

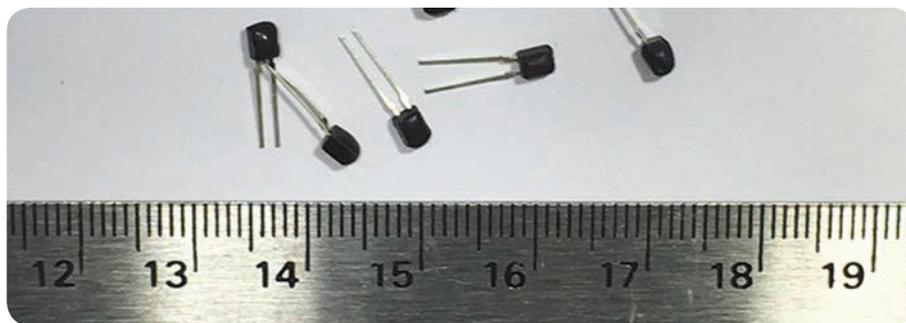
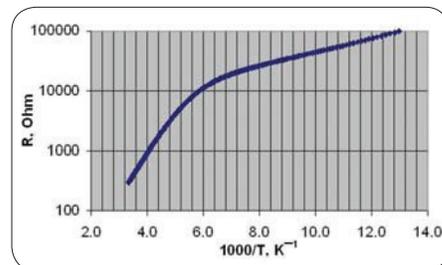
AdSem, Inc.

Novel Semiconductor Thermometers

AdSem, Inc., developer of unique semiconductor thermometers for high, low and ultralow temperatures, offers novel semiconductor thermometers designed for sensing the level of cryogenic liquids. These thermistors have fast response and are perfect for measurements in cryogenic liquids with boiling temperature down to 0.5K, including the liquid noble gases (xenon, argon, neon), oxygen, nitrogen, hydrogen, helium and He-3. The thermistors can work in

non-linear regime at high voltage, causing thermistor overheating and sharp resistance decrease, when the sensor is out of the liquid. The Adsem thermistors can also work in Ohmic regime at low voltages as highly sensitive cryogenic thermometers for temperature ranges of 300K-77K, 400K-20K, 400K-1.3K and 300K-0.3K. Customers can also use the thermistors as a "furnace" for evaporation of liquid helium if necessary. Standard tolerances available for resistance value at liquid nitrogen are ± 5 , ± 10 , ± 20 and ± 50 percent. Resistance values in cryogenic liquids can be customized for any narrow sub range in range of

15KOhm-0.5MOhm. R(T) dependence for one typical cryogenic thermometer in linear/Ohmic regime as shown. www.adsem.com.



AdSem, Inc. Si
Ge
Advanced Semiconductors

**Unique Si & Ge
NTC Thermistors**

High T: up to 500°C
Cryogenic T: 300K - 0.3K
Ultra-Low T: 4K - 1mK

People, Companies in Cryogenics

CSA is pleased to congratulate the **Cryogenics and Superconducting Society of Japan (CSSJ)** on the achievement of its 50th anniversary. The worldwide cryogenics community is a relatively small and very specialized one and thus our groups have much in common as we are seeking the same goal: to spread understanding of the benefits and contributions of cryogenics throughout the world and to further research and development in the field.

The Rothman Institute nominated **Cryofab, Inc. (CSA CSM)**, a manufacturer of cryogenic equipment, for New Jersey Family Business of the Year for 2015, recognizing the company's multigenerational impact on the community and its perseverance, commitment to family and business success. Three generations of the Grillo family have now helped build Cryofab into

a thriving manufacturer with more than 10 million dollars of annual revenue.

Fabiola Gianotti officially began her term as CERN's new—and first female—Director General on January 1, bringing with her a group CERN describes as a "new dream team." Gianotti earned her PhD in experimental particle physics from the University of Milan in 1989 and joined CERN as a researcher in 1994. While at CERN she has served on several international committees and has received many awards, including the Special Fundamental Physics Prize of the Milner Foundation.

Gianotti will serve as Director General for the next five years. Members of her team are **Frédéric Bordry**, director for accelerators and technology; **Eckhard**

Elsen, director for research and computing; **Charlotte Lindberg Warakaulle**, director for international relations, and **Martin Steinacher**, director for finance and human resources.

"Over the next five years, we have challenges to face. We need to ensure excellent performance of the LHC accelerator, detectors and computing, in order to deliver exciting science at the energy frontier," Gianotti said in a New Year's message to her colleagues. "We need to maintain a diverse and compelling scientific program. And we need to start building the long-term future of our field."

The **Institute for Theoretical and Experimental Physics (ITEP)** awarded **Stan Brodsky**, a professor of particle physics and astrophysics at Stanford University