# Shri RLT College of Science, Akola UG and PG Department of Microbiology Departmental Report (2022-23)

The Department of Microbiology offers education at undergraduate, postgraduate and research level. The department has three laboratories namely UG, PG and Research laboratory. This year, the total students in PG department were 46 and in Undergraduate course were 371.

Dr. V. D. Nanoty (Principal, Shri. R. L. T. College of Science) has been appointed as the Chairman of Board of studies in Biochemistry including Microbiology and Food Science in Amravati University, Amravati. He is Ph.D. supervisor in field of Microbiology. Currently, under his guidance, seven students are pursuing Ph.D and one has been enrolled for pre-PhD course work.

In the academic year of 2022-23, for the implementation of "Choice-Based Credit System (National Education Policy)-2020", workshops were conducted in various institutes of SGB Amravati University, Amravati. For these workshops, 70 resource persons were appointed by the university. Of these, two educators-Dr. V. D. Nanoty and Dr. H. S. Malpani from the department, were also appointed. They conducted workshops at Amravati and Buldhana, respectively, on 17th September, 2022.

Two textbooks were published by the faculty in this session- Dr. V. D. Nanoty, Dr. H. S. Malpani, and Ms. S. N. Gawande. As per the syllabus of B. Sc. I Semester I of SGBAU, Amravati, 'Fundamentals of Microbiology and Microbial Physiology' and for B. Sc. I Semester II, 'General and Applied Microbiology'.

Dr. H. S. Malpani He acted as a rapporteur at International conference on 'Innovation in Biotechnology' at Sanjivani College, Kopargaon.

Maharashtra State Development of Educators and Enhancement in Delivery (MS-DEED) Programme is a collaboration between IISER Pune and the Maharashtra State Faculty Development Academy (MSFDA)-Centre for Multi-disciplinary Curriculum & Pedagogy under the Department of Higher and Technical Education, Government of Maharashtra. A 3-day Level 1 Faculty training programme was conducted by IISER and MSFDA at Shri Shivaji College of Science, Akola from 13<sup>th</sup> to 15<sup>th</sup> March, 2023. From the department Ms. S. N. Gawande, Mr. S.A Toshniwal, and Ms. M.R Kashid successfully completed the programme. Dr. H.S. Malpani acted as Observer in the same Programme.

This year, total 24 PG students completed the project work under the guidance of Dr. V.D Nanoty, Dr. H.S Malpani and Ms. S.N Gawande.

Mr. Sandeep Toshniwal qualified MH-SET-2023 in Life Sciences. All faculty members attended several events and conferences and also published research papers at National and International reputed journals.

**MERITORIOUS STUDENTS:** This year six postgraduate students of our department grabbed ranks in the merit list of SGB Amravati University in Masters of Science (Microbiology). Ms. Vaishnavi Labhade secured 2<sup>nd</sup> rank and Ms. Pallavi Mansute, Ms. Anjali Pawar, Ms. Priyanka Chouvhan, Ms. Prerna Deshmukh, and Ms. Mrunalini Allap secured 5<sup>th</sup> rank.



**CERTIFICATE/DIPLOMA COURSES:** The Department runs career-oriented courses like CCLT and DCLT every year. This year, total 53 students have been enrolled for these courses.





#### **MEMORANDUM OF UNDERSTANDING:**

1) CIIMS: Departments construct MoUs with various institutions for the benefit of students. On 16<sup>th</sup> June 2023, a MoU was signed with CIIMS, Nagpur. CIIMS is one of the finest Hospital & Research centres of Central India located in Nagpur. Dr. V.D. Nanoty, Dr. Patankar, Dr. Rajpal Kashyap and Dr. Naik were present during MoU signing ceremony. Dr. Harish Malpani and Dr. Abhaya Shende took efforts for the same. This MoU will benefit students for internship and training program.



2) Forest Division, Maharashtra: Another MoU was signed between Office of Deputy Conservator of Forests (Akola Forest Division) and Department of Microbiology, Shri R.L.T College of Science, Akola and Nisargkatta. Mr. S.A. Wadode (ACE, Akola Forest Div.) and Mr. Arjuna K. R (DYCF Akola Forest Div.) along with Dr. V.D. Nanoty, Dr. S.M. Nagrale, Mrs. Vaishali Badgujar and Dr. Harish Malpani were present during the MoU signing ceremony. Under this MoU, an activity of Seedball preparation was conducted at Katepurna wildlife sanctuary on 5th June 2023.



