

NANOGETTERS

News from
Integrated Sensing Systems

FOR IMMEDIATE RELEASE

Friday, June 6, 2003

Contact: Doug Sparks
(734) 547-9896 Ext 119
or dsparks@mems-issys.com

ISSYS launches NanoGetters™ at Transducers '03

ANN ARBOR, MICH - - Integrated Sensing Systems will announce the launch and commercialization of NanoGetters™ which provides great vacuum gettering capability without the problems of particle and oxidation contamination encountered with traditional NonEvaporable Getters (NEGs).

NanoGetters™ are targeted at high performance MEMS vacuum packaging, bulk gas purification and solid-state vacuum pumps. NanoGetters™ are tested and ideally suited for the following applications:

- ~~✍~~ MEMS vacuum packaging
- ~~✍~~ Solid-state vacuum pumps
- ~~✍~~ Gas purification
- ~~✍~~ Vacuum displays
- ~~✍~~ Semiconductor Equipment
- ~~✍~~ Scientific vacuum systems

All engineering vacuum solutions are a series of successive compromises, and the choice of getter materials is no exception. NonEvaporable Getters (NEGs) have been employed for many years in vacuum, gas purification systems and Micromachined devices. NEGs have several major disadvantages that

NanoGetters™ overcomes including shedding particles during handling and processing plus the requirement for activation of an oxide layer, which reduces the getters effectiveness by consuming getter matter.

In use at ISSYS since mid-2002, NanoGetters™ are made up of proprietary, patent pending, thin film multi-layers. The material is particle free, is not oxidized during manufacturing and resists oxidation at room temperature or during brief high temperature excursions. These unique properties avoid the need for special getter storage, handling and long, high temperature activation steps required by existing NEG getters. NanoGetters™ are available in chip, strip, wafer and foil configuration and can be integrated into micromachined wafers.

Of importance to the MEMS industry is NanoGetters™ new proprietary vacuum wafer bonding service for capping wafers with patterned NanoGetters™ allowing integration into MEMS vacuum package process at the full wafer or individual chip level.

NanoGetters™ are offered in a variety of standard sizes or can be customized and supplied to meet industry solutions such as getter strips, coated wafers and vacuum bonding. In addition, complete MEMS design, processing and packaging services including: Vacuum and Inert Gas Packaging, High Q Resonators, Tunneling Devices, Gyroscopes, Coriolis Flow Sensors, Bolometers, RF-MEMS and Pressure Sensors are available.

Additional information can be found on the Internet at <http://www.nanogetters.com>

NanoGetters™ will be introduced at Transducers '03 Trade Show (<http://transducers03.org/>) held next week from June 8 - 12, 2003 in historic Boston, Massachusetts at the Boston Marriott Copley Place.

If you're attending be sure to stop by booth #15 to learn more about NanoGetters™.

Company Background:

ISSYS is a leader in advanced micromachining technologies for medical devices, microfluidic and scientific analytical sensing applications used in the development of drug infusion pumps and wireless, implantable sensing systems. Founded in 1995 by world renowned leaders in MEMS technology, ISSYS operates an "everything under one roof" multi-million-dollar, state-of-the-art Bio-MEMS fabrication facility located in suburban Ann Arbor, Michigan.

For more company, product and service information, please visit <http://www.mems-issys.com/>

- end -