

SRR & CVR GOVT. DEGREE COLLEGE (A) VIJAYAWADA

DEPARTMENT OF MICROBIOLOGY

2021-2022



Department Annual Report 2021-22

BRIEF HISTORY OF THE DEPARTMENT

The Department of Microbiology was established in the Academic Year 1998-99 when restructured courses were first established in selected Government Colleges. Now Department has offering UG programme Microbiology with allied subjects Botany and Chemistry has sanctioned strength of 30 students. At present the Microbiology laboratory is fully equipped with instruments such as microscopes, laminar air flow, oven, incubator, refrigerator, and sufficient glassware. The department is fully furnished. The department has its own library with books in microbiology both of Indian and foreign authors. A new job oriented restructured UG programme B.Sc MBF (Microbiology, Biochemistry & Food Technology) has introduced in the year 2019-2020 with intake of the students is 30 every year. The Department is giving importance to the student centric & skill oriented programmes. The strength of the first year students are 41(MBC-10 & MBFT-31).

Department Annual Report 2021-22

The Department of Microbiology is committed to Teaching along with fostering research environment in the campus. Even though the department happens to be the youngest in the college. This year Dr D Jyothi, In-Charge Department of Microbiology awarded with Doctoral degree from Acharya Nagarjuna University, Guntur in Faculty of Natural Science of Department of Botany during month of January 2022. Her dissertation entitled” **Medicinal Plants of Tribal Traditional System From Guntur District AP State(India) Along with Phytochemical Screening and Evaluation of some Biological Activities of Diospyros Sylvania Roxb. “under guide ship of Prof. D. Rosaiah, Dean Faculty of Natural Sciences, Acharya Nagarjuna University, Gntur.**

The Department of Microbiology has been planned and organized various programs **viz Invited lectures, Guest lectures, seminars, field trips, Free Health Camps, Awareness programs** and so on apart from the regular teaching.

The department of microbiology organized **International Virtual Talk On “r DNA Technology and Fermentation in Industry: An Integrated Approach in Science and Technology for Sustainable Future” on 26th February 2022 on the occasion of National Science day Celebration 2022.** Mr M.V.S.K Mohan, Head of the Department, Human insulin API Production, Julphar UAE is the Chief Guest addressed the participants on Significance of rDNA technology; Human insulin production process at Human Insulin API Production, Julphar, United Arab Emirates and then virtual open House to Human insulin API Production, Julphar, UAE

was conducted by Mr Mohan. He explained the working principle and application of equipment. A total 370 participants registered and Dr. K. Bhagya Lakshmi, Principal is the Chairperson of the Event, Dr D Jyothi, Convenor and Dr.Kopuri Aruna is Co- convenor.

The Department of Microbiology has **Organized Health Camp** with Dr Noori Parveen, MBBS & FICM, Kadapa, popularly known as Mother Theresa of Kadapa. The objective of the camp was to provide information regarding diet, exercise and weight control. Free medicines have been provided to subjects Dr Noori created awareness on Significance of personal hygiene to prevent the spread of contagious diseases. She conducted free medical health check up and treated around 70 members of students, both teaching and non teaching staff and she provided with free medicine in the camp. This program is aimed at early diagnosis of problems arising due to the stress. A successful free Medical Health Check-up camp was organized by the Department of Microbiology.

The Department of Microbiology has been planned 7 days student training programme on “**Scientific Beekeeping**” in association with Krishi Vigyan Kendra, Ghantasala, Krishna (Dist.), is one of the best organizations under National Bee Board (NBB) of Ministry of Agriculture, Hyderabad to be scheduled from 28th to 6th March 2022. Since our students have industrial production, sources of The training program emphasized on adopting the techniques of scientific beekeeping and developing entrepreneurship. A total of 28 number of BSc Microbiology (MBC & MBFT) students trained.

The Department of Microbiology has Organized an **Extinction Lecture** on the occasion of Celebrating **the Birth Anniversary of Dr Ehrlich Paul (Father of Modern Chemotherapy) on 14th March 2022**. Mrs K L C Devi, Academic Coordinator and In- Charge Dept of English SRR & CVR Govt. Degree College (A) is the Chief Guest addressed the students about contributions of Paul Ehrlich and motivate the students to create innovations in Science and Technology.. Dr. K. Bhagya Lakshmi, Principal and President of the Event, mentioned about significance of Chemotherapy, Ehrlich became famous as one of the main founders of chemotherapy. Dr S V Tahaseen, In-Charge Dept of Biochemistry, inspired the students to make their career and profession in science.

The Department of Microbiology has Organized Guest Lecture on topic STAINING TECHNIQUES which are useful in diagnosing Bacterial and fungal infections. Dr. K. Sucharitha HOD Microbiology GDC Women's Guntur acted as the Resource person. The students of I yr MBC & MBF have participated and the session is so interactive. Dr. K. Sucharitha explained grams staining technique and spore staining technique. . The participants understood the techniques and got benefited

Field trip to Biofertilizer Laboratory, ARS, ANGRAU, Amaravati, Guntur, Andhra Pradesh. As a part of the curriculum, students of III B.Sc (MBC) Microbiology visited Biofertilizer Laboratory ARS, ANGRAU, Amaravathi, and Guntur on 6/11/2021. It is one of the most important producers of biofertilizers in the State under the Department of the Agriculture with a capacity to produce 20 to 25 metric tons of different types of Biofertilizers annually to supplement the use of chemical fertilizers considerably. Dr K Lakshmi pathy , Senior Scientist , In charge Biofertilizer laboratory guided us to learn the aim and objectives of the laboratory . Different types of Biofertilizers produced in the lab and benefits and usage of Biofertilizers. Sir explained about isolation and mass multiplication of various biofertilizers viz *Rhizobium*, *Azotobacter*, *Azospirillum*, YAM and Phosphate solubilizing bacteria.

The Department of Microbiology has organized another Field Visit to Bio fertilizer Unit, **Krishi Vigyan Kendra, Ghantasala, Krishna (Dist.)** for III BSC MBC on March 7th 2022. Azolla is Bio fertilizer to Improve Soil Fertility. Most of the nitrogen fixed becomes available to rice only after the azolla has decomposed, although a small amount of ammonium is released into the water by azolla during growth. During decomposition, organic nitrogen is mineralized rapidly during the first two weeks and then at a more gradual rate Nitrogen is released mainly in the form of ammonium. The participants understood significance of biological nitrogen fixation under field conditions. Dr .D .Jyothi, In Charge Dept of Microbiology and Dr. Kopuri Aruna, Dept of Microbiology accompany the students.

The Department of Microbiology also organized **Orientation Programme for Higher Progression Online** to (III & II BSc MBC) students, Student/Class seminars, Community Service Projects on Swachh Survekshan and conducted quizzes. Department has taken Feed back on design and review of the syllabus from students, teacher, industrialist and parents through online.

The Department of Microbiology having three functional MOUs one is with **Jaya Teja Center for Research & Diagnosis, Suryarao Peta, Vijayawada-520002 with effect from 01-08-2022** for a period of **Three Years**, second one with **Saharogya Healthcare Pvt. Limited, Door NO: 29-19, 57/1, Dornakal Road, Suryaraopeta, Vijayawada-520002** and third one is with **Thanusri Mushrooms, Door No: 3-33, Eluru Road, Ramavarappadu, and Vijayawada-521108.**

We are happy that three student viz Kumari Chandini, Kum. Sadvika and Kum. Susmitha joined in Central Universities and seven students got admission in Sate Universities. **“Even though the department happens to be the youngest in the college, we are striving our best”.**