



INSTITUTE OF ADVANCED MATERIALS & TECHNOLOGY NEWSLETTER

January 14, 2008

Headline Stories



Top floor of Benjamin Hall Building to house administrative staff and research facilities of i-AMT.

1. The i-AMT has a new home. The Office of Research has approved use of the top floor of Benjamin Hall Building for i-AMT to support administrative and research functions, including parts of the Institute's Shared Instrumentation Facilities.

2. The i-AMT is set to launch Shared Instrumentation Facilities in 2008.

These facilities, which will be made available to the UW research community and to local industry, will provide a comprehensive range of equipment for material synthesis, device fabrication, and test. The facilities that are due to go online include:

Inert Atmosphere System for Fabrication and Characterization of Thin-Film Organic Electronics and Photonics: A tandem inert atmosphere glovebox equipped with a sophisticated evaporator system and electronic testing equipment will be established through the funds from Department of Defense and private foundations. This facility will allow researchers to fabricate/test organic photonic and semiconductor devices totally in inert atmosphere.

Awards/Grants

Energy Thrust Faculty Team wins NSF "IGERT Grant on Bio-Energy"

The team led by Daniel Schwartz, has been awarded the UW Bioresource-Based Energy for Sustainable Societies Program funded by the NSF's Integrative Graduate Education and Research Traineeship (IGERT) Program. This program will train a new generation of Ph.D. scientists and engineers, giving them a rich, in-depth education and an unique interdisciplinary, multi-cultural background through research experience on sustainable bioresource-based energy. This program also marks the first successful award of a federal grant awarded through i-AMT. For more information, please see: <http://www.cheme.washington.edu/people/faculty/schwartz.htm>

Facility for Synthetic Scale-up and Purification: This facility will be equipped with world class equipment for synthesizing and characterizing of advance organic and biomaterials. This multi-user facility will provide synthesis and purification capabilities for large-scale production of new materials.

In addition, researchers in i-AMT are working to raise funding for a high throughput Electron Beam Lithography (EBL) Facility and an Optoelectronic Device Test Facility. We will update you as these facilities come online.

3. Faculty members in Multifunctional Composite Thrust in the news.

The team led by Prof Kuen Lin and Michael Richey (Boeing) was recognized for their development of a certification program that combines theories and practical applications of composite materials, which trains the next generation of Boeing engineers who will apply their skills to design, build, and service the Boeing 787 Dreamliner. The excellence of this program has resulted in news features on Boeing News Now and UW Educational Outreach Press Release (http://www.outreach.washington.edu/uweo/press/releases/01072008_uwboeing.asp). This program also won the prestigious Excellence Award from Corporate University Xchange (www.corpu.com), a leader in corporate university research and in benchmarking industrial learning programs. Past winners of this award include Intel, IBM, Cisco, Catepillar, etc. In addition, AMTAS (an FAA Center of Excellence on Advanced Materials in Transport Aircraft Structures), directed by

i-AMT Researchers Win DOE "Solar America Initiative" Grant

The team of Alex Jen (PI), Christine Luscombe, David Ginger, Hong Ma and John Rehr has received an award from the Department of Energy's (DOE) Solar America Initiative for their proposal, "Future Generation Photovoltaic Device and Process". This project joins a portfolio of DOE investments that now includes partnerships with over 100 companies within the PV sector, supporting development of lower-cost crystalline silicon manufacturing processes, new thin film module technologies, and concentrating photovoltaic technology solutions for the commercial and utility sectors. For more information, please see: <http://energy.gov/news/5690.htm>

Prof's Mark Tuttle and Kuen Lin, will sponsor the one-week course "AMTAS Institute on Advanced Aircraft Composites" on March 19-23, 2008.

4. We are excited to announce that Michael Hochberg has joined the faculty team at i-AMT.

As a result of a recruiting process strongly supported by i-AMT and MDITR (an NSF STC), Michael Hochberg is joining the UW EE faculty as an assistant professor in Fall 2008. Prof Hochberg is recognized as one of the young leaders in the field of nanophotonic devices. His recent accomplishments include an Air Force Office of Scientific Research Young Investigator Award, which will fund his research on nanophotonic devices. Prof Hochberg will be a major contributor to the Institute's Photonics/Optoelectronics Research Thrust and is one of the UW faculty leading the fund raising effort for the EBL Facility.

5. In an effort to expedite the translation of research results to commercial applications, i-AMT has assembled an advisory board to assess the commercial potential of inventions developed by i-AMT faculty.

The board members are composed of seasoned technology business professionals, investors, and technology/IP managers from UW TechTransfer and i-AMT. They will work closely with UW TechTransfer to accelerate patenting decisions and initiate licensing discussions. For more information, please contact Keith Ritala (ritala@u.washington.edu).

6. The i-AMT web site is due to launch in February 2008.

Please stay tuned for announcements on the launch of this web site and future i-AMT presentations.

Other awards:

David Ginger:
Camille Dreyfus Teacher-Scholar Award (<http://www.dreyfus.org/tc07awards.shtml>); Sloan Fellowship (<http://www.sloan.org/programs/fellowshiplist.shtml>)

Michael Hochberg:
AFOSR Young Investigator Research Program Award (<http://www.wpafb.af.mil/news/story.asp?id=123072950>)

Christine Luscombe:
NSF Career Award (<http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0747489>)

Larry Dalton & Alex Jen:
Optical Society of America Fellow, 2008 (<http://www.osa.org/aboutosa/awards/fellows/recentfellows/2008.aspx>)

Buddy Ratner:
Biomedical Engineering Society's 2008 Pritzker Distinguished Lecturer Award (http://www.cheme.washington.edu/about/news_flashes/ratner-BMES.htm)

i-AMT sponsored Events:

- NANOPHOTONICS FOR BREAKFAST SERIES: <http://depts.washington.edu/nanophot/>
- MSE SEMINAR SERIES: <http://depts.washington.edu/mse/about/news/seminars/seminar-win-2008.htm>
- INTENSIVE COURSES IN NANOSCIENCE AND NANOTECHNOLOGY AT PNNL: <http://www.nano.washington.edu/pnnl/>
- ENERGY AND ENVIRONMENT SEMINAR: <http://www.washington.edu/students/crscat/MECHE.HTML>

People of i-AMT

- Director:** Alex Jen
Associate Director: Daniel Schwartz
IP & Outreach Manager: Keith Ritala
Special Advisor: Alvin Kwiram
Assistant Director: Hanson Fong
Shared Instrumentation Facilities Coordinator: Michael Hochberg
Research Thrust Leaders: Photonics & Optoelectronics:
Leader: Larry Dalton
Assoc Leader: David Ginger
Biomaterials & Bionanotechnology:
Leader: Buddy Ratner
Energy:
Leader: Samson Jenekhe
Assoc Leader: Guozhong Cao
Multifunctional Composites:
Leaders: Rajendra Bordia
Mark Tuttle
Assoc Leader: Kuen Lin

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