

PG and Research Department of Microbiology

Special lecture on “Journey of Antibiotics: From Microbes to Cancer and PCOS”

The PG & Research Department of Microbiology at J.J. College of Arts and Science (Autonomous) organized a special lecture titled "Journey of Antibiotics: From Microbes to Cancer and PCOS" on 30.07.2026. The event featured Dr. S. Achiraman, Professor from the Department of Environmental Biotechnology, Bharathidasan University, Tiruchirapalli - 620024, as the Resource Person. The session was held in the MBA Conference hall and drew a large audience of students and faculty members.

In his insightful lecture, Dr. S. Achiraman traced the fascinating evolution of antibiotics, beginning with their discovery from microbial sources and their foundational role in treating infectious diseases. He then expanded the scope to highlight the profound connections between microbial metabolites and complex non-communicable diseases. He explained how several antibiotic compounds derived from microbes have been repurposed or serve as the basis for critical anti-cancer drugs, and discussed the emerging role of the human microbiome in influencing the efficacy of modern cancer therapies. Furthermore, he delved into the intricate link between the gut microbiome, antibiotic-induced dysbiosis, and Polycystic Ovary Syndrome (PCOS). He elaborated on how microbial imbalances contribute to systemic inflammation, insulin resistance, and metabolic disruptions, which are key drivers of PCOS, thereby highlighting new frontiers in microbiome-based therapeutic interventions.

Dr. P. Jeevan, Head of the Department of Microbiology, welcomed the resource person and the participants. He stressed the importance of such interdisciplinary knowledge in broadening the academic horizons of the students and keeping them abreast of cutting-edge research in biotechnology and medicine.

Over 80 students actively participated in the interactive session following the lecture. They raised thought-provoking questions regarding the mechanisms of antibiotic resistance, the potential of microbiome modulation in managing PCOS, and the future of microbial engineering in oncology. Dr.M.Poornima, Assistant Professor, Department of Microbiology, delivered the Vote of Thanks, expressing profound gratitude to Dr. S. Achiraman for his illuminating and highly informative session.