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PERKINELMER AND TEAKORIGIN TEAM UP TO PROVIDE ENHANCED TRANSPARENCY IN FOOD

Combining Molecular Spectroscopy Techniques with Analytical Chemistry Expertise to Uncover Nutritional Value of Food

WALTHAM, Mass – December 5, 2017 – [PerkinElmer, Inc.](#), a global leader committed to innovating for a healthier world, today announced a collaboration with [TeakOrigin](#), a company that integrates technology and data platforms to serve as a detector for food authenticity and quality.

PerkinElmer's cutting-edge molecular spectroscopy instrumentation, combined with TeakOrigin's team of analytical chemistry experts, will help bring greater transparency to a wide range of food items that consumers purchase and eat. Based on the findings of their research, PerkinElmer and TeakOrigin will aim to develop a first-of-its-kind technology that uses a single platform to analyze a number of food types for key indicators that determine authenticity, quality and freshness. The research will leverage molecular spectroscopy, UV VIS, mid/near infrared and Raman spectroscopy techniques – which are fast, small, and relatively low cost and non-destructive to the food being tested.

This collaboration underscores the depth of capabilities within PerkinElmer's food franchise and further solidifies its position as an industry leader in providing advanced detection and analysis technologies across the global food supply chain. Food manufacturers leverage PerkinElmer's extensive portfolio of solutions to screen for critical factors such as ingredient adulteration and food safety and quality to protect customers from potential health risks and preserve integrity of their brands.

“Food can lose a significant amount of nutritional value in the supply chain and preparation process, and the growing lack of transparency within the modern food system is increasingly impacting the consumer both nutritionally and financially,” said Brent Overcash, CEO, TeakOrigin. “Together with PerkinElmer, we want to deliver a quick, simple and secure way to ensure that the food we eat is what's indicated on the label, confirm how fresh and nutritious it is, and help eliminate food fraud and misrepresentation.”

In addition to molecular spectroscopy, TeakOrigin is leveraging traditional analytical techniques (such as HPLC, GC/MS, TGA, wet chemistry) to determine the chemical properties of foods so that the relationships to the spectra can be validated. Contrary to the approach that photonics companies take, TeakOrigin is chemically characterizing the samples as the spectra are collected.

The first research initiatives are taking place at PerkinElmer's scientific laboratory at its headquarters in Waltham, Massachusetts. For this project, lab analytical results will be calibrated against their molecular spectroscopy results to facilitate fast, portable screening of foods for quality and safety threats. The initial pilot testing will be for olive oil, honey and apples, with the intent to extend this type of analysis to many other foods.

“PerkinElmer brings extensive experience developing instrumentation, software and services to help food manufacturers better detect ingredients and adulterants, while navigating regulations,” said Jim Corbett, executive vice president and president, Discovery & Analytical Solutions, PerkinElmer. “Working with TeakOrigin, we look forward to addressing key underlying issues in the food system, leading to better and healthier food decisions for grocery retailers and consumers.”

In the future, PerkinElmer and TeakOrigin will aim to develop and validate new hand-held spectroscopic devices and chemometric models.

About PerkinElmer

PerkinElmer, Inc. is a global leader committed to innovating for a healthier world. Our dedicated team of 9,000 employees worldwide is passionate about providing customers with an unmatched experience as they help solve critical issues especially impacting the diagnostics, discovery and analytical solutions markets. Our innovative detection, imaging, informatics and service capabilities, combined with deep market knowledge and expertise, help customers gain earlier and more accurate insights to improve lives and the world around us. The Company reported revenue of approximately \$2.1 billion in 2016, serves customers in more than 150 countries, and is a component of the S&P 500 Index. Additional information is available through 1-877-PKI-NYSE, or at www.perkinelmer.com.

About TeakOrigin

TeakOrigin is on a mission to tightly integrate analytical chemistry, optical spectroscopy, and deep/machine learning into lab-fidelity digital food fingerprints. These datasets serve as a “common language” for food across the entire food supply chain and can identify a unique food item and what nutrients are in that particular food item. It is a digital dataset company focused on creating a revolutionary and seismic shift within the food supply industry to drastically reduce food fraud and misrepresentation.

For more information, please visit www.teakorigin.com

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