BioSpectrum the business of Bio & Health Sciences

Gel electrophoresis equipment business booms

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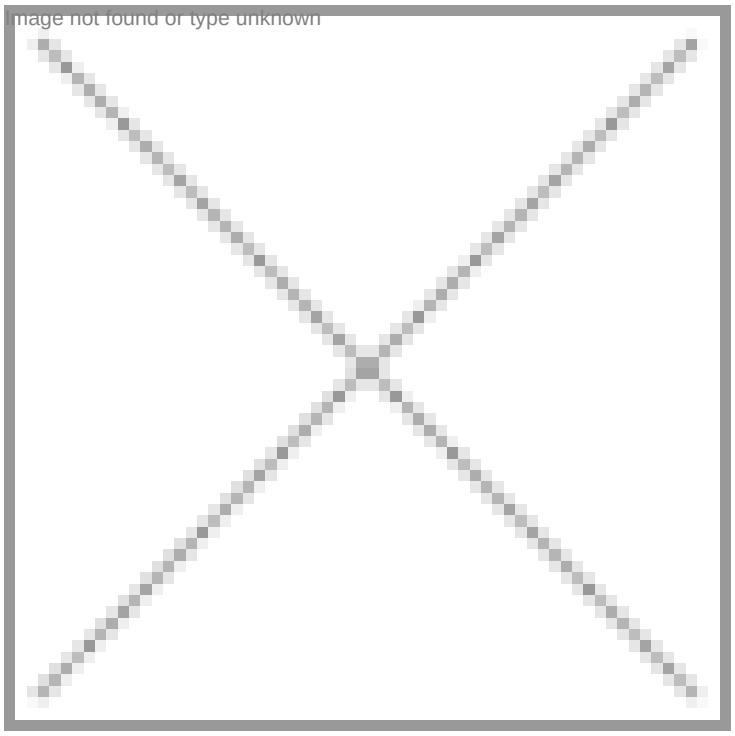

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Increased research activities, coupled with more and more educational institutions offering courses in biotechnology and related disciplines, have opened up the market for electrophoresis equipment in India.

There are many players supplying electrophoresis equipment to the research community. The key players include Bio-Rad Labs, Bangalore Genei, GE Healthcare (formerly Amersham Biosciences) and Thermo Electron Corporation. In India, there are about 10 local players who manufacture electrophoresis equipment. These companies are Pune-based Advanced Technologies Corporation and Ambala-based Popular Traders. The local players mostly produce low-end products, and cater to the needs of schools, colleges, and research laboratories.

There are many others who are into the business of trading these products. Medi Spec Instruments India represents Galileo Bioscience of the US; JH Bio Innovations represents US-based eGene for its capillary electrophoresis systems; Lark Laboratories represents a US-based company; Axygen Scientific represents Labnet International; and Quantum Biologicals represents Italy-based Cellogel Electrophoresis for its clinical electrophoresis.

Popular Traders has been manufacturing gel electrophoresis equipment for the last 25 years. Starting with three models, today it manufactures 20 types of electrophoresis equipment. Sharing his views, Ajay Gupta, partner, Popular Traders, said, "With the biotech boom, we are now receiving a lot of enquiries from colleges, research labs, schools, universities for our range of electrophoresis products. Our products are available in the range of Rs 3,000-7,000 per unit. The market is also growing rapidly with more players offering a range of electrophoresis products with additional features. In the last few years, the growth was about 25 percent. It is now growing at a rate of 100 percent." However, he expressed concerns on the availability of raw materials and lack of testing centers for testing these raw materials.

The market has been growing at a rapid rate in the last few years.

Rima Singh, product manager, Bio-Rad Laboratories (India), said, " Now more organizations, both private and public sector, are actively involved in research activities. The state funding for research activities too has increased in the last few years. So there is an increase in the need for electrophoresis products. Gel electrophoresis equipment are available in the range of $1000 to $12,000 per unit. Approximately 200-300 units of electrophoresis equipment are sold every year."

Bimal Desai, manager, marketing and sales, Thermo Electron LLS India, said, "Gel electrophoresis is more popular compared to capillary electrophoresis among the research community. Electrophoresis equipment are available starting from Rs 10,000 to few thousand dollars."

Sharing his thoughts about the market, M Kannan, marketing manager, Lark Laboratories, which is importing electrophoresis equipment from the US companies, said, "The market for electrophoresis equipment is growing and there is a good demand from researchers and institutions."

