

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
DEPARTMENT OF MICROBIOLOGY

ANNUAL REPORT 2023-2024

Microbiology department is one of the leading departments which provides best education in Microbiology and create innovator. Students are inspired and motivated to develop their interest in Microbiology subject and help them to built strong career. Qualified and dedicated teaching staff includes one regular faculty and six Ad-hoc and two C.H.B. lecturers. There are Four supporting nonteaching staff.

Students Strength:

In U.G. and P.G. Microbiology department total students admitted were 381 and 42 respectively.

Result Analysis:

Overall result of odd and even semesters for U.G. and P.G. department is yet to be declared by University.

I. Achievements -

A- (Medals/Awards/Prizes at University level):

Sr. No.	Name of the Student	Class	Title
1	Sakshi Mohite	MSc II(CHE)	All India Inter University Wushu Championship@Jammu
2	Manika D. Parihar	BSc I(SCsM)	All India Inter University WushuChampionship @Jammu
3	Aditya R. Selokar	BSc III (CGM)	South-West Zone-M.G.M. University,Aurangabad
4	Akansha K. Kirpan	BSc III	All India Inter University Taekwondo Championship
5	Arya K. Raut	B.C.A.-I	All India Inter University Archery Championship
6	Vaishnavi D. Dhabre	BSc III	All India Inter University Archery Championship
7	Aditya R. Selokar	BSc III	All India Inter University Fencing Championship
8	Arya Dumbhare	BSc III	All India Inter University Hand ball Championship
9	Jiwak D Wasekar	MSc I	All India Inter University Rugby Championship

10	Sakshi Mohite	MSc II	All India Inter University Wushu Championship
11	Manika D. Parihar	BSc III	All India Inter University Wushu Championship
12	Anup Tiwari	BSc III	All India Inter University Base ball Championship
13	Vedanti D. Wakulkar	BSc III	All India Inter University Korf-ball Championship
14	Nidhi V. Khambalkar	BSc III	All India Inter University Base ball Championship
15	Nidhi V. Khambalkar	BSc III	All India Inter University Soft ball Championship
16	Payal Bopche	BSc III	All India Inter University Soft ball Championship
17	Mohini Bhute	BSc III	All India Inter University Soft ball Championship
18	Harshita M. Sutar	B.C.A-I	All India Inter University Soft ball Championship
19	Vaishnavi D. Dhabre	BSc III	All India Archery Championship (National)

B. Cultural Achievements-

Sr. No.	Name of Students	Class	Achievements
1	Tanuja Shinde	BSc Sem VI	Participation
2	Janhvi Kayaskar	BSc Sem VI	Participation in intercollegiate Dance Competition
3	Wrukshani Dhobale	BSc III	Best Camper Youth Leadership Development Camp Organized by Yuvak Biradri at Verul,,Dist. Chatrapati Sambhaji Nagar.
4	Pranav Lakhe	BSc III	Participation Outstanding
5	Ayesha Khan	BSc I	Secured third position in inter collegiate Debate Competition organized by Shri City Binzani College on 31/10/23
6	Wrukshani Dhobale	BSc III	Secured Consolation prize in students parliament organized by Yuvak Biradri at District Council on 19/01/24
7	Team		
8	Kshitija Gupta		Extempore speech competition during the world space week 2023 celebration organized by Regional Remote Sensing Centre -Central ,NRSC ISRO during 4-10,October 2023
9	Anushka Palandurkar		Elocution competition conducted by VUPTA at Gadchiroli during 24-25Feb 2024
10	Yugansh Konoje	BSc I	National Photo Essay Competition in physics on 18 th March 2024 organized by Bajaj

			College of science Wardha & Indian association of Physics Teacher(IAPT)
11	Shaunak Hirde	BSc III	Selected in RTMNU team unit for Indradhanushya State Level Yuva Mahotsav 2023
12	Madhavi Roria	BSc III	Secured third position in photography competition at Taywade College ,Koradi.
13	Khushi Somkuwar	BSc III	Participated Outstanding
14	Bhavanjali Rinayte	BSc III	Evento 2024

