



For Immediate Release

NEWS RELEASE

Polatomic, Inc. and UTD Team Awarded \$2,000,000 Navy STTR Contract for Advanced Magnetometer Research

RICHARDSON, Texas (January 12, 2006) – Dr. Robert Slocum of Richardson based *Polatomic, Inc.* and Dr. Duncan MacFarlane, Associate Dean for Interdisciplinary Studies in the Erik Jonsson School of Electrical Engineering at the University of Texas at Dallas have been awarded a \$2,000,000 Phase II STTR contract from the STTR Program Office of the Naval Air Systems Command. The research will lead to a laser magnetic field sensor with sensitivity of 3 femto Tesla, one-hundred times more sensitive than Navy magnetometers currently used in airborne Anti-Submarine Warfare (ASW).

Dr. Slocum noted that this research will build on *Polatomic* laser magnetometer technology built up through more than 40 Small Business Innovation Research grants. As the university team member with *Polatomic*, Dr. MacFarlane, Assistant Dean of Electrical Engineer, will conduct investigations of low-noise lasers for the advanced OSP laser magnetometer. MacFarlane said, "The fact that the university participants in this research were reduced by research competition to UTD and Princeton is an indication of the growing strength of the photonics area of the UTD Electrical Engineering Department." The laser magnetometer technology to be developed here can provide solutions to major defense problems facing the nation including detection of enemy submarines and buried sea mines and to location of Improvised Explosive Devices in Iraq.

Slocum pointed out that this technology for airborne detection of enemy submarines called Magnetic Anomaly Detection (MAD) was first brought to Texas during World War II by UTD and TI founders Erik Jonsson and Eugene McDermott. These AN/ASQ-8 MAD sets were the first product manufactured for an outside customer by GSI, the company that emerged as Texas Instruments a few years later. *Polatomic* designed the AN/ASQ-233 Submarine Detecting Set, which currently is 1000 times more sensitive than the original AN/ASQ-8. Slocum said that it is significant that *Polatomic* and UTD can build on this Texas technical heritage and provide the U.S. Navy with the Advanced Optically Driven Spin Precession Magnetometer with sensitivity 100 times better than the current MAD system in the fleet.

The Small Business Technology Transfer Program (STTR) STTR is an important new small business program that expands funding opportunities in the federal innovation research and development arena. Central to the program is expansion of the public/private sector partnership to include the joint venture opportunities for small business and the nation's premier nonprofit research institutions. The contract funds research over a forty-two month period.

About the Company

POLATOMIC's mission is to develop and produce advanced magnetic detection sensors and systems for magnetic surveillance and measurement of magnetic fields on land, sea, and in space. We work with our customers to find the superior technical solution to their magnetic measurement problem at a reasonable cost. *POLATOMIC's* extensive investment in advanced laser magnetometer technology has resulted in world leadership in magnetic systems for airborne Anti-Submarine Warfare, Buried Sea-Mine Hunting, Undersea Surveillance and investigation of planetary magnetism.

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[Go Back a Page](#) | [Go to Top of Page](#) | [Print Version](#)

Monday, September 15, 2008

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