite***, SH Koli, JD Rajput, VS Patil, T Agarwal, SV Patil* (2019) Production and characterization of multifacet exopolysaccharide from an agricultural isolate, *Bacillus subtilis*. **Biotechnology and applied biochemistry**. DOI 10.1002/bab.1824 (IF 2.724)
 8. Sunil H. Koli, Rahul K. Suryawanshi, **Bhavana V. Mohite**, & Satish V. Patil (2019) Prospective of Monascus pigments as an additive to commercial sunscreens. **Natural Product Communication 14(12), 1-7 (IF 1.496)**
 9. JD Rajput, SH Koli, **BV Mohite**, R S Bandre, SV Patil, VS Patil (2019) A green tactic for the synthesis of classical 3,3-bisindolylmethanes in waste curd water. **SN Applied Sciences**. Springer 1:1187. <https://doi.org/10.1007/s42452-019-1212-y>
 10. SV Patil, SH Koli, **BV Mohite**, R Patil, RR Patil, HP Borase, VS Patil (2019) A Novel Screening Method for Potential Naringinase Producing Microorganisms. **Biotechnology and Applied Biochemistry**.323-327July doi: 10.1002/bab.1728. (IF 2.724)
 11. **BV Mohite**, SH Koli, SV Patil (2018) [Bacterial exopolysaccharide: A smart biomaterial to address the heavy metal stress](#). **New Biotechnology** 44, S59. (IF 6.49)
 12. **BV Mohite**, SH Koli, SV Patil (2018) Heavy metal stress and its consequences on exopolysaccharide (EPS) producing *Pantoea agglomerans*. **Applied Biochemistry and Biotechnology** 186(1), 199-216 doi 10.1007/s12010-018-2727-1 (3.094)
 13. SH Koli, **BV Mohite**, RK Suryawanshi, HP Borase, SV Patil (2018) Extracellular red Monascus pigment-mediated rapid one-step synthesis of silver nanoparticles and its application in biomedical and environment. **Bioprocess and Biosystems Engineering**. <https://doi.org/10.1007/s00449-018-1905-4> (IF 3.434)
 14. SV Patil, CD Patil, CP Narkhede, RK Suryawanshi, SH Koli, L Shinde and **BV Mohite** (2018) Phytosynthesized Gold Nanoparticles-*Bacillus thuringiensis* (Bt-GNP) formulation: A Novel Photo Stable Preparation against Mosquito larvae. **Journal of Cluster Science**. 10.1007/s10876-018-1368-4 (IF 3.447)
 15. SV Patil, HP Borase, CD Patil, RK Suryawanshi, SH Koli, VS Patil and **BV Mohite** (2018). Fabrication of paper sensor for rapid screening of nanomaterial synthesizing potential of plants. **Journal of Cluster Science**. <https://doi.org/10.1007/s10876-018-1396-0> (IF 3.447)
 16. **BV Mohite**, SH Koli, CP Narkhede, SN Patil, SV Patil (2017) Prospective of Microbial Exopolysaccharide for Heavy Metal Exclusion. **Applied Biochemistry and Biotechnology**. 183(2), 582-600(IF 3.094)
 17. SH Koli, **BV Mohite**, HP Borase, SV Patil (2017) Monascus Pigments Mediated Rapid Green Synthesis and Characterization of Gold Nanoparticles with Possible Mechanism. **Journal of Cluster Science**. DOI: 10.1007/s10876-017-1254-5 (IF 3.447)

18. HP Borase, CD Patil, RK Suryawanshi, SH Koli, **BV Mohite**, SV Patil (2017) Mechanistic approach for fabrication of gold nanoparticles by *Nitzschia* diatom and their antibacterial activity. **Bioprocess and Biosystems Engineering**. DOI: 10.1007/s00449-017-1801-3. (IF 3.434)
19. CP Narkhede, CD Patil, RK Suryawanshi, SH Koli, **BV Mohite**, & SV Patil (2017) Synergistic effect of certain insecticides combined with *Bacillus thuringiensis* on mosquito larvae. **Journal of Entomological and Acarological Research**. 49(1), <https://doi.org/10.4081/jear.2017.6265>
20. **BV Mohite**, RK Suryawanshi and SV Patil (2016) Study on drug loading and release potential of Bacterial cellulose. **Cellulose Chemistry and Technology**. 50(2), 219-223 (IF 1.387)
21. **BV Mohite**, SV Patil (2015) In situ development of nanosilver impregnated bacterial cellulose for sustainable released antimicrobial wound dressing. **Journal of Applied Biomaterials and Functional Materials**. DOI10.5301/jabfm.5000257, 14(1), e53-58 (IF 2.744)
22. **BV Mohite***(2015) Efficient biotransformation of phenol and its derivatives Using *Streptococcus epidermis* by catechol 2,3-dioxygenase metabolism. **Environment Engineering and Management Journal**. 14(4), 843-850 (IF 0.916)
23. **BV Mohite**, SV Patil (2014) Physical, structural, mechanical and thermal characterization of bacterial cellulose by *G. hansenii* NCIM 2529. **Carbohydrate Polymers**. 106,132-141 (IF 10.723)
24. **BV Mohite**, SV Patil (2014) Bacterial cellulose of *Gluconoacetobacter hansenii* as a potential bioadsorption agent for its green environment applications. **Journal of Biomaterials Science, Polymer Edition**, 25(18),20532065,DOI: 10.1080/09205063.2014.970063 (IF 3.682)
25. **BV Mohite**, SV Patil (2014) A novel Biomaterial: Bacterial Cellulose & Its New Era Applications. **Biotechnology and applied biochemistry**. 61(2), 101-110, DOI 10.1002/bab.1148 (IF 2.724)
26. **BV Mohite**, SV Patil (2014) Investigation of bacterial cellulose biosynthesis and polymerization mechanism in *G. hansenii*. **ISRN Microbiology**. Volume 2014, Article ID 836083, 7 pages
27. **BV Mohite**, BK Salunke , SV Patil (2013) Enhanced Production of Bacterial Cellulose by Using *Gluconacetobacter hansenii* NCIM 2529 Strain Under Shaking Conditions. **Appl Biochem Biotechnol**. 169 (5), 1497-1511, DOI 10.1007/s12010-013-0092-7. (IF 2.277)
28. **BV Mohite*** (2013) Isolation and characterization of indole acetic acid (IAA) producing bacteria from rhizospheric soil and its effect on plant growth. **J of soil science and plant nutrition**. 13(3), 638-649
29. **BV Mohite***, GA Chaudhari, HS Ingale, VN Mahajan (2013) Effect of fermentation and processing on in vitro mineral estimation of selected fermented foods. **International Food Research Journal**. 20(3), 1373-1377 (IF 1.169)