The biotech boom is definitely boosting the demand for electrophoresis equipment. The market could grow at a higher rate if it gets some more support from the government in terms of incentives to local manufacturers or more funding to research organizations/institutions.

Narayan Kulkarni

Ess Dee Aluminium files for IPO

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Ess Dee Aluminium Ltd (EDAL), a flagship company of the Dutta Group of Industries, has filed its draft red herring prospectus with the Securities & Exchange Board of India (SEBI) to enter the capital market with its proposed initial public offering (IPO).

EDAL proposes to offer 69,60,000 equity shares of Rs 10 each for cash at a premium to be decided through a 100 percent book-building process. Of this, 1,50,000 equity shares are reserved for allotment to eligible employees, thus the net offer to public stands reduced at 68,10, 000 equity shares. The offer to public will constitute 25.79 percent of the post issue fully diluted equity capital.

Of the net offer to public, the company proposes to reserve 50 percent for allotment to qualified institutional bidders and of this, five percent will be allotted to mutual funds. Of the balance, 15 percent is to be reserved for allotment to non-institutional bidders and the balance 35 percent is being reserved for allotment to retail investors on a proportionate basis.

Gel electrophoresis is a method that separates macromolecules—either nucleic acids or proteins—on the basis of size, electric charge, and other physical properties. It is is one of the staple tools in molecular biology and is of critical value in many aspects of genetic manipulation and study. One use is the identification of particular DNA molecules by the band patterns they yield in gel electrophoresis after being cut with various restriction enzymes. Viral DNA, plasmid DNA, and particular segments of chromosomal DNA can all be identified in this way.

Another use is the isolation and purification of individual fragments containing interesting genes, which can be recovered from the gel with full biological activity.

Gel electrophoresis makes it possible to determine the genetic difference and the evolutionary relationship among species of plants and animals. Using this technology, it is possible to separate and identify protein molecules that differ by as little as a single amino acid.

The protein molecules in a sample of fish muscle tissue and plant grain endosperm tissue can be separated according to their individual molecular mass and compared to samples that have been treated with a reducing agent, such as 2-ercaptoethanol. Complex proteins (composed of two or more polypeptide chains) can be broken down into their respective polypeptide fractions. A reducing agent breaks the disulfide bonds that hold the polypeptide together.

Sudip Datta, chairman and managing Director, Ess Dee Aluminium, said, "The IPO is an important milestone in realizing our larger corporate vision as we propose to set up a new unit to manufacture aluminium foil based packaging products to enhance our product portfolio and industry reach. It would help strengthen our position in the pharmaceutical packaging business and tap future growth opportunities in aluminium foil-based pharmaceutical, FMCH and food packaging business."

Imperial's new corporate headquarters inaugurated

Imperial Life Sciences (formerly Imperial Bio-Medics) inaugurated its new corporate headquarters in Gurgaon, a 15,000-sft facility which houses all departments including customer support, technology support, massive warehouse, human resources department and an application support lab.

The application support lab is a fully equipped life sciences research laboratory, which houses instruments like QPCR, automated nucleic acid sequencers, nucleic acid isolation systems, robotic liquid handling stations and various types of thermal cyclers including speed cyclers, dual block and DDPCRs. The company plans to create a full-fledged microarray facility shortly at its new office.

"This new sophisticated set up equipped with modern communication gadgets will ensure smooth functioning of the entire system and the ease of functioning will in turn be transferred to all the clients with faster turnaround times and prompt support," said Neeraj Gupta, corporate vice president, Imperial Life Sciences.

Zensar to offer pharma services

As a part of the strategy to structure integrated capabilities to meet the growing demands from pharma and biotechnology sectors, Zensar Technologies, a software and BPO services provider, has launched pharma consulting practice focusing on efficient and cost-effective solutions for the pharmaceutical and biotech sectors. With this launch, Zensar will offer customers best practices in compliance, enterprise solutions and technology advisory services.

Zensar has also formed an advisory board by roping in professionals from IT and healthcare industries to enhance the offering to the pharma market. The board comprises Pradipto Mohapatra, CEO, RPG Life Sciences, Dr Ganesh Natarajan, MD, Zensar Technologies, Pramod Lele, CEO, Hinduja Hospitals, Ramesh Kodali, CEO, Zensarâ€“OBT, Laura Sherman, vice president, submission and validation, Impact, USA and John Nidelcheff, president, Impact, USA.

Giridhar Rao, associate vice president, SAP business, Zensar Technologies said, "Industry trends and predictions show promise for the pharma industry. Zensar is looking at leveraging its innovative technology frameworks to customers with best practice in compliances such as current Good Manufacturing Practice (cGMP), and Electronic Common Technical Documents (eCTD). We will also offer enterprise solutions, and technology advisory services to organizations in this space."

