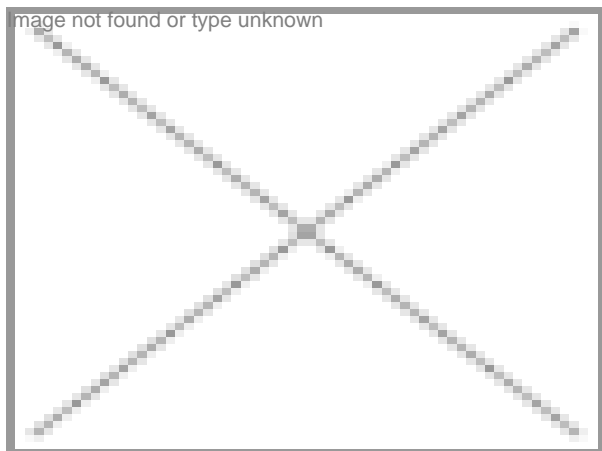


## TICEL Bio Park inaugurated

16 December 2004 | News



Located in the knowledge corridor of Tamil Nadu (Chennai), TICEL Bio Park Ltd, a biotechnology park, which facilitates research and development activities, was inaugurated by Chief Minister J Jayalalithaa on November 10, 2004. This marks the determined bid by Tamil Nadu to forge ahead in the life sciences research and development and reach the future frontiers of biotechnology.



The TICEL Bio Park has been set up by the Tamil Nadu Industrial Development Corporation (TIDCO) in technical collaboration with the US-based Cornell University with a capital outlay of Rs 65 crore. According to Rameshram Mishra, secretary to Tamil Nadu government, industries department, CMD, TIDCO, and chairman, TICEL, this facility would be a hub for research and development in the domains of biotechnology, which includes medical, nutraceuticals, agriculture biotechnology and bioinformatics. KR Viswanathan, managing director of the Park, hopes that this facility would catalyze an investment of over Rs 1,000 crore in two years and attract 1,200 people.

The park spans across five acres of land and has a super built-up area of 1.43 lakh square feet. The park has been designed on a modular basis and has 72 modules, each of 915 sq. ft. According to Mishra, the foundation for this project was laid in April 2003 and the project was

accomplished in a record time of 17 months. Further, the project cost was kept under control. The initial project plan expenditure was estimated at Rs 62.50 crore. Commenting on the equity stake of the company, Mishra said, "The total equity is Rs 9 crore. TIDCO, TIDEL, Indian Bank, Indian Overseas Bank and Karur Vysya Bank are the major equity stakeholders in the venture. While TIDCO's and TIDEL's stakes are Rs 2.58 crore and Rs 2 crore respectively, that of Indian Bank, Indian Overseas Bank and Karur Vysya Bank is Rs 1.92 crore, Rs 1 crore, and Rs 1.5 crore, respectively. Further a term loan of Rs 20.80 crore has been procured from the three banks."

At the time of inauguration, the Park touched 28 percent occupancy, informed Viswanathan. "In two years time, we expect the park to be completely sold out, when we will consider Phase II. SGS India Ltd has taken up 22,000 sq. ft, while Vimta Labs has taken 11,00 sq. ft of space in the park. Frontier Lifeline has taken up one module for heart-valve production and testing," he added.

The role of the TICEL Bio Park is to provide lab infrastructure, world-class equipment and services, training centers, and special programmes to develop IP. As part of that objective, the Tichel Bio Park has wet labs for fermentation, microbiology and molecular biology and facilities for plant and animal tissue culture, downstream processing and analysis. It has a transgenic green house, training center with videoconferencing facility, bioinformatics infrastructure with remote access to supercomputer at Indian Institute of Science, Bangalore. It meets biosafety at level-2 standards. It has tied up with the Central Leather Research Institute (CLRI) for animal tissue culture and analytical services and Vimta Labs Ltd for molecular biology. While the lease rental for biotech firms is pegged at Rs 55 per sq. ft, the outright sale cost is Rs 5,000 per sq. ft. The rentals for the bioresource center is Rs 40 per sq. ft and, according to Viswanathan, the TICEL Bio Park ideally wants tenants and not owners.