30. **BV Mohite**, KK Kamalja, SV Patil (2012) Statistical optimization of culture conditions for enhanced bacterial cellulose production by *Gluconoacetobacter hansenii* NCIM 2529. **Cellulose** 19(5), 1655-1666, DOI10.1007/s10570-012-9760-y (IF 6.123)
31. **BV Mohite***, SP Pawar, AR Morankar, (2011) Isolation, selection and biodegradation profile of phenol degrading bacteria from oil contaminated soil. **Bulletin of environmental contamination and toxicology**. 87 (2), 143 - 146. DOI: 10.1007/s00128-011-0322-z (IF 2.807)
32. **BV Mohite*** (2011) Iron Determination - A Review of Analytical Methods. **Asian J of research in chemistry**. 4(3), 348-361(ICV 5.10)
33. **BV Mohite*** and RE Jalgaonwala (2011) Evaluation of phenol biodegradation potential of indigenous soil isolate and characterization of its metabolic pathway. **International Journal of Chemistry and Applications**. 3(2), 187-191.
34. RE Jalgaonwala, **BV Mohite**, RT Mahajan (2011) A review: Natural products from plant associated endophytic fungi. **J. Microbiol. Biotech. Res.**, 1 (2), 21-32
35. **Mohite BV***, Magar JG (2010) Use of agricultural wastes for cellulases production by *Aspergillus niger* with submerged & solid state fermentation. **Bionanofrontier** 2(3),189-192
36. **BVMohite***, RE Jalgaonwala, S Pawar, A Morankar (2010) Isolation and characterization of phenol degrading bacteria from oil contaminated soil. **Innovative Romanian Journal of Food Biotechnology**, 7, 61-65
37. RE Jalgaonwala, **BV Mohite**, RT Mahajan (2010) Evaluation of endophytes for their antimicrobial activity from indigenous medicinal plants belonging to North Maharashtra region India. **International j on Pharmaceutical and Biomedical Research**, Vol. 1(4), 136-141
38. **BV Mohite*** (2010) A study on biodegradation of phenol by bacterial isolated from oil contaminated soil. **Journal of Advances in Science & Technology**, 13(3), 85-87
39. **BV Mohite***, GA Chaudhari, PP Dhande, HS Ingale, VN Mahajan, PA Bhole (2010) Nutrients bioavailability improvement of plant based foods by household processes. **Journal of Chemo & Biosphere**.1 (1), 99-105
40. SP Pawar, AR Morankar, MP Padhye and **BV Mohite*** (2010) Isolation of Phenol degrading bacteria and characterization of its catabolic pathway. **Compendium of research articles by budding researchers**. 2, 47-49

- **Books/Book Chapters published:**

Dr. S. S. Khandare

1. **S.S. Khandare and M.G. Ingale (2022)** Climate Change and its Impact on Plant–Microbe Interaction. In: Climate Change and Microbes Impacts and Vulnerability. J.A. Parray, S.A. Bandh, N. Shameem (Editors). CRC Press, Taylor and Francis Group, Apple Academic Press. Pp125-161. eBook ISBN: 9781003189725.

Dr. Ulka. A. Malode

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Mr. M. G. Ingale

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Dr. B. V. Mohite

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➤ **Facilities:**

i. Laboratories-UG Lab, PG Lab, Research Lab, Instrumentation etc.

