

GOVERNMENT DEGREE COLLEGE KHAIRATABAD

DEPARTMENT OF MICROBIOLOGY

EDUCATIONAL TOUR REPORT

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GOVERNMENT DEGREE COLLEGE KHAIRATABAD

DEPARTMENT OF MICROBIOLOGY

(26/09/2018)

Report on educational tour to visit Centre for Cellular and Molecular Biology

Introduction:

The Centre for Cellular & Molecular Biology (CCMB) is a premier research organization in frontier areas of modern biology. The objectives of the Centre are to conduct high quality basic research and training in frontier areas of modern biology, and promote centralized national facilities for new and modern techniques in the inter-disciplinary areas of biology. CCMB was started initially as a semi-autonomous Centre on April 1, 1977 with the Biochemistry Division of the then Regional Research Laboratory (presently, Indian Institute of Chemical Technology, IICT) Hyderabad forming its nucleus and Dr P M Bhargava heading the new Centre. Earlier, the Governing Board of the Council of Scientific and Industrial Research (CSIR) New Delhi, the apex body which constituted 44 research institutions in the country, approved the proposal in 1976 to establish such a Centre in view of the importance of research in the frontier and multi-disciplinary areas of modern biology. During 1981-82, the CCMB was accorded the status of a full-fledged national laboratory with its own Executive Committee and Scientific Advisory Council. With major expansion plans, it was decided to relocate the Centre to a spacious campus. It has received many awards from the international institution for its enthusiastic and novel discoveries.

It is providing

- Training to the people in the advanced areas of biology to serve the needs of development in these areas, with special provision for short-term training of staff from other institutions in techniques for which adequate facilities may not exist elsewhere.

- Centralized facilities in the country for new and modern techniques in the inter-disciplinary areas of biology, and to ensure that these facilities are so organized, maintained and administered that they can be put to maximal use by research workers from other laboratories and institutions in the country.
- Providing the major research breakthroughs the field of science for betterment of society especially medicinal, agricultural, pathological areas.

Every year CCMB conducts an open day programme on 26 September. On this occasion students from school, colleges and universities visits the CCMB.

Objectives of the tour:

- To inculcate the research attitude among the students
- To know the current research and developments in the science.
- To know the knowledge about recent technologies developed in and outside the CCMB.
- To encourage the students towards the science.
- This program also encourages the students to think in analytical way.

Report:

Students of B.Sc III yr, M.B.C (Microbiology, Botany and Chemistry) and along with the Smt. B, Sofial Rani, Assistant Professor of Microbiology has planned to visit the CCMB on its open day i.e on 26 September 2019. A total of 45 student's were participated in the educational tour and visited the CCMB.

For each batch CCMB officials allotted a guide to explain the labs and their research programs. The guide explained about the equipment present in the different labs. The students are basically

from Microbiology background. They visited Microscope facility lab and guide explained the different advanced version microscopes and its advantages.

Students also visited the molecular biology labs where they explained about the chromatography techniques and their applications. In the open area posters and live models were presented. The students enthusiastically involved in the model presentations like Zebra fish, Liquid nitrogen, rice varieties developments and stem cell technology and entomology. The posters includes the Mass spectrometry, Different microscopes, Crystallography techniques. Some models were explained by the CCMB research scholar lively for example cell cultures, observation of insects with digital microscopes etc. Students really inspired by the research and their presentation.

In the after noon, we went to the **Centre for Research and Development (CFRD)**, Osmania Unveristy, Hyderabad. It is research facility center for research scholars of Osmania University. One the research scholar K. Anil assisted and explained about the experiments carried out in the institution. He explained in detail about the various instruments by exposing the students lively. He demonstrated the PCR, HPLC, AKTA purification, Ultra filatration, Ionexcgange Chomatography, Electrophoresis techniques, different centrifuges, Maldi Tof-Tof, Inoculation chambers, liquid nitrogen chambers. He also demonstrated the confocal microscope with already present data.



Zebra fish model



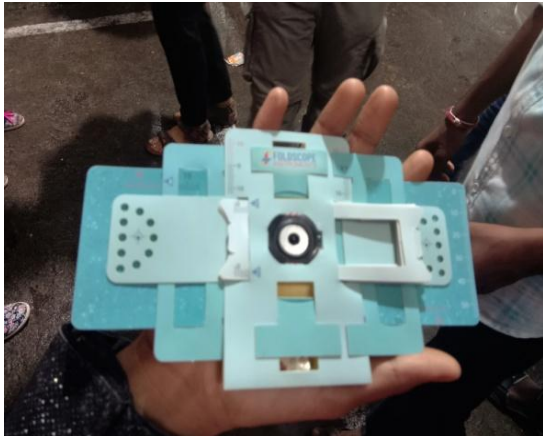
Models and live presentation demonstration by research scholars

