

CIRCULAR

DEPARTMENT OF MICROBIOLOGY, CHEMISTRY & BIOCHEMISTRY

Visit to Indian Institute of Sciences, Bengaluru on IISc Open Day

This is to inform all BSc students of II semester & BSc Honours (Microbiology) students of M. S. Ramaiah College of Arts, Science and Commerce-Autonomous that the Department of Microbiology, Chemistry & Biochemistry is organizing a visit to IISc on IISc Open day on 1st March 2025.

This activity aims for learning about the latest advancements in science and technology through exhibits, demonstrations, and lab visits and help students to engage with IISc researchers, faculty, and students to understand their work and career experiences.

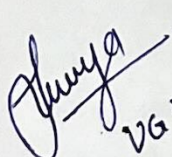
The faculty accompanying students


1. Dr. Arvindganth. R
2. Dr. Swetha P
3. Dr. Shashidhar
- 4.

Date: 1st March 2025

Time: 09:30am onwards

Place of Visit: Indian Institute of Science, Bengaluru.


HOD
in Microbiology
in Chem/Biochem


Principal
Principal
M.S.Ramaiah College of Arts, Science &
Commerce-Autonomous
MSRIT POST, MSR Nagar
Bengaluru - 560 054

DEPARTMENT OF MICROBIOLOGY

&

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

REPORT ON INDUSTRIAL VISIT

Visit to Indian Institute of science, Bengaluru-Open Day 2025

Title: Visit to Indian Institute of science, Bengaluru-Open day 2025

Date: 01st March 2025

Venue: Indian Institute of science, Bangalore

Participants: I and IV Year BSc students

Co-ordinators:

Dr. Aravindganth. R

Dr. Swetha. P

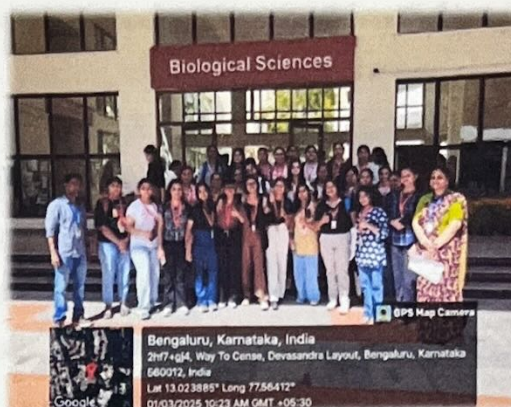
Dr. Shashidhar

No. of Participants: 82

Objective:

- To provide students with firsthand experience of cutting-edge research and innovations in the fields of Biotechnology, Microbiology, Chemistry, and Genetics.
- To enable students to engage with researchers, faculty members, and Ph.D. scholars to understand ongoing research projects and career opportunities in scientific research.
- To witness live demonstrations of sophisticated instruments, experimental techniques, and laboratory setups used in various research domains.
- To explore how different branches of science, including life sciences, chemical sciences, and computational sciences, integrate for groundbreaking discoveries.
- To inspire students to develop a scientific temperament, critical thinking, and curiosity for pursuing higher studies or research-oriented careers.
- To gain insights into potential career paths in academia, industry, and research institutions.
- To establish academic connections and collaborations with researchers and institutions for future internships or projects.

On 1st March, 2025, the Department of Microbiology, MSRCASC, organized an outreach activity to the Indian Institute of Science (IISc) Open Day 2025. This initiative aimed to expose students to cutting-edge research in biological and chemical sciences, inspiring them to explore scientific advancements and career opportunities in research. A total of **82 students** from the first and fourth-year B.Sc. programs participated in this educational visit.



During their visit to the Indian Institute of Science (IISc), students explored various research labs, experiment stalls, and interactive exhibits across the Biological and Chemical Sciences departments.

In the Biological Sciences department, they visited labs including Biochemistry (BC), Central Animal Facility (CAF), Centre for

Ecological Sciences (CES), Centre for Infectious Disease Research (CIDR), Centre for Neuroscience (CNS), Microbiology and Cell Biology (MCB), Molecular Biophysics Unit (MBU), and the Department of Developmental Biology and Genetics (DBG). They observed advanced lab instruments such as confocal and fluorescence microscopes, flow cytometers, PCR machines, next-generation sequencing (NGS) platforms, electron microscopes, cryostats, and live-cell imaging systems.

