

Shiksha Mandal's  
**Bajaj College of Science, Wardha (Autonomous)**  
**Departmental Profile- Biotechnology**

**About The Department:**

Department of Biotechnology was established in the year 2006 to run B.Sc. undergraduate course. Current intake capacity for the course is sixty students. We offer Biotechnology subject with Chemistry and any one option from Microbiology/Botany/Zoology. The Department has also run post graduation course during the year 2010-2014. The department has highly qualified, experienced and dedicated faculty with specialization in Molecular Biology, Plant Tissue Culture, Agricultural and Environmental Microbiology, Immunology and Bioinformatics. The aim of department is to foster knowledge in students pertaining to basic and advance in biotechnology field.

Bajaj College of Science, Wardha has been granted autonomous status from the academic year 2017-18. The curriculum under autonomy has been modified 20% by highly experienced subject experts in consultation with academicians, research scientists and industry personnel to meet the latest requirements of biotechnology industries. The faculty and the students of the department are involved in various co curricular and extracurricular activities. It is also inculcating entrepreneurial skills in biotechnology graduates who would fulfill the role of job providers rather than jobseekers.

The department has well-furnished laboratories with all equipment's to impart more hands on training to the students and to carry out their projects. It has both college central library and departmental library where reputed International and National editions of books are made available to the students and faculties.

Alumni of the department occupy good positions in various industries like Meril Diagnostic Pvt.Ltd., Glenmark Pharmaceutical Ltd., Wipro Ltd, TCS, Eclerx services; Cap Gemini India Pvt Ltd. Graduating students normally find good fellowships in higher education and pursue their career in reputed institutes like NISER, Bhubaneswar and IIT-Roorkee.

**Highlights of the Department:**

➤ Library	Total 40 Books in the Departmental Library
➤ Internet facilities for staff and students	3 desktops for staff and students with internet facility
➤ Students Laboratories	UG Lab 44" X 26" 1 Plant Tissue Culture Laboratory


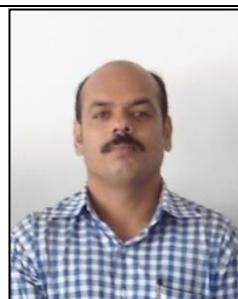
**Courses/Programmes Offered:**

Course		Specialization	Intake Capacity
UG	Bachelor of Science	Students may opt for Biotechnology in following combinations: 1. Biotechnology, Zoology, Chemistry 2. Biotechnology, Botany, Chemistry 3. Biotechnology, Microbiology, Chemistry	60

## Faculty Profile:

Session 2022-23	Name	Qualification	Designation	Teaching experience
	<b>Dr. Mrs. Ulka Malode (Bidwai)</b>	M.Sc Microbiology, Ph.D	Coordinator  Assistant Professor- Microbiology  Add on Course Coordinator	18 years
	<b>Dr. Kunal A. Kale</b>	M.Sc Biotechnology  Ph.D.	Assistant Professor  On Contractual Basis	6 years
	<b>Ms. Komal S. Dhumane</b>	M.Sc Microbiology	Assistant Professor  On Contractual Basis	3 Years
	<b>Ms. Pallavi B. Rode</b>	M.Sc Microbiology	Assistant Professor  On Contractual Basis	8.5 Months

### Supporting Staff:

Session 2022-23	Name	Designation	Work Experience
	<b>Mrs. Chanda P. Kumbhalkar</b>	Laboratory Assistant	23 Years
	<b>Shri. Kiran Badwaik</b>	Laboratory Attendant	17.5 Years

### Highlights of the Syllabus under Academic Autonomy:

1. The syllabus ensures that the students graduating with Biotechnology as one of the subjects will have the academic standard required to pursue post-graduation in Biotechnology in India and abroad.
2. Students graduating with Biotechnology will acquire skills that will be of tremendous value to them especially if they choose a career in Research, Academics, or Industry.
3. The graduates with Biotechnology will be able to face any national competitive exams held for the graduates will be able to qualify examinations like JAM, CSIR-NET, SET, GATE etc.
4. Syllabus contains important topics like Microbiology, Enzymology, Cell Biology, Biochemistry, Molecular Biology, r-DNA Technology/ Genetic Engineering, Immunology, Virology, Fundamental of Biomolecules, Biophysical Technique, PCR (Polymerase Chain Reaction), Bioinformatics, Environmental Biotechnology, Industrial Biotechnology, Food Biotechnology, Tissues Culture, etc are included in UG and PG syllabi.
5. Along with the theory, skill-oriented experiments including some innovative projects will prepare the students to orient themselves to bridge the gap between science and technology.

## Research:

### 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
Isolation and characterization of exopolysaccharide producing lactobacilli from probiotics	Dr. U. A. Malode	UGC, WRO PUNE	Government	4.2	2014-2016

### Papers in journals:

#### Dr. Ulka. A. Malode (Bidwai)

1. Bacteriological Analysis of Ice-cream Available in Amravati. U.A.Bidwai. and D.H.Tambekar Asian 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 and S.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.,

