

The International Conference on Nanophotonics 2010

Industry Exhibition-1

[Canon Marketing Japan Inc.](#)



キヤノンマーケティングジャパン株式会社

Obudcat's Nano Imprint Lithography is designed for full area UV and thermal imprint to the entire substrate. The Obuducat Soft Press Technology®, which uses air pressure allows to imprint nano-pattern homogeneously. Moreover, IPS®, (Intermediate Polymer Stamp®) makes it possible to avoid contact between the master stamp and the hard substrate which will be the solution to mass production.

This increases the stamp lifetime, and meanwhile enables contamination control by limiting the replication of contaminants to greatly improve process yield.

Plus, STU®, (Simultaneous Thermal and UV®) realizes precise pattern imprint to substrate.

Obudcat not only provides Nano Imprint Lithography, but also provides stamp manufacturing, anti-sticking coating process, STU®, resist which will be the solution to the entire process flow.

These Obudcat's solution bring in the adoption of LED high volume manufacturing and also is expected to improve for the optical devices (lens, glass, film), large area imprint and so on.

[JEOL Ltd.](#)



「JEOL is a leading world supplier of analytical and electron optic instruments for science and advanced equipment for semiconductor, medical, and environmental industries.」

[TOSHIBA MACHINE CO., LTD.](#)



TOSHIBA MACHINE GROUP, the Home of Manufacturing Technologies from High-Precision to Large-Scale, is a total machine manufacturer that offers the variety of the products for the customer needs.

Founded as a machine tool manufacturer in 1938, Toshiba Machine has since developed and produced a wide variety of product lines in response to the demands of the times.

Now operating as the Toshiba Machine Group, the company is involved in the production and sale of diverse equipment including injection molding machines, die-casting machines, plastic extrusion machines, industrial robots, nanoimprint machines, high-precision machines, machine tools, and hydraulic equipment.

Toshiba Machine entered the field of nanoimprint machines in 2004 to develop and manufacture press-type and roll-to-roll nanoimprint machines.

In 2009 the high-precision machine business was consolidated with a new Nano Processing System Division launched to synergize nanoimprint lithography with ultraprecision machining.

To realize device mass production with nanoimprint machines, it will be necessary not only to improve machine performance, but also to perfect the overall technology, including the mold, resin material, process design, and inspection required for implementing the entire manufacturing sequence.

We are working tirelessly to develop these technologies as a total solution for our customers.

[AET, Inc.](#)



Ever since its establishment in 1988, AET has undertaken the role of pioneer in importing hardware and software products from top class vendors aiming to introduce the most advanced technology and specializing in electromagnetic technology.

CST (headquartered in Germany) 's electromagnetic simulation software, "CST STUDIO SUITE" has recorded the sale of over 1000 seats worldwide. Its customers include major electric makers, public research organizations and universities. The software has been accepted both in Japan and abroad as a specialist tool to solve a wide range of complex problems in electromagnetic fields. AET works as the exclusive Japanese distributor of CST, also provides online support, training services and engineering services, which result in increased customer satisfaction.

With highly technical knowledge, a broad network and ingenious ideas, AET constantly strives to propose the best solution for each customer, aiming to contribute to the progress of human society.

[Rsoft Design Group Japan KK](#)



RSoft Design Group is the worldwide leader in photonic design automation software, and serves several industries including optical communication, optoelectronics, and semiconductor manufacturing. Within optical communications, RSoft is the only company to provide a full range of design, optimization, and planning tools. Within the physical layer, RSoft provides the most extensive collection of award-winning design tools for passive and active optoelectronic components and subsystems.

[Tomoe Engineering Co.Ltd.](#)



[Nanonics Imaging Ltd.](#)



NANONICS IMAGING LTD.

Company Name: Tomoe Engineering Co., Ltd. / Nanonics Imaging Ltd.

Tomoe Engineering who is Japanese distributor of Nanonics Imaging Ltd. in Israel, would like to introduce unique SPM/NSOM system made by Nanonics:

Product Key word:

Multiprobe SPM/NSOM/Confocal; Optometronic 4000 Photonic Workstation,
AFM/Raman/TERS;
AFM/SEM/FIB; Cryogenic NSOM/AFM/Raman

Product description:

Single/Multiprobe AFM/NSOM/SPM/Confocal Systems with transparent optical & electron/ion beam integration. Multiprobe plasmonic, photonic, biological, electrical, thermal characterization. On-line Raman/TERS, SEM, FIB, 10° K operation. AFM/NSOM modes with Si or transparent fiber probes. NanoTool Kit of optical, electric, thermal & nanochemical deposition probes with deep trench/side wall imaging. Multiprobe Photonic/Plasmonic Characterization System and new revolutionary Hydra optical BioAFM.

[Coherent Japan, Inc.](#)



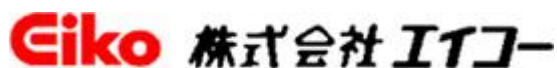
We are one of the world's leading suppliers of photonics-based solutions to a broad range of commercial and scientific research customers. We design, manufacture and market lasers, laser-based systems, precision optics and related accessories for a diverse group of customers.

Coherent is the only company to offer a complete line of ultrafast products:

•Oscillators •Amplifiers •Pump Lasers •OPAs •OPOs •Accessories

The common element of our ultrafast lasers and accessories is that their cutting-edge performance is easily accessible — even for users without expertise in lasers — and ultrastable from day to day. For every user, it's Better Ultrafast Every Day.