In the Chemical Sciences department, students explored labs in Inorganic and Physical Chemistry (IPC), Materials Research Centre (MRC), Organic Chemistry (OC), and the Solid State and Structural Chemistry Unit (SSCU). They observed X-ray diffraction (XRD) machines, NMR spectrometers, mass spectrometers, Raman spectrometers, scanning electron microscopes (SEM), transmission electron microscopes (TEM), and gas chromatography-mass spectrometry (GC-MS) systems. Some of the key highlights of their experience are as follows:

Students gained insights into ongoing research on bacterial diseases, their impact on human health, and advancements in disease diagnostics and treatment. They also learned about the significance of gut microbiota in human health, including its role in digestion, immunity, and metabolic functions. A fascinating session on tardigrades introduced students to these resilient micro-animals known for surviving extreme conditions, including space, and they also saw the live specimens of tardigrades under a microscope. In food



microbiology, students explored various food preservation techniques, microbial fermentation, and food safety measures and



saw a live demonstration of detecting food adulteration. A visit to the biology section allowed students to observe stored specimens of various vertebrates and invertebrates, including ants, butterflies, and marine life forms, providing a deeper understanding of biodiversity and taxonomy. Additionally,

students engaged in fun activities like crossword puzzles, matching placards, and performed sample loading in gel electrophoresis, enhancing their practical skills and interactive learning experience.

The students participated in exciting demonstrations involving helium and dry ice, witnessing scientific phenomena such as sublimation and gas expansion. They also observed live experiments showcasing various chemical reactions, including color-changing solutions, exothermic reactions, and simple acid-base titrations. Additionally, they were introduced to advanced chemical analysis techniques, including spectroscopy and material characterization methods used in modern scientific research, broadening their understanding of experimental chemistry and its applications.

Outcomes:

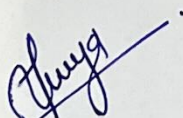
- Enhanced understanding of real-world applications of microbiology, biotechnology, chemistry, and genetics.
- Increased awareness of research opportunities and career pathways in scientific fields.
- Inspiration to pursue higher education and research in leading institutions like IISc.
- Students observed sophisticated instruments used for advanced research across various domains, including high-resolution imaging, molecular analysis, and material characterization.
- Active participation in hands-on experiments, which strengthened their practical learning experience.
- The visit to these research labs broadened students' horizons, helping them explore diverse scientific fields and gain exposure to cutting-edge research areas for potential future pursuits.

Co-ordinators:

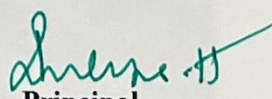
Dr. Aravindganth. R

Dr. Swetha. P

Dr. Shashidhar



HOD



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Bengaluru - 560 054

Glimpse of the Visit



Department of Microbiology
Visit to Indian Institute of Sciences, Bengaluru
1st March 2025
Attendance

Sl. No.	Name of the Student	Registration Number	Class	Section	Signature
1	Shruthi K. H	U18MB2480183	11 th sem	'C'	<u>Shruthi</u>
2	Varsha . N	0212	-	C	<u>Varsha</u>
3	Maithri	0386	-	E	<u>Maithri</u>
4	Prachi	0079	-	C	<u>Prachi</u>
5	Saanchitha . N	0078	-	C	<u>Saanchitha</u>
6	Anushka Bose	0384	-	C	<u>Anushka</u>
7	Lechana	0080	-	C	<u>Lechana</u>
8	Balaji Gowda . J. K	0048	-	C	<u>Balaji</u>
9	Ikshita	0044	-	C	<u>Ikshita</u>
10	Deeksha . M	0371	-	C	<u>Deeksha</u>
11	Shambhavi	0043	-	C	<u>Shambhavi</u>
12	Varshitha . N	0053	-	C	<u>Varshitha</u>
13	Poornima . Y. H	0390	-	C	<u>Poornima</u>
14	Smrithi	0056	-	C	<u>Smrithi</u>
15	Sandhya	0077	-	C	<u>Sandhya</u>
16				n	

Department of Microbiology
Visit to Indian Institute of Sciences, Bengaluru
1st March 2025
Attendance

Sl. No.	Name of the Student	Registration Number	Class	Section	Signature
1	Prabanti Pal	U18MB245379	11 th sem UG	B	Prabanti
2	Shreendhi Patel	U18MB2450112	"	B	Shreendhi
3	Deepa P	U18MB2450075	II sem	B	Deepa
4	Varsha	U18MB2450027	II sem	B	Varsha
5	Shushmitha	5382	II se	B	Shushmitha
6	Salomi	0016	II se	B	Salomi
7	Muskan	0381	II se	B	Muskan
8	S. Nandini	0350	II sem	B	Nandini
9	Nikitha Sagar	0014	II se	B	Nikitha
10	Trupthi	200	II se	B	Trupthi
11	Sanjibtha	0029	II se	B	Sanjibtha
12	Viebha	368	II se	B	Viebha
13	Priyanka	0084	II se	B	Priyanka
14	Ranjitha	0036	II se	B	Ranjitha
15	RUKSHA.S	0129	-11-	-11-	RUKSHA
16	RACHANA.S	0038	-11-	-11-	RACHANA