**Dr. Kunal A. Kale**

1. 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.
2. Kunal A. Kale, Meena S Deogade DNA Bar code: - New approach for authentication of medicinal plant, How to cite the article: joinsismed 2017, vol 4(4), pp 185- 187.
3. Meena Shamrao Deogade, Tarulata Pandya, Kethamakka Shivarama Prasad,Kunal Kale, Nilima Tankhiwale ."Antimicrobial Activity of *Vitex Negundo* Linn. (Nirgundi) Leaves Extract" J. res. tradit. medicine 12/4.
4. Meena Deogade, Tarulata Pandya, Nilima Tankhiwale, Prasad KSR, Kunal Kale. (2016)." Antibacterial activity of *Krishna Tulasi* (*Ocimum tenuiflorum* linn.)" *Ayurpharm int j ayur alli sci.*, 5/ 11.
5. Harshal Kharkar,Kunal Kale,Prashant Thakare (2016) Molecular characterization of *Pyricularia grisea* isolates using AFLP-DNA fingerprinting. J pure and applied microbiology. Vol. 10(2), p. 1181-1188.
6. Kale K.A. and Thakare P.V, (2014)Rapid and simplified method for isolation of fresh leaves, herbarium, silica dried and tuber sample of medicinally important plant species found in Indian forest. *IGERT*, vol:3(3), 1490-1493,.
7. Kale K.A. and Thakare P.V., (2013)Genus *Chlorophytum* Ker Gawl: Medicinally important plant from ancient Indian literature (Ayurveda).*IJAHM*, 3:3, 1201-1211.
8. Thakare. P.V. and Kale K.A., (2014) A molecular phylogeny of *Chlorophytum* species using chloroplast trnLT and AFLP analysis. *Biodiversity: The inventory value and benefits of life.*" (Advances in biotechnology and bioinformatics book series).

**Ms. Komal S. Dhumane**

1. 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. S. Dhumane, M.G. Ingale. *JETIR* (2019) 6 (6): 990-1000. (IF: 5.87).

**Books/Book Chapters published:**

**Dr. Ulka. A. Malode (Bidwai)**

1. DNA Bar Code: - New Approach for Conservation of Biodiversity.Kunal Kale, Pratiksha Pohekar,Ulka Malode-Bidwai.Chapter in 1 st volume of peered reviewed Edited Book 2021Innovative research trend in Science and Humanities. INSC Publishing House(IPH) Pushpagiri Complex, Beside SBI Chikkamagaluru Karnataka.

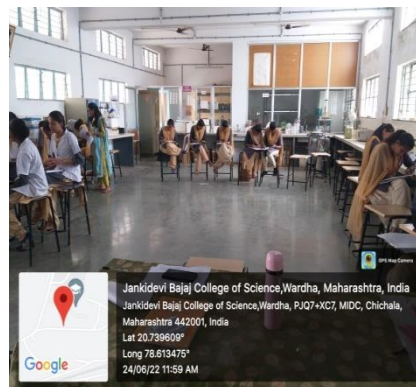
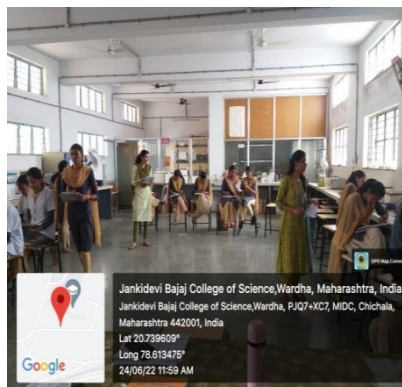
**Dr. Kunal A. Kale**

1. Kunal Kale and Prashant Thakare Genus *Chlorophytum*KerGawl.: Ancient medicinal plant from Indian hills. (Book r) accepted in book "Medicinal and Aromatic plants- Exploration and utilization". (Estern Book house publication). SBN 10: [9383252154](#)/ ISBN 13: [9789383252152](#)
2. DNA Bar Code: - New Approach for Conservation of Biodiversity.Kunal Kale, PratikshaPohekar,Ulka Malode-Bidwai.Chapter in 1 st volume of peered reviewed Edited Book 2021Innovative research trend in Science and Humanities. INSC Publishing House(IPH) Pushpagiri Complex, Beside SBI Chikkamagaluru Karnataka.



## Facilities:

## UG Laboratory:



**UG Laboratory 44" X 26"**



**Instrumentation Area**

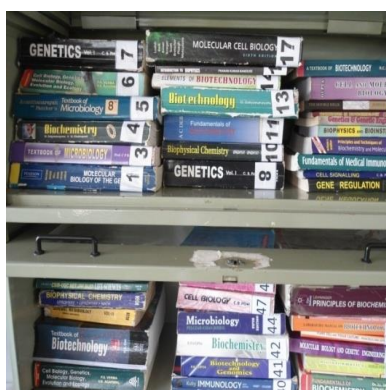


**Plant Tissue Culture Laboratory**



## Proper Disposal of Microbial Culture

### Departmental Library:



### Sophisticated Major Instruments:

S.R. NO.	NAME OF THE INSTRUMENTS	QUANTITY
1.	Incubator	02
2.	Oven	01
3.	Microscope	03
4.	Gel Electrophoresis	01
5.	Micro centrifuge	02
6.	High Speed Homogenizer	01
7.	Chromatography Chamber	01
8.	Deep freezer	01
9.	Transilluminator	01
10.	Water Bath Shaker	01
11.	Cooling Centrifuge	01
12.	Rotor Head	01
13.	Orbital Shaking incubator	01
14.	Microscope Olympus	05
15.	Autoclave	02
16.	Electronics Top Pan Balance	01
17.	Angle Head	01

18.	Digital colorimeter	02
19.	Electronics Digital Potentiometer	01
20.	Digital Conductivity Meter	01
21.	Heating Mantle	01
22.	Vortexes	01
23.	Microwave Oven	01
24.	Microtome	01
25.	Vertical Electrophoresis Assembly	01
26.	Gel Rocker	01
27.	Vertical Laminar Air Flow	01
28.	Microscope Olympus	03
29.	Digital pH Meter	01
30.	Magnetic Stirrer	01
31.	Binocular Microscope	03
32.	Water Bath	01
33.	Binocular Microscope	01
34.	Weighing Balance	02
35.	Refrigerator Vertical 457 Lit.	01

### **Extracurricular Activities:**

- Department of Biotechnology, Bajaj College of Science, Wardha, organized Online National Level Slogan Competition on “Corona Warriors” to commemorate “Independence Day 2020” on 15th August 2020. Winners of first, second and third prize are Miss. Megha B. Lakhe, Miss. Shivani R. Satone, Miss. Kajal Mendhe, However, Adv. Ajay U. Bhakt and Surekha Dubey got consolation prize.
- Miss. Bhargavi Deshpande from Dept. of Biotechnology participated in Online University Level Intercollegiate Speech Competition on Topic: Swami Vivekanand- Youth Inspiration on 16<sup>th</sup> April 2022 organized by Student Council of Randhirsingh Bhadoriya Mahavidyalaya, Umred.
- Students of Department of Biotechnology presented skit on “Application of Biotechnology field for betterment of Human Life” on the occasion of “76<sup>th</sup> Independence Day- Azadi Ka Amrit Mahotsav” on 15<sup>th</sup> August 2022. The objective of organizing this activity was to make junior college and first year students aware of the application of biotechnology in various fields for the betterment of human life and to motivated students for selection of biotechnology as a carrier option.

