

## **RedShiftBio Launches New Protein Characterization Instrument System - AQS<sup>3</sup>pro**

**See Change with the new AQS<sup>3</sup>pro System for protein characterization from RedShiftBio.**

*One highly automated system, five key measurements: **Aggregation, Quantification, Stability, Structure and Similarity***

Boston, MA April 30th

At PEGS 2018 (April 30<sup>th</sup> – May 4<sup>th</sup>, Boston, MA) RedShift™ BioAnalytics, Inc. (RedShiftBio™) will unveil the AQS<sup>3</sup>pro, a new protein characterization platform with powerful, integrated bioanalytics software that delivers automated, high sensitivity spectroscopic analysis for the development, formulation and manufacture of biotherapeutics. The AQS<sup>3</sup>pro allows users to ‘see change™’ in the secondary structure of proteins over the concentration range of 0.1 to 200 mg/mL, providing the **Aggregation, Quantification, Stability, Structure and Similarity** measurements that underpin drug safety and efficacy. Its ability to provide multiple attribute data reduces or eliminates the need for performing separate measurements across different tools. Combined with its advanced automated multi-sample capability, the AQS<sup>3</sup>pro substantially streamlines the analytical workflow associated with the commercialization of biotherapeutics. To find out more about the AQS<sup>3</sup>pro visit [www.redshiftbio.com](http://www.redshiftbio.com)

‘The AQS<sup>3</sup>pro is an important advance in biophysical characterization technology that transforms the utility of IR spectroscopy for biotherapeutic analysis,’ said Dr. Eugene Ma, CTO, RedShiftBio. ‘Its introduction is the culmination of first rate R&D by our in-house team coupled with extensive input from a network of industrial and academic collaborators. The accuracy, repeatability and reproducibility of the new system has been verified across hundreds of samples, involving thousands of protein measurements. These data and the enthusiasm of contributing partners underpin our confidence in its considerable value to the industry.’

The AQS<sup>3</sup>pro uses the patented technique of Microfluidic Modulation Spectroscopy (MMS) which combines mid-infrared laser spectroscopy with microfluidics and advanced signal processing to measure the secondary structure of proteins. It provides direct, label-free measurements over the concentration range 0.01 to 200 mg/mL, characterizing samples under

all the conditions routinely encountered in biopharmaceutical development and manufacture, without sample dilution. Measurement is highly automated, with workflow efficiency further boosted by multi-sample, walk-away operation and state-of-the-art bioanalytics software. The innovative and flexible analytics suite automates the routine analysis of spectroscopic data, at the same time providing improved tools for gaining insights into structural change and its implications.

‘We have been partnering in the testing of the AQS<sup>3</sup>pro’, said Professor Christopher Roberts of the University of Delaware. ‘The application of MMS and infrared spectroscopy for protein solutions offers the ability for simultaneous and *in situ* quantification of secondary structural changes and protein concentration across a broad range of protein concentrations, and a wide range of sample conditions. This tool will be extremely useful for scientists and engineers spanning from basic protein science to biologic product development.’

If you are visiting PEGS 2018 then drop by our booth 316 to see the new instrument. If you would like to find out more about the AQS<sup>3</sup>pro then visit <https://redshiftbio.com/mms>

## About

RedShiftBio<sup>™</sup> is a provider of innovative analytical instrumentation for the research, development and manufacture of protein therapeutic drugs. The company has developed a powerful new analytical technique, Microfluidic Modulation Spectroscopy (MMS) that enables direct probing of the biophysical structure of proteins. The patented MMS technology provides comprehensive secondary structure information across five key measurements, in a single automated analysis, replacing the requirement to run samples on multiple instruments. For further information, please visit [www.redshiftbio.com/collaboration](http://www.redshiftbio.com/collaboration), or email [info@redshiftbio.com](mailto:info@redshiftbio.com)

To find out more about RedShiftBio:

Please visit [www.redshiftbio.com/collaboration](http://www.redshiftbio.com/collaboration), or email [info@redshiftbio.com](mailto:info@redshiftbio.com)

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