### **AVISHKAR RESEARCH CONVENTION:**

This year 2 UG, 4 PG, and 2 post-PG students from the department participated in the research convention "Avishkar-22" at district level. Of these, 6 candidates, Ms. Sonali Gawande, Mr. Sandeep Toshniwal, Ms. Vaibhavi Tople, Ms. Lekha Upadhyay, Ms. Sharwari Deshpande, and Ms. Sakshi Gosavi, qualified for university-level Avishkar.



### **BEST STUDENT AWARD:**

Every year Microbiologist's Society India bestows 'Best Student Award' to one student each from UG and PG. This year, Ms. Aarti Nakat (UG) and Vishwajitsingh Daberao (PG) bagged the award from Shri R.L.T College of Science, Akola.

## **INAUGURATION OF MICRANS:**

The student activity unit of the department "MICRANS" was renamed to "AMBER" (Association of Microbiologists and Biochemists for Education and Research) to include the students of Biochemistry. The unit was inaugurated on  $10^{\rm th}$  October, 2022 by the hands of Dr. Vedprakash Mishra and Dr. Tushar Deshmukh. Various programmes were conducted under the unit for skill development and welfare of students.



#### EVENTS ORGANIZED BY THE DEPARTMENT

#### 1) WORLD FOOD WEEK:

On occasion of "World Food Week" (10<sup>th</sup> Oct-16<sup>th</sup> Oct), Department of Microbiology in collaboration with Microbiologist Society, India organized an inter-collegiate poster competition for UG students on theme "Healthy Food: A Gateway to Healthy life" on 10<sup>th</sup> October 2022. About 70 students from different colleges participated in the competition and displayed their posters. Dr. Arti Deshpande (Prof. and Head, Department of Microbiology, Shankarlal Khandelwal College, Akola) acted as the judge for the competition and also gave guidance to the students. Dr. D.D Bhokare (Prof. Department of Microbiology, Shankarlal Khandelwal College, Akola) also visited the event and acknowledged the ideas of the students.





### 2) GUEST LECTURE:

On 22<sup>nd</sup> November 2022, Department in collaboration with MSI organized a guest lecture of Dr. Sanjeev Patankar on 'Principles of Molecular Diagnosis and use of therapeutic equipment'. He informed the students about various techniques used in diagnosis of diseases and disorders.





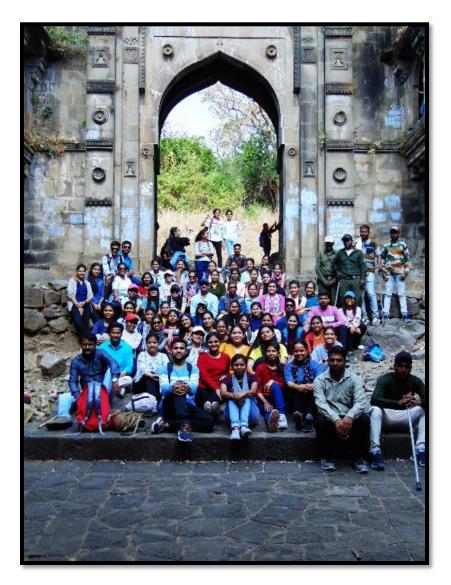
## 3) EDUCATIONAL TOUR FOR UG STUDENTS:

As a part curriculum, every year the departments conducts educational tours for UG and PG students. For the students of B.Sc III educational tour was conducted to Mahan water purification plant on 24th November, 2022. Total 94 students took part in the tour along with 8 staff members. The students learnt about the processes involved in water purification such as sedimentation, flocculation, aeration, chlorination and filtration by rapid sand filters.