Particulars	Number	Area (Sq. ft.)
H.O.D.'s Cabin + Staff Room	01	150
Departmental Library	01	Shared with preparation room
Departmental Laboratories	02	1000 +1000 (UG + PG)
Instrumentation Room	01	250
Research Laboratory	01	200

ii. ICT

Type of Facility	Numbers Available
Computers	04
Laptop	01
Printers	03
Internet facility	Available
Access of internet to the students	At Central library and Department

iii. Departmental Library

No. of books	62
Charts (course related)	09
Students' projects	81
Seminar copies	143
Question papers (University and college exam)	File Available

iv. Sophisticated Major Instruments:

- Gel Documentation, Model Gusto
- Trinocular Microscope with Microscope image projection system, Make Olympus
- Polymerase Chain Reaction (P.C.R.) Eppendorf with 98 wells, master cycle gradient
- Double Beam UV Visible Spectrophotometer, Shimadzu Model UV-1800 quartz cuvettes
USB Cable Software CD.

- Fermentor, Shree Biocare India, Cap 3 lit
- UV Transilluminator, with filter (25 cm x13cm) Bio – Safety Cabinet Class II, type A2 , 4’x2’x2’G/powder coated micro-fit make.
- Deep Freezer, Remi Quick freezer, BDF 2822
- Cooling Centrifuge , Remi
- Biosafety Cabinet
- Orbital Shaker Incubator
- Sonicator
- Molecular Biology experimental setup.
- Contech High Precision Balance CA-224
- Visible Spectrophotometer
- Soxhlet Extraction unit
- Laboratory Centrifuge
- Horizontal Electrophoresis Gel system
- Vertical Gel Page System
- Orbital Shaking incubator

v. Sophisticated Minor Instruments

- Digital Calorimeter (112 Systronics)
- Microwave Oven
- Autoclave Vertical BTL
- Laboratory Oven
- Microscopes
- Gel Rocker
- Vortex Shaker
- pH Meter
- Photofluorometer
- Electrophoresis Assembly
- Paper Electrophoresis Assembly
- Membrane Filter Assembly
- Anaerobic Jar
- BOD Incubator
- Bacteriological Incubator
- Mini Centrifuge
- U. V. Tran illuminator
- Heating Mantle
- Chromatography Cabin

Sophisticated Instruments



➤ Departmental Activities

1. Co-Curricular activity

- **Virtual lecture Series:**

The department conducts virtual lectures, National and International Webinars by eminent scientist and academicians from India and abroad for the PG students. Students get benefited from this programme since there are interactive sessions with the scientists. Dr. Trupti Gogte, BITS, Dubai, Prof. Dr. Tanzima Yeasmin Department of Microbiology, Rajshahi University, Bangladesh, Prof. Dr. A.M. Deshmukh, Former Prof. and Head, Department of Microbiology, Babasaheb Ambedkar Marathwada University (BAMU), Sub Centre- Osmanabad, Dr. Rajpal Singh, Kashyap, CIIMS, Nagpur has delivered the lectures in this series.

Prof. Incharge - Dr. Ms Suhas Khandare.

- **Online Quiz competition on subject**

Online Quiz competition for UG and PG M microbiology students has been organized by department of Microbiology on subject topic in first week of May 2020.

- **Online Quiz competition on COVID-19**

Online quiz on COVID-19 general awareness quiz for UG-PG students of college in third Week of April 2020 organized by Department of Microbiology, BCS, Wardha.

- **Online Quiz competition on COVID-19 for other college students and faculties**

Online COVID-19 general awareness quiz for other college students and faculties was organized by Department of Microbiology, BCS, Wardha.

- **International level webinar on “Career Opportunities and Entrepreneurship in Bioscience”**

Department of Microbiology organized International level webinar on “Career Opportunities and Entrepreneurship in Bioscience” organized by Department of Microbiology, Bajaj College of Science, Wardha in Collaboration with Microbiologist Society India (MSI) held on 22 July 2020. There were two speakers namely Two Speakers. I : Dr. Sanjeev Patankar, Ex Principal, SS Jaiswal College, Arjunimor, Dist. Gondia and delivered lecture on ‘Career opportunities & Entrepreneurship in Biosciences’ the second speaker was Dr. Devendra Lingojwar, Founding Director, Adeetechgene Biotech Pvt. Ltd,Pune, India. He talk on ‘Success story as Bio-entrepreneur’ Total 1246 participants from 21 states and 5 different countries were participated.

- **Online Seminar Competition for Undergraduates and Postgraduates**

Online Seminar Competition for Undergraduates and Postgraduates department students were arranged between 25th -28th November 2020 for Undergraduates and for Postgraduates on 5th December 2020. Total 35 undergraduate (BSc Sem V- 07 students , BSc Sem III -12 students, BSc Sem I- 06 Students) and 03 postgraduate students were participated and presented on different microbiology topics. Each student presented for 10 min Presentation on Zoom platform.

- **Canvas Competition for Undergraduate students**

Canvas Competition was organized for Undergraduate students of the department and called for the canvas submission upto **15th January 2021**. **Various microbiology topics were choosen for the completion such as** Post Corona Impact on Society, Bioluminescence, Bioleaching, Bioremediation, GM Foods, Use of Microorganisms in day today life, Hazards of Biotechnology. Students had chosen any one topic for presentation out of it. 14 students have participated in the activity

- **Poster Competition for Postgraduate students**

Poster Competition was organized for Postgraduate students of the department on **19th January 2021**. **Various microbiology topics were choosen for the completion such as** Different Vaccines for COVID 19, CRISPER Technology, Microbes as a solution to pollution, DNA Fingerprinting, Newly Emerging Diseases, Gene Therapy. Students had chosen any one topic for presentation out of it. 03 students were participated in the activity.

