CEM Launches New Technology for Rapid Fat/Oil Analysis

(Matthews, North Carolina) October 25, 2016- CEM Corporation, a leading supplier of process control solutions, is pleased to introduce the all new ORACLE Fat Analyzer based on a very recent breakthrough in NMR technology. ORACLE is the first ever rapid fat analyzer that requires absolutely no method development and can analyze fat in any unknown food sample with reference chemistry accuracy and exceptional repeatability.

"For the first time, a new disruptive technology exists that allows for the direct measurement of fat in any food product in 30 seconds," commented Michael J. Collins, President and CEO of CEM Corporation. "This has never been possible before and requires no prior knowledge of the sample composition. It's going to change the landscape in terms of food testing and will have an impact that will be felt across the whole industry on a global basis."

Pre-release trials of ORACLE at major global testing labs have provided confirmation of the abilities of the technology. Timothy Lumb, Chemistry Manager of ALS UK, commented "The CEM ORACLE Fat Analyzer has demonstrated the ability to eliminate daily calibrations used with previous technology for a broad range of samples while maintaining high sample accuracy and precision. As one of the global leaders in food testing this is very beneficial for our testing needs."

The food industry has traditionally relied on reference wet chemical methods as the primary standard for fat analysis. These long, antiquated, and hazardous processes suffer from repeatability challenges and take several hours to complete. This has led to the use of rapid fat analyzers which are calibrated against reference wet chemistry. While faster, these systems often require extensive method development as results are affected by sample composition. Existing NMR techniques have partially reduced method development by the ability to directly analyze an entire sample and not be effected by surface properties. However, all current technologies still require some form of method development and correlation to reference chemistry.

ORACLE is unique in that it completely eliminates method development and the need for reference chemistry. This is based on a newly developed NMR technique that completely isolates the fat response signal in any sample type or matrix. "In five years, ORACLE could become the new reference method for the entire industry, and that's truly amazing," Collins stated. "I've had the dream for the last 20 years of an instrument with this capability. This is a revolutionary technology that CEM has brought to market and it makes me very proud and excited that we've been able to do this."

The instrument comes in two configurations, rapid and high-throughput. The rapid system is paired with the newly released SMART 6 Moisture/Solids Analyzer allowing for moisture and fat analysis in less than 5 minutes. The high-throughput option incorporates a robotic system allowing for the unattended processing of up to 100 samples.

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CEM Corporation, a private company based in Matthews, North Carolina, is a leading provider of microwave laboratory instrumentation. The Company has subsidiaries in the United Kingdom, Germany, Italy, France, and Japan, as well as a global network of distributors. CEM designs and manufactures systems for life sciences, analytical laboratories and processing plants worldwide. The Company's products are used in many industries including pharmaceutical, biotech, chemical and food processing, as well as academic research.
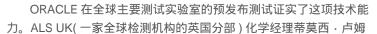
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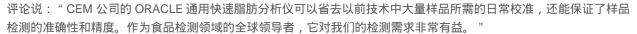Devin.Darrell@cem.com
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高通量型检测脂肪含量