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**CAMECA LAUNCHES EIKOS™, NEW COST-EFFECTIVE
ATOM PROBE MICROSCOPE FOR RESEARCH AND INDUSTRY.**

**EIKOS Enables Routine, High-Performance 3D Nanoanalysis
For Both Industrial and Research Applications.**

MADISON, WI, USA – CAMECA, a world leader in scientific instrumentation and metrology solutions, is pleased to announce the release of EIKOS™, a new atom probe microscope. EIKOS provides accessibility to atom probe tomography with increased ease of use and a low cost of ownership. Utilizing standard microscopy sample preparation methods, it delivers nanoscale structural information that is expected to yield a greater understanding of materials for research and faster development of products for industrial applications.

“CAMECA is very proud to introduce EIKOS” notes Dr. Tom Kelly, CAMECA Vice President for Innovation and New Technologies. “We derived our new instrument’s name from the Greek word meaning ‘image,’ and we trust that EIKOS will bring atom probe tomography within the reach of many new microscopists, researchers and engineers, allowing them to interrogate their materials at the atomic level.”

“CAMECA built on its 30 years of success in atom probe tomography instrumentation and application to deliver the new EIKOS platform, which we have designed to maximize its utility in the development of commercial alloys and its ability to perform essential research at the university level. The design, layout and footprint of the EIKOS provide flexibility for site requirements, while its high reliability and ease of use are made possible thanks to two major instrumental innovations: an integrated counter electrode, which eliminates the need for in-situ alignment, and a new 532nm laser pulse system.”

EIKOS is designed to address a wide variety of applications including metals, nuclear structural materials, thin films and coatings. Its standard specimen preparation methods and mature data analysis routines make it the new, cost-effective tool for alloy development and nanoscale materials research, and a most-valuable addition to CAMECA’s atom probe tomography product line.



The EIKOS platform is available in two configurations:

- The base EIKOS system, incorporating a reflectron design that combines excellent mass resolving power and signal-to-noise ratio with a voltage pulsing system to ensure very high data quality on a wide variety of metallurgical applications, and
- The fully configured EIKOS-X system, which adds an integrated, automated laser pulsing module with computer-controlled focused spot design to provide access to a larger application range. The base EIKOS system can be field upgraded to the EIKOS-X.

Exclusively developed and manufactured by CAMECA, atom probe microscopes are used by the most prestigious research and development laboratories around the world. Atom probe tomography (APT or 3D APT) is the only materials analysis technique offering extensive capability for both 3D imaging and chemical composition measurements at the atomic scale. Since its development in the 1960s, the technique has contributed to major advances in materials science.

The CAMECA Atom Probe Tomography product line now comprises two families: the LEAP 5000 (Local Electrode Atom Probe), which provides the fastest, most sensitive 3D imaging and analysis with nanoscale resolution across the widest range of applications (metals, oxides, ceramics, advanced energy storage materials, semiconductors and electronics, bio-minerals and geochemistry), and the newly launched EIKOS family, which offers accessibility to atom probe tomography with improved ease of use and a low cost of ownership that addresses both research and industrial applications.

About CAMECA

CAMECA has more than 60 years of experience in the design, manufacture and servicing of scientific instruments for material micro- and nanoanalysis. Since pioneering Electron Probe Microanalysis (EPMA) instrumentation in the 1950s and Secondary Ion Mass Spectrometry (SIMS) in the 1960s, CAMECA has remained the undisputed world leader, while achieving numerous breakthrough innovations in such complementary techniques as Low-energy Electron-induced X-ray Emission Spectrometry (LEXES) and Atom Probe Tomography (APT).

Headquartered near Paris, CAMECA also has a production facility in Madison WI, USA (where the LEAP 5000 and EIKOS Atom Probes are designed and manufactured), and further locations in Brazil, China, England, Germany, India, Japan, Korea, Russia and Taiwan. CAMECA is a business unit of the Materials Analysis Division of AMETEK, Inc., a leading global manufacturer of electronic instruments and electromechanical products.

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CAMECA EIKOS™ Atom Probe Microscope



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