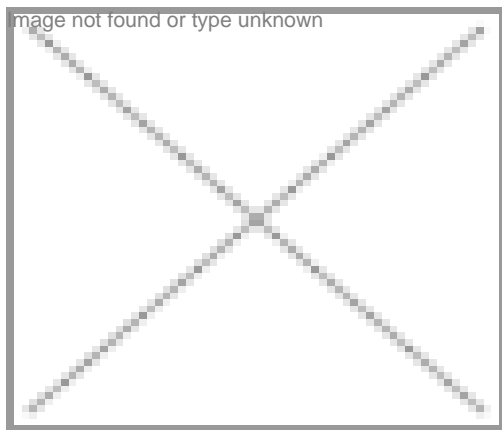
The Park aims at encouraging biotech entrepreneurs to set shop. The Tamil Nadu biotech policy had spelt out setting up of a venture fund through TIDCO with an initial corpus of about Rs 30 crore for biotechnology. This fund known as "Emerging Technologies Fund", which would be managed by professionals and target the biotech projects both within and outside the biotech parks, is being negotiated with IL&FS. "The priority would now be marketing the Park and achieving full occupancy," said Mishra.

---

## Biocon launches bio-insulin

Biocon Ltd, India's leading biotechnology company, launched its first recombinant product, Insugen, a new generation bio-insulin. It is claimed to be the world's first recombinant human (r-DNA) insulin using Pichia Expression, a yeast expression system that secretes pro-insulin in an extra-cellular manner and thereby enables an elegant purification process for Insulin. Biocon has submitted a Drug Master File (DMF) to the United States Food and Drug Administration (USFDA).

Insugen will be available in 10 ml vials of 40 iu/ml for an introductory price of Rs 126 in India. The three different formulations of Insugen in the market for the treatment of diabetes include Insugen R (regular), Insugen (NPH) and Insugen 30/70 (Biphasic). During the first phase of the launch, Insugen will be available in Delhi, Punjab, Rajasthan, Maharashtra, Gujarat, Goa, Karnataka, Tamil Nadu, Andhra Pradesh and Kerala.



Announcing the launch, Kiran Mazumdar-Shaw, chairman and managing director, Biocon said, "The launch of Insugen marks a significant milestone in Biocon's foray into protein therapeutics. Our focus areas are diabetes and oncology and this is the first major step towards diabetes care. Biocon's Insugen meets the highest global standards and we are confident of our success in this area. The launch of Insugen is the fruition of an integrated effort of our scientists, engineers and clinicians. This launch reiterates our commitment to providing biotechnology solutions for worldwide diseases".

Biocon has also announced a tie-up with Nobex Corporation, USA to explore and develop oral insulin for diabetes treatment. Biocon also has a global supply agreement for human insulin with Bristol Myers-Squibb. In addition, the company conducted a "Winning with Diabetes" walk with noted cricketer Wasim Akram on November 14, 2004 (World Diabetes Day) to spread diabetes awareness.

Dr Arvind Atigal, chief operating officer, Clinigene International, added, "Insugen is India's most clinically validated r-DNA insulin. Biocon has conducted a comparative, multi-centric clinical trial on 450 patients as against the norm of a sample size of 360 patients. In addition to this Insugen has also been tested for non-inferiority with existing marketed drugs in India and is at par with global brands."

Commenting on Biocon's tryst with diabetes care, Sandeep Bamzai, vice president, marketing, Biocon Ltd, said, "Diabetes has emerged as a major killer disease in the country. Insulin injections are a painful process. Biocon is coming out with pen fillers as an alternative to injections through syringes." According to Sandeep Bamzai, Biocon is talking to vendors for making these pens. The company is setting up a facility to manufacture the cartridges for these pens at its Bangalore facility. Speaking to the reporters in Pune he said, "Imported pens are available in the country but they are priced at around Rs 2,000 while the cartridges or pen-fills cost about Rs 1,700. Biocon is investing in capacities to make the cartridges while the vendor will manufacture the pens."

Declining to specify the probable pricing, Bamzai said, "The company would be able to make this in the country more economically." He, however, pointed out that the pricing would be competitive and the company could bring the product out in the market in about 12 months time. Launching the lowest price insulin in the Indian market, the company hopes to build a 20 percent market share. The insulin market in the country is currently at Rs 232 crore but is expected to grow at about 30 per cent.