Ocimum Biosolutions sets up its German subsidiary

Ocimum Biosolutions has set up its German subsidiary in Ebersberg (Germany) in order to expand its presence in the European market.

This is a milestone for Ocimum after its successful acquisition of the microarrays division of MWG Biotech AG. The German subsidiary, Ocimum Germany GmbH, aims to tap the huge genomics market in Europe and provide quality R&D enabling solutions to universities, research institutes, biotech and pharma companies in Europe.

Anuradha Acharya, CEO, Ocimum Biosolutions, said, "Eupore is a big market for us. We chose to base our European operations in Germany as it is centrally located in Europe. We are also planning to expand further in the market through acquisitions." Ludwig Winzer, managing director of the Ocimum Germany GmbH, said, "This is one more consequent step in

Ocimum's overall strategy and a clear commitment to our customers."

Ocimum Biosolutions emerged as the winner of NASSCOM IT Innovation in India 2005 Award for its innovative ideas and products. Deloitte Technology Fast 50 India 2005 Program, which honours the fast-growing technology companies, ranked Ocimum fourth among the 50 fast-growing technology companies in India.

Wipro Biomed inks pact with Ciphergen Biosystems

Wipro Biomed has entered into a strategic alliance with Ciphergen Biosystems. As per the agreement, Wipro Biomed will market Ciphergen's patented protein chip technology products and services for translational proteomics and biomarker discovery and development for India, Sri Lanka, Bangladesh and Nepal market.

Built on over 15 years of biomedical experience, Wipro Biomed with three businesses- life science group, diagnostics system group and medical systems group, has more than 2000 customers. It has developed expertise in consulting, deploying, servicing and back up of bio-medical equipment.

Biotron inks marketing pact with CISBIO

Biotron Healthcare (India), which is engaged in the distribution of products, technology and services, has tied up with a French company, CISBIO International to offer HTRF based assays in India. The HTRF is a proprietary technology of CISBIO for the detection of biomolecular interactions and is widely used by the pharmaceutical industry for the high throughput screening stage of drug development.

Venkatesh Voleti, director, sales, Biotron Healthcare (India), said, "New drug discovery research in India has seen a rapid growth over the last few years. Realizing the potential at an early stage, we have positioned ourselves to be one of the preferred vendors of solutions, instruments, kits and assays. The tie-up with CISBIO is a step further in this direction so as to bring cost effective primary and secondary screening solutions."

Waters exhibits first of its kind mass spectrometry system

At the triennial International Mass Spectrometry Conference, from August 27, 2006 to September 1, in Prague, Waters presented a host of new products debuted earlier this year. Highlighting Waters 2006 product news is the launch of a first-of-its-kind mass spectrometry system, the Synapt High Definition MS (HDMS), and a new collaboration with Applied Biosystems.

The Synapt HDMS System is for researchers working at the limits of conventional mass spectrometry (MS) and who need to further characterize and define their samples.

Waters also announced a new partnership with Applied Biosystems to offer direct support of Waters ACQUITY Ultra Performance LC (UPLC) System within Applied Biosystems Analyst software. Applied Biosystems joins Thermo Electron and Bruker Daltonics among the ranks of mass spectrometry companies collaborating with Waters to provide scientists with greater operational integration and connectivity between Waters ACQUITY Ultra Performance LC System and mass spectrometers from Applied Biosystems, Thermo, and Bruker. "Scientists have seen the unique advantages of using UPLC with mass spectrometry to increase throughput and performance. We are pleased to work with Applied Biosystems/MDS SCIEX to offer UPLC as a fully-supported LC inlet to the Applied Biosystems/MDS SCIEX family of mass spectrometers," said Rohit Khanna, vice president, worldwide marketing, Waters Corporation.

Bio-Rad to acquire LS business from Ciphergen

Bio-Rad Laboratories has signed a definitive agreement to acquire Ciphergen Biosystems' ProteinChip Systems and worldwide technology rights to surface enhanced laser desorption/ionization (SELDI-TOF-MS) for approximately $20 million

in cash. In addition, Bio-Rad will make a $3-million equity investment in Ciphergen.

This will provide Bio-Rad with access to leading protein analysis technology for the life science market and represents a significant addition to the company's portfolio of products. The acquisition includes manufacturing, sales, intellectual property, and a significant customer base.

