

'Expanding Orissa's bio landscape'

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Established in year 2009, KIIT Technology business Incubator (KIIT- TBI) is the first bioincubator in the state of Orissa and one amongst twelve others supported by the Biotechnology Industry Research Assistance Council (BIRAC) accross India. With support from the National Science and Technology Entrepreneurship Development Board (NSTEDB), department of science and technology (DST), it was registered as a section 25 (non-profit) company in the same year.

The KIIT-TBI has a broader vision and mission of transforming research developments into commercially-feasible technologies for the benefit of society. It works on a mission to inspire young minds and nurture the bio-entrepreneurs to enable them to establish small, medium bio-enterprises. It provides the necessary infrastructure, technical and scientific inputs, mentoring and networking for the start-ups. Additionally, it is working on capacity building program to create awareness and to promote bio-entrepreneurship.

The bioincunator focuses mainly on biotechnology, information and communication technology (ICT) and engineering sector. Recently in Feburuary 2013, KIIT-TBI received funding support from DBT-BIRAC under the BioIncubator Support Scheme (BISS) to strengthen its bioincubator facilities.

Creating bioentreprenuers

The objective behind its establishment is the promote bio entrepreneurship and to provide a platform or support system for translating ideas to develop products or services that may lead to business. The biotech industries in the state of Orissa are at a very early stage of development and somehow the ecosystem is not yet developed. Therefore, the biotech R&D innovations and inventions and academia-industry technology transfer leading to licensing and new product development are a major gap here. This was the driving factor for the establishment of KIIT-TBI.

KIIT-TBI provides state of the art laboratory facilities and support/mentoring services to create an appropriate setting and

nurturing environment for budding entrepreneurs. Laboratories include microbiology, molecular biology, plant tissue culture, bioinformatics, protein labs. Additionally, a standalone animal house facility is available to for animal testing. Other facilities include ready to use office spaces, high speed internet connectivity, library, conference/meeting rooms, and telecommunication facilities. It also provide a platform for networking along with technical, legal, financial and secretarial support.

Maa Kanak Biofertilizers, one of its graduated incubatee is the leading organic inputs manufacturing unit in Orissa. The company is committed to development, improvement and commercialization of organic agriculture. They were awarded the best incubatee award at the fourth ISBA innovation and Enterpreneurship awards, 2012.

Various biotech start up have benefitted from the facilities provided at the bioincubator:

 \hat{a} - In-DNA Life Sciences Pvt. Ltd.- which offers a range of diagnosis such as cytogenetic tests, molecular cytogenetics including FISH, for complex genetic disorders and cancers, uses the R&D labs at the incubator for their research work. They are also working on developing advanced genetic tests such as array based comparative genomic hybridization and gene arrays.

â- ENOVEO which provides bioengineering and environmental solutions is benefitted by availing mentorship and networking facility at the bioincubator.

â- Biologic Application Pvt. Ltd. - which is working on development of various probiotic based products like fermented milk drink and fruit yogurt, used the bioreactor and other R&D facilities at the incubation centre. Currently they are in scale up stage.

â– Nano Herb Research Laboratory. - which is engaged in developing different bio molecules from natural resources using nanotechnology to enhance their efficacy and effectiveness uses the R&D facilities at the incubator. Innovators had filed the patent on nanocurcumin and already commercialized to IPCA, Mumbai.

Collaborative model

Says Dr Madhu Khatri, program manager (Bioincubator), KIIT-TBI, "For revenue generation, we have a well designed program in terms of rentals of office and lab space, entrepreneurship development programmes, workshops, seminars, training in Biotechnology equipments handling, certificate programs, usage charges of equipments during both in R&D scale and Pilot scale and equity share (with the start-ups) which will lead self-sustainability for the incubator in very near future."

KIIT-TBI has tied up linkages with University of California, Los Angeles, USA; Institute of Chemical technology, Prague, Czech Republic and Applied Stem Cell Biology and Cell Technology, Biomedical and Biotechnological Center (BBZ), Universität Leipzig, Germany for possible technology development, validation and commercialization. It is also supported by various other agencies and schemes of government of India. These include Technology Development Board (TDB), Department of Information Technology's (DIT), Technological Incubation and Development of. Entrepreneurs (TIDE) scheme Technology Refinement and Marketing Programme (TREMAP), Technology Information, Forecasting and Assessment Council (TIFAC) and Micro, Small & Medium Enterprises (MSMEs).

"All these functionaries are engaged in helping innovations and entrepreneurship promotion and thereby creation of enterprises for the development of the society and we would like to thank them all for their continuous support to us in this noble mission, said Dr Mrutyunjay Suar, CEO, KIIT-TBI.

Immediate plans

The current thrust areas of bioincubator includes biopharma, biofertilizer, microbial enzyme isolation and purification, bioremediation, biopesticide, biomarker and diagnostic, bioelectronics, functional foods and development of quality animal feed (aqua/poultry/pet animals).

Dr Mrutyunjay Suar mentioned that bioincubator is taking initiatives to promote awareness by organizing several programs and camps. He added further, "Recently, we organized an "Ignition course in Bioentrepreneurship" for the first time in Orissa, which was a huge success. To take it further to the next level, the centre is planning to host a few specialized workshops and training programs on bio-business by inviting international mentors."

A new building for KIIT-TBI with 40000sq ft is coming up which will be inaugurated by Nobel laureate in Physiology or Medicine (2007), Prof Oliver Smithies in mid November this year. It will house various technical facilities such as bioprocess lab, analytical and validation facility, up- scaling facility, cell and tissue culture facility, packaging facility and a good manufacturing practices (GMP) facility for product development and translation. Images: