## **Report - Guest Lecture on**

## **Genomics in Life Sciences**

Date: 16.07.2019 Venue : Conference Hall. Time: 10.30 – 12.30

Guest lecture on Topic "Genomics in Life Sciences" was given **by Dr. N. Senthil Kumar,** Professor, Department of Biotechnology, Mizoram University, (A Central University), Aizawl, Mizoram – 796004, India. Welcome Address was given by Dr. S. Umamaheswari, Associate Professor and Head, Department of Zoology.

**Dr. N. Senthil Kumar** has given introduction about Genome projects and bioinformatics. He explained the central dogma of molecular biology, PCR and Human genome projects. He gave the knowledge in evolution is must for biology students and he added that Africa is the place of origin of human from apes. He talked about human genetic variations, and how individual genes play a role in health and disease of man and also Genomic medicine.

He talked about Cancer and how unhealthy diets and life style causes cancer. The etiology of cancer is <u>multifactorial</u>, with genetic, environmental, medical, and lifestyle factors interacting to produce a given malignancy. He explained Mitochondrial gene Mutation in Different population. He stated the importance of bioinformatics tools in study of cancer. He also explained about research opportunities in the field of Genomics.

He shared his ideas on different databases of bioinformatics and its importance. DDBJ, OMIM, EMBL, PDB. He also explained the hierarchy of Geneome, Transcriptome, Proteome, Structural proteome. The students were motivated to study the concepts of biology indebth, and also to do research in novel areas of biology.

Dr. N. Senthil Kumar, Professor, Department of Biotechnology, Mizoram University, (A Central University), Aizawl, Mizoram – 796004, India.

