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“The competitive landscape is evolving rapidly that drives innovation, with companies constantly striving to offer tailored solutions”

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The Indian market for laboratory and analytical instruments/equipment has been experiencing steady growth,driven by various factors. Firstly, there's a notable increase in investment in research and development across industries like pharmaceuticals, biotechnology, healthcare, and academia. This heightened activity spurs demand for cutting-edge instruments and equipment to support experimentation and analysis. Additionally, the expanding healthcare infrastructure in India is a significant contributor. In an interaction with BioSpectrum India Vipul Chhatbar, the CEO of Medispec and Vice President of Indian Analytical Instruments Association (IAIA) shared his insights on market trends, challenges, and opportunities shaping the sector.

How do you evaluate the growth scenario of the Indian market specifically for laboratory and analytical instruments/equipment?

Technological advancements play a pivotal role in shaping the laboratory and analytical instruments/equipment market. Automation, artificial intelligence, and data analytics are revolutionising laboratory workflows and enhancing analytical capabilities. Companies that leverage these innovations to develop solutions specifically suited to the Indian market stand to gain a competitive edge.

The competitive landscape is also evolving rapidly. We see a mix of domestic and international manufacturers and suppliers vying for market share. This competition drives innovation, with companies constantly striving to offer tailored solutions and superior products to meet diverse customer demands.

Of course, there are challenges to navigate as well. Infrastructure limitations, regulatory complexities, and price sensitivity among end-users pose hurdles. Additionally, ensuring an adequately skilled workforce to operate advanced instruments remains a priority. Overcoming these challenges requires strategic planning, investment in infrastructure and training, and a deep understanding of regulatory requirements.

Overall, the growth scenario for laboratory and analytical instruments/equipment in India is promising. With increasing research activities, technological advancements, and supportive regulatory frameworks, there are ample opportunities for stakeholders. However, staying abreast of market dynamics, fostering innovation, and addressing challenges will be crucial for sustained growth and success.

In recent years, there have been remarkable advancements in laboratory and analytical instruments/equipment, particularly in two key areas: Next-Generation Sequencing (NGS) and Surface Plasmon Resonance (SPR) technology.

Could you highlight some of the new technological developments that have significantly impacted your sector recently?

Let's start with Next-Generation Sequencing (NGS). This technology has revolutionised genomics and molecular biology research by significantly improving sequencing speed, accuracy, and cost-effectiveness. With the continuous advancement of NGS platforms, researchers now have unprecedented access to genomic information, enabling large-scale sequencing projects with remarkable depth and breadth. NGS has accelerated gene discovery, enhanced our understanding of genetic variation, and helped unravel complex biological systems.

Moving on to Surface Plasmon Resonance (SPR) technology, Nicoya Lifesciences has introduced two cutting-edge instruments: OpenSPR and Nicoya Alto. These instruments cater to different needs and applications within the study of molecular interactions.

OpenSPR, for instance, is a compact and user-friendly SPR instrument designed to make SPR technology accessible to individual laboratories. Its affordability and real-time data acquisition capabilities simplify studying various molecular interactions, including protein-protein and protein-small molecule interactions.

On the other hand, Nicoya Alto represents the pinnacle of SPR innovation as the world’s first digital high-throughput benchtop SPR system. This maintenance-free instrument offers a label-free analysis of molecular interactions, enabling researchers to visualise and study multiple interactions simultaneously. Nicoya Alto is ideal for applications requiring high-throughput analysis and advanced imaging, such as drug discovery, biochemistry, and molecular biology research.

Could you provide a brief overview of MEDISPEC's portfolio and its specialisation in laboratory and analytical instruments/equipment?

MEDISPEC has been a pioneering force in biotechnology, life sciences, analytical, diagnostics, and food technology for over 25 years. Our extensive range of state-of-the-art products covers a wide spectrum of scientific needs, including imaging & microscopy, microplate instrumentation, flow cytometers, seahorse real-time cell metabolic analyzers, surface plasmon resonance, gel documentation systems, freezers, incubators, biosafety cabinets, thermal cyclers, liquid handling, and other diagnostic solutions. These products are meticulously crafted to expedite scientific breakthroughs across various research endeavours and routine testing applications.

What advancements have been made through your collaboration with Agilent's Cell Analysis division?

Through our partnership with Agilent's Cell Analysis division, we've introduced a range of advanced instruments tailored to diverse research needs. This includes the BioTek product line, renowned for its state-of-the-art solutions in cell imaging, multimode detection, and automated microplate readers. Additionally, we've introduced Seahorse analyzers for real-time cellular metabolic analysis, Flow Cytometers for high-throughput cell analysis, and Xcelligence Real-Time Cell Analyzers for monitoring cell behaviour in real-time.

How has your partnership with Nicoya Life Sciences contributed to innovation in the laboratory sector?

Our collaboration with Nicoya Life Sciences has resulted in groundbreaking SPR instruments, namely the OpenSPR and Alto systems. The OpenSPR is the first SPR instrument designed for academic purposes, offering affordable and accessible label-free biomolecular interaction analysis. Conversely, the Alto system caters to the high-throughput needs of the biopharmaceutical industry, providing rapid and accurate characterisation of molecular interactions.

How do these new products and technologies enhance research capabilities in various fields?

These innovative products and technologies significantly enhance research capabilities across various fields, including drug discovery, biomedical research, and biotechnology. They empower researchers with the tools they need to make impactful contributions to science and society by advancing scientific knowledge and accelerating discoveries. We remain committed to continually bringing pioneering solutions to the laboratory sector to support researchers in their quest for innovation and discovery.

What are your company revenues, and what was the growth last year? What are you expecting in the coming year?

With good demand for highly advanced and quality laboratory products in the market, our company's revenues for the past three fiscal years have witnessed a positive growth. For the year 2022-23, we had a turnover of Rs 52 crore and this has increased to Rs 65 crore in 2023-24. We are anticipating a similar growth for 2024-25, and expect to touch the Rs 85 crore mark.

Are there any expansion plans or initiatives in place for setting up new centres of excellence or exploring new markets?

Yes, we are continually exploring opportunities for expansion and growth through strategic initiatives, partnerships, and market exploration. One recent significant partnership we're proud to announce is with Nicoya Life Sciences, enabling us to offer cutting-edge SPR instruments to our customers. Additionally, we've established our own Center of Excellence (CoE) at our head office in Mumbai to showcase our latest products and provide hands-on experience to customers. While specific expansion plans are in progress, we are committed to identifying strategic partnerships, launching new initiatives, and exploring emerging markets to strengthen our position in the laboratory and analytical instruments sector.

What kind of support do you receive or expect to receive from the government, if any, to foster the growth of your industry?

Currently, we are keen on receiving support from the government, particularly in ensuring the due diligence of Indian manufacturers. Many customers face issues where claimed specifications are not met, and most products are imported from other nations, falsely labelled as "Made in India." We believe government support in implementing stringent regulations and quality control measures will foster the growth of our industry and ensure fair competition in the market.

Amguth Raju