NURTURING INNOVATION

200 acres of pristine land, hundreds of driven researchers and government funding to boot- a park where innovation blooms.

BY SANGEETA SHAUKAND

About 30 km north of Hyderabad, there is a 600 square km swathe of largely untouched land called the Genome Valley, and rightly so. Ringed by a large, tranquil lake and miles of serenity, the valley is India's first biotechnology cluster and home to some of the most prestigious research and development institutions. Genome Valley also provides world-class infrastructure to more than 100 biotechnology companies for conducting cutting-edge research in life sciences, training their scientists, scientific collaboration and manufacturing activities. In the heart of this cluster, the IKP Knowledge Park sits on a sprawling 200-acre campus.

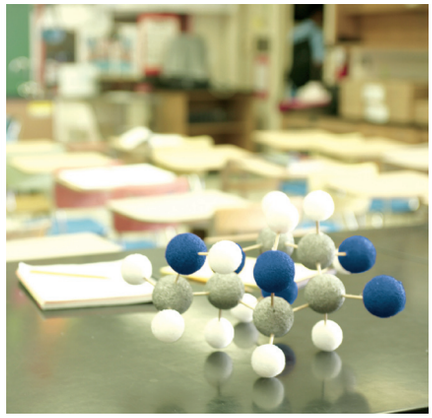
Launched in 1999 by ICICI Bank in partnership with the government of Andhra Pradesh, the park fosters innovation in life sciences. It's the first of its kind knowledge gateway for multinational companies. The park contains five facilities that it calls innovation corridors. The first of these corridors holds 10 cavernous laboratories. It has a mix of ready-to-use modular laboratory blocks with shared facilities and sup-

port services, as well as developed land for customised R&D. ICICI Bank had provided the initial funding of INR 40 crore (more than US$ 800,000). There was also generous financial, administrative and infrastructural support from the Central government and 200 acres of prime land free of cost from the government of Andhra Pradesh.

The park's mission is to "create a world class centre for leading-edge business-driven research in India," says Deepanwita Chattopadhyay, its managing director and CEO. "This will foster the spirit of innovation, as the environment, the infrastructure and the attitude are all driven towards research, development and refinement. Genome Valley itself already has la creme de la creme of India's biotechnology institutions. The IKP Park is home to the absolute top layer of such Indian companies—both in research and development and manufacturing."

The IKP Knowledge Park has some of the most distinguished scientist-entrepreneurs on its board who have made it their mission to deepen India's research achievements. Chief among them is Dr Bala A Manian, who is also on the board of directors of the biotechnology firm Biocon of Bengaluru. Manian is a Silicon Valley entrepreneur who founded ReaMetrix, an innovation-based biotechnology company. Manian's proprietary digital optical technology was so useful for Hollywood's special effects industry, especially for the producer of the Star Wars series, George Lucas, that he received a special achievement Oscar award in 1999. Leading polymer scientist and former director general of the council of scientific research, Dr R A Mashelkar is also on the park's board.

Eight biotechnology companies and two R&D laboratories are already functioning at the park. Recognised by the government as a scientific and industrial research organization(SIRO), the ISO 9001-2008 certified park is entitled to customs and excise duty waivers. Since peer-reviewed and constantly



updated scientific information is key to any research programme, the park has a highly structured and hugely popular virtual information centre (VIC) that amalgamates research information from all over the world and makes it available online to researchers. It also has a knowledge network for collaborative research and knowledge sharing with key institutions of the world.

Some of these institutions include the Indian Institutes of Technology; Indian Institute of Science, Bengaluru; Centre for Cellular and Molecular Biology, Hyderabad; National Chemical laboratory, Pune; and the International Crops Research Institute for the Semi-Arid Tropics, Hyderabad. These are giant research institutions where some of India's top most scientific and analytical minds are at work. VIC is a key component of this knowledge network, bringing a database of network members, their library catalogues and online access to international and national databases. "This rapidly deepening library of critical scientific information helps the scientific community, especially those in biotechnology research, access and utilise up to the minute developments in their fields of study and interest," said Chattopadhyay. The funding for the VIC has come from the government's Department of Scientific and Industrial Research.

> The park has the IITs, Indian Institute of Science and ICRISAT as its knowledge network partners

It is, however, the park's life sciences incubator that has the research community really excited. Funded by the Department of Science and Technology, it nurtures startups and spin offs in pharmaceuticals and biotechnology.

ICICI itself has a Centre for Technologies in Public Health (ICTPH) here, a centre for research on designing, developing and delivering innovative solutions in healthcare. It is working on malaria, tuberculosis, reproductive health including HIV and AIDS and child health. Another facility here is the ICICI Centre for Advancement of Agricultural Practice (ICAAP), for improving agricultural productivity levels.

All research either leads to, or goes through, the patent alley. Patent search, registration and analysis is an area of tremendous importance to the research community. Through its patent body, the Andhra Pradesh Technology Development Centre (APTDC), the Confederation of Indian Industry (CII) operates a patent advisory unit at the park.

"A lot of the research at the park's laboratories is about steps and stages in scientific and industrial processes, and it may simplify or change the way a chemical or drug might be made or stabilised. There is also research on new molecules and chemicals, methods and better processes. We have provided the environment and work constantly to aid the process of research, development, innovation. Science is bound to benefit from this," adds Chattopadhyay. It will. ■