

DEPARTMENT OF MICROBIOLOGY
ST. FRANCIS COLLEGE FOR WOMEN
HYDERABAD
ACADEMIC YEAR-2025-26



St. Francis
College for Women
Begumpet, Hyderabad-500016
(Autonomous & Affiliated to Osmania University)



जैवप्रौद्योगिकी विभाग
DEPARTMENT OF
BIOTECHNOLOGY

Guest Lecture Report on “Host Pathogen Interaction”

The poster features the logos of St. Francis College for Women and the Department of Biotechnology at Osmania University. It announces a guest lecture by Dr. Hameeda Bee, an Associate Professor and Chairperson of the Board of Studies in the Department of Microbiology, on September 11, 2025, from 9:30 am to 10:30 am at Gerosa Hall. The event is specifically for B.Sc. III C students.

St. Francis
College for Women
Begumpet, Hyderabad-500016
(Autonomous & Affiliated to Osmania University)

जैवप्रौद्योगिकी विभाग
DEPARTMENT OF
BIOTECHNOLOGY

DBT STAR COLLEGE
(Under Strengthening Component)
Department of Microbiology
Organizes
Guest Lecture on
Host-Pathogen Interaction

Resource Person

Dr. Hameeda Bee
Associate Professor and
Chairperson-BoS
Department of Microbiology
University College of Science
Osmania University

11th September, 2025
9:30 am to 10:30 am
Gerosa Hall

For B.Sc. III C Students

The Department of Microbiology had organised an Guest Lecture on 11th September 2025. The resource person for the same was Dr Hameeda Bee, Associate Professor and Chairperson of the Board of Studies, Department of Microbiology, University College of Science, Osmania University, Hyderabad. The event was organized for BSc IIIyr, MSc Iyr and MSc Iyr students at Gerosa Hall, St Francis College for Women, Hyderabad.

Objectives and Expected Outcomes:

Objectives:

- To introduce students to the importance of **Host-Pathogen interactions**.
- To create awareness on the different mechanisms employed by pathogens to invade the host's system.
- To understand the various mechanisms in the host's system to defend itself from the pathogen's invasion.

Outcomes:

- The students of Bsc. III C were able to learn about the different Host-Pathogen mechanisms.
- The guest lecture encouraged students to view Host-Pathogen interactions as not just a concept of Microbiology but also view it from a perspective of interdisciplinary research.
- Students gained valuable insights into the harmful and potentially the beneficial outcomes of HPI.
- Improved ability to interpret research on infection and immunity dynamics.

Participation Details:

- **Faculty:** Dr. P. Roselin, Dr. Anitha Thomas, Dr. Gayathri, Dr. Arsheen, Dr Sunitha, Ms. Swathi, Dr. K. Suman, Ms. Natasha.
- **Students:** B.Sc.III C students

Organizing Members:

Dr. P. Roselin, Dr. Arsheen Tabassum, Dr. K. Suman, and Faculty, Department of Microbiology & MicroAura@SFC club.

Report

The Guest Lecture on the topic Host-Pathogen interactions took place on 11th September, 2025, at Gerosa Hall, St. Francis College for Women.

The event began with an introduction of the guest speaker Dr. Hameeda Bee, Associate professor, Chairperson-BoS, University College of Science, Osmania University by Dr. K. Suman. Dr. Arsheen Tabassum formally introduced the Guest speaker, after which Dr. P. Roselin felicitated Dr. Hameeda Bee with a sapling as a token of appreciation.

The guest lecture began with the basic introduction to the topic as to how the pathogen interacts by invading the system of the host and proliferates within the host. This was followed by the explanation of the importance of learning these interactions. Ma'am explained that the pathogens typically manifest in the host as either primary pathogens which directly attempt to take over the host's system or opportunistic/commensals (they attack when the host's immune system is compromised).

Then ma'am went on to explain about the stages of Host-Pathogen interactions which are: transmission, adherence, invasion and colonization, evasion, damage and exit.

This was followed by the examples of the two different strains of the E. coli; one was the commensals, which most E. coli strains are but the second is a parasitic strain of E. coli i.e. O157:H7.

Like pathogens, the hosts also have certain defense mechanisms against the pathogens such as cellular defense (Phagocytes) and Molecular defense (Antimicrobial proteins).

An engaging Q&A session followed, allowing students to interact directly with Dr. Hameeda Bee and gain deeper insights into the real-world applications of microbiology with respect to Host-Pathogen interactions.

The event concluded with a Vote of Thanks delivered by Vyshnavi, President of Micro Aura Club, expressing heartfelt gratitude to all dignitaries, organizers, and attendees. The day ended with the National Anthem, closing the event on a patriotic and proud note.

Pictures:

