Waters

NEWS RELEASE

World's First Cyclic IMS Mass Spectrometer Installed at Aston University

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- Technology brings university scientists unparalleled potential for chemical, biological and human disease research
- First commercial research instrument of its kind in the world.

MILFORD, Mass.--(BUSINESS WIRE)-- Aston University and Waters Corporation (NYSE: WAT) announced today the completed installation of the world's first **Waters™ SELECT SERIES™ Cyclic™ IMS (ion mobility spectrometry) mass spectrometer** within the University's School of Health and Life Sciences, where the instrument will support research into the biology of human diseases, the discovery of new therapeutics and advances in biotechnology.

This press release features multimedia. View the full release here:
https://www.businesswire.com/news/home/20191107005188/en/

Waters Corporation has completed the installation of the world's first SELECT SERIES Cyclic IMS mass spectrometer within the School of Health Sciences at Aston University (Birmingham, England). (Photo: Business Wire)

Mass spectrometry (MS) is a widely deployed analytical method used by scientists to identify and quantify molecules in a sample and determine their detailed molecular structure. For example, it can be used to more effectively identify disease biomarkers that allow for early detection.

Ion mobility spectrometry is a proven technique that separates ions by their size, shape and charge. The SELECT SERIES Cyclic IMS takes ion mobility to a new level, replacing the traditional linear ion mobility region with a novel compact cyclic device. Ions traverse around the cyclic region and with every pass greater ion mobility resolution is achieved. In addition, the advanced technology enables the unique ability to perform ion mobility selection for ion mobility/ion mobility and IMSn experiments.

The new instrument will be used by researchers at Aston University and across the Midland Innovation consortium to answer complex biological questions.

Andrew Pitt, Professor of Pharmaceutical Chemistry & Chemical Biology, Aston University said: “We are delighted to have this new technology in our lab here at Aston; it will provide us and other researchers in the Midlands with a step change in how we conduct our research.

“The new instrument is one of a relatively recent class of mass spectrometers, incorporating ion mobility, which separate molecules based not only on their mass but also by their shape. This allows us to see what is going on in biology in much more detail, including information we are able to gain from the shape of molecules that will allow us to solve much more complex questions.”

Combining novel IMS capability with significantly improved mass spectrometry performance and enabling software, this platform allows leading researchers to unlock the potential in scientific discovery.

Jim Langridge, Advanced MS Technologies Waters Corporation said: “Human biology is extraordinarily complex and the SELECT SERIES Cyclic IMS gives research scientists the ability to probe deeper into the chemistry and biology of human disease like never before.

“By collaborating with leading researchers like Professor Pitt, we continually advance the science of mass spectrometry, accelerating their research into human health and well-being.”

Aston University scientists will run a visiting researcher programme that will allow researchers from many disciplines to visit Aston and work with the first-of-its-kind SELECT SERIES Cyclic IMS instrument, exploring its unparalleled experimental potential.

The journal Analytical Chemistry documented the effectiveness and power of the cyclic IMS instrument in a recent article titled: **A Cyclic Ion Mobility – Mass Spectrometry System.**

About Aston University

Founded in 1895 and a University since 1966, Aston is a long established university led by its three main beneficiaries – students, business and the professions, and our region and society. Aston University is located in Birmingham and at the heart of a vibrant city and the campus houses all the university’s academic, social and accommodation facilities for our students. Professor Alec Cameron is the Vice Chancellor & Chief Executive.

About Waters Corporation

Waters Corporation (NYSE: WAT), the world's leading specialty measurement company, has pioneered chromatography, mass spectrometry and thermal analysis innovations serving the life, materials and food sciences for more than 60 years. With approximately 7,200 employees worldwide, Waters operates directly in 35 countries,

including 15 manufacturing facilities, and with products available in more than 100 countries.

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