### **Co-curricular Activities:**

- Department of Biotechnology organized a Guest Lecture on “Entrepreneurship and Career Opportunities in Biotechnology” and “Waste Management Practices” by Dr. Ashish Polkade, Director, Vision Ecological Pvt. Ltd., Pune on 20<sup>th</sup> July 2019.



- Department of Biotechnology organized one day workshop on “Basic Techniques in Bioinformatics” for M.Sc. and B.Sc. students of Bajaj College of Science by Dr. Kunal A. Kale, faculty Department of Biotechnology on 13<sup>th</sup> August 2019.
- Department of Biotechnology organized “Biotechnology Open-Day” activity that was held on 28<sup>th</sup> September 2019, under the guidance of the Principal, Dr. Om Mahodaya and coordinator, Department of Biotechnology Dr. Ulka Malode and faculty Dr. Kunal Kale and Dr. Anchal Rathi take efforts for the success of the event. The main objective of this event was to spread the knowledge of biotechnology among junior college students.
- Dr. Kunal A. Kale, Assistant professor, Department of Biotechnology BSCW, was invited as a Guest Speaker for 2 days Workshop on “Dravya – 2019” . The Workshop was focused on Identification and standardization of Medicinal Plants in researches of “Ayurveda” at Mahatma Gandhi Ayurveda Medical College, Hospital & Research Institute, Salod, Wardha on 20<sup>th</sup> and 21<sup>st</sup> December 2019.
- Department of Biotechnology has organized one day workshop on 5<sup>th</sup> March 2020. Dr. Kunal Kale faculty of Department of biotechnology gives hands on “Methodology and Application of Restriction Enzyme Based Technology”. Total 22 students of PG Department of Botany benefited by this workshop.
- “Online Departmental Seminar Competition” on UG Biotechnology Curriculum of Sem III and Sem V on 5<sup>th</sup> September 2021, Total 24 students were participated in Seminar Competition from B.Sc. III<sup>rd</sup> and V<sup>th</sup> semester. Participant’s videos were evaluated by committee of jury. The members of jury committee were Dr. Y. S. Patil (Asst. Prof. Dept. of Microbiology, DM. Burungale Science and Arts College, Shegaon) and Dr. Pranita Gulhane (PG Department of Microbiology, Shri. Shivaji Science College, Nagpur). Winners of first, second and third prizes were Aniket Vitalkar, Aishwarya Chandankhede and Angha Makode from BSc. Semester III and from B.Sc. Semester V winners were Shweta Magar, Krutika Panbude and Akshit Chamke. The objective of Competition was, to boost up students confidences and motivated students for participation in co-curricular and extracurricular activity.
- "How to Prepare effective e-Poster and Abstract” by Dr. Kunal A. Kale, on 25<sup>th</sup> October 2021 for B.Sc. II<sup>nd</sup> and III<sup>rd</sup> year Biotechnology students. Total 51 students participated (19 online and 32 offline). The objective of lecture was to increase the understanding of student regarding Designing of scientific poster and Scientific Poster presentation.
- Ten students of Dept. of Biotechnology successfully completed 15 days online certificate course and internship programme on “Computer Aided Drug and Vaccine Design” organized by Institute of Innovation Triuvannamalai, Tamilnadu, India held from 29<sup>th</sup> January to 12<sup>th</sup> February 2022.
- Department of Biotechnology, Bajaj College of Science, Wardha organized “Biotechnology Orientation Programme and Vaccine Awareness Poster Exhibition” to aware the students about Department of Biotechnology and enhance understanding regarding importance’s of vaccination. This event was inaugurated on 29<sup>th</sup> August 2022

in the UG Department of Biotechnology at the hands of Principal, Dr. Om Mahodava, Bajaj College of Science, Wardha under auspicious presence of Dr. P. V. Tekade, Head of Department Chemistry and Convener RICH Club, Bajaj College of Science, Wardha under able guidance of Convenor of the event Dr. Ulka Malode –Bidwai and Co-ordinator of the event Dr. Kunal A. Kale, Ms. Komal S. Dhumane and Ms. Kranti Bamnote.

- Department of Biotechnology, Bajaj College of Science, Wardha organized “Biotechnology Open Day” to aware the students regarding Biotechnology as a career option and enhance understanding regarding cutting-edge experiments and equipment handling. This event was inaugurated on 17<sup>th</sup> September 2022 in the UG Department of Biotechnology at the hands of Officiating Principal, Dr. P. V. Tekade, Bajaj College of Science, Wardha under auspicious presence of Shri. S. E. Nakhale, Vice- Principal, Junior College, Bajaj College of Science, Wardha under able guidance of Convenor of the event Dr. Ulka Malode –Bidwai and Co-ordinator of the event Dr. Kunal A. Kale and Miss Komal S. Dhumane. Students of Biotechnology Department demonstrated ELISA, Thin Layer Chromatography, Plant Tissue Culture, *etc.* In all, 200 students and faculties from junior and senior college were benefited by this “Biotechnology open day”.
- Department of Microbiology and Biotechnology organized Model Competition on the occasion of Birth Anniversary of Dr. Har Gobind Khorana on 19th January 2023.
- State Level Student Seminar Competition, Scintillation’ 23 on 24th February 2023 in the stream of Microbiology and Biotechnology Subject organized by Bajaj College of Science, Wardha.