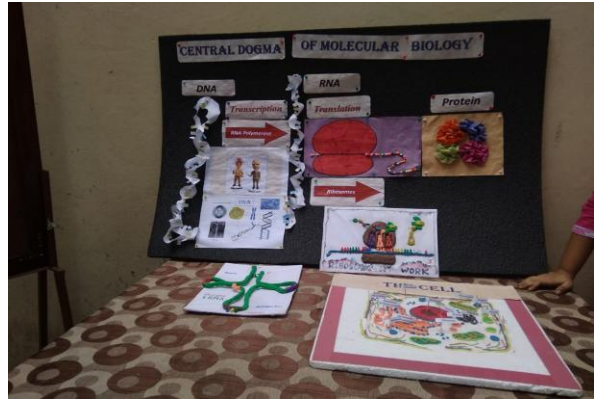
This open day was organized to facilitate students and the general public to create awareness of the ongoing research at in the frontiers of modern biology and to ignite young minds and young students with interactive visits would begin to think of their careers in basic science. Every country that has a strong basic science culture has succeeded in the overall development.

The centre showcased a variety of posters on wildlife conservation, cancer curing studies, infections, eye and other genetic diseases, nano biological studies, Antarctic bacterial studies, genomics, DNA finger printing, Foldscope exhibits on improved structural biology attracted the attention. Aerofish facilities. Later we went to Liquid nitrogen department there we saw its function and usage lively. In addition, state of the art instruments used in molecular biology were shown.

Finally we reached poster exhibition which were explained by trained research scholars and scientists. Some of the posters explain about the themes like: when brain cells die, endangered species, what are proteins etc. In additions to it we also seen pocket microscope which made me amazed and became my favorite.

Really an extraordinary research is going on in CCMB which is appreciable and motivated the young students to take part in CCMB in future. We really enjoyed a lot in in visiting CCMB.





GOVERNMENT DEGREE COLLEGE KHAIRATABAD

DEPARTMENT OF MICROBIOLOGY

Report on Field Trip to CCMB

(26/09/2019)

Council of scientific and Industrial research (CSIR) New Delhi was established on September 26th 1942 and as a part of CSIR Foundation day celebrations CCMB organized an open day for the science students, Teachers and scientists from all over the state.

This open day was organized to facilitate students and the general public to create awareness of the ongoing research at in the frontiers of modern biology and to ignite young minds and young students with interactive visits would begin to think of their careers in basic science. Every country that has a strong basic science culture has succeeded in the overall development.

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Really an extraordinary research is going on in CCMB which is appreciable and motivated the young students to take part in CCMB in future. We really enjoyed a lot in in visiting CCMB. Around 40 students of B.Sc Microbiology I and II Yrs have visited the CCMB .





Government Degree College, Khairatabad, Hyderabad

Re-Accredited by NAAC with B+ grade

ISO certified college: ISO 9001: 2015

Academic year 2022-23

**FIELD TRIP/EDUCATIONAL
TOUR REGISTER**

Department of Microbiology

FIELD TRIP/EDUCATIONAL TOUR

Name of the place visited: Department of Microbiology

Class : II and III yr

Year : 2022-23

Date : 25.04.2023

Number of students attended : 52

Introduction:

The Department of Microbiology, organized to visit the Department of Microbiology on its open day. Students attended this program and

Objectives of the program:

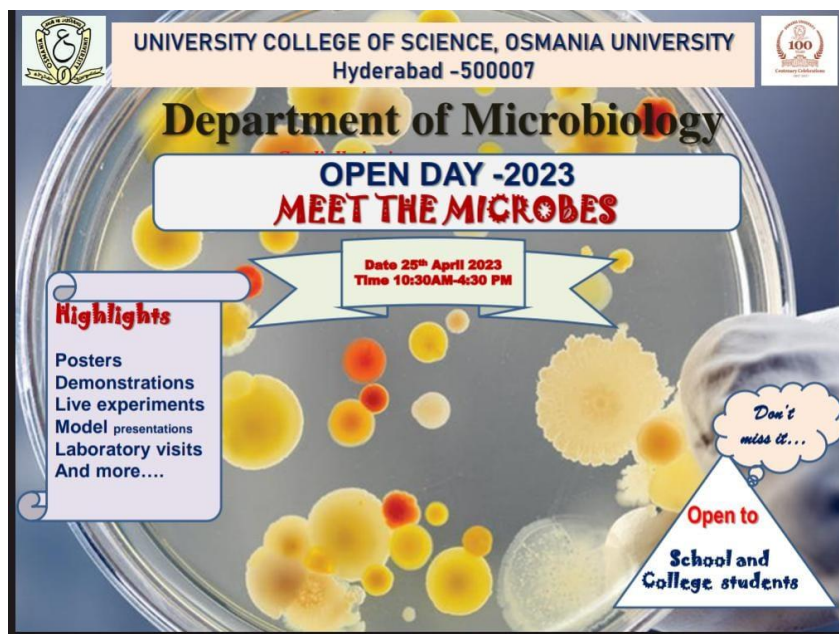
- To Create awareness about the recent trends in the research
- To encourage the students towards the research
- To enlighten about the techniques and equipment used in the research

Expected outcome:

- Students can get an idea about the equipments
- Students get an awareness on the research occurring in the department
- Enlighten about the future prospects in the field of Microbiology

Brief report of the program:

Department of Microbiology and other science departments announced their open day to visit the respective laboratories and research activities.