- **Celebration of Birth Anniversary of Scientists in Microbiology**

The online quiz competition organized by Department of Microbiology on the occasion of Birth Anniversary of renown Microbiology Scientists: Louis Pasteur and Robert Koch" is organized on 5th January 2021 at 12.00 pm. The quiz competition will be on Moodle platform. The Quiz Timing is 25 Min for 25 marks. Bsc Sem I 25 Student has participated in the quiz.

- **Celebration of Gandhi Jayanti**

On the occasion of Gandhi Jayanti on 2 October 2020 department cleaning programme was carried out under the guidance of Head of Department Dr. Mrs. Suhas Khandare and Mahila Adhayan Kendra, Bajaj College of Science, Wardha. The teaching and non teaching staff has participated for the cleanliness of the department and surrounding campus.

- **State Level MicrobiOlympiad:**

Every year, State Level MicrobiOlympaid Microbiological Contest organized in collaboration with R.C Patel College, Shirpur, Dist. Dhule and Microbiologists Society India. This contest is very

good platform for the students of B.Sc. part I, II and III categories to access themselves on state level. Prof. Incharge – Mr. Mayur Ingale.

- **Motivational Talk by Successful Innovator: Dr. Rahul Suryawanshi**

The online Motivational Talk by Successful Innovator was jointly organized by Department of Microbiology and Institution Innovation Council (IIC) of the Bajaj College of Science, Wardha on Tuesday 14th December 2021. The speaker of the event was Dr. Rahul Suryawanshi, Research Scientist, Gladstone Virology Institute, San Francisco, California, United States. The event got good response from the UG and PG students of various institutes as well as college faculties. Total 243 participants were registered for this programme. Dr. Suryawanshi motivated the students by showing his own journey from undergraduate to research as well as explained his current research findings. The comparing of the programme was carried out by Dr. B V. Mohite, Co-ordinator of the programme.

Dr. Om Mahodaya, Principal, Bajaj College of Science has delivered the keynote address. Guest introduction was given by Dr. B. V. Mohite. The question and answer session was conducted by Dr. U.A. Malode. Vote of thanks was delivered by Mr. M. G. Ingale.

- **Microbiology Week Celebration “Micromania” (23-25 August 2022)**

Micromania Inauguration

The Microbiology week was inaugurated on 23rd August 2022 at 12.20 pm on the hands of Dr. M. R. Chandrakar, Vice Principal, BCS, Wardha. Dr. Mrs. S. S. Khandare, Head, Department of Microbiology, Dr. P. V. Tekade, Convener, RICH club and Dr. B. V. Mohite, Coordinator, Micromania were present on the dais for the programme. The inauguration ceremony was conducted at Department of Microbiology, BCS, Wardha. On this occasion Wall Magazine of Microbiology was also inaugurated. Ms. Riya Urkande compared the programme and vote of thanks was given by Ms. Mugdha Shukla. All faculty members, Non-teaching staff, volunteers and students participants were present for the inauguration event.

Online Poster Competition and Exhibition

The online poster competition was jointly organized by Department of Microbiology and Research Innovation Curriculum Hour (RICH) Club of the Bajaj College of Science, Wardha on the occasion of celebration Microbiology week “Micromania” on Tuesday 23rd August 2022. The competition was organized for undergraduate and postgraduate students. There was total 15 undergraduate and 19 postgraduate students presented posters online via Google meet. The BCS students also prepared poster and exhibited at Gandhi Memorial Hall, BCS, Wardha. E-certificates were given to the winners and participants. The registered students are from other colleges like, Vidyabharti College, Seloo, LAD College, Nagpur, CHM College, Ulhasnagar. The winners in undergraduate category were: Ms. Aastha Naik, CHM College, Ulhasnagar (First Rank) and Ms. Nubesha Pathan, BCS, Wardha (Second Rank). The winners for postgraduate category were: Ms. Rubina Pathan, BCS, Wardha (First Rank) and Ms. Bhagyashri Dorale, BCS, Wardha (Second Rank).

Quiz Competition “The Right Guess”

The quiz competition “The Right Guess” was jointly organized by Department of Microbiology and Research Innovation Curriculum Hour (RICH) Club of the Bajaj College of Science, Wardha on the occasion of celebration Microbiology week “Micromania” on Wednesday 24th August 2022. The competition was organized for undergraduate. There was total 16 undergraduate students participated in 8 groups (2 students in one group). The quiz was conducted at Gandhi Memorial Hall, BCS, Wardha. Certificates and trophies were given to the winners. Each participant received the participation certificate. The winners were: Ms. Khushboo Nimaje and Ms. Deipali Avchat (First Rank) and Mr. Hemang Butale and Mr. Pradunya Kumbhare (Second Rank).