### **Industry-Academic Interaction:**

- Department of Biotechnology has organized a “Educational Tour” under the guidance of Principal, Dr. Om Mahodaya and Coordinator, on 8<sup>th</sup> January 2020. Total 50 B.Sc. students along with Coordinator, Department of Biotechnology Dr. Ulka Malode and faculty, Dr. Kunal Kale and Dr. Anchal Rathi and non-teaching staff Shri. Kiran Badwaik and Mrs. Smita Gaikwad visited Forensic Science Laboratory, Institute of Science, Ankur Seeds, Nagpur. This Educational tour helps students to upgrade their knowledge in respective subject. This visit changes their perspective towards research, opportunities in the field of Biotechnology.

### **Social Outreach Programmes/ Workshops:**

- Dr. Ulka A. Malode delivered a popular talk on “Importance of Swachata (Clean India, Green India), Current status of Plastic Usage among India” under the banner Cleanliness Drive to NSS Students held on 18<sup>th</sup> September 2019.
- The Department of Biotechnology, Bajaj College of Science, Wardha in association with Jankidevi Bajaj Gram Vikas Sanstha, Wardha, organised a “Hemoglobin Detection Camp for Rural Women at Khangoan Tal. Hinganghat, Dist. Wardha”. This event was organised on the occasion of Mata Jankidevi Bajaj Jayanti on 7<sup>th</sup> January. This event was inaugurated on 8<sup>th</sup> January 2021 in ZP school at the hands of Mrs. Jyoti Ghote, Sarpanch, Khangoan, Gram Panchayat under auspicious presence of all the members of Gram Panchayat Khangoan, under able guidance of Convenor of the event Dr. Ulka Malode –

Bidwai and Faculty Dr. Kunal A. Kale, Miss Komal S. Dhumane and Miss. Khushboo O. Parimal. Total 52 women benefited in this camp. The objective of camp was to detect hemoglobin level in rural area women's and aware them regarding symptoms and preventive major during low hemoglobin level.

- The Department of Biotechnology, Bajaj College of Science, in association with Jankidevi Bajaj Gram Vikas Sanstha, Wardha, organised a “Hemoglobin Detection Camp for Rural Women at Khangoan Tal. Hinganghat, Dist. Wardha”. This event was organised on the occasion of Mata Jankidevi Bajaj Jayanti on 7<sup>th</sup> January. This event was inaugurated on 20<sup>th</sup> January 2021 in ZP school under auspicious presence of all the members of Gram Panchayat Madani, under able guidance of Convenor of the event Dr. Ulka Malode –Bidwai and Faculty Dr. Kunal A. Kale, Miss Komal S. Dhumane and Miss. Khushboo O. Parimal Mrs. Mridula Patil, Assistant Project Officer, Miss. Bhageshri Ingle and villagers from Madani. Total 105 women benefited in this camp. The objective of camp was to detect hemoglobin level in rural area women's and aware them regarding symptoms and preventive major during low hemoglobin level.
- The Department of Biotechnology, Bajaj College of Science, in association with Jankidevi Bajaj Gram Vikas Sanstha, Wardha, organised a “Workshop for ZP Teacher on Basic Techniques in Biotechnology Field” to make the Zila Parishad teachers aware of the application of cutting-edge experiments in Biotechnology. This event was inaugurated on September 22<sup>nd</sup>, 2022 in the UG Department of Biotechnology at the hands of the Officiating Principal, Dr. P. V. Tekade, Bajaj College of Science, Wardha in the auspicious presence of Dr. V. Wanmali, Ex-Vice Principal, Junior College, Bajaj College of Science, Wardha under the able guidance of the convenor of the event, Dr. Ulka Malode-Bidwai, and Co-ordinator of the event, Dr. Kunal A. Kale, Miss Komal S. Dhumane. Students of the Biotechnology Department demonstrated and explained the applications of ELISA, Thin Layer Chromatography, Plant Tissue Culture, *etc.* The faculties and students of the Department of Biotechnology, Bajaj College of Science, Wardha, strove hard for the success of the events.

### **Recent Achievement of Students:**

1. Miss. Ashwini Zade selected in RTM Nagpur University Basketball Team for Maharashtra State Krida Mahotsav (Ashwamedh) at Dapoli Dist. Ratnagiri
2. Miss. Dipali Mitkar Selected in RTM Nagpur University Baseball Team for All India Inter University Tournament at Rohatak.
3. Roshani Bhosale won 3<sup>rd</sup> Prize in inter cluster seminar competitions organized by Jankidevi Bajaj College of Science, Wardha on 18<sup>th</sup> August 2018.
4. Mr. Anmol Sangitwar won Second Prize in Drawing competition on the occasion of “National Voter's Day” on 25<sup>th</sup> January 2019
5. Miss. Divya Kuratkar won 3<sup>rd</sup> Prize in poster Competition in International Conference on “Future Tech of Life Science” organized by S.K. Porwal College, Kamptee in association with Microbiologist Society of India on 14<sup>th</sup> and 15<sup>th</sup> February 2019.
6. Ms. Anam Sayyed has successfully completed a project under the guidance of Dr. Sahil Akhtar CDRI, Lucknow as a summer research fellow the Programme jointly

organised by IASc., Bangalore, INSA, New Delhi and NASI, Prayagraj during May to July 2019.

