

Technology

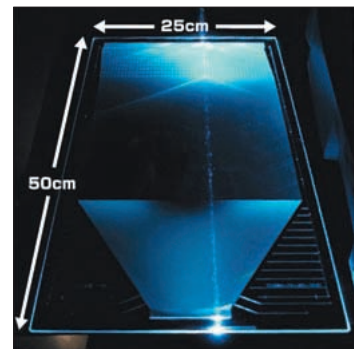
Launching of Development Project for Next-generation DNA Sequencers

Shimadzu has launched the development project for next-generation DNA sequencers, making full use of cutting-edge nanotechnologies. Compared to current models of capillary-type sequencers, these new products are being designed to increase analysis speed tenfold, while cutting costs by more than ten times the current rate; they will also provide fully-automated analysis procedures. The DNA sequencers are planned for release in the first quarter of 2003.

The new DNA sequencers are being developed in anticipation of the growing demand for high-speed, high-capacity DNA analysis for such rapidly emerging applications as genetic diagnosis and "tailor-made" medical treatment. To achieve this, they will feature Shimadzu's original MEMS* technologies, which will

enable the creation of products that integrate such technological capabilities as super high-speed DNA sequencing, SNP analysis, and high-capacity information processing. Meanwhile, to reduce development time, Shimadzu concluded a collaboration agreement with the U.S. bio-venture company Genomems in December 2001. This tie-up enables Shimadzu to combine its accumulated expertise with Genomems' advanced, patented technology (large-scale micro electro mechanical system for DNA electrophoresis) to further accelerate product development.

Shimadzu is vigorously pursuing development in the field of life science, particularly in the fields of genome and protein analysis. By effectively combining product development, contract analysis and the provision of reagents, we aim to

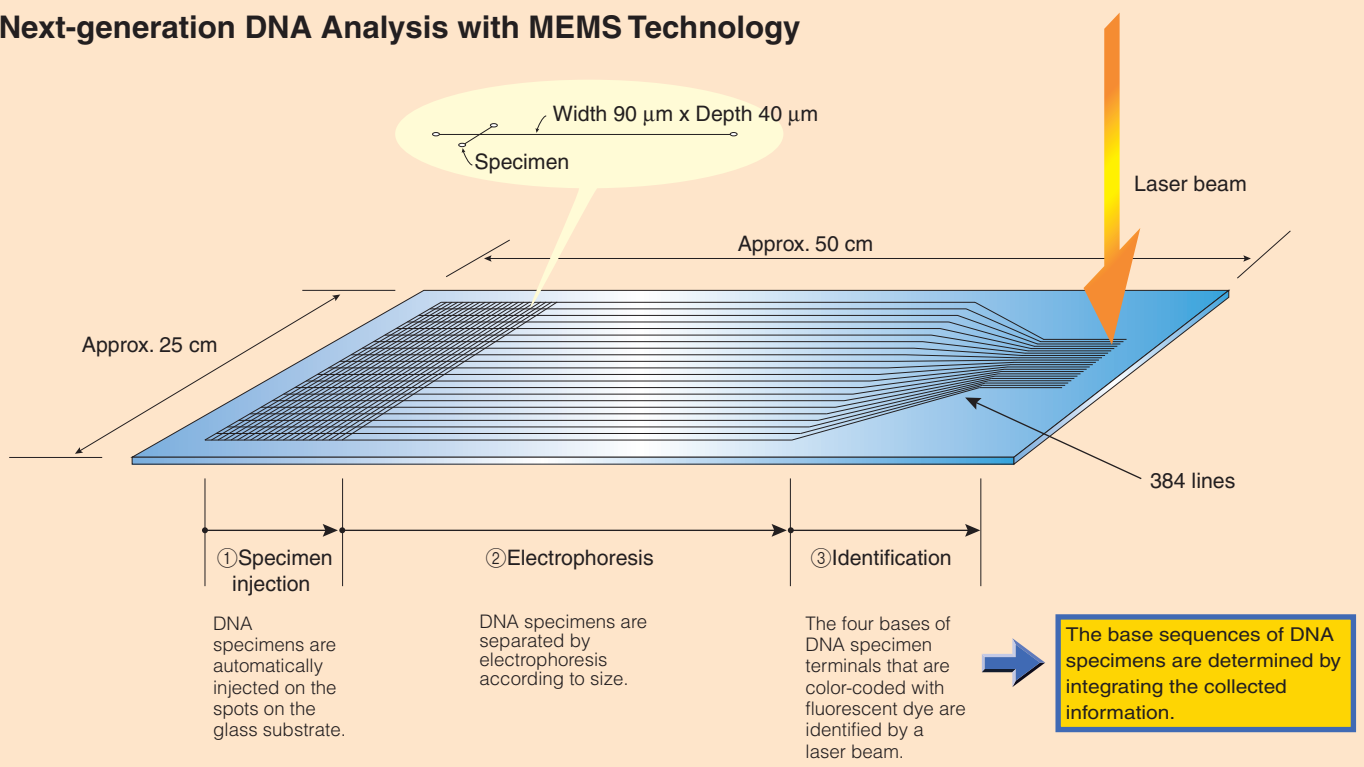


Large scale glass substrate (25cm X 50cm)

