

DESIGN.
FABRICATION.
TESTING.

SAMPLES Quarterly

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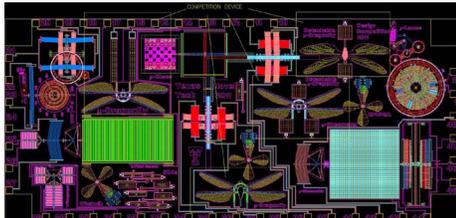
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Design Competition Winners!

Sandia National Laboratories MEMS Technologies Department is pleased to announce the 2011 winners of the MEMS University Alliance Design Competition!

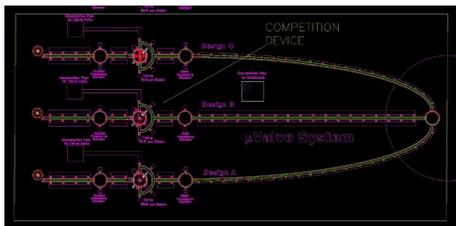
NOVEL DESIGN CATEGORY

Texas Tech University – Microbotic Dragonfly



EDUCATIONAL CATEGORY

Carnegie Mellon University – Pressure Sensitive Microvalve



This year's competition was once again very competitive. Each year the designs get better and the associated white papers get more professional. Thank you all for participating and for making this year's competition so successful.

We look forward to seeing the participating schools at Sandia on May 17th to present their designs and to interact with Sandia MEMS experts. This year's participants were: Texas Tech University, Carnegie Mellon University, University of Oklahoma, University of New Mexico, Air Force Institute of Technology, and the University of Utah.

SPIE Travel Awards



SPIE

We would like to thank SPIE for partnering with Sandia National Laboratories to provide travel grants to schools participating in the Sandia MEMS University Alliance Design Competition. This enabled many students to attend our awards ceremony at the end of the competition. SPIE representative Dr. Justin Mansell is also participating as a judge for the competition.

2011 Design Competition Judges

Michael S. Baker, Sandia National Laboratories

Dr. Brian D. Jensen, Brigham Young University

Dr. Justin D. Mansell, Active Optical Systems, LLC

Dr. Jack L. Skinner, Sandia National Laboratories

Mr. Austin Welborn, LMATA Government Services

Please go to our website for complete bios of our judges.

University Alliance Design Competition Awards Ceremony

May 17, 2010

Sandia National Laboratories
Albuquerque NM

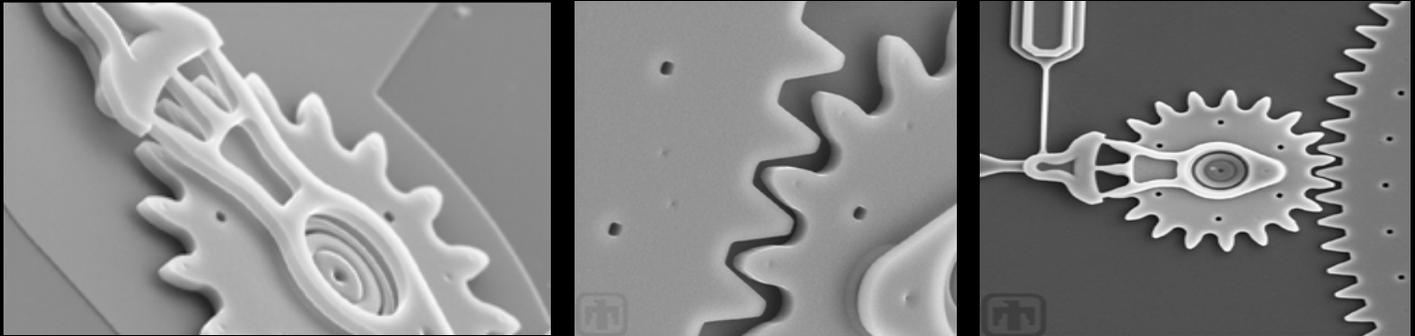
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Sandia National Laboratories



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Unplanned Lab Shutdown

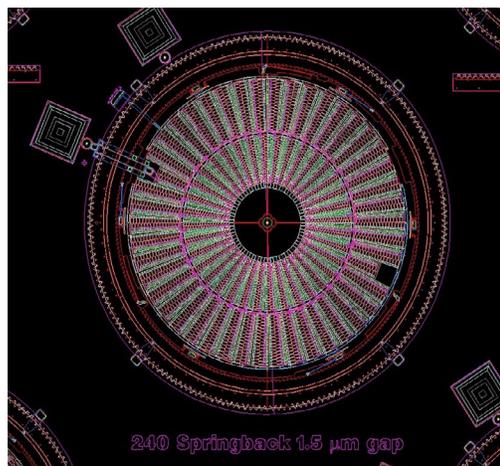
On February 3-4, 2011 Sandia National Laboratories was forced into an emergency shutdown due to extreme cold temperatures and a shortage of natural gas in New Mexico. The shutdown enabled the local utility company to divert the gas that would normally be used in Sandia's operations to heating residential areas during the extreme weather.



As a consequence of the shutdown, Sandia's fabrication facilities had to be re-started which caused a delay in our run schedule.

TRA Revision

A major benefit of running the SAMPLES program has been the ability of researchers to actively test the MEMS designs they create. Recently, Alliance members at the University of Utah discovered a problem with the spring back TRA (Thermal Ratcheting Actuator) module and alerted Sandia to the problem. Sandia will be releasing a revised version of the TRA module within the next few weeks.



We would like to thank alliance members at the University of Utah for providing the feedback we needed to put together a new revision.

Short Course Plans

Sandia is planning a session of our MEMS Short Course later this year, and would like to invite University Alliance members to attend. Please contact us at memscc@sandia.gov if you are interested.

Contact:

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