7. Ku. Achal Puri selected in Maharashtra State Team for National Ball Badminton Championship at Erode, Tamil Nadu on 11<sup>th</sup> to 15<sup>th</sup> August 2018.
8. Bhupendra Kangale selected in RTM Nagpur University Water Polo Team for Inter University Tournament at. Bangalore on 28<sup>th</sup> to 31<sup>th</sup> October 2018.
9. Ku. Kalyani Badhiye selected in RTM Nagpur University Football Team for Inter University Tournament at. I.T.M. University, Gwalior on 29<sup>th</sup> November 2018 to 2<sup>nd</sup> January 2019.
10. Ku. Kalyani Badhiye selected in RTM Nagpur University Ball Badminton Team for Inter University Tournament at. Krishna University, Vijayawada on 9<sup>th</sup> to 13<sup>th</sup> January 2019.
11. Ms. P. Kewate, Ms. A. Charode, Ms. S. Zade, Ms. N. Bhagat, Ms. N. Bhagat, Ms. K. Mendhe and ,Ms. P. Salwe won 3<sup>rd</sup> prize in the Rangoli competition on “Immunology”, organized by “Microbiologist Society of India” on 16<sup>th</sup> September 2019.
12. Ms. Roshani Bhosale, Ms. Lakshmiparvati Gharpure and Ms.Firdos Nasrin Abu Salam Shaikh won 2<sup>nd</sup> prize in a poster competition organized by “Microbiologist Society of India”, Department of Microbiology, Bajaj College of Sciences, Wardha, on 17<sup>th</sup> September 2019.
13. Miss. Divya Kuratkar won 3rd Prize in poster Competition in International Conference on “Future Tech of Life Science” organized at S.K. Porwal College, Kamptee in association with Microbiologist Society of India on 14<sup>th</sup> and 15<sup>th</sup> February 2020.
14. Laxmiparvati Gharpure has participated and got a Consolation prize in the E-Poster event a National virtual Contest entitled “How to be eco-friendly during Corona virus crisis: Going green in lockdown” organized by Biology Society on the occasion of “World Environment Day” on 05<sup>th</sup> June 2020.
15. Ku. Kalyani Badhiye Select in Rashtrasant Tukdoji Maharaj Nagpur University Netball Men Team. For Inter University Tournament at Annamalai University Andrapradesh on 13<sup>th</sup> to 16<sup>th</sup> February 2020.
16. Miss. Jhaveriya Qureshi selected in Rashtrasant Tukdoji Maharaj Nagpur University Sepak Takraw Women Team for Inter University Tournament at. Bareli MJP Rohilkhand University (17<sup>th</sup> to 19<sup>th</sup> February. 2020).
17. Vijaysingh Tomar Selected in Rashtrasant Tukdoji Maharaj Nagpur University Sepak Takaraw Women Team for Inter University Tournament at. Bareli MJP Rohilkhand University on 19<sup>th</sup> to 23<sup>rd</sup> February 2020.
18. Ms. Kajal Mendhe has won Third Prize in Online National Level Slogan Competition on “Corona Warriors” organized by Department of Biotechnology, Bajaj College of Science, Wardha, to commemorate “Independence Day 2020” on 15<sup>th</sup> August 2020.
19. Mr. Atharva Bhingare won Second Prize in "Innovative Idea /Concept competition for student organized by research promotion cell, Bajaj College of Science, Wardha on 20<sup>th</sup> November 2021.
20. Mr. Laukik Thakre won First Prize in Online National Level Essay Writing Competition organized by Cultural Committee, Bajaj College of Science, Wardha on the occasion of “International Youth Day” on 12<sup>th</sup> January 2022.

21. Miss. Rimzim Ravindra Karode, won First Prize in Online National Level Solo Dance Competition organized by Cultural Committee, Bajaj College of Science, Wardha to commemorate, 73<sup>rd</sup> Republic Day "Azadi ka Amrit Mahotsav on 26<sup>th</sup> January 2022.
22. On the occasion of National Science Day 2022 on 2nd March 2022 Department of Microbiology and Computer Science of Dharampeth M.P. Deo Memorial Science College, Nagpur organized video making competition on 2<sup>nd</sup> March 2022. Sanika Golait got 2<sup>nd</sup> prize for "Radioactive Waste Management " and Aniket Vitalkar got consolation prize for "Strategies for Sustainable Agriculture Waste" that they get felicitated by Principal Dr. Om Mahodaya. Theme of the competition was "Integrated approach in Science and Technology for sustainable future". For this competition eight students were participated under the able guidance of Co-ordinator Dr. U A. Malode and Dr. K A. Kale from Department of Biotechnology, Bajaj College of Science, Wardha.
23. Ms. Kiran Tajane participated and won Third Prize in "Rangoli Competition" organized by Cultural Committee, Bajaj College of Science, Wardha to commemorate 76<sup>th</sup> Independence Day- "Azadi ka Amrit Mahotsav on 15<sup>th</sup> August 2022.
24. Ms. Nubsha Pathan won Second Prize in "Online Poster Competition" under Microbiology Week "MICROMANIA" organized by Department of Microbiology in association with Research Innovation Curriculum Hour (RICH) Club, Bajaj College of Science, Wardha on 23<sup>rd</sup> August 2022.
25. Ms. Khushboo Nimje and Ms. Dipali Awachat won First Prize and Pradunya Kumbhare won Second Prize in "Quiz Competition: The Right Guess (UG)" under Microbiology Week "MICROMANIA" organized by Department of Microbiology in association with Research Innovation Curriculum Hour (RICH) Club, Bajaj College of Science, Wardha on 24<sup>th</sup> August 2022.
26. Ms. Khushi Deogade, Ms. Siddhi Borikar, Ms. Sakshi Warwatkar and Ms. Thritee Bhagat won First Prize in "Fermented Food Competition and Expo" under Microbiology Week "MICROMANIA" organized by Department of Microbiology in association with Research Innovation Curriculum Hour (RICH) Club, Bajaj College of Science, Wardha on 25<sup>th</sup> August 2022.
27. Ms. Sampada P. Udepurkar qualified inter college final screening test of Rainbow 2022 and won Second Prize in "Classical Dance Competition" organized by Student Development Cell, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur on 27<sup>th</sup> to 28<sup>th</sup> September 2022 at Yashwant Mahavidyalaya, Wardha.
28. Ms. Khushi Deogade won 1<sup>st</sup> Prize and Mr. Atharva Bhingare won 2<sup>nd</sup> Prize in Model Competition on occasion of Birth Anniversary of Dr. Har Gobind Khorana organized by Department of Microbiology and Biotechnology, Bajaj College of Science, Wardha on 19<sup>th</sup> January 2023. For this competition total 8 students were participated from Department of Biotechnology, Bajaj College of Science, Wardha.
29. Mr. Aniket Vitalkar, Ms. Simran Thool and Ms. Khushi Deogade Participated in District and University Level Selection Trial of Avishkar Research Convention 2022-23 organized by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur on 16<sup>th</sup> to 17<sup>th</sup> December 2022 at Dadasaheb Balpande College of Pharmacy, Dham Mandir, Besa, Nagpur.



