The department of Biotechnology, GITAM Institute of Science, GITAM University organized a 2 day Lecture workshop on “Advances in Molecular Techniques on 27th and 28th November, 2015. The workshop commenced with the inaugural Function on 27th of Nov, 2015 with lighting of the lamp by Prof. G. Subramnayam, hon’ble Vice Chancellor, GITAM University, followed by key note address by the Chief guest, Dr. Shekhar C. Mande, Director, National Centre for Cell Science, Pune who delivered a lecture on “The role of structures in understanding *M. tuberculosis*”. His lecture gave insight into molecular interactions and various biophysical methods. He stressed on understanding the atomic structure, which has immense potential for designing future generation of drugs to tackle so many diseases. Later, Dr. Sharmistha Banerjee, University of Hyderabad delivered her lecture on “How HIV exploits host cell machinery”. She presented various approaches used in this field, their advantages and disadvantages and also emphasized on identifying protein-protein interactions between the host and HIV and how to target the interacting sites rather than inactivation of the host proteins entirely. She expressed that efforts are being made to understand global HIV-human protein-protein interactions. Her lecture was interesting and motivating.

The Post lunch session began with student interaction with Dr. Sekhar C. Mande Director, National Centre for Cell Science, Pune and other resource persons. Future career prospects in the field of life sciences and fellowship opportunities in Biotechnology and related fields were presented. All the resource persons motivated students to pursue their research
careers in the field of Life Sciences. Later, Dr. Subhadeep Chaterjee, Head Laboratory of Plant-Microbe Interactions, Centre for DNA Fingerprinting and Diagnostics (CDFD) has given his presentation on “Cell –Cell communication in bacteria”. He explained quorum–sensing system and the strategies to understand cell–cell signaling in plant pathogenicity. His talk was inspiring and punctuated with interesting examples.

The second day of the workshop began on 28th Nov, 2015 with the lecture of Dr. Brammanandam Manavathi, Assistant Professor who has given his lecture on “Engagement reception and break up: Understanding the concept of cell migration by modern technologies”. His lecture was lucid and interesting and he could clearly present on “Dissecting cell biology using Proteomics, cell migration, its assembly and disassembly”. He has lectured on how we can understand the cell migration by using techniques like wound healing, co-immuno preceipitation and confocal microscopy and narrated how this is helpful in understanding the breast cancer.

After a short tea break, the session began with the lecture by Dr. Sharmistha Banerjee, Associate Professor, University of Hyderabad who spoke on “HIV-TB co infection: How HIV infection aggravates tuberculosis”. She has given a nice presentation and enlightened students on recent techniques like iTRAQ (isobaric tags for relative and absolute quantification) and explained the promising future opportunities in co-infection biology and its understating. Later, Dr. M. Anitha, Associate Professor, Department of Biotechnology, GITAM University has given her presentation on “Functional analysis of Repetitive Sequences”. She presented her lecture in a very lucid manner about DNA and RNA nuclear matrix and their isolation methods with a note on the repetitive sequence GAGAA centromeric repeat in Drosophila and its importance in their survival during adult stage. She also explained about Teleomeric repeat TTAGG in Bombyx mori and further development of synthetic pyrrole and imidzaole drugs in chromatin opening.
All the speakers have given presentations with latest information and have interacted with the participants and answered all their queries. Overall, 190 students from local degree colleges, research scholars, scientists & academicians have participated in the lecture workshop and made it a grand success. Students actively interacted with scientists and academicians in different sessions of the two day seminar and they have given their feedback in the valedictory function and appreciated the organizers for providing them the opportunity to interact with the distinguished scientists which give exposure to the current trends in biological research. Later, Prof. N. Lakshmana Das, Principal, GITAM Institute of Science, GITAM University has given valedictory address and the seminar ended with vote of thanks by Dr. N. Sai Kishore, Assistant Professor, Department of Biotechnology, local organizing secretary. One of the distinct features of this meeting at GITAM University was the active participation of more girl students. All the participants have expressed their satisfaction on the hospitality provided by GITAM University.