C. Students' Extension Activity/ Extracurricular activity

Sr. No.	Name of the activity	The number of students who Participated
1.	Calendar making competition (14 th September 2023)	70 students participated
2.	Rangoli competition (14 th September 2023)	50 students participated
3.	International webinar on Biosafety: A mandatory laboratory ritual (20 th October 2023)	100 students participated
4.	Dental checkup camp (28 th December 2023)	29 students participated
5.	Plant Tissue Culture workshop (9 th February 2024)	21 students participated
6.	Scientific Model Making Competition (24 th February 2024)	61 students participated
7.	State level workshop on Career Crafting in Sustainability Management (7 th March 2024)	170 students participated

I. Research Paper Publications

A. Total Number of publications: 01

- i) International - 01
- ii) National -

B. Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of Journal	Year of publication	Citation Index	Institutional affiliation as mentioned	Number of citations excluded
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Phytochemical study and testing of Ocimum sanctum's for Antioxidant effects	N. Sundaramoorthy, AS Manapure, N Ramasamy, C Karthika, Pranita B. Gulhane , S. Malode, S.P. Chaudhari, M.G. Shinde	International Journal of Zoological Investigations	2024	-	S.S.E.S.A's Science College, Congress Nagar, Nagpur-12	-

B. Faculty participation in conferences/seminars/workshops and symposia:

Name of the Faculty	Title of Conference/ Seminar/ workshop Attended	Period	Level International / National/State /University /College	Whether Presented papers	Whether abstract /paper published in Souvenir /Abstract Book
Dr. Pranita Gulhane	National Conference on "Scientific Approaches for Sustainable Development"	4 th & 5 th December 2023	National	Yes (Oral)	Yes
Dr. Pranita Gulhane	International Conference on "Microbiological Research: Current Challenges & Future Perspectives"	9 th – 11 th January 2024	International	Yes (Oral)	Yes
Dr. Pranita Gulhane	Self-Paced Virtual International Symposium on "Water"	22 nd -26 th March 2024	International	No	No
Ms. Sanchari Sarkar	Microbiology Workshop on "Explore the world of Microbes and Superbugs"	4 th December 2023	College Level	No	No
Ms. Priya Gaidhane	Microbiology Workshop on "Explore the world of Microbes and Superbugs"	4 th December 2023	College Level	No	No

Ms. Nupur Deshmukh	Microbiology Workshop on “Explore the world of Microbes and Superbugs”	4 th December 2023	College Level	No	No
Ms. Pallavi Butle	Microbiology Workshop on “Explore the world of Microbes and Superbugs”	4 th December 2023	College Level	No	No
Ms. Sarika Tekade	Microbiology Workshop on “Explore the world of Microbes and Superbugs”	4 th December 2023	College Level	No	No
Ms. Ankita Manapure	Microbiology Workshop on “Explore the world of Microbes and Superbugs”	4 th December 2023	College Level	No	No
Ms. Sayali Sangole	Microbiology Workshop on “Explore the world of Microbes and Superbugs”	4 th December 2023	College Level	No	No
Ms. Anjali Pogade	Microbiology Workshop on “Explore the world of Microbes and Superbugs”	4 th December 2023	College Level	No	No
Ms. Triveni Pardhi	Microbiology Workshop on “Explore the world of Microbes and Superbugs”	4 th December 2023	College Level	No	No
Ms. Sanchari Sarkar	State Level Workshop on “Career Crafting in Sustainability Management”	7 th March 2024	State level workshop	No	No
Ms. Priya Gaidhane	State Level Workshop on “Career Crafting in Sustainability Management”	7 th March 2024	State level workshop	No	No
Ms. Nupur Deshmukh	State Level Workshop on “Career Crafting in Sustainability Management”	7 th March 2024	State level workshop	No	No
Ms. Pallavi Butle	State Level Workshop on “Career Crafting in Sustainability Management”	7 th March 2024	State level workshop	No	No

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Ms. Anjali Pogade	State Level Workshop on “Career Crafting in Sustainability Management”	7 th March 2024	State level workshop	No	No
Ms. Triveni Pardhi	State Level Workshop on “Career Crafting in Sustainability Management”	7 th March 2024	State level workshop	No	No

BEST PRACTICES OF THE DEPARTMENT

Department always organizes various activities for the benefit of students. Under Microbiologists Society India, UG and PG Microbiology students are encouraged to participate in various academic and extra-curricular activities at college level activities well as those organized by MSI. Teacher - students interaction is encouraging which inculcate competitive and humanitarian spirit in the students. Those activities are given as follows.

