**Air Products Donates Nine Patented Technologies to University of Pennsylvania School of Medicine**

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Air Products and Chemicals, Inc. (NYSE:APD) has donated a major technology portfolio to the University of Pennsylvania School of Medicine, consisting of nine U.S. patents involving various novel perfluorocarbon compositions and methods for using certain compounds in medical applications, namely magnetic resonance imaging (MRI) and radiation therapies for cancer. Other applications include liquid breathing (neonatal/adult), vitreous fluid replacement in the eye, ultrasound, treatment of spinal cord injury and organ preservation. Perfluorocarbons (completely fluorinated organic compounds) used in these applications are highly stable, as well as chemically and biologically inert, and are regulated by the U.S. Food and Drug Administration (FDA).

As a leading worldwide producer of fluorine gas and products based on fluorine, Air Products has been engaged for more than 25 years in the global development of inorganic and organic fluorine compounds using direct and indirect fluorination. Fluorocarbons, for example, are used in chip production (by the worldwide electronics industry) and fluorinating agents and intermediates are used in pharmaceutical applications. Air Products marked its first successful venture in the use of these materials for medical purposes in the 1970s when it developed several fluorochemical compounds serving as oxygen carriers for the synthetic blood program sponsored by the National Institutes of Health. The company subsequently continued the development of research and commercial partnerships to broaden the application of perfluorochemicals for bio-medical applications within its specialty gas research and development department.

In the mid-1980s, Air Products redirected its strategy for specialty fluorine materials, primarily focusing on the electronics market, where they are used as etching and cleaning agents in the fabrication of electronic devices. Today, Air Products is the leading supplier of fluorinated gases for these applications.

According to John C. Tao, corporate director, Technology Partnerships at Air Products, the University of Pennsylvania was selected through an intensive competition. It was determined that the patent estate would serve to enhance research already under way within the Department of Radiology in the University's School of Medicine, which is affiliated with the University of Pennsylvania Health System.

"The University of Pennsylvania's radiology department is number one in the country," said Tao, "and prepared the best proposal for the further development and commercialization of the perfluorocarbon materials."

Dr. Frank Schweighardt, Air Products' manager of process analytical, and co-author of the patent estate, added, "The University's radiology team is in an excellent position to take this leading-edge, bio-medical technology and develop cost-effective, life-saving diagnostic tools to benefit humankind."

"Penn is expanding our research and development project aimed at optimizing the use of the donated technology as MRI contrast agents," said R. Nick Bryan, M.D., Ph.D. and chairman of Penn's Department of Radiology. "We hope to be able to develop diagnostic tools to identify hypoxic tissue, which would be a breakthrough for stroke, heart attack and cancer treatment.

"Penn also plans to develop these very high oxygen-soluble materials," Bryan continued, "for increasing the effectiveness of cancer radiation treatment of solid tumors."

Air Products and Chemicals, Inc. (www.airproducts.com) is the world's only combined gases and chemicals company. Founded more than 60 years ago, the business has annual revenues of $5.5 billion and operations in 30 countries. Air Products is a market leader in the global electronics and chemical processing industries, and a longstanding innovator in many industrial markets, including coatings, adhesives and polyurethanes. The company distinguishes itself through its 17,500 employees around the world, who build lasting relationships with their customers and communities based on understanding, integrity and passion.

The University of Pennsylvania Health System is distinguished not only by its historical significance—first hospital (1751), first medical school (1765), first university teaching hospital (1874), first fully integrated academic health system (1993)—but by its position as a major player on the world stage of medicine in the 21st century. Committed to a three-part mission of education, research, and clinical excellence, UPHS has excelled in all three areas.