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Spectradyne Wins the 2023 CYTO Innovation Technology Showcase

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Spectradyne is proud to have been selected as the winner of the 2023 CYTO Innovation Technology Showcase for its ARC™ nanoparticle analyzer. The competition finals were held at CYTO, the annual meeting of the international Society for the Advancement of Cytometery (ISAC) in Montreal, Canada May 20-24. The event hosted 1,800 attendees and exhibitors from around the world, and featured 5 days of scientific programming, posters, and networking events.

Entrants to the competition submitted a written application and a 5-minute video introducing their company and new technology. In March, 13 semi-finalists were selected from the broad range of entrants, and their application videos made available on-line by ISAC for public comment. Three finalists were announced, including Spectradyne and its ARC particle analyzer, on April 5th.

The three finalists presented their pitches live and in person at the "CYTO Innovation Technology Showcase" session on May 20th. Jean-Luc Fraikin, Spectradyne's CEO, presented on behalf of Spectradyne. A panel of expert judges, chosen for their expertise in not only the scientific aspects of cytometry but also in the business techniques needed to manage these types of small companies, judged the presentations, and selected Spectradyne as the winner.

Spectradyne's ARC particle analyzer uniquely combines two orthogonal characterization methods in a single instrument: Microfluidic Resistive Pulse Sensing (MRPS), Spectradyne's patented electrical technique, directly counts and sizes particles one-by-one in complex biological samples, without any assumptions of the particles' optical properties. Simultaneously, the fluorescence of each particle is measured to quantify internal and external cargo. This combination delivers fast measurements of unprecedented sensitivity and accuracy for particle size, concentration, and fluorescence—extendable far beyond the limits of conventional flow cytometry.

The ARC particle analyzer is ideally suited for measurements at the nanoscale, including lipid nanoparticle (LNP) size, concentration, and loading (dose), extracellular vesicle (EV)

concentration and phenotyping, and quantification of viral vectors such as lentivirus. These applications are not adequately served by conventional flow cytometry, since the particles are too small to be accurately detected and measured using purely light-based techniques.

"We are honored to receive this prestigious award, which validates Spectradyne's unique method for delivering accurate particle size, concentration, and fluorescence measurements at the nanoscale," says Dr. Fraikin. "Initial customer reaction to this new product has been very exciting, and we look forward to watching adoption of the ARC continue to grow, particularly in nanomedicine applications. Huge congratulations to Spectradyne's entire team for this well-deserved win!"

For more information on the ARC system, visit https://nanoparticleanalyzer.com/arc-product/.