NISHIKANTHA SINGH	0074	<u>u</u>	'B'	<u>Neel</u>
SHRUTHIKA	0021	-11-	-1e-	<u>Sheth</u>
ROHITH SHARMA	0002	-11-	-11-	<u>Sheth</u>
NIKHIL JAIN	0001	-11-	-1e-	<u>Sheth</u>
Syed Fouzan	0003	-11-	-11-	<u>Sf</u>
A G Ketan	0012	-u-	-u-	<u>Inde</u>
NID Chirag	0022	u	u	<u>Inde</u>






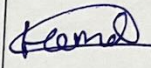


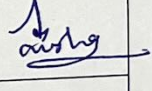
Department of Microbiology
Visit to Indian Institute of Sciences, Bengaluru
1st March 2025
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Sl. No.	Name of the Student	Registration Number	Class	Section	Signature
1	Druti.V	U18MB2450017	BSc	'A'	
2	Pratiksha .G.P.	U18MB2450637	BSc	B	
3	Dinva. G	U18MB2450031	BSc	A	
4	Tanmayu.S	U18MB2450013	BSc	B	
5	Thijaswini. C.N.	U18MB2450093	BSc	B	
6	A.Krishna.Samyuktha	U18MB2450119	BSc	B	
7	Yojana.M	U18MB2450096	BSc	B	
8	Sakthi Vibushini.B	U18MB2450196	BSc	B	
9	Sumedha.S.M	U18MB2450358	BSc	B	
10	Yuktha.M.P	U18MB2450015	BSc	B	
11	Sudhasshan Babu	U18MB2450358	BSc	B	
12	Sushmitha	U18MB2450382	BSc	B	
13	Srebanthi Pal	U18MB2450371	BSc	B	
14	Srinidhi	U18MB2450112	BSc	B	
15	Thrupthi	U18MB2450200	BSc	B	
16	Priyanka.k.m	U18MB2450084	BSc	B	

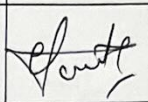
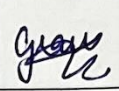
17. Nibha.p

U18MB2450261 BSc B


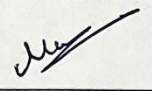
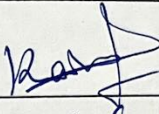

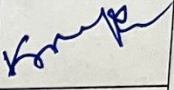

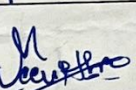
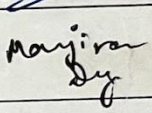
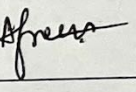
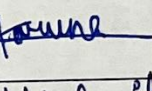
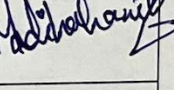
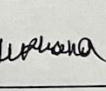


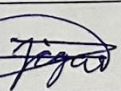
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Sl. No.	Name of the Student	Registration Number	Class	Section	Signature
1	Jahnvi.R	U18MB245009	I	A	
2	Hanika.G	U18MB245000	I	A	
3	Jahnvi Gaode	50205 U18MB245005	I	A	
4	Varsha.g.	U18MB245004	I	B	
5	Durga.R.	U18MB2450075	I	B	
6	Hemal.L	U18MB2450076	I	A	
7	Maushitha.K.S	5011	I	A	
8	Anusha N	5028	I	A	
9	Anirha.M.	U18MB2450338	I	A	
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Sl. No.	Name of the Student	Registration Number	Class	Section	Signature
1	Goutham Yadhav Y	U18MB2450030	BSC	'A'	
2	Gnanu Sawa M	U18MB2450372	BSC	'A'	
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Sl. No.	Name of the Student	Registration Number	Class	Section	Signature
1	Korisisiddugouda	U18MB2430018	II nd sem	A	
2	madhan kumar	U18MB2430020	II nd sem	A	
3	Kavana.S	U18MB2450122	II nd sem	A	
4	Mahalakshmi.P	U18MB2450328	II nd sem	A	
5	Krupa.R	U18MB2450114	II nd sem	A	
6	Keerthana.H	U18MB2450098	II nd sem	A	
7	Jeewitha.M	U18MB2450369	II nd sem	A	
8	Manjira Dey	U18MB2450112	II nd sem	A	
9	Manvish A/green	U18MB2450380	II nd sem	A	
10	Karuna	U18MB2450198	II nd sem	A	
11	Madha	U18MB2450039	II nd sem	A	
12	Lekhana	U18MB2450316	II nd sem	A	
13	Sree lakshmi	U18MB2450125	II nd sem	A	
14	Khwaish	U18MB2450065	II nd sem	A	
15	Jigar	U18MB2450069	II nd sem	A	
16	Manasa.M	U18MB2450022	II nd sem	A	