

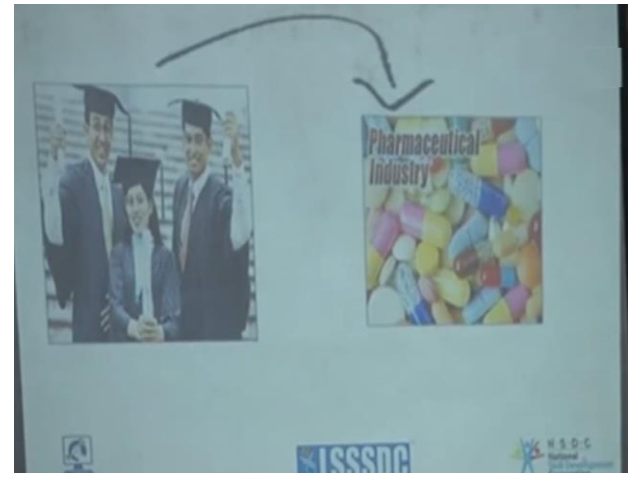
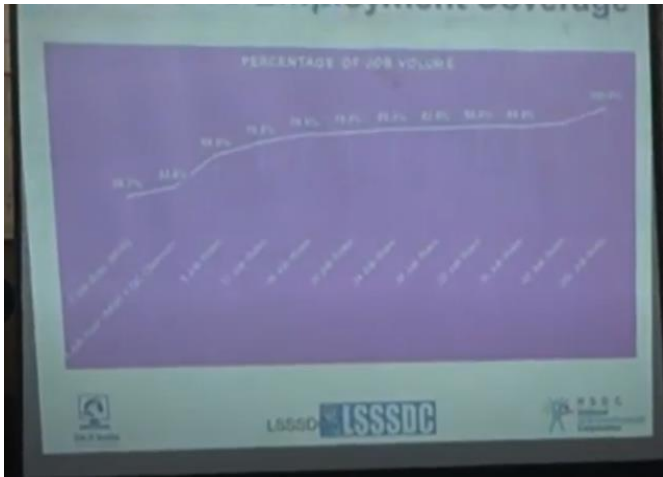
## REPORT

### **“Industrial Applications of Biotechnology”**

One Day Entrepreneurship Programme on Industrial Applications of Biotechnology was organised by Department of Biotechnology in collaboration with IQAC on 20-07-2015 at Auditorium Hall College Campus under the Chairmanship of worthy Principal, Prof. Dr. Mushtaq Ahmad Lone.

Dr. Rashid, Assistant Professor Biotechnology, while addressing students and faculty members highlighted various industrial applications Biotechnology for the production of commercially and medicinally important products. Industrial biotechnology involves the exploitation of biological resources for the processing and production of enzymes, chemicals, materials and energy. It is recognized as a key enabling technology that can contribute to addressing major societal challenges, through the use of sustainable alternatives to fossil fuels for the manufacture of everyday products, as well as for the discovery of breakthrough methods and pathways to achieving entirely new functionalities and performance. IB has already delivered considerable benefits to the Country through products ranging from antibiotics and vaccines, to biofuels, food and feed, and plastics, as well as through recycling of wastes and reduced energy consumption for the manufacture of chemicals and other materials. In recent years, the development of synthetic biology to further drive novel solutions and provide platform technologies to enable IB has seen significant interest and gains in commercial potential. Synthetic biology is an interdisciplinary scientific field that is considerably synergistic with industrial biotechnology, and IB users will undoubtedly benefit as early adopters of this nascent industry. The hallmark of synthetic biology is its application of engineering principles to biology in order to enable the design and synthesis of biologically based parts, novel devices and biological systems, all of which are today underpinned by rapid advances in genetic and computational technologies, which are boosting development of powerful gene engineering capabilities, while lowering the costs of DNA synthesis and sequencing. It creates step changes in the development of products to keep pace with socioeconomic needs and add value to current IB offerings – and for this reason, the opportunities and development needs for synthetic biology are integral to the IB roadmap. The breadth of products and markets where IB can be deployed is a defining strength, yet IB is seldom recognized by consumers and stakeholders outside its immediate value chains or user markets, due to its status of an underpinning technology than an end product.





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Media Secretary