Organizes “Micromania 2023”

Date: 14-09-2023

Best Volunteer Award-

For active participation and help during various activities organized by Microbiology department students are always appreciated for their efforts. As a part of recognition for this, Best Volunteer Award was given to 10 students of B.Sc. Final Year at the hands of Hon’ble Principal Prof. Mahendra Dhere sir.



Best Volunteer Award 14/09/23

CALENDAR MAKING COMPETITION ORGANIZED

Calendar Making Activity- Microbiology and Biotechnology students have prepared the Calendar-2024 on the topic “Microbiology and Biotechnology for Better Health” Certificates of appreciation were given to the all Participants.

Winners from PG Microbiology are Sejal Nilatkar, Komal Nibrad, Ashwini Nandanwar, Pratiksha Teltumade and Vaibhav Jaronde.

Winners from UG Microbiology are Sourabhi Khaparde, Chetana Das, Shrishti Dhote, Shatakshi Kamble and Khushi Anmadwar.

Organizes FARMERS WORKSHOP on Role of Soil Rejuvenator in Soil Health Management

Date: 27/07/2023

Department of Microbiology organizes Farmer’s workshop by Dr. Rajesh Pal manager Microbiome HiMedia Laboratories Pvt. Ltd., Nagpur on “Role of Soil Rejuvenator in soil health management” dated 27th July 2023 in collaboration with NSS, sponsored by HiMedia Laboratories Pvt. Ltd.at Event hall, Fetri village, Dist. Nagpur. This Programmed was enlightened in gracious presence of Hon’ble Chairman & Principal, Prof. Mahendra P. Dhore Sir, Coordinator Prof. Atul Bobdey, NSS Coordinator Prof. P.S. Utale & Programme Convener Dr. Pranita Gulhane. Farmers Workshop is aimed at equipping farmers & Skill course students with the knowledge and practical skills of this present scenario to build an integrated and productive agriculture scheme as part of the farm business.



Farmer Workshop 27/07/23

Organizes “Micromania 2023” Date: 14-09-2023

Felicitation of RTMNU Merit students:

The programme includes Felicitation of RTM Nagpur University Merit Students of B.Sc and M.Sc. Microbiology – Summer 2022 batch. Summer 2022 RTMNU Merit students were Ms. Manali Kakde (5th Merit), & Ms. Bhavika Ranapura (5th Merit) from PG Microbiology. Nazish Jeevaji (7th Merit) Sakshi Bobdey (8th Merit), Vrinda Borkar (8th Merit) and Komal Waghmare (9th Merit and B.Sc Microbiology Gold Medalist Dr. N. U. Rao Gold Medal for Highest Marks in Microbiology) from UG Microbiology. These merit students were felicitated at the hands of Hon’ble Principal Prof. Mahendra Dhore sir.

Organizes “Micromania 2023” Date: 14-09-2023

Student induction programme

Newly admitted student of B.Sc and M.Sc Ist year were welcomed by the hands of Hon’ble Principal Prof. Mahendra Dhore sir.



Student induction Program of M.Sc. 1st year Batch 2023-2024

Organizes “Micromania 2023” Date: 14-09-2023

Rangoli Competitions:

Rangoli Competition was organized on the theme of ‘Viral Diseases’ in which 50 students have participated. Prof. Seema Kadu madam and Prof. Yogita Meshram madam were judges for the competition. Competition Winners were- First Position: Ms. Arya Walode and Ms. Ishita Padgil (M.Sc 1st year), Second Position: Ms.Kajal Rahandale and Ms.Nital Patle (B.Sc 1st year) and Third Position: Ms. Ishwari Gawande and Ms. Akanksha Bisen (M.Sc 1st year) Two consolation prizes were- First Position: Ms. Leena Meher and Ms. Akanksha Tekade (M.Sc 1st year) and Second Position: Kartik Kadu and Leena Gholse. (B.Sc 1st year)



Rangoli Competition 14/09/23

Organizes “Micromania 2023” Date: 14-09-2023

Microbiologists Society, India –

MSI students unit was installed and the Certificates of MSI office bearers and executive members were distributed at the hands of Chief Hon’ble Principal Prof. Mahendra Dhore , Prof. Atul Bobdey and Convener - Dr. Pranita Gulhane.

