



Leading With Innovation

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Rigaku to partner with Covalent Metrology to deliver New Semiconductor Lab Resources in Silicon Valley

A new collaboration between Rigaku and Covalent will deliver state-of-the-art metrology capabilities to the semiconductor and electronics markets

November 29, 2018 – Sunnyvale, CA. [Rigaku Corporation](#), a global leader in X-ray analytical instrumentation, is pleased to announce a new partnership with [Covalent Metrology](#), a leading provider of analytical services to advanced materials innovation companies.

In a joint declaration, Covalent and Rigaku reveal a first-of-its-kind collaboration agreement demonstrating a mutual commitment to support American high-tech industries with the most advanced metrology capabilities in the world.

Under the terms of this agreement, Rigaku, “The world’s leading supplier of X-ray metrology technology,” will be supplying Covalent with several state-of-the-art instruments for their new facility in Sunnyvale, California. This collaboration agreement provides Covalent with exceptional analytical service capabilities and Rigaku a North American demonstration facility located in the heart of Silicon Valley.

“This partnership will significantly expand Covalent’s product offering. Rigaku is a proven leader in this field and has earned its outstanding reputation over many decades of technology innovation. Working together, our respective customers will benefit from being able to access the most advanced technology, staffed by world-class experts and delivered with unprecedented customer service,” said Craig Hunter, Covalent’s Founder and CEO.

The Rigaku [Semiconductor Metrology Division](#) designs and manufactures X-ray based measurement tools to solve semiconductor manufacturing challenges. With over 35 years of global market leadership in the semiconductor industry, Rigaku metrology tools employ X-ray fluorescence ([XRF](#)), X-ray diffraction ([XRD](#)), X-ray reflectometry ([XRR](#)) and Critical-Dimension Small-Angle X-ray Scattering (CD-[SAXS](#)) techniques, enabling everything from in-fab process control metrology to R&D for thin film and materials characterization.

Products include in-line, high-throughput X-ray monitoring tools for measuring critical process parameters such as film thickness, density and roughness, XRF spectrometers for thickness and composition determination, and total-reflection XRF spectrometers ([TXRF](#)) with integrated vapor phase decomposition (VPD) for trace contamination monitoring.

“We believe deeply in the power of American ingenuity, and we are focusing our investments in areas where we can have a direct impact on innovation. Rigaku is committed to advancing cutting-edge technologies that deliver solutions for yield enhancement and process development,” said Kiyoshi Ogata, Rigaku Senior Vice President. “Covalent Metrology’s experienced leadership, top-notch technical team and business model innovations altogether make them the ideal partner for our Silicon Valley Semiconductor Lab. We are proud to be a part of this collaboration and look forward to enabling new customer designs.”

Covalent Metrology provides imaging and characterization services to support R&D, defect analysis, and quality control for companies in semiconductors, solar, medical devices, MEMS and other industries. Covalent’s analytical services include atomic force microscopy ([AFM](#)), X-ray [XRD/XRR](#), high-resolution X-ray diffraction (HR-XRD), scanning electron microscopy ([SEM](#)), spectral ellipsometry, optical profilometry, [UV-VIS-NIR](#) spectrophotometry, TEM, XPS, TOF-SIMS and many others.

More information about semiconductor tools from Rigaku is available at rigaku.com/products/semi.

More information on characterization services offered by Covalent Metrology is available at covalentmetrology.com.

About Rigaku

Since its inception in Japan in 1951, Rigaku has been at the forefront of analytical and industrial instrumentation technology. Rigaku and its subsidiaries form a global group focused on general-purpose analytical instrumentation and the life sciences. With hundreds of major innovations to their credit, Rigaku companies are world leaders in X-ray spectrometry, diffraction, and optics, as well as small molecule and protein crystallography and semiconductor metrology. Today, Rigaku employs over 1,400 people in the manufacturing and support of its analytical equipment, which is used in more than 70 countries around the world supporting research, development, and quality assurance activities. Throughout the world, Rigaku continuously promotes partnerships, dialog, and innovation within the global scientific and industrial communities.

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About Covalent

Covalent Metrology was founded in 2016 and is based in Sunnyvale, California. Its mission is to help companies who use advanced materials to get better data and insight about key research, development and production programs faster, more easily and less expensively. Covalent is dramatically changing the characterization and imaging landscape by combining innovative pricing, data platforms and top-notch customer service with world-class scientists, state-of-art tools, and strategic partnerships. In just over 2 years, Covalent has 150 customers in 20+ industries.

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