expand the overall scope of our life science business. The development of next-generation DNA sequencers will play a key role in spurring Shimadzu's growth in the life science industry.

* MEMS (Micro Electro Mechanical System) is a term that refers to the technology of integrating mechanical and electrical components and mechanisms with ultimate miniaturization. MEMS also refers to products made using this technology.

Next-generation DNA Analysis with MEMS Technology



Exhibition

Exhibition of 19 New, State-of-the-art Digital Modality Products, Including Next Generation FPD Systems

Shimadzu impresses with its new angiography system featuring innovative C-arm control and world-leading high-speed performance



The International Technical Exhibition of Medical Imaging 2002

Japan's largest international exhibition of medical imaging devices, "The International Technical Exhibition of Medical Imaging 2002," was held in Kobe from April 4 to 6, and attracted some 30,000 visitors. Under the theme of "Innovations in Digital & X-ray," Shimadzu exhibited and released 19 state-of-the-art medical models. The Shimadzu booth drew large numbers of visitors throughout the three-day exhibition. The AngioSpeed VF, Shimadzu's newest digital angiography system, was of particular interest to visitors, who were greatly impressed by its revolutionary C-arm control and world-leading high-speed performance.

Key features of the AngioSpeed VF include:

- Unrivalled speed of examination, with the world's fastest 60 degree/sec. rotation DSA (MaxScan) and 25 degree/sec high-speed C-arm positioning, along with high-speed and high-accuracy digital imaging (1024-matrix, 12-bit, 30 frames/sec.)

- The world's first C-arm controller with lateral C-arm movement, utilizing a triple pivot mechanism at the arm base. This makes it possible to cover the entire body of a test subject without any need for body repositioning — a remarkable achievement for a C-arm device.

- Speedy work-flow, resulting from the simple, innovative, and ergonomically designed interface CAT and efficient image management via various hospital digital networks.

At the booth, we also exhibited the AngioSpeed VC, a ceiling-traversing model that boasts the same level of performance as the AngioSpeed VF. It features a built-in 9-inch direct conversion FPD (Flat Panel Detector) which was pre-viewed as a next-generation flat panels system. Customer interest and expectations in flat panels is rapidly growing. Our "next-generation flat panel corner" and our display of the AngioSpeed VC with built-in flat panel drew large numbers of visitors throughout the exhibition. We showed images of the heart and abdomen via monitors and film. The quality and sharpness of the images free from halation greatly impressed visitors and illustrated the high quality of Shimadzu's direct conversion FPDs.

Many customers also enthusiastically inspected our other new models, while asking many questions. For three full days, the Shimadzu booth throbbed with a lively, positive energy. The following are products also exhibited at the show:

Next generation FPD-compatible systems

Shimadzu attracts worldwide interest for groundbreaking fluoroscopy instruments that combine high resolution and high sensitivity.

Shimadzu FPD technology (Pre-view)

Next-generation FPD technology for the ultimate in radiography and fluoroscopy imaging.

Sonialvision digital table

Fully digital systems that offer upgrade-ability to next-generation FPD-built-in systems, as well as multiple functions and expandability that transcend the limitations of existing multi systems.

SET-2400W, E/T simultaneous collection clinical PET

This system dramatically cuts the portal-to-portal time of test subjects down to 25% of that of existing systems, thanks to Shimadzu's innovative Emission/Transmission simultaneous collection technique (patented).

Sepio Prime/Stage, a new mammography device

Improves the effectiveness of film images by enabling the clear display of chest walls (which are difficult to see in X-ray radiation fields), thereby reducing the risk of missing malignant growths.

MOBILEART, Cordless mobile X-ray System

An inverter-type cordless X-ray system, popular for its exceptional ease of use (e.g., its natural and smooth motion) and fast high-accuracy imaging.

Subrina, sub-second CT scanner (7800 series)

Offers optimal operating environments according to the level of user experience, along with fast and flexible performance for a wide variety of inspections. Also reduces radiation exposure.