BEST STUDENT AWARD Date: 28th February 2024

Every year we are nominating Microbiology Department students for Best Student awards given by Microbiologist's Society India (MBSI) as well as Rashtrasant Tukadoji Maharaj Nagpur University Teachers Association (RTM-NUMBTA). This nomination was based on students average percentage of marks for all the semesters, participation in extracurricular activities, research oriented attitude and the overall performance in the college. The trophies were given at the hands of Honourable Principal Prof. M.P. Dhore sir in the college program and the felicitation of those students was carried out in the conference hall. So, for the year 2022-2023, from the Department of Microbiology Ms. Wrukshani V. Doble (UG Microbiology) and Ms. Vaishnavi R. Nannaware (PG Microbiology) were felicitated as Best students from the respective categories by Microbiologist's Society India (MBSI) whereas Ms. Adithya A. Kallatu (UG Microbiology) and Ms. Triveni S. Pardhi (PG Microbiology) were felicitated by as Rashtrasant Tukadoji Maharaj Nagpur University Teachers Association (RTMNUMBTA) from the respective categories. This activities is helpful to boost our students for their betterment. The award ceremony was held on 28th February, 2024 on Natioual Science day.

Organizes State Level Workshop on Career Crafting in Sustainability Management (C2SM 2024)

Date: 7-03-2024

Department of Microbiology in collaboration with Bharat Eco Solutions & Technologies (BEST), Pune and Rising India, Pune has organized State Level Workshop on Career Crafting in Sustainability Management. More than 170 participants from various colleges and universities have taken benefit of this workshop. The workshop was conducted by Resource Person Dr. Ashish Polkade- alumni of the college & Founder of BEST, Pune, Dr. Suraj Bhagat – Certified Career Counsellor and psychologist Rising India, Pune. Hon'ble Principal Prof. Dhore sir inaugurated the programme. The program was graced by Coordinator Prof. Bobdey sir & Convener Dr. Pranita Gulhane madam. They also offered internship to interested students. The program offers interactive sessions to groom the personality of students.

International webinar on Biosafety:

A mandatory laboratory Date- 20/10/2023

Department of Microbiology has organized international webinar on Biosafety: A mandatory laboratory ritual dated 20th October, 2023. This event was held to mark the centenary year celebration of Rashtrasant Tukadoji Maharaj Nagpur University and Dr. Panjabrao alias Bhausaheb Deshmukh's 125th birth anniversary. The webinar was conducted virtually in gracious presence of Hon'ble Principal Prof. Dhore sir, Coordinator Prof. Bobdey sir & Convener Dr. Pranita Gulhane. Dr. Riyazuddin R., Researcher, Institute of Bioengineering, Mignel Hernandez University, Elche, Spain was the eminent speaker in this program. The objective of the webinar was to aware students about hazardous biological material, the risks associated with their use and how to minimize the risks and to protect against or prevent release or exposure. Information regarding Biosafety levels, managing laboratory risks by engineering control, waste disposal, shipment and transfer of biological materials and many more related topics were discussed. Approximately 100 participants participated.

Educational Visit to Raman Science Centre and Planetarium, Nagpur

Date- 4/12/2023

Students of M. Sc. 1st year Microbiology along with teachers visited the Raman Science Centre and Planetarium, Nagpur on 4th Dec 2023 for the exhibition “Vaccine Injecting Hope”. The exhibition was arranged on the occasion of “Science Expo and Innovation Festival” conducted by Raman Science Centre and Planetarium from 5th August 2023 to 31st December 2023. Students also visited the Planetarium show and explored new ideas of science with great enthusiasm. Visit was helpful for students to explore the innovative ideas in science.



