May 29, 2009

Pressure Biosciences, Inc. Announces the Release of Its Much Anticipated, Next Generation Sample Preparation Product: the PCT MicroTube Adapter Kit

SOUTH EASTON, Mass., May 29, 2009 (GLOBE NEWSWIRE) -- Pressure BioSciences, Inc. (Nasdaq:PBIO) ("PBI" and the "Company") today announced that it will unveil and release for sale its PCT MicroTube Adapter Kit (patent pending) at the 57th Annual Conference of the American Society for Mass Spectrometry (ASMS), to be held at the Pennsylvania Convention Center (Philadelphia, PA) from May 31 - June 4, 2009. Approximately 6,500 scientists are expected to attend the ASMS Conference. There will be at least six presentations by independent scientists on the advantages of the Company's unique and patented pressure cycling technology ("PCT") and/or its new PCT MicroTube Adapter Kit in mass spec studies.

The PCT MicroTube Adapter Kit includes an ergonomically designed, space-saving Workstation, PCT MicroTubes and MicroCaps, and specialized tools to enable the user to process up to forty-eight samples simultaneously in the Company's primary product, the PCT Sample Preparation System ("PCT SPS"), as compared to three currently. We believe that this satisfies the desired sample volume and throughput requirements of most proteomic laboratories. The new PCT MicroTube is made of a state-of-the-art polymer with unique features that separate it from competitive products, including extreme chemical resistance, broad useable temperature range, non-wetting surface, negligible protein and nucleic acid binding, and the ability to efficiently transmit pressure from the pressure generating instrument ("Barocycler") to the sample. The new PCT Microcap was designed with an added feature to allow it to easily excise and transfer protein gel spots to the PCT MicroTube for processing, a necessary function in many mass spec labs that is currently done by cutting the protein spots out by hand, or by expensive robotic systems. We believe that the PCT MicroTube Adapter Kit, in combination with the PCT SPS, can reliably increase the quality and decrease the cost of sample preparation for the mass spectrometry field. Additionally, we believe that the small volume, high throughput PCT MicroTube consumable will broaden the use of PCT into areas of proteomic and genomic sample preparation outside of mass spectrometry, such as biomarker discovery, plant and animal biology, and forensics.

The Emmes Group (2008) estimates the biological sample preparation market to be comprised of up to 80,000 laboratories and 500,000 researchers worldwide. Since 2007, PBI has installed over 75 PCT Sample Preparation Systems ("PCT SPS") into this market, primarily for the preparation of biological samples for scientific research purposes by laboratories outside of the mass spectrometry field. However, recent presentations by several independent, well-known scientists have demonstrated that PCT offers unique benefits over current methods in the preparation of samples for downstream mass spectrometry analysis. These benefits include a significant reduction in processing time

(hours to minutes), a reduction in undesired protein modifications, an increase in protein digestion efficiency, and the opportunity for PCT to be used to standardize sample preparation for the field of mass spectrometry. To capitalize on these and other competitive advantages, and to enable the Company to better expand its PCT customer base into the mass spectrometry market, the PCT MicroTube Adapter Kit was developed.

Dr. Shane Burgess, Director of the Life Science and Biotechnology Institute at Mississippi State University, and a Beta Site tester of the PCT MicroTube Adapter Kit, said: "PCT offers clear advantages over our standard method of sample preparation, including shorter processing time, higher throughput, and reduced operating costs - and all without sacrificing quality. In addition, although we have yet to confirm this, our data lead me to believe that PCT may also improve the number of proteolytic peptides we can identify in each preparation. In all, we found these advantages so significant that we recently incorporated PCT into our standard mass spec proteomics analysis workflow. We also believe that throughput will continue to increase, and operating costs will continue to decline, once we incorporate the new MicroTube Adapter Kit into our normal operation, which we plan to do as soon as possible."

Dr. Alexander R. Ivanov of the Harvard School of Public Health, and another Beta Site tester of the PCT MicroTube Adapter Kit, commented: "Data generated in our laboratory over the past few months show that PCT results in the identification of more unique peptides than our standard sample preparation technique for mass spectrometry. Our data also indicate that PCT may be highly successful in digesting very complex samples, an area of great difficulty at the present time. These advantages, coupled with the unique characteristics of the new PCT MicroTubes and PCT MicroCaps that we evaluated over the past several months, offer scientists working in proteomics, especially in mass spectrometry, a wonderful new tool for scientific discovery."

Dr. Edmund Ting, Senior Vice President of Engineering for PBI, said: "We paid attention to the needs of the sample preparation scientist and developed an innovative solution for the high throughput processing of micro-liter sized samples using cycled high pressure. We believe that this patent pending sample containment and processing system, combined with the unique power of PCT, gives the researcher extraordinary ability to gain new knowledge using today's analytical identification techniques, such as mass spectrometry. Based on the results from our Beta Site tests, we believe that our PCT MicroTube Adapter Kit can benefit a large segment of the proteomics and genomics research community."

About Pressure BioSciences, Inc.

Pressure BioSciences, Inc. (PBI) is a publicly traded company focused on the development of a novel, enabling technology called Pressure Cycling Technology (PCT). PCT uses cycles of hydrostatic pressure between ambient and ultra-high levels (up to 35,000 psi and greater) to control bio-molecular interactions. PBI currently holds 13 US and 6 foreign patents covering multiple applications of PCT in the life sciences field, including genomic and proteomic sample preparation, pathogen inactivation, the control of chemical (primarily enzymatic) reactions, immunodiagnostics, and protein purification. PBI currently focuses its efforts in the development and sale of PCT-enhanced enzymatic digestion products designed specifically for the mass spectrometry marketplace, as well as sample preparation products for biomarker discovery, soil and plant biology, forensics, histology, and counter-bioterror applications.

Forward Looking Statements

Statements contained in this press release regarding the Company's intentions, hopes, beliefs, expectations, or predictions of the future are "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward looking statements include statements regarding the expected commercial release of the Company's PCT MicroTube Adapter Kit; the expectation that the ASMS annual conference will have 6,500 attendees and at least six presentations that will discuss the advantages of PCT and/or the PCT MicroTube Adapter Kit; the advantages, benefits, capabilities, and features of PCT and the PCT MicroTube Adapter Kit, including speed, reduction in undesired protein modifications, reduction in sample preparation costs, an increase in protein digestion efficiency, the inertness and non-wetting characteristics of the MicroTube, and the use of the MicroCap as a protein spot picker and transfer device; and the potential markets for the Company's PCT-based products. These statements are based upon the Company's current expectations, forecasts, and assumptions that are subject to risks, uncertainties, and other factors that could cause actual outcomes and results to differ materially from those indicated by these forward-looking statements. These risks, uncertainties, and other factors include, but are not limited to: the risk that the Company may not release the new PCT MicroTube Adapter Kit on May 31st, or anytime; possible difficulties or delays in the implementation of the Company's strategies that may adversely affect the Company's continued commercialization of PCT; changes in customer's needs and technological innovations; the Company's sales force may not be successful in selling the Company's PCT product line because scientists may not perceive the advantages of PCT over other sample preparation methods, particularly in the mass spectrometry market; and scientists may not be able to duplicate the results achieved at particular laboratories having already used PCT and/or the PCT MicroTube Adapter Kit. Further, the Company expects that it will need additional capital to fund its continuing operations beyond the second quarter of 2010. Additional risks and uncertainties that could cause actual results to differ materially from those indicated by these forward-looking statements are discussed under the heading "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2008, and other reports filed by the Company from time to time with the SEC. The Company undertakes no obligation to update any of the information included in this release, except as otherwise required by law.

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