30. Ms. Khushi Deogade won Consolation Prize in Poster Presentation in National Conference on Biotechnology for Better Tomorrow at Tayawade College, Koradi, Nagpur on 22<sup>nd</sup> to 24<sup>th</sup> January 2023.
31. Ms. Aaliya Sayyad won 2<sup>nd</sup> Prize and Ms. Sakshi Nimje won 3<sup>rd</sup> Prize in Mehendi Competition, Ms. Rimzim Karode won 3<sup>rd</sup> Prize in Art Exhibition, Ms. Sampada Udepurkar won Consolation Prize in Dance Competition, Ms. Bhargavi Deshpande won 2<sup>nd</sup> Prize in Carrom and Ms. Aishwarya Chandankhede won 3<sup>rd</sup> Prize in Carrom, Mr. Ayush Bajpayee won 3<sup>rd</sup> Prize in Badminton, Mr. Aditya Kewate won 2<sup>nd</sup> Prize in Volleyball (Boys Team), Mr. Aditya Kewate won 2<sup>nd</sup> Prize in Cricket (Boys Team), Mr. Shishir Gongade, Mr. Ayush Bajpayee and Mr. Kartik Sontakke won 1<sup>st</sup> Prize in Volleyball (Boys Team), Ms. Khushboo Nimje and Ms. Vaishnavi Chaware won 1<sup>st</sup> Prize in Volleyball (Girls Team), Ms. Sakshi Thakre won 3<sup>rd</sup> Prize in Volleyball (Girls Team) on Youth Fest 2023 (Yugam 2023) organized by Bajaj College of Science, Wardha (Autonomous) on 23<sup>rd</sup> to 25<sup>th</sup> January 2023.
32. Ms. Siddhi Borikar won 2<sup>nd</sup> Prize in State Level Golden Jubilee Research and Innovation Festival, Shodhotsav- 2023 for Level III in Category of Commerce and Management organized by Brijlal Biyani Science College, Amravati on 16<sup>th</sup> February 2023. For this competition total 3 students were participated from Department of Biotechnology, Bajaj College of Science, Wardha.
33. Ms. Khushi Deogade won 2<sup>nd</sup> Consolation prize in State Level Student Seminar Competition, Scintillation' 23 in stream Microbiology and Biotechnology at Bajaj College of Science, Wardha on 24<sup>th</sup> February 2023.
34. Ms. Sanika Ingole won 1<sup>st</sup> Prize and Ms. Simran Thool won Consolation Prize in Y20 District Level Poster Competition on Future of Work: Industry 4.0, Innovation and 21<sup>st</sup> Century Skills organized by Bajaj College of Science, Wardha on 27<sup>th</sup> February 2023. For this competition total 8 students were participated from the Department.
35. Ms. Sanika Ingole represents Wardha Dist. for Youth-20 Consultation on Theme Peacebuilding and Reconciliation- Ushering in an era of on war: The Philosophy of Vasudhaiva Kuttumbakam at Symbiosis International University Campus Lavale, Pune on 10<sup>th</sup> to 11<sup>th</sup> March 2023.

### **Recent Achievements of Faculty:**

1. Coordinator of the Department Dr. U. A. Malode nominated as member of Board of Studies in Microbiology Subject, RTM Nagpur University, Nagpur.
2. Faculty of the Department Dr. Kunal A. Kale Received National Biotech Award 2023 for significant excellent, and outstanding contribution to the field of Biotechnology as a Bioentrepreneur on the occasion of National Conclave, 2023: Industry-Academia Meet for Student of Rural and Urban India on Bimake in India organized by Krishna Institute of Allied Sciences, KVV, Karad in collaboration with Microbiologist Society, India on 20<sup>th</sup> May 2023

## **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, 30<sup>th</sup> 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**

Department of Biotechnology and Microbiology in association with Microbiologist Society of India (MSI) has Inaugurated "Microbiology Biotechnology Society students Unit" on 1<sup>st</sup> February 2022 by the hand of Dr. A.M. Deshmukh President Microbiology Society, India, in presences of Principal, Dr. Om Mahodaya, Dr. Sanjeev Patankar, President, Microbiologist Society, Maharashtra-Goa Region. Followed by guest lecture on "Next Generation Sequencing: A vital tool in disease diagnosis and pandemic management" by Dr. Rahul C. Bhoyar, Project Scientist, CSIR, institute of genomics and integrative Biology New Delhi. Total 95 students and faculties of departments benefited with this lecture.

