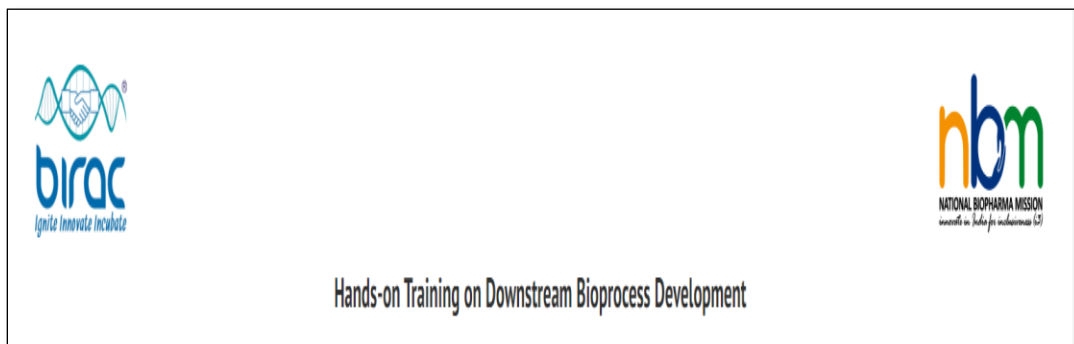


National Biopharma Mission supported Hands-on Training Programme on ‘Downstream Bioprocess Development’ from January 20 -24, 2020 at KIIT-TBI, Bhubaneswar



The Cabinet Committee on Economic Affairs in May 2017 approved the National Biopharma Mission (NBM), “Innovate in India (I3) – Empowering biotech entrepreneurs & accelerating inclusive innovation”. This ambitious mission of the Department of Biotechnology (DBT) is being funded by the Government of India at a total project cost of Rs 1500 crores for five years on a 50% cost sharing via World Bank loan and is being implemented at the Biotechnology Industry Research Assistance Council (BIRAC), a Public Sector Undertaking of DBT.

The mission is focused to transform the health standards of the country through affordable product development and is currently working to bring 5-7 biopharmaceutical products closer to market in the coming 4 years.

Major activities within the umbrella of the NBM are:

1. Specific Product Development

The mission has identified three major verticals for product development namely Vaccines, biotherapeutics and medical devices and diagnostics. As part of the vaccine development efforts, support is being provided for universal flu vaccine, pneumococcal vaccine and vaccines for cholera and dengue which, are under various stages of development. The mission is also focused on providing support for development of biosimilars (therapeutic proteins and monoclonal antibodies) for various communicable and infectious diseases. Some of the biosimilar products being supported include Human Serum Albumin, Herceptin, Insulin Glargine, as well as, clone development for production of Ramucirumab, Golimumab and factor VIII. Considering that 75% of medical device market is dominated by imported products, the Mission is focused on developing core technologies offering cost effective indigenous alternatives to existing foreign makes. Development of materials for bio-absorbable implants (bone implants), slip ring CT

scanners, next generation endoscopes, next generation MRI scanners, to name but a few, are being supported.

2. Building Shared Infrastructure

The program is dedicatedly working to create an enabling ecosystem for affordable product development in the country through creation of GLP, GMP and GCLP compliant facilities besides cell line repositories (both Mammalian and Microbial cell lines) and facilities for medical device testing and prototyping. A few of the facilities being supported include (i) GLP compliant facility for analytical characterization of biotherapeutics, (ii) GCLP facilities for clinical immunogenicity, (iii) GMP manufacturing facilities for biotherapeutics (Microbial and Mammalian) (iv) Medical Device and diagnostics rapid prototyping facilities, (v) EMI and EMC facilities for electrical safety testing of electronic medical devices and (vi) a large animal facility for evaluation of implantable medical devices. The Mission is also supporting the creation of Translational Research Consortia (TRC) for Dengue and Chikungunya consisting of a Consortium of premier Indian institutions that would enable the development of multidisciplinary translation ecosystem partnership platform. The TRCs are aimed at generating resources, reagents, infrastructure and knowledge that would fast-track national efforts to tackle these infectious diseases, which are growing public health problem.

The Mission is further focused on strengthening clinical trial capacity, for testing biologicals as well as vaccines, and establishing a data management system for enhanced data analysis and reporting. Strengthening the technology transfer capacity of the country is another major focus area of the Mission as part of which, five incubators have been identified to establish Technology Transfer Offices. The Mission is simultaneously working towards generating skilled taskforce in the area via trainings and workshops.

3. Building and strengthening domain specific knowledge and management skills:

The Mission supports trainings and workshops as per its mandate. As on date, about 762 participants have been trained under different trainings and workshops under the National Biopharma Mission including 220 female participants. So far, the Mission has supported workshops in the areas of clinical research, regulatory compliances, technology transfer, biopharmaceuticals and medical devices. Several more workshops are enqueued as a regular activity under the Mission.

A hands-on training programme on *Downstream Bioprocess Development* is being organized from January 20-24, 2020 by KIIT – Technology Business Incubator (KIIT- TBI), Bhubaneswar. The training programme is supported by DBT-BIRAC under the aegis of NBM.

This 5-day programme shall cover advanced downstream processing design, optimization and troubleshooting of chromatographic processes. The focus is on design and optimization of critical operating parameters involved in developing a scalable, economic and robust chromatographic process.

Sponsorship from NBM includes participation in 5-day programme, workshop material, accommodation and hospitality for the duration of the programme.

Dr. Bilqeesa Bhat
Project Scientist,
bhat.bilqeesa3000@gmail.com

Contact Person:

Dr. Kavita Singh Email: technical.birac@gov.in