### **Biocon, Vaccinex partner for therapeutic antibodies**

Biocon and Vaccinex Inc. announced a broad strategic partnership to discover and co-develop at least four therapeutic antibody products. The collaboration combines Vaccinex's capabilities to discover fully human monoclonal antibodies using its proprietary antibody discovery technology and Biocon's expertise in clinical research and biologics manufacturing. The parties will jointly work to identify promising antibody candidates and move them rapidly into clinical development. The parties plan to focus on antibody products directed to cancer, inflammation and autoimmune disease. As part of the collaboration, Biocon will also make an equity investment in Vaccinex.

Vaccinex is a privately held biotechnology company engaged in the discovery and development of novel therapeutic antibodies. It has developed the only library-based antibody discovery platform capable of directly expressing bivalent, fully human antibodies in mammalian cells, using its proprietary vaccinia vector technology.

---

## **Three solutions to improve pharma research: Mashelkar, Yamada**

Pharmaceutical research will become more innovative if the industry follows a three-fold path of improving the science, improving the economics, and looking for new paradigms in research. This was stated by Dr RA Mashelkar, director general, CSIR, and reiterated by Dr Tachi Yamada, global head of research at GlaxoSmithKline, the world's second-largest pharma company.

They were speaking at the inaugural session of a conference on "Building Innovative Pharma in India" organized by the Confederation of Indian Industry. Dr Mashelkar who chaired the organizing committee, said the conference was being held close to January 1, 2005, when India's pharma industry would usher in a new patents regime and stressed on the need to develop a new model of competitiveness based on research rather than merely competing on being the lowest cost producer.

Dr Mashelkar said that the pharma industry needs to be more confident in its capabilities to develop new molecules, to use India's advantages of trained people and lower costs in a smarter way and to cooperate with other countries like China, Brazil, Mexico, which along with India, Dr Mashelkar classified as Innovative Developing Countries (IDCs).

In his presentation, Dr Yamada outlined the way forward for the industry. He said that better science would come through using automation to speed up the preliminary search for potential new molecules; the mapping of the human genome would help in drug discovery; using new technologies like imaging to make smaller dosage sizes.

In this new era, Dr Tachi Yamada forecast a bright future for India. He said that building an innovative pharma is only possible when it is done in partnership with India. This would happen as India made the transition from a low-cost competitor to a generic player to what he termed, "me-too" competitor, to an innovator and finally to global scale.

In the valedictory session, Kapil Sibal, Union Minister of State for Science and Technology, said that the government wanted to augment the quality and quantity of India's human capital. To immediately strengthen the quality of manpower, Sibal

proposed a tripartite alliance bringing together industry, academia, and government. This alliance was imperative to provide Indian industry with appropriately trained manpower, since our pharma companies are going up the value chain and need to develop new products.

---

## **Chiron Vaccines enters into JV with Panacea Biotec**

Chiron Vaccines, the world's fifth largest vaccine producer based in United Kingdom and Panacea Biotec Ltd, the third largest BioSpectrum Top 20 company, announced a new joint venture company, Chiron Panacea Vaccines, to focus on providing new breakthrough vaccines in India.

Chiron Panacea Vaccines has been set up at an initial cost of \$1 million and both partners will have equal stakes in it. The joint venture has the potential expand Chiron's regional base. Chiron Vaccines already has a manufacturing facility located at Ankleshwar in Gujarat and supplies anti rabies vaccines to the UN countries. Chiron exports its products to Thailand, Sri Lanka, Bangladesh, Tunisia, and South Africa.

To begin with, the 50-50 joint venture will market four pediatric vaccines in India from January 2005. Panacea Biotec has developed two of these vaccines indigenously and the other two have been developed using Chiron's technology. All four are combination vaccines. The company will continue to produce most of the vaccines locally but may consider importing some of the products from Chiron, especially in cases where the market size is limited or when the product is technology-intensive. Rajesh Jain, joint managing director, Panacea Biotec, said that the joint venture is part of an effort to provide innovative, yet affordable vaccines and to extend its repertoire of vaccines.

---

## **Serum launches Rabivax**

Serum Institute of India Limited, the largest manufacturer of vaccines in India has launched the first indigenously developed Human Diploid Cell (HDC) rabies vaccine called Rabivax in India. "Rabivax is the only indigenously developed Human Diploid Cell (HDC) rabies vaccine in India," said Dr Cyrus Poonawalla, chairman, Serum Institute of India Limited.