[EIKO Corporation](#)



EIKO supports innovative technology over ten years by advanced vacuum products.

EIKO Corporation has been supplying our products for domestic and overseas research facilities since 1974.

Recently, EIKO makes contributions to research and development of micro-machines, semi-conductor, display, photovoltaic system and etc.

We will challenge for innovative technology by the rich harvest reaped from our users.

[Spectra-Physics K.K.](#)



For nearly 50 years, Spectra-Physics® has been an industry-leading global supplier of advanced laser solutions to the scientific research, life and health sciences, microelectronics, solar, semiconductor, and industrial manufacturing markets. Our portfolio of high performance, high reliability products includes a wide range of ultrafast, Q-switched DPSS, CW and quasi-CW, high-energy pulsed, tunable, gas, and fiber-based lasers.

■ Mai Tai SP --- Short Pulse Ultrafast Oscillator

Mai Tai® SP ultrafast laser is the ultimate short-pulse oscillator with an unprecedented level of automation and long-term environmental stability. Designed for seeding ultrafast amplifiers, the Mai Tai SP laser is capable of producing a broad range of output bandwidths: 60 nm to 10 nm, corresponding to near transform-limited pulse widths from <25 fs to 100 fs. The bandwidth is user-adjustable via the Mai Tai SP graphical user interface (GUI). This unique feature allows for seeding sub-35 fs, 120 fs, and 2 ps amplifier systems using the same seed laser without manual realignment. Also adjustable via the GUI is the center wavelength from 780 to 820 nm.

[CORNES DODWELL LTD.](#)

CORNES DODWELL

CORNES DODWELL is constantly seeking innovative products and advanced technologies to introduce to the Japanese market in response to the needs of business and industry.

With a network of international partners that extends across the globe, CORNES DODWELL is able to bring to the attention of its customers the very best that the world has to offer.

In an era characterized by rapid change and advances in knowledge, CORNES DODWELL prides itself on a proven ability to respond swiftly, flexibly and successfully to the diverse requirements and demands of the modern business world.

CORNES DODWELL not only continues to work in support of Japan's economic growth but also to promote the development of friendly relationships and cultural exchanges between Japan and other countries.

CORNES DODWELL is also committed to the concept of corporate social responsibility (CSR) and to the adoption and strict application of policies designed to preserve and protect the environment.

[Shimadzu Corporation](#)



Shimadzu

— Thinking Globally

Shimadzu Corporation has been involved in activities at research institutes and in cutting-edge industrial fields throughout the world for many years. This global perspective is essential in many fields. For instance, in the environmental field, addressing problems at a global level is now indispensable, and in front-line medical fields, much research is now being pursued through international networks. In the industrial equipment fields of semiconductors and flat panel displays (FPDs), from development to production and distribution, international borders have effectively disappeared. In order to more precisely fulfill the demands of our customers, Shimadzu is striving to enrich our corporate activities by thinking globally. We are cultivating product development, production, and service bases all over the world as we work to provide our world-wide customer base with superior products and services. Shimadzu continues in its quest to become a corporation that is trusted on a global scale by people everywhere, in every global arena.

[Cybernet Systems Co., Ltd.](#)

CYBERNET SYSTEMS CO., LTD.

CYBERNET SYSTEMS has provided advanced technologies and services in the areas of scientific engineering calculation and product development for over 30 years. Our CAE solutions provide a variety of analysis capabilities, including stress, heat, vibration and noise analysis for structures and mechanical products, control analysis for mechanical and telecommunications devices, optics design for optical lens and LED products, and electronic analysis for printed circuit boards.

As our optical software, we provide “Optiwave”, “Poynting for Optics”, “LightTools”, “setfos” and more.

“Optiwave” and “Poynting” for Optics provide design and simulation environment of opto-electronic circuits and optical communications. “Light Tools” and “setfos” provide very powerful optical solutions for kinds of Flat Panel Display, Light Source, Solar cell and materials.

[Erionix Inc.](#)

ELIONIX

株式会社 エリオニクス

ELIONIX.Inc was established in 1974, 35 years ago, and has been oriented to Nanotechnology products. The company name “ELIONIX” comes from Electron, Ion and X-ray which are the technology equipped with our systems and have been continuously developed in our history. All of our products are designed for the ultra fine field and “One and Only” features, such as the 4nm pattern wiring by Electron Beam Lithography system, 3D measurement function by SEM or etc. These systems offer users opportunities to create new directions in their successful researches.

Regarding our Electron Beam Lithography systems, we have been continuously improving their performance since company establishment. Recently, we have released a new Electron Beam Lithography “ELS-F125”, which has 125 kV acceleration voltage, and has achieved 4nm line writing and very fine and uniform pattern in an entire large field with high beam current. This system is our landmark of “One and Only” policy and we intend to continue this policy of our performance.

[Nanophoton Corporation](#)



Nanophoton is an Osaka University's venture company established in February 2003 by people from diverse fields including science, engineering and managements. The specialty and skills brought by each person are different but we share the same dream, "Leading edge microscopes from Nanophoton!" Nanophoton is manufacturing new products to meet demands of the world by monitoring and responding to world trends. All members of Nanophoton aspire to open up leading edge technologies and to contribute to society through nanotechnologies and photonics applied products. Based on our philosophy to produce and market the world's best microscope, we have launched laser Raman microscope RAMAN-11. It is a world first laser Raman microscope realizing fast observation of high definition Raman imaging. It enables anyone to easily obtain the high quality Raman imaging in a short time due to the development of our original optical scanning method.

[Cambridge University Press Japan](#)



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