Fermented Food Fest Competition and Expo

The Fermented Food Fest Competition and Expo was jointly organized by Department of Microbiology and Research Innovation Curriculum Hour (RICH) Club of the Bajaj College of Science, Wardha on the occasion of celebration Microbiology week “Micromania” on Thursday 25th August 2022. The competition was organized for undergraduate and Postgraduate students. There was total 14 undergraduate and 6 postgraduate student groups participated in the competition. Total 80 participants were registered for the competition. The competition and expo was conducted at Gandhi Memorial Hall, BCS, Wardha. All students exhibited their fermented food at the stall with a banner for its information and significance. All Students, Teaching and non-teaching staff of the college has visited the food fest expo. Certificates and trophies were given to the winners. Each participant

received the participation certificate. The winners were: Ms. Sakshi Warwatkar and Group (First Rank) and Ms. Prachi Dangare and group (Second Rank) in undergraduate category. The winners of postgraduate category were Ms. Arya Bhat and group (First Rank) and Ms. Vaishnavi Bhomle (Second Rank).

Valedictory and Prize distribution of Micromania

The valedictory programme of Microbiology week “Micromania” was conducted on 25th August at 3 pm at Department of Microbiology, BCS, Wardha. Dr. Om Mahodaya, Principi, BCS, Wardha, Dr. Mrs. S. S. Khandare, Head, Department of Microbiology, Dr. P. V. Tekade, Convener, RICH club and Dr. B. V. Mohite, Coordinator, Micromania, Prof. Rajendra Jadhav were present on the dais for the programme. Dr. Mrs. S. S. Khandare gave overview of the 3 competitions conducted in Macromania. Dr. Om Mahodaya guided the students on this occasion. Dr. B V Mohite summarized the microbiology week celebration and announced the prizes. The comparing of the programme was carried out by Mr. Dilip Raghvan and Ms. Tanvi Kalmegh proposed the vote of thanks. The student participants Ms. Rubina Khan and Ms. Sakshi Khonde given the feedback about the programme. The prize was distributed by the hands of dignitaries on the dais. All faculty members, Non-teaching staff, volunteers and students participants were present for the valedictory event.

2. Industry-Academia Interaction Programme:

Department of Microbiology regularly arrange educational tours under industry-academia programme. Some of the institutes where student visits are Rajiv Gandhi Biotechnology Centre, Central Citrus Research Institute, Government Institute of Forensic Science, Nagpur, National Environmental Engineering Research Institute (NEERI), Bio-Era, Pune, CCMB Hyderabad, IICT Hyderabad, Osmania University of Hyderabad, Royal Life Sciences Laboratories Hyderabad. Students get benefited by this study tour since they get familiar with the working of these laboratories and different sectors in research institutes. Prof. Incharge –Dr. S.S. Khandare & Dr. Ulka Malode (Bidwai)

3. Social Outreach Programmes of the Department:

Microbiology students should dispense their knowledge to the society. With this idea Dr. Ms. Suhas Khandare started the social outreach programme. The main objective of this program is linking of UG ,PG students to the school going childrens specially of Zilla Parishad and Nagarpalika

Schools, where children's from economically poor background get the education. These students are guided on different topics like their Personal Hygiene and Role of Microbes, Microbes in day today life, water borne diseases during rainy seasons, importance of washing of hands, Environment Protection and Preservation, Soil Pollution etc. The students can be motivated to think over how Microbiology can help the society for their upliftment. Prof. Incharge -Dr. Ms Suhas Khandare

- **Preparation of slogan and digital banner regarding COVID-19 awareness**

Preparation of slogan and digital banner regarding COVID-19 awareness Preparation of slogan and digital banner regarding COVID-19 awareness activity by Department of Microbiology in first week of April 2020 and propaganda on social sites for the COVID 19 awareness in second Week of April 2020.

- **Survey on Corona Vaccination**

The survey on awareness on Corona vaccination for Wardha district (<https://forms.gle/1PR4v8eeir2XP4qu8>) is going on by PG students of department of microbiology as their MSc. Dissertation. They are collecting data related to vaccine for COVID 19 and its post consequences by online mode. They also try to convince people for vaccination, if they are not ready to take vaccine.

- **Preparation and Participation of PG students in awareness video on Hand sanitization, Vaccination and Mucormycosis**

PG microbiology students (Jr. And Sr.) prepared videos on various topics like Hand sanitization, Vaccination and Mucormycosis for COVID 19 awareness. Students also convinced their family, friends, neighbours about the use and significance of hand sanitization, prevention of COVID 19 by vaccination and danger of Mucormycosis and treatment for it.

4. Workshops:

Department regularly organized workshops under Edu-bridge between JBCS-NCCS, Pune as well as in collaboration with Hi Media Laboratories. Scientists from National Center for Cell Science, Pune conducted the workshops on the topics Proteomics, Bioinformatics, Separation of Protein by SDS-PAGE, Nanotechnology, Research Career and ethics, Restriction fragment length Polymorphism, for M. Sc. Microbiology students as well as for M. Sc. Botany and M. Sc. Zoology students. Prof. Incharge -Dr. Ms Suhas Khandare .

