

Viosense Successfully Completes Phase I SBIR Project

November 15, 2002, Pasadena, CA: Viosense Corporation announces the successful completion of Phase I SBIR Project.

During the execution of this project, two optical MEMS based shear stress sensor concepts were designed and developed for the measurement of wall shear stress. The diverging fringe Doppler shear stress sensor used linearly diverging fringes for direct measurement of the wall velocity gradient within the laminar sublayer. The dual velocity shear stress sensor used two velocity sensors to calculate the mean wall shear. Both sensors were surface mounted, with optical probe volumes in the proximity of the flush-mounted sensor surfaces. Excellent results for the design Reynolds numbers were obtained.

The Phase I SBIR project studied and demonstrated the feasibility of optical shear stress sensors as a viable technique for accurate measurement of wall shear under a variety of configurations. The project demonstrated the general feasibility of the concepts, their accuracy and range of operation, and the fabrication of the sensors into a waterproof linear array. The Phase I research also identified technical hurdles to be crossed during system implementation in Phase II and beyond.

Viosense commercializes micro optical sensor and 3-D imaging technologies licensed from Caltech. Viosense is a Caltech Technology Transfer company, and a Jet Propulsion Laboratory Technology Affiliate.

For Further Information Contact:

Dr. Engin Arik
arik@viosense.com

Viosense Corporation
36 S. Chester Avenue
Pasadena, CA 91106
www.viosense.com

For Sales Inquiries, Contact:

Mr. Michael Kotas
kotas@viosense.com