



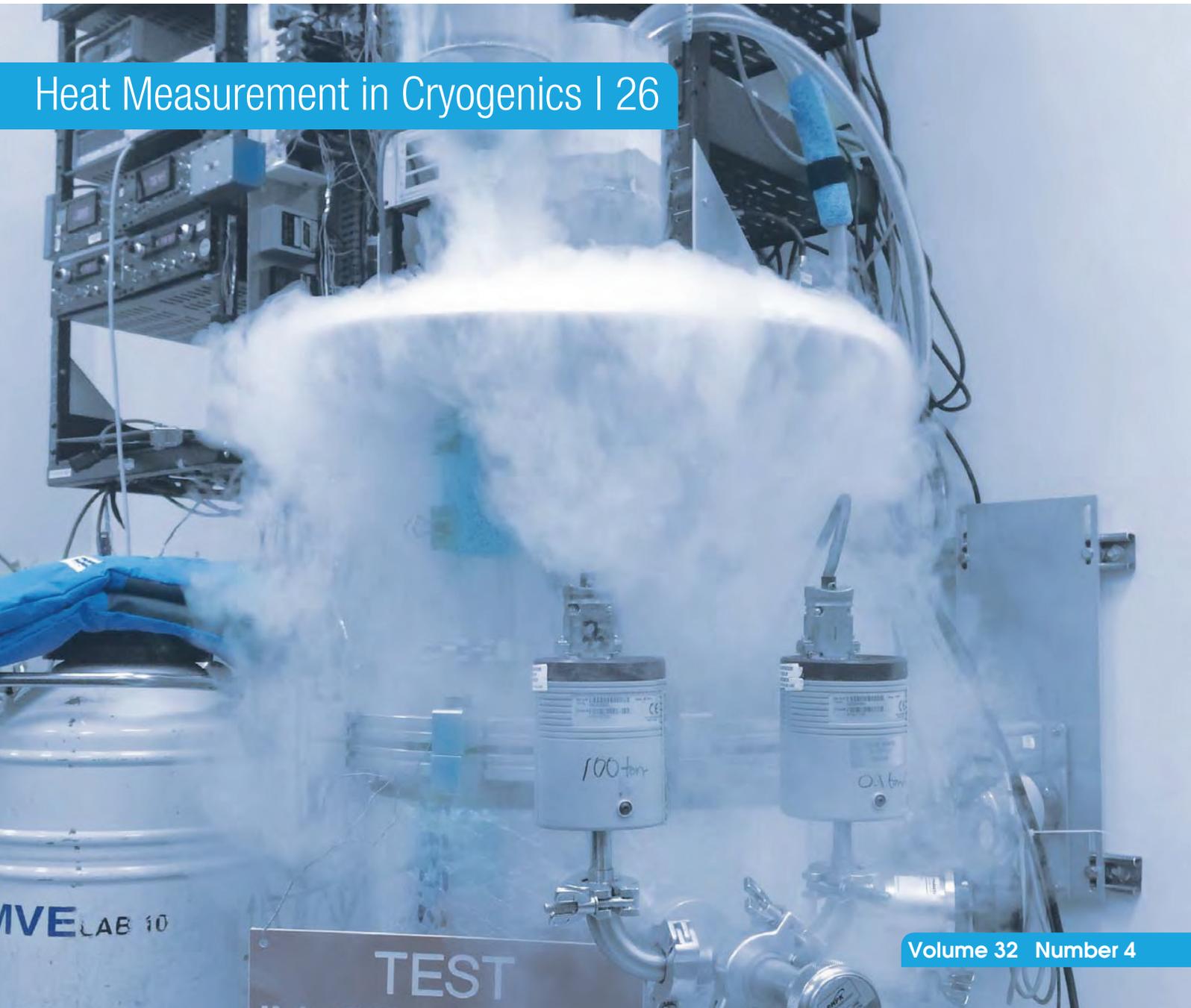
ICC19 Conference Recap 8
Novel High Effectiveness Recuperator..... 12
New Cryostat Design Volume..... 18

Cryogenic Coatings for Deep Space..... 28
LIGO Prepares Cryogenic Update..... 38
SCW Student Scholarship Established 45

Cold Facts

The Magazine of the Cryogenic Society of America, Inc. **INTERNATIONAL**

Heat Measurement in Cryogenics | 26



Volume 32 Number 4

Product Showcase

In the interest of enhancing the value of *Cold Facts* and helping prospective customers find cryogenic products and services, we offer this Product Showcase. We invite companies to send us short releases (150 words or fewer) with high resolution JPEGs of their new products. This editorial feature is open to all companies and related manufacturers.

Le-tehnika

SRI474 cryocooler

Le-tehnika specializes in the development of miniature cryogenic coolers, from production and assembly of components to integration into complex systems.

Their product range includes miniature coolers based on the Joule-Thomson effect (self-regulated, fixed orifice, actively controlled, fast cooldown) and coolers based on Stirling cycle (rotary drive). Their cryocoolers are designed for cooling IR detectors or superconductive materials to cryogenic temperatures (below -150°C , -238°F or 123 K).

The company recently developed two new Stirling cryocoolers. The integral rotary Stirling cryocooler SRI421 (0,25W@80K) is designed for smaller devices. It requires little power consumption, has low acoustic noise and provides an expected MTTF of 15,000hrs. The integral rotary Stirling cryocooler SRI474 (0,75@80K) is for larger devices. It was developed for use with IR detectors that need higher cooling power or temperatures lower than 77 K.
<http://cryocoolers.eu> ■



Oxford Instruments

OptistatDry

The new OptistatDry TLEX model provides cryogenic temperatures for sample-in-exchange-gas applications at temperatures from <4 K to 300 K. Its sample cooldown is less than 45 minutes.



This new top-loading cryogen-free cryostat is ideal for customers whose samples are not appropriate for sample-in-vacuum arrangement. Some samples are not suited to a vacuum environment due to poor thermal conductivity, including powders, or because they are in liquid form. For such cases, the sample-in-exchange-gas option is a better solution. In addition, those who are running short experiments and want to maximize the throughput of samples will find the new TLEX version even quicker for sample exchange and just as easy to use as the OptistatDry sample-in-vacuum version. A range of different designs of top-loading sample rods and sample holders are available to meet customer needs.

<http://www.oxford-instruments.com> ■

Cryotherm

CRYO LC®: Level measurement and control device for cryogenic liquid nitrogen

Cryo LC works under different pressures and can be applied to all sizes of vessels and systems in which its level probe can be fitted. It consists of the basic device, display, operating panel and housing.

The unit has two functions: level measurement and automatic level control. An alarm is set off, both optically and acoustically, if the level of liquid nitrogen



falls below the lowest level or rises above the highest one. Alarms also occur if there

is a sensor short circuit or sensor wire breakage.

Whether installed in a control cabinet or as an independent device, the Cryo LC can be operated concurrently with a minimum of two displays and operating units for both local and remote operation. The unit provides modular construction, fast assembly and easy operation in addition to individually adjusted level controls and level probes. Cryo LC also features switch-on protection, a safety measure against manipulation and faulty operation
www.cryotherm.de ■