➤ Recent Achievement of Students

1. Mayank Shukla and Diksha Taksande from B. Sc. final year cleared IIT JAM entrance exam (Biology) for the year 2017-18. Ms Nitya Varsha, Mr Samyak Bhagat, Ms Nivedita Dambhare, Ms Khushabu Meshram cleared IIT JAM entrance exam in 2018-19.
2. Aditya Bhaskarwar and Ayushi Choudhary from M. Sc. 1st year completed summer internship from NIT Rourkela in the year 2019-20.
3. Diksha Kalode and Shivani Mude from M.Sc 1st year and Divya Tawar and Pranali Bansod from M.Sc. 2nd year participated and presented the paper in International Conference on “Ayurveda for Global Well Being” organized by Ayurvedic College, Salod at Datta Meghe Institute of Medical Sciences and Research in January 2018.
4. Ruchika Bhisekar, Jayanti Mishra, Darshana Mankar & Harshada Sontakke from M.Sc.1st year participated and presented the poster in National conference on “Recent trend in polymer technology” organized by NMU Jalgaon in January 2020 and among them Ruchika Bhisekar and Jayanti Mishra got best poster award.
5. Sakshi Chawade from UG secured 2nd prize and Bhumika Dhoke from PG secured 1st prize in National Essay Competition on Microbiology, organized by Microbiologists Society, India for the year 2019-20. Bhumika Dhoke also received a Travel Assistance of Rs. 2000 for attending any National conference in Microbiology/Biotechnology in any part of India.
6. Pranali Jaunjal and Adity Motilinge M.Sc.I presented the poster on topic ‘Phage therapy’ at One day International Conference on ‘Future Tech of Life sciences’ organized by S. K. Porwal College, Kamptee in February 2020 and were awarded by 3rd prize. Ruchika Bhisekar from M.Sc. 1st year presented the poster on the topic ‘CRISPR-Cas-9’ in the same conference.
7. Ms. Harshada Kitey submitted Ph. D. in RTM Nagpur University in 2019, Mr. Nikhil Samarth get selected for Ph.D. at NCCS, Pune in 2019, Miss Pragati Kamble, joined Ph. D. program at RGCB Trivendrum in 2019 and Miss Anuja Maitreya selected at NEERI in Jan 2020. Miss. Ayushi Choudhary joined Ph.D. program at CDRI, Lucknow.
8. Student Council of Randhirsingh Bhadoriya Mahavidyalaya, Umred has organized Online University Level Intercollegiate Speech Competition on Topic: Swami Vivekanand- Youth Inspiration on 16th April 2022. Miss. Devyani Pande (BSc Sem II) from Dept. Of Microbiology participated in this Online University Level Intercollegiate Speech Competition.

9. Ms. Devyani Pande (BSc Sem II) has won the first prize in the debate competition on the occasion of International Women's Day on 8th March 2022. The competition was organized by Centre for Women Studies and Services (CWSS), Bajaj College of Science, Wardha.
10. Mayank Khandagale: Selected for International camp for leadership under Ananta ASPN Emerging Leaders Fellowship in month of October 2022



Ms. Devyani Pandey (BSc Sem II) has won the first prize in the debate competition

Winners of Innovative Idea competition 2021

Innovative Idea/concept competition 2021 was organized by Research Promotion committee of Bajaj College of Science, Wardha. The competition was taken for Undergraduate and Postgraduate students in two categories, Physical and chemical sciences and other is biological sciences by inviting their proposed research innovative idea in not less than 150 words. Total 07 students has participated and out of which -3 students have been awarded with prizes. First prize awarded to Mr. Diip Raghvan (Bsc Sem III) and Ms. Isha Deshmukh (Msc Sem III) and Second prize to Ms. Sonali Hete (Msc Sem III).



Winners of Innovative Idea competition 2021

➤ Departmental Society

Microbiology-Biotechnology society

The purpose of the formation of society by students is to provide platform for them to explore their ideas related with subject. The society organizes various activities like guest lectures, poster competition, wall magazine, educational tours etc. Students arrange guest lecturers of eminent personalities. This society helps to develop the leadership qualities among the student. Department of Microbiology in collaboration with Microbiologist Society, India, organized different activities for the students of UG and PG like National Level Poster competition, Scientific Rangoli competition, Essay Competition and “Fermented Food Exhibition/Competition. Students participated in all these activities and come up with flying colours. Prof. Incharge of this society is Dr. Ulka Malode.

- **Inauguration of Microbiology Biotechnology Society Student Unit for the session 2020-21 and guest lecture**

The Microbiology Biotechnology Society Student Unit for the session 2020-21 has been inaugurated online on Saturday, 30th January 2021 at 10.30am. The programme was chaired by Dr. Om Mahodaya, Principal, Bajaj College of Science, Wardha. Dr. A. M. Deshmukh, President, Microbiologist Society, India (MSI) has addressed the students. The introductory speech was delivered by Dr. Mrs. S. S. Khandare, HOD, Department of Microbiology. She introduced the office bearers of the Microbiology

Biotechnology Society Student Unit for the session 2020-21. On this Occasion Dr. Sanjeev Patankar, Ex Principal, SS Jaiswal College, Arjunimor, Dist. Gondia and President, MSI, Maharashtra and Goa region delivered a guest lecture on the topic “Nutritional Immunology & its Possible Role in COVID-19 Like Infections” Total 86 undergraduate and Postgraduate students along with Microbiology and Biotechnology faculty members were present for the programme. The vote of thanks was given by Dr. Ulka Malode-Bidwai, Coordinator, Biotechnology Department.