## Event Gallery:



**Students of Department of Biotechnology presented skit on “Application of Biotechnology field for betterment of Human Life” on 15<sup>th</sup> August 2022**



**Guest Lecture on “Entrepreneurship and Career Opportunities in Biotechnology” and “Waste Management Practices” by Dr. Ashish Polkade on 20 July 2019.**



**One day workshop on Basic Techniques in Bioinformatics by Dr. Kunal A. Kale, on 13<sup>th</sup> August 2019**

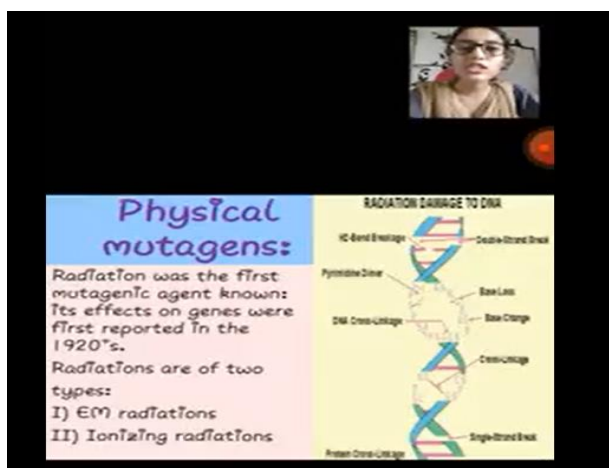


**Biotechnology Open-Day” on 28<sup>th</sup> September 2019**



**Dr. Kunal A. Kale invited as a Guest Speaker for 2 days Workshop on “Dravya”2019 at Mahatma Gandhi Ayurveda Medical College, Hospital & Research institute, Salod, Wardha on 20<sup>th</sup> and 21<sup>st</sup> Dec. 2019.**





**Online Departmental Seminar Competition on UG Biotechnology Curriculum of Sem III and Sem V on 5<sup>th</sup> September 2021**



**Department of Biotechnology, Bajaj College of Science Wardha Organised lecture on "How to Prepare effective e-Poster and Abstract " by Dr. Kunal A. Kale on 25<sup>th</sup> October 2021.**

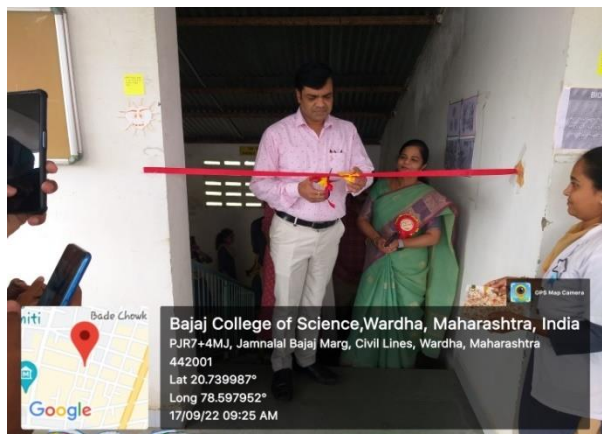


**Institute of Innovation Triuvannamalai, Tamilnadu India organized 15 days certificate course and internship on “Computer Aided Drug and Vaccine Design” during 29<sup>th</sup> January to 12<sup>th</sup> February 2022.**



**Biotechnology Orientation Programme and Vaccine Awareness Poster Exhibition on 29<sup>th</sup> August 2022**





**Biotechnology Open Day on 17<sup>th</sup> September 2022**



**Educational Tour on 8<sup>th</sup> January 2020**



**Dr. Ulka A. Malode delivered a popular talk on "Importance of Swachata (Clean India, Green India), Current status of Plastic Usage among India" on 18<sup>th</sup> September 2019**





**Hemoglobin Detection Camp for Rural Area women's at Khangoan Tal. Hinganghat on 8<sup>th</sup> January 2021**



**Hemoglobin Detection Camp for Rural Area Women's from Madani Tal. Seloo, Dist. Wardha on 20<sup>th</sup> January 2021**



**Workshop for ZP Teacher on Basic Techniques in Biotechnology Field on 22<sup>nd</sup> September 2022**





**Department of Microbiology and Biotechnology organized Model Competition on 19th January 2023.**



**State Level Student Seminar Competition, 'Scintillation' 23 on 24th February 2023 in the stream of Microbiology and Biotechnology Subject organized by Bajaj College of Science, Wardha**



**Roshani Bhosale won 3<sup>rd</sup> Prize in Inter Cluster Seminar Competitions on 18<sup>th</sup> August 2018**



**Winners of various competitions organised to celebrate National Voter's Day**

**Mr. Anmol Sangitwar won Second Prize in Drawing competition on 25<sup>th</sup> January 2019**



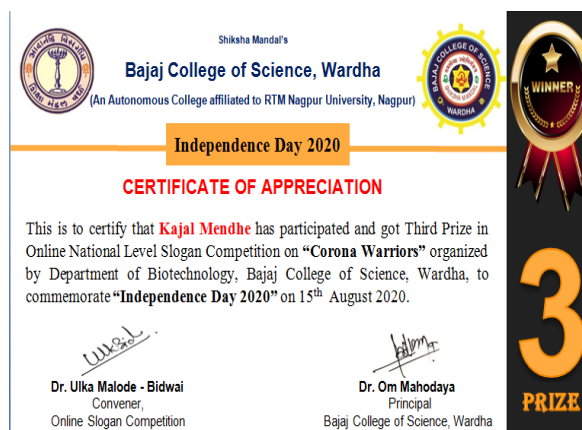
**Ms. Diva Kuratkar won 3<sup>rd</sup> Prize in poster Competition in International Conference on "Future Tech of Life Science" 14<sup>th</sup> and 15<sup>th</sup> Feb 2020.**



**Miss Anam Sayyed has successfully completed a project under the guidance of Dr. Sahil Akhtar, CDRI, Lucknow as a "Summer research fellow" on May-July 2019.**



**Ms. Laxmiparvati Gharpure and got Consolation prize in E-Poster event of National virtual Contest entitled “How to be eco-friendly during Corona virus crisis: Going green in lockdown” on 05th June 2020.**



**Ms. Kajal Mendhe has participated and got Third Prize in Online National Level Slogan Competition on “Corona Warriors” on 15<sup>th</sup> August 2020.**



**Mr. Atharva Bhingare won Second Prize in “Innovative Idea/Concept Competition” on 20<sup>th</sup> November, 2021.**



**Mr. Laukik Thakre won First Prize in Online National Level Essay Writing Competition on 12<sup>th</sup> January 2022.**



**Miss. Rimzim Ravindra Karode, won First Prize in Online National Level Dance Competition 26<sup>th</sup> January 2022.**