The Department of Microbiology, Botany, Zoology and Biotechnology of our college, planned to visit the Osmania University on open day i.e on 25.04.2023. More than 50 students attended the educational tour. Ph. D scholars explained about the recent trends in the science like CRISPER Cas 9 technology and unforgotten scientists of Microbiology in detail. Students visited the molecular pathogenesis lab, probiotics lab, cell culture lab, Marine microbiology lab, anaerobic cultivation lab in the microbiology department. Research scholars explained about their research work and equipments detail with procedures and applications. Students of Microbiology Department learnt about the lyophilisation technique, HPLC methodology, FPLC procedure, Electroporation, cold centrifugation, Probiotic bacteria preparation, cellulose synthesis from waste, Agarose gel electrophoresis, SDS-PAGE, chromatography techniques via practical demonstration by the research scholars. Students also visited the Department of Biotechnology and Centre for Plant Molecular Biology.

Photos of the activity :



Students and faculty with Dr. Hameeda and Dr. Sandeeptha


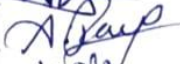

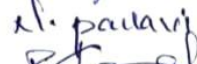

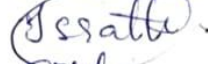




Explanation by the research scholars

Attended Students list:

S.No	Name of the student	Group and year	Signature
1.	N. Mayur	BSC.(Anmbz) III yr	<u>Mayur</u>
2.	M. Preeti	BSC. (Mzc) III yr	<u>Preeti</u>
3.	Shirisha	BSC. (Mzc) III yr	
4.	Preeti goud	BSC. (Mzc) III yr	
5.	J. Bala Kishora	BSC. (Mzc) III yr	
6.	B. Daksha Sri	B.Sc (Mb, bt, d) 2 nd yr	<u>B. Dakshad.</u>
7.	P. Sravani	BSC (MBCBT) I st yr	<u>P. Sravani</u>
8.	G. Akshitha	BSC (MBCBT) 1 st yr	<u>G. Akshitha</u>
9.	E. Shiva	BSC (MB/BT) 1 st yr	<u>E. Shiva</u>
10.	A. Mounika	Bsc (MBBTC) 1 st year	<u>A Mounika</u>
11.	N. Shiva Keshava	Bsc (MBBTC) 1 st yr	<u>Shivatshava</u>
12.	P. Hemant Sagar	MBZcs - 1 yr	<u>P. Sagar</u>
13.	A. Shreethi	Mbcbt - 1 yr	<u>A. Shreethi</u>
14.	M. Siddartha	MBZcs - 1 yr	<u>M. Siddartha</u>
15.	P. Karthik	MBCBT - 1 yr	<u>P. Karthik</u>
16.	M. Dileep	MBBTC - 1 yr	<u>M. Dileep</u>
17.	Cheela. Anji reddy	MBZC - 2 nd yr	<u>Anji</u>
18.	A. Siri	MBANPsy - 2 nd yr	<u>A. Siri</u>
19.	J. Ashwini	MBZcs (B.Sc) 2 nd yr	<u>J. Ashwini</u>
20.	A. Pooja	MBZc (B.Sc) 2 nd yr	<u>Pooja</u>
21.	Y. Mohana	MBZcs (B.Sc) 2 nd year	<u>Mohana</u>
22.	Hd. Abdul Wahed	MZbt (BSC) 2 nd yr	<u>H. Abdul Wahed</u>
23.	K. Vyshnavi	MZbt (BSC) 2 nd yr	<u>K. Vyshnavi</u>
24.	P. Sucharitha	Mbbtc (BSC) 2 nd yr	<u>Suchi</u>
25.	Sanija mixza Kousar	MBZCS (B.Sc) 2 nd yr	<u>Sanija</u>
26.	V. Tjassri	MBZpsy 2 nd Bsc	<u>Tjassri</u>
27.	D. Shana warolan	MBZpsy 2 nd Bsc	<u>Shana</u>
28.	S. Swetha	MBZCS (BSC) 2 nd yr	<u>Swetha</u>

S.No	Name of the student	Group and year	Signature
29.	M. Akhil Kumar	AnMC II nd	
30.	A. Pavani	ANMZ II	
31.	Axshiya Kousar	MbZCS (B.Sc II nd yr)	
32.	N. pavani	MbZC (B.Sc II nd yr)	
33.	B. Kemal	MbBTC 1 st year	
34.	Issath	MbBTC 1 st year	
35.	D. Akshitha	Bt MbZ 1 st year	