As per the agreement, Ciphergen will retain rights to the diagnostics market. Through a separate supply agreement, Bio-Rad will supply instruments and reagents to Ciphergen. The transaction is expected to close in the fourth quarter 2006 and is subject to approval by Ciphergen's stockholders and other customary closing conditions.

"The study of proteins continues to be a rapidly growing area in the life sciences. With the acquisition of Ciphergen products, Bio-Rad will be able to provide a broad range of proteomic tools from basic separations to full identification of proteins," said Norman Schwartz, president and CEO, Bio-Rad.

PerkinElmer collaborates with UK varsity to address PTB challenge

PerkinElmer has announced a multi-year license and research collaboration agreement with the University of Leicester (UK).

As per the agreement, the two organizations will begin to lay the groundwork for the clinical investigation and discovery of biomarkers that Predict Preterm Birth (PTB). This collaboration will be financed by PerkinElmer.

Currently there are no rapid or accurate tests that positively predict preterm labor. The collaboration between PerkinElmer and the University of Leicester, which is home to one of Europe's foremost research teams dedicated to the study and prediction of PTB, is designed to effectively address the need and eventually design and supply an effective preterm labor test predictor. The partnership will give PerkinElmer broader access within Prof. JC Konje's research group to clinical samples, methodology and clinical consultancy support in the field of maternal health.

D-10 platform from Bio-Rad

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Bio-Rad Laboratories has launched D-10 HbA1c testing system. Till date BioRad has done more than 60 installations in India.

The D-10 system is based on the "Gold standard" HPLC Technology (high pressure liquid chromatography) and is targeted at the mid size lab segment which performs 200-800 HbA1c tests every month. Now the D-10 platform is available with additional features in rack loading.

The D-10 system has got all the necessary certifications and approvals from regulating bodies like the National Glycohemoglobin Standardization Program (NGSP), the USFDA and CE certificate.

Apart from the HbA1c values, the report obtained from this analyzer also gives a chromatogram of the complete hemoglobin fractions like the Adult Hemoglobin, Fetal Hemoglobin, Hemoglobin A2 as well as any abnormal hemoglobins.
For details, visit: www.bio-rad.com

Eppendorf introduces FemtoJet express

Eppendorf has added FemtoJet express microinjector to its cell technology family. It is used for the injection of liquid in the volume range from femtoliters to microliters. An external pressure supply guarantees the permanent availability of higher injection pressures. Programmable injection parameters ensure high reproducibility.

The FemtoJet express was developed for the needs in the fields of developmental biology and functional genomics. And it is suited for microinjection into small organisms (e.g. fruit flies) or embryos in an early stage of development.

The injection parameters (injection pressure, injection time and compensation pressure) can be set easily and quickly via control buttons directly on the device. The integrated "clean" function enables quick rinsing of blocked capillaries. The main functions can also be operated with the supplied hand key or an optional foot key. The device can easily be integrated into automation processes via an RS 232 interface.
For details, contact: info@eppendorf.co.in

BioTek launches NanoQuot microplate dispenser

BioTek Instruments has introduced the NanoQuot microplate dispenser, a low volume liquid dispensing solution for the life science research and drug discovery markets. Sub-microliter dispensing offers scientists increased assay throughput and lower reagent expenses. The NanoQuot dispenses these volumes down to 100 nl precisely and accurately. NanoQuot will help researchers transition into high density, low volume microplate formats with an incomparable price-to-performance ratio, while also maintaining backward compatibility with existing formats and volumes. In India, MediSpec Instruments India represents BioTek Instruments for its range of equipment.
For details, contact: chhatbarv@biotek.in

Millipore's new Stericup filter cups

Millipore has announced an enhanced design for its Stericup filter cups. The fast flowing, low protein-binding cups sterilize tissue culture media, buffers and other aqueous solutions. The new ergonomic design incorporates recessed finger grips on the receiver flask that make it easier to hold, minimize slippage, and facilitate lab procedures. The performance results and quality specifications of the Stericup filter cups remain the same. Volume markings on the side of the cup are accurate and consistent with standard products. The no-tip Stericup filter cups are stable, compact and stackable. The threads of the bottle attachment are slightly recessed for added protection against contamination. The redesigned Stericup filter cups are available to process in 150 mL, 250 mL, 500 mL, and 1L volumes. Stericup devices are part of a family of Millipore sterile filtration products. Filter units are available in syringe, pressure, vacuum or pump-driven versions. Millipore also offers a wide range of pore sizes, configurations and volume capacities.
For details, contact: millipore@vsnl.com