- **Inauguration of Microbiology Biotechnology Society Student Unit for the session 2021-22**

The Microbiology Biotechnology Society Student Unit for the session 2020-21 has been inaugurated online on Tuesday, 1st February 2022 at 12.30 pm. The programme was chaired by Dr. Om Mahodaya, Principal, Bajaj College of Science, Wardha who delivered the presidential speech. The inauguration was done on the hands of Dr. A. M. Deshmukh, President, Microbiologist Society, India (MSI). The introductory speech was delivered by Dr. Mrs. S. S. Khandare, HOD, Department of Microbiology. She explained the background of the programme and introduced the office bearers of the Microbiology Biotechnology Society Student unit for the session 2021-22. The guest of honour was Dr. Sanjeev Patankar, Ex Principal, SS Jaiswal College, Arjunimor, Dist. Gondia and President, MSI, Maharashtra and Goa region who addressed the students about the role of students in student unit. On this Occasion Dr. Rahul Bhoyar, Project Scientist, CSIR Institute of Genomics and Integrative Biology, New Delhi delivered a guest lecture on the topic “Next generation sequencing : A vital Tool in disease diagnosis and Pandemic Management” Total 110 undergraduate and Postgraduate students along with Microbiology and Biotechnology faculty members were present for the programme. The comparing of the programme was done by Dr. Bhavana Mohite. The question answer session was nicely conducted by Dr. Kunal Kale. The vote of thanks was given by Dr. Ulka Malode-Bidwai, Coordinator, Biotechnology Department and Microbiology Biotechnology Society Student Unit

➤ **Add-on Course/ Skill Based Certificate Courses Offered**

1. Clinical Laboratory Technology (Self Finance)

To impart crucial job skills to the students an add-on-Course ‘Clinical Laboratory Technology’ a career-oriented course’ is run by Department. The complete syllabus is of 20 credits including eight days training programme at well recognized pathology laboratory. The course updates the knowledge and skills of students in clinical and pathological study. Total number of seats are 20 and Course duration is 06 Months. Minimum 40% passing criteria through external and internal assessment.

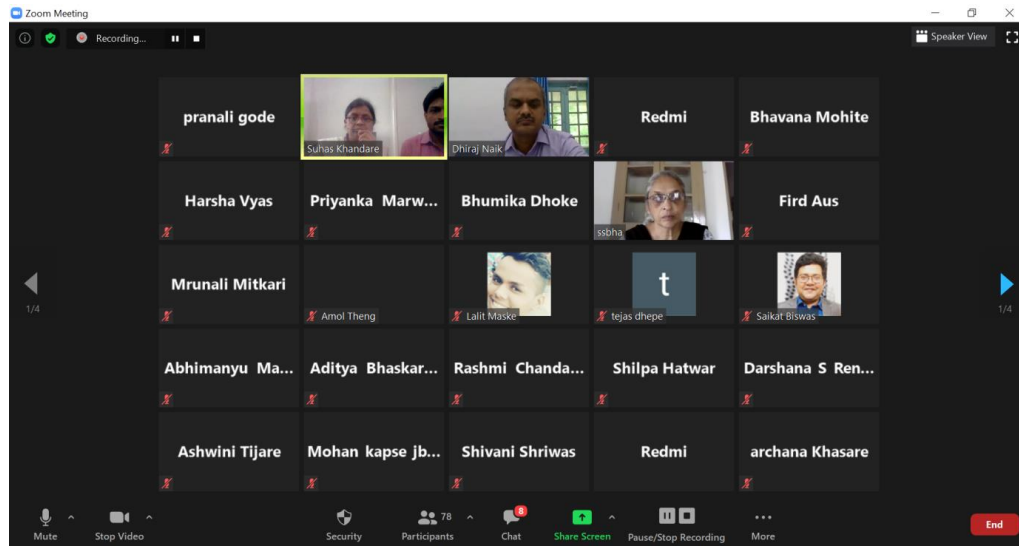
Prof. Incharge is Dr. Ulka Malode (Bidwai).

2. Post Graduate Diploma in Clinical Research

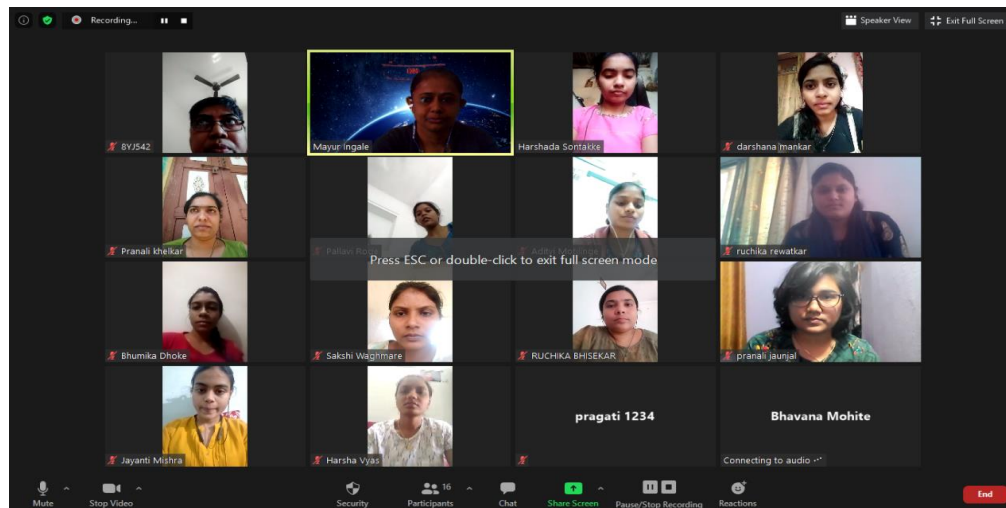
Department of Microbiology started Post Graduate Diploma in Clinical Research in collaboration with IICRM, Nagpur from the session 2021-22. Presently 25 students have registered for the course. This carrier oriented score is beneficial for the students of Life science pursuing P.G. in Microbiology, Botany, Zoology and Biotechnology. Course duration is 06 months plus 03 months internship in medical college. Any life science graduate with chemistry as one of the subject. This course will train the students to work in pharmaceuticals companies, in hospitals as clinical research associate, clinical trial auditor, medical writer, project manager, regulatory affair manager, biostatistician, drug safety associate. The students are also skilled to start business as a site management organization.