Visit to Raman Science Center 04/12/23

Dental Check Up camp

Date- 28/12/2023

Department of Microbiology in collaboration with Swargiya Dadasaheb Kalmegh Smruti Dental College & Hospital, Nagpur has organized Dental Check-up camp on 28th December 2023. This event was held to mark the centenary year celebration of Rashtrasant Tukadoji Maharaj Nagpur University and Dr. Panjabrao alias Bhausahab Deshmukh's 125th birth anniversary. Dr. Ashish Lanjekar - the Chief Guest, Dr. Juzer Rasul - Guest of Honour inaugurated the program in gracious presence of Hon'ble Principal Prof. Dhore sir and Prof. R.N. Deshmukh sir. Coordinator Prof. Bobdey sir & Convener Dr. Pranita Gulhane have contributed for the success of the program. Teaching & Non-teaching staff of the college along with students have benefitted the free dental check up camp in which the mouth wash sample was also distributed by the team of doctors. The number of teaching faculty (senior & junior), non-teaching faculty and students were (53&20), 32 & 29 respectively.

Organizes Workshop on Plant Tissue Culture

Date – 9/02/2024

Plant Tissue culture workshop was organized by Department of Biotechnology, in collaboration with Department of Botany S.S.E.S.A's Science College, Nagpur during 09th February 2024. Plant Tissue culture workshop was conducted under the chairmanship of Hon'ble Principal Prof. Mahendra Dhore, Coordinator- Prof. Atul Bobdey , Prof. Rajendra Deshmukh Head Department of Botany and Convener- Dr. Pranita Gulhane & Prof. Punita Tiwari . A total of 21 students from UG Botany & UG Biotechnology of the college have participated the same and expressed the creativity in it.

The hands-on training in plant tissue culture is conducted in a laboratory equipped with laminar flow hoods, autoclaves, incubators, and other necessary equipment. The training is divided into theoretical sessions and practical demonstrations.

Theoretical Session: Introduction to plant tissue culture, Aseptic Techniques-Principles of sterility, method of sterilization & prevention of contamination, Culture Initiation-Explant selection, surface sterilization & culture establishment & Applications-Micropropagation, synthetic seed production.

Practical Demonstration: Preparation of nutrient media: Weighing and mixing of components, pH adjustments, and sterilization. Sterilization Techniques: Surface sterilization of explants using chemicals (ethanol) and heat (e.g autoclaving). The hands on training provided students with valuable practical skills in plant tissue culture, focusing specifically on media preparation, inoculation and surface sterilization. Through surface sterilization exercises, students grasped the significance of eliminating contaminants to establish pure culture.



Workshop on Plant Tissue Culture 09/02/24

Inter University Scientific Model Making Competition on “SCIENCE FOR A SUSTAINABLE FUTURE”

Date: 24-02-2024

Inter University Scientific model making competition entitled “Science for a sustainable future” on the occasion of 125th Birth Year Celebration of Dr. Panjabrao alias Bhausaheb Deshmukh, Centenary Year Celebration of R.T.M. Nagpur University & National Science Day was organized by Department of Microbiology and Biotechnology, S.S.E.S.A's Science College, Nagpur on 24th February, 2024. Scientific Model making competition was conducted under the chairmanship of Hon'ble Prof. Mahendra Dhore,

Principal, Science College, Nagpur, Coordinator Respected Prof. Atul Bobdey and Convener- Dr. Pranita Gulhane. Chief Guest Dr. Shashikant Rokde graced the occasion. A total of 61 students comprising of 32 groups from UG Microbiology & Biotechnology as well as PG Microbiology of the various colleges and universities have participated individually and in groups also and expressed the creativity in it.

Prof. Punita Tiwari and Dr. Reshal Deshmukh judged the competition and selected three groups. The first prize (Javed Nisar Sheikh and Aditya Balchane from Sardar Patel Mahavidyalaya, Chandrapur), Second prize (Netra Raut and Darshika Nipane from Shivaji Science College, Nagpur) and Third prize (Arya Walode and Akansha Bisen from Shivaji Science College, Nagpur), first consolation prize (Ishita Padgil from Shivaji Science College, Nagpur) and the second consolation prize (Krutika Vaidya and Naba Shiekh from Sevadal Mahila Mahavidyalaya, Nagpur).



Scientific Model Making Competition 24/02/24



Head of the Department

Dr. Pranita B. Gulhane

**Department of Microbiology
Science College, Congress Nagar,
NAGPUR.**