

# The New York State Center of Excellence in Small Scale Systems Integration and Packaging

## May 2009 Update on Activities

### S<sup>3</sup>IP SEMINAR SERIES

The Center's next seminar offering will be by Dr. Deborah Chung, University at Buffalo. Dr. Chung will speak on cooling of microelectronics. May 19

### ADL OPEN HOUSE

The ADL will provide an overview of the capabilities available in the Lab to companies in the Northeast region. June 10

### TECHNICAL ADVISORY BOARD MEETINGS

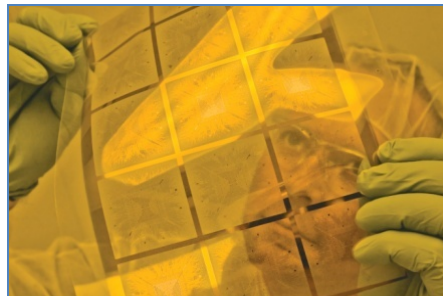
The CAMM and the IEEC will host the spring 2009 quarterly Technical Advisory Board meetings. June 15 -16

### FLEXIBLE ELECTRONICS SYMPOSIUM

The Center will host the 2<sup>nd</sup> annual international symposium on current research in the field of flexible electronics. August 19

### QUARTERLY WORKSHOP OF NATIONAL FPOE WORKING GROUP

The Center will host the summer quarterly workshop of the National Working Group on Flexible, Printed and Organic Electronics. August 20



- **New Tools at the CAMM:** The Center for Advanced Microelectronics Manufacturing (CAMM) has received and installed a General Vacuum High Vacuum Deposition System (pictured at left), and is currently installing the new CHA High Vacuum Deposition tool.
- These systems, valued at over \$10M, will enable companies to conduct research on new materials and processes for flexible
- electronics applications in solar, medical and defense areas.

**First Prototype Built at CAMM:** The Center has demonstrated its first sensor prototype on plastic (shown at left) and is working with its federal and industrial partners to develop application testbeds.

### Integrated Electronics Engineering Center (IEEC) Reports Economic Impact to New York State:

The IEEC supplies microelectronics packaging expertise to its industrial partners. The IEEC recently reported on its economic impact to the New York State Foundation of Science, Technology and Innovation. The IEEC's programming and activities generated an impact of over \$23M on New York State for reporting year 2007-2008.





**ADL Lab Continues to Grow its Resources and Expertise:**

The Analytical and Diagnostics Laboratory (ADL) has recently added new instrumentation to its capabilities, including new surface science and microscopy instrumentation. These tools are currently being installed in the ADL Lab, and on the second floor of the ITC and will be available to faculty and industrial partners.

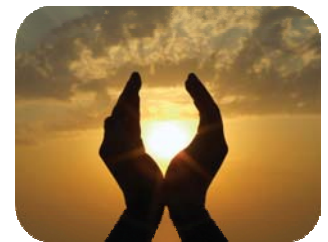


The ADL has been increasing its services to faculty and external partners. The Lab invoiced \$300K in 2008 for use of its facilities. The Center is planning an open house in June, as part of its marketing of the Lab to small businesses across the Northeast.

**New Microfabrication Laboratory Preparing to Open:**

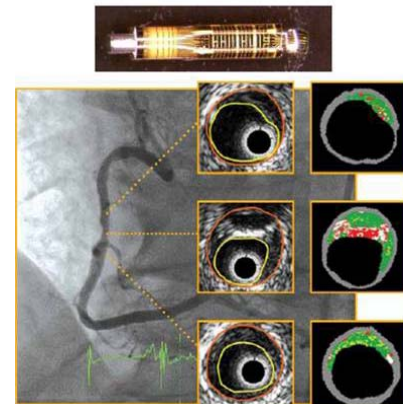
S<sup>3</sup>IP's new microfabrication laboratory, under construction in Science II, will enable faculty to build small prototypes as part of their research program. Funded by a New York State award for high technology commercialization, the lab will open in Spring, 2009.

**CASP Initiative Underway:** The Center for Autonomous Solar Power (CASP) faculty team, led by Seshu Desu, has been meeting to put its research plan in place. Funded by the Department of Defense, the Center will focus on the development of new solar technologies for military and consumer applications. The CASP Lab is currently under development at the ITC.



**Commercialization Enabled by**

- **CAMM:** Endicott Interconnect Technologies is moving forward on a new commercialization program at the CAMM. EI is working with Unovis-Solutions and a leading manufacturer of intravascular ultrasound (IVUS) catheters to develop and manufacture a state-of-the-art flexible substrate and flip chip component package as part of a revolutionary new catheter technology (shown at right). EI estimates that this program in 2008 has resulted in four new jobs, one retained job and revenue approaching \$2.5 million for the company.



**CONTACT**

The Small Scale Systems  
Integration and Packaging  
Center  
Binghamton University  
PO Box 6000  
Binghamton, New York 13902-  
6000i  
(607) 777-5314  
<http://s3ip.binghamton.edu>

**DIRECTOR**

Bahgat Sammakia,  
Professor, Department of  
Mechanical Engineering  
[Bahgat@binghamton.edu](mailto:Bahgat@binghamton.edu)