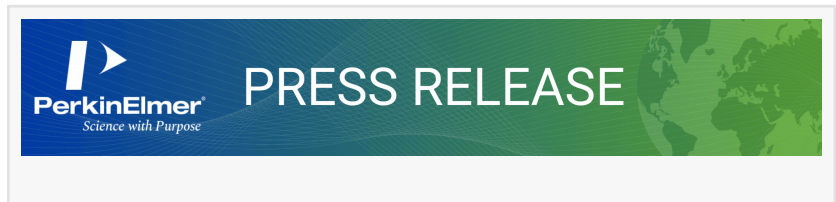


PerkinElmer & Covalent: Advanced Failure Analysis Collaboration

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Collaboration pairs PerkinElmer's ICP-MS/MS and LC-MS/MS technologies with Covalent's failure analysis expertise to help manufacturers pinpoint the root causes of material failure and performance degradation.



PerkinElmer and Covalent today announced a strategic collaboration to provide advanced analytical instrumentation and analysis services that address the growing complexity of failure analysis and materials characterization.

In the high-stakes fields of advanced electronics, semiconductor manufacturing, energy storage, and other precision-materials industries, identifying the root causes of material failures and performance drops is essential. Component degradation, trace chemical contamination, and structural breakdowns require highly sensitive analytical tools capable of detecting the smallest indicators of a larger problem.

Utilizing Inductively Coupled Plasma Mass Spectrometry (ICP-MS/MS) and Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS), researchers and manufacturers can track down ultra-trace elemental impurities and organic degradation mechanisms. These techniques optimize manufacturing quality control and accelerate root-cause failure analysis.

"This is an important partnership to help us better understand the analysis challenges facing the semiconductor, electronics, and battery industries," said Paul Davies, Vice President, North America, PerkinElmer. "Covalent is a well-respected subject matter expert in this space and will be an invaluable voice of the customer, helping us push the boundaries of what ICP-MS/MS, LC-MS/MS, and other technologies in our portfolio are capable of in failure analysis, raw material characterization, and battery lifetime diagnostics."

"PerkinElmer has been a trusted leader in analytical science for decades, and we are honored that they chose to partner with us for these critical applications," said Craig Hunter, CEO of Covalent. "As materials systems and product designs become more complex, the ability to combine cutting-edge instrumentation with expert application knowledge is more important

than ever. Our partnership with PerkinElmer will help customers gain deeper insight into the mechanisms that drive performance and reliability.”

PerkinElmer’s ICP-MS/MS delivers unmatched sensitivity for ultra-trace chemical analysis of metallic impurities before they deposit on silicon or compound-silicon wafers. The technique can also characterize the corrosion, solder joint deterioration, and migratory short-circuiting that cause modern printed circuit boards and electronic packages to fail.

PerkinElmer’s LC-MS/MS technology provides electrolyte degradation profiling for battery performance analysis and helps characterize the chemical degradation of coatings and epoxy mold compounds in electronic components.

These same capabilities extend to impurity profiling, medical device characterization, and broader precision-materials work where chemical sensitivity is the binding constraint.

About PerkinElmer

PerkinElmer is a global leader in analytical and testing solutions, pharma specialty services, and omics solutions, serving customers across the life sciences, applied & industrial, and food. Drawing on nearly 90 years of pioneering innovation and engineering expertise, we support the science of our customers with insights of the highest standards of safety, quality and compliance for vital therapeutics, the integrity of the global food chain, the performance and sustainability of critical materials, and the sustainability of our environment. Together with scientists, laboratory and quality leaders, and manufacturing operators worldwide, our 5,500 colleagues in 35 countries empower progress by providing trusted insights and services for a healthier, safer, and more sustainable world.

For more information, visit: www.perkinelmer.com

About Covalent

Covalent is a leading provider of advanced material testing, characterization, and failure analysis services, helping manufacturers, OEMs, and R&D teams turn complex material data into clear, actionable insights. Headquartered in Sunnyvale, California, Covalent operates a 30,000-square-foot laboratory equipped with more than 75 instruments and \$25 million in analytical technology, backed by a team of scientists more than 70 percent of whom hold PhDs or advanced degrees. Accredited to ISO/IEC 17025 across more than 60 standardized and proprietary methods, Covalent supports more than 1,500 customers across the semiconductor, electronics, energy, medtech, aerospace, and advanced materials industries.

For more information, visit www.covalent.com.

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