"Compared to other tissue culture vaccines, HDC products are considered the best as they offer better protection and very high safety standards. In fact, WHO considers it as the 'Gold Standard'. Some years back HDC rabies vaccines were being imported into India, their cost is very high. With a competitive price tag of Rs 293, Rabivax will be within the reach of the majority of Indians," said Dr Poonawalla.

"Another major advantage is that even people who are allergic to vaccine components can take Rabivax as this HDC vaccine completely eliminates such risks," says Dr Bhardwaj, Medical Director, Serum Institute of India Limited. "Free of antibiotics like Neomycin, Streptomycin, Kanamycin and Polymyxin-B, it is a boon for people who are allergic to such compounds. So also people who are allergic to egg and avian proteins found in other vaccines."

Dr Bhardwaj noted that Rabivax has undergone several clinical trials involving around 200 patients and more than 1000 doses of the vaccine. Rabivax has very low reactogenicity as a study involving 1608 patients and more than 4180 doses of the vaccine has shown.

---

## **Cadila to conduct clinical trial of mycobacterium Immuvac**

Cadila Pharmaceuticals in association with government of India is all set to conduct multi-centric clinical trial of Mycobacterium w (Immuvac) across eight centers in India. Cadila Pharmaceuticals developed Immuvac, a potent, unique Immunomodulator for the first time in the world. The trial is going to be conducted in approximately 2000 patients of pulmonary tuberculosis and will be investigated by clinicians from reputed institutes of India,

To initiate this project and take it way forward and it has organized an investigators meeting on September 21, 2004 and was attended by members of the medical fraternity and Dr Bindu Dey, director, Department of Biotechnology (Task Force on Medical Biotechnology), including staff of the clinical research and medical affairs department of Cadila Pharmaceuticals

About 20 products including conventional and recombinant vaccines, anti cancer bio-therapeutics, diagnostics using recombinant antigens and natural thrombolites with high market potential are in Cadila Pharmaceuticals' biotechnology basket. Specifically in the area of biotechnology at Cadila Pharmaceuticals, a collaborative research and development is being carried out in half a dozen national and international research laboratories like IMTECH, Chandigarh, NII and CBT,

New Delhi, ICGEB, New Delhi and Trieste, Italy.

Cadila Pharmaceuticals has also set up its own research facility at Indian Institute of Science (IISc) Bangalore, demonstrating an example of excellence in Industry academia interaction.

---

## **Mascon Life Sciences partners with Span Diagnostics**

Mascon Life Sciences (MLS), a division of Mascon Global Limited, has entered into a strategic alliance with Span Diagnostics, one of India's largest manufacturer of diagnostic products. Span will apply Mascon's proprietary software "EXOMETM" to analyze and target important infectious diseases such as HIV, TB etc. MLS will also be supporting Span with in-silico biology services such as peptide designing, structure prediction etc. Span Diagnostics aims to accelerate analysis and the development part of its diagnostics kits by adding up in-silico services to their activities.

"We believe that this will be one of the most effective collaboration, in terms of the efficiency and efficacy of the R&D processes at our centre," stated Dr HC Mody, GM R&D, Span Diagnostics. "It was also meaningful to us that Mascon could address all in-silico requirements at Span". "This mutual understanding will facilitate Span with high levels of acceleration while maintaining the specificity and sensitivity of the output," emphasized Vibhav Garg, principal-business development manager at Mascon Life Sciences.

---

## **VLife launches ChemInf software**

VLife Sciences Technologies Pvt Ltd (VLife), a bioinformatics company based in Pune, has launched ChemInf software for database searches, chemical fingerprinting and pharmacophoric analysis. ChemInf is available in PC version with Windows/Linux options making 'ready to use' without any additional investment need in existing IT infrastructure. ChemInf comes with full customization support and 'plug-in' facility with external and in-house databases of the customer and integration 'plug-in' with VLifeMDS product suite.

With an integrated discovery approach and portfolio of offerings, VLife provides solutions to the pharmaceutical researchers to improve research productivity in variety of ways. VLife's in-house research programs have resulted in potent pipeline, which is at different stages of development.

VLife offers integrated software packages for computer aided drug and molecule discovery, completely designed and developed by VLife. It also provides end-to-end software for molecular modeling and simulation powered by tools to conduct protein and ligand level studies. All its products provide for ease of customization and seamless integration of custom-specific protocols. Any specific algorithm, method, activity log or protocol can be easily implemented and rapidly integrated with the mainstream features.