#### 4) EDUCATIONAL TOUR FOR PG STUDENTS:

For the PG students an educational tour was conducted at Shahnur wildlife sanctuary and Narnala fort on 13<sup>th</sup> December 2023. The tour was conducted to promote wildlife conservation. Total 61 students along with 6 staff members took part in the tour. Mr. Amol Sawant (Founder, Nisarg Katta, Akola) guided the students regarding biodiversity of Melghat forest and their efforts in conservation of various flora and fauna.



### 5) **SEMINAR COMPETITION:**

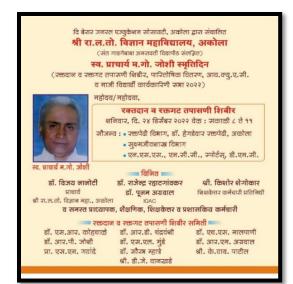
On the occasion of 179th birth anniversary of Sir Robert Koch (11th December 1843-27th May 1910), Department of Microbiology of Shri R.L.T College of Science, Akola in collaboration with Microbiologist Society, India organized an intercollegiate seminar competition on theme "Contributions of Sir Robert Koch in the field of Microbiology" on 12th December 2022. The event was conducted in the gracious presence of Dr. V.D. Nanoty who was the president of the event. Dr.

H.S Malpani gave the introductory speech and welcomed all the participants to the event. Total 20 students participated in the event.



## 6) BLOOD GROUPING AND BLOOD DONATION:

On the Memorial Day of late Principal M.G. Joshi, under the guidance of Dr. V.D. Nanoty the department organized a blood grouping camp on 24<sup>th</sup> December 2022. This year, the blood group of 104 candidates was determined. They were also made aware of the blood types and its importance. The post graduate students of Microbiology volunteered in the camp. The students and staff of the department donated blood in the camp.







7) BLOOD GROUPING CAMP: Similar blood grouping camp was held on  $14^{\rm th}$  March 2023 at adopted village 'Apatapa' at the NSS camp of Shri R.L.T College of Science, Akola. During this camp the blood group of more than 50 villagers was tested.



**8) WORKSHOP ON MOLECULAR BIOLOGY:** In collaboration with Hi-Media, the department organized a one-day workshop on "Techniques in Molecular Biology" on 20<sup>th</sup> March 2023. Mr. Singh and Dr. Sunil Kokane from Hi-Media conducted the workshop. They demonstrated experiments related to molecular biology to the PG students. More than 55 students benefitted from the workshop.





Dr. Harish S. Malpani Asst. Professor & Head Department of Microbiology

# **PHOTO GALLERY**





Dr. V.D Nanoty as a Resource person for CBCS implementation workshop



Dr. V. D Nanoty as Chairman of Board of studies in Biochemistry including Microbiology and Food Science in Amravati University, Amravati



Dr. H.S. Malpani as a Resource person for CBCS implementation workshop





Dr. H.S. Malpani acted as a rapporteur at International conference on 'Innovation in Biotechnology' at Sanjivani College, Kopargaon

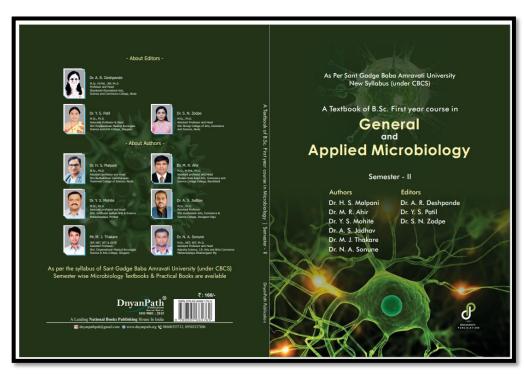


Invited Talk at NSS camp of Shri Shivaji College, Akola at "Sonala" village



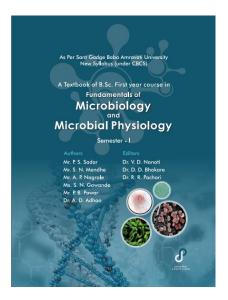


**Faculty at MSDEED Programme** 



Textbook 'General and Applied Microbiology' for B. Sc. I Semester II as per the syllabus of SGBAU, Amravati





Textbook 'Fundamentals of Microbiology and Microbial Physiology' for B. Sc. I Semester I as per the syllabus of SGBAU, Amravati