Prof. Incharge is Dr. S.S. Khandare

Event Gallery



Guest Lecture by Dr. Sujata Bhargava



Seminar Competition for PG Students

2021-22

Guest Speaker

Dr. Rahul K. Suryawanshi

Work Experience:

- Research scientist – Gladstone Institutes
- Post-doctoral Associate –University of Illinois @ Chicago
- Postdoctoral Associate, Erasmus Mundus Fellow, University of Perugia
- Senior Research Fellow – North Maharashtra University
- Junior Research Fellow – North Maharashtra University
- Laboratory Technician – National Aids Research Institute, ICMR
- Research Associate – Simbiosys Biowares Now Lonza Biotech

Research Funding:

- ISPB grant, SERB National Postdoctoral grant

Research Publications: 55

Honors & awards:

- Gladstone Institute of virology Award of Excellence 2021
- Kreithman post-doctoral research award – Ben-Gurion University of Negev, Israel.
- Erasmus Mundus (EUPHRATES) Fellowship – European Union
- JRF & SRF, CSIR, New Delhi, India
- International Travel Grant, ICMR, New Delhi, India
- Biotech industrial training – Biotech Consortium India Ltd, Government of India.

Motivational Talk by Successful Innovator: Dr. Rahul Suryawanshi

THE SEQUENCE EXPLOSION

Graph showing the exponential growth of DNA sequencing data from 2000 to 2020. The y-axis represents the number of sequences (log scale) and the x-axis represents the year. A red line shows the growth, starting from around 10,000 in 2000 and reaching over 100,000 by 2020. Key milestones are marked: 10,000 (2000), 1,000 (2005), 100,000 (2010), and 10,000,000 (2015).

Rahul Bhoyar

Bajji College of Science, Warananagar
DEPARTMENT OF MICROBIOLOGY AND BIOTECHNOLOGIES

In collaboration with
Microbiology Biotechnology Society (MBS)
Student Unit Inauguration



Guest Lecture on
*** Next-generation Sequencing: A vital tool in Disease Diagnosis and Pandemic Management ***
1st February 2022

Welcomes You

Dr. Rahul Bhoyar

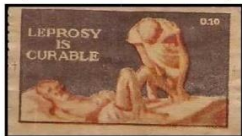
Inauguration of Microbiology Biotechnology Society Student Unit for the session 2021-22 and Guest Lecture by Dr. Rahul Bhoyar

Shiksha Mandal's
Bajaj College of Science, Wardha
 An Autonomous institution affiliated to RTM Nagpur University, Nagpur
 NAAC Reaccredited 'A' Grade (CGPA 3.21)
 College with Potential for Excellence
 (Phase II)

Department of Microbiology
 In collaboration with
Microbiologist Society India
 organizes

“Poster Competition”
 (for Post Graduate Students)



On the occasion of
“World Leprosy Day”
Theme: Towards Zero Leprosy

Instructions:

- Competition will be online and Poster should be self designed
- e- certificates to all winners and participants
- Register and submit your poster online by following link:
<https://forms.gle/N59b4N7PEpcnuut6>
- Prepare a digital poster max. 18 x 25 " and upload and submit the link
- Last date of submission of online poster: **30th January 2022.**

<p style="text-align: center;">Convener Dr. Mrs. S. S. Khandare Head, Dept. of Microbiology Bajaj College of Science, Wardha</p>	<p style="text-align: center;">Co-ordinator Dr. Ms. Bhavana Mohite Asst. Prof. Dept. of Microbiology Bajaj College of Science, Wardha</p>
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Principal
Dr. Om Mahodaya
 Bajaj College of Science, Wardha

Online Poster competition on the occasion of World Leprosy Day, Theme Zero Leprosy



Inauguration of Micromania 2022-23



Inauguration of wall magazine



Inauguration of Poster exhibition in Micromania



Quiz competition in Micromania



Quiz competition in Micromania



Food Fest and Expo competition in Micromania



Food Fest and Expo competition in Micromania



Food Fest and Expo competition in Micromania



Prize distribution of Micromania competitions



Prize distribution of Micromania competitions



Prize distribution of Micromania competitions