

Young and Robust: Tianjin Institute of Industrial Biotechnology

The Tianjin Institute of Industrial Biotechnology (TIB) was initiated hand-in-hand by CAS and People's Government of Tianjin City in March, 2009. Located in the Tianjin Airport Economic Area, TIB has a historical mission of developing industrial biotechnology system and promoting the sustainable development of Tianjin and Bohai Bay Economic Rim.

TIB is devoted to addressing important scientific problems and crucial technological bottlenecks in bio-economic development by constructing the artificial cell-factory using most advanced biotechnology. Based on a solid foundation of scientific research, TIB is mainly focused on three research areas: protein science and bio-catalysis engineering, bio-synthesis and microbial manufacturing engineering, and biological systems and bio-process engineering. TIB incubation center is committed to transformation of lab technology or lab research achievement. It will accelerate the application of new technology in industrial scale or facilitate to produce a new product in order to promote the economic development. Its support system includes two platforms: one is the basic research platform that consists of high-throughput screening platform, biology technology platform, fermentation process & simulation platform, and biomedical engineering platform; and the other is the public services platform consisting of library, instrumental analysis center and database service.

In March, 2010, TIB moved into the new R&D building, which has a building area of 43,000 square meters and great improvement on the condition of offices and research labs. Then, new instruments were put into use successively. The support system is also under construction. At the same time, the second-period construction plan of TIB had been approved by CAS, according to which the building area will be 20,000 square meters and will be used as an industrial-scale experiment platform.

TIB hosts 170 faculties and staff at present, including 22 research field leaders, 12 winners of the “Hundred Talents Program of CAS”, 10 winners of “Thousand Talents Plan of Tianjin”. There are 110 graduated students studying in TIB. With its further development, it will retain more excellent talents to join TIB.

TIB has applied 59 patents and published 100 papers in international journals, among which 54 papers were indexed by SCI until 2011. At the same time, TIB has carried out a wide range of cooperation with enterprises and signed 35 cooperation contracts with the enterprises in Tianjin, Hebei and Henan provinces, etc.

Three major laboratories have been set up in TIB, including the National Engineering Laboratory of Industrial Enzymes approved by the National Development and Reform Commission, the CAS Key Laboratory of Microbial Engineering Systems approved by the CAS, and the Tianjin Key Laboratory for Industrial Biological Systems and Bioprocessing Engineering approved by Tianjin municipal government.

Since the beginning of its construction, TIB has been paying attention to the cooperation with enterprises. Through unremitting effort, nine joint laboratories had been set up, such as Enzymes Preparation Laboratory of JieCheng Biologicals & Tianjin Industrial Center established with the Jiangsu JieCheng Bio-Engineering Co., Ltd, Synthesis Joint Laboratory established with Tianjin Pharmaceuticals Research Institute Co., Ltd, and Innovation Joint Laboratory established with Anhui BBBCA Biochemical Co., Ltd.

Though new and young, TIB has already established a solid scientific foundation, strong S&T innovation capability, and effective ability to resolve issues related to bio-industries, striving to grow into a national research institution that possesses “first-class achievements, first-class benefits, first-class management and first-class talents”.