**Sanika Golait won 2<sup>nd</sup> Prize and Aniket Vitalkar won Consolation Prize in Video Making Competition on 2<sup>nd</sup> March 2022**





**Ms. Kiran Tajane won Third Prize in “Rangoli Competition on 15<sup>th</sup> August 2022**



**Ms. Nubesha Pathan won Second Prize in “Online Poster Competition” on 23<sup>rd</sup> August 2022**



**Ms. Khushboo Nimje and Ms. Dipali Awachat won First Prize in “Quiz Competition: The Right Guess (UG)” on 24<sup>th</sup> August 2022.**



**Pradunya Kumbhare won Second Prize in “Quiz Competition: The Right Guess (UG)” on 24<sup>th</sup> August 2022.**



**Ms. Khushi Deogade, Ms. Siddhi Borikar, Ms. Sakshi Warwatkar and Ms. Thrilee Bhagat won First Prize in “Fermented Food Competition and Expo” on 25<sup>th</sup> August 2022.**



**Ms. Sampada P. Udepurkar won Second Prize in “Classical Dance Competition” on 27<sup>th</sup> to 28<sup>th</sup> September 2022**



**Ms. Khushi Deogade won 1<sup>st</sup> Prize in Model Competition on 19<sup>th</sup> January 2023.**



**Mr. Atharva Bhingare won 2<sup>nd</sup> Prize in Model Competition on 19<sup>th</sup> January 2023.**



**Mr. Aniket Vitalkar, Ms. Simran Thool and Ms. Khushi Deogade Participated in District and University Level Selection Trial of Avishkar Research Convention 2022-23 organized by RTMNU, Nagpur on 16<sup>th</sup> to 17<sup>th</sup> December 2022**



**Ms. Khushi Deogade won Consolation Prize in Poster Presentation in National Conference on Biotechnology for Better Tomorrow on 22<sup>nd</sup> to 24<sup>th</sup> January 2023.**



**Ms. Aaliya Sayyad won 2<sup>nd</sup> Prize in Mehendi Competition- Yugam 2023 on 25<sup>th</sup> January 2023**





**Ms. Sampada Udepurkar won Consolation Prize in Dance Competition- Yugam 2023 on 25<sup>th</sup> January 2023**



**Ms. Bhargavi Deshpande won 2<sup>nd</sup> Prize in Carrom- Yugam 2023 on 25<sup>th</sup> January 2023**



**Ms. Aishwarya Chandankhede won 3<sup>rd</sup> Prize in Carrom - Yugam 2023 on 25<sup>th</sup> January 2023**



**Ms. Rimzim Karode won 3<sup>rd</sup> Prize in Art Exhibition- Yugam 2023 on 25<sup>th</sup> January 2023**



**Mr. Ayush Bajpayee won 3<sup>rd</sup> Prize in Badminton- Yugam 2023 on 25<sup>th</sup> January 2023**



**Ms. Siddhi Borikar won 2<sup>nd</sup> Prize in State Level Golden Jubilee Research and Innovation Festival, Shodhotsav- 2023 on 16<sup>th</sup> February 2023.**



**Ms. Khushi Deogade won 2<sup>nd</sup> Consolation prize in State Level Student Seminar Competition, Scintillation' 23 on 24<sup>th</sup> February 2023.**



**Ms. Sanika Ingole won 1<sup>st</sup> Prize in Y20 District Level Poster Competition on Future of Work: Industry 4.0, Innovation and 21<sup>st</sup> Century Skills on 27<sup>th</sup> February 2023.**



**Ms. Simran Thool won Consolation Prize in Y20 District Level Poster Competition on Future of Work: Industry 4.0, Innovation and 21<sup>st</sup> Century Skills on 27<sup>th</sup> February 2023.**



**Ms. Sanika Ingole represents Wardha Dist. for Youth-20 Consultation at Symbiosis International University Campus Lavale, Pune on 10<sup>th</sup> to 11<sup>th</sup> March 2023.**

**Shiksha Mandal's  
Bajaj College of Science, Wardha  
(AUTONOMOUS)**

**DEPARTMENT OF MICROBIOLOGY AND BIOTECHNOLOGY**

**In association with  
Microbiologist Society, India  
ANNOUNCES**

**MICROBIOLOGY BIOTECHNOLOGY SOCIETY  
Student Unit Inauguration &  
Guest Lecture  
ON**

**"Next-generation Sequencing: A vital tool in  
Disease Diagnosis and Pandemic Management"**  
1<sup>st</sup> February 2022, 12.30 pm

**Inauguration at the Hands of**  
**Dr. A. M. Deshmukh**  
President, Microbiologist  
Society, India

**Guest of Honour**  
**Dr. Sanjeev Patankar**  
President, Microbiologist Societ  
India, Maharashtra & Goa Regio

**Speaker**  
**Dr. Rahul C. Bhoyar**  
Project Scientist,  
CSIR- Institute of Genomics and Integrative Biology,  
New Delhi.

**Dr. Om Mahodaya**  
Principal  
Bajaj College of Science, Wardha

**Dr. Mrs. S. S. Khandare**  
Head, Department of Microbiology  
Co-ordinator, MSI- RTM Nagpur  
University, Nagpur Chapter

**Dr. U. A. Malode-Bidwai**  
Co-ordinator, Department of Biotechnology,  
Prof. Incharge Microbiology-Biotechnology Society Student Unit, BCS, Wardha

The screenshot shows a Zoom meeting interface. The main screen displays a slide with the same event details as the poster. The left sidebar shows a list of participants. The bottom of the screen shows the Zoom controls and a grid of participant video feeds.

**Department of Microbiology and Biotechnology in collaboration with Microbiologists Society India Organized Microbiology-Biotechnology Society Student Unit Inauguration and Guest Lecture on "Next-generation Sequencing: A vital tool in Disease Diagnosis and Pandemic Management" on 1<sup>st</sup> February 2022.**