

## **ASEE 2007 Conference Session Summary: *Thinking Ahead***

Theodore Baldwin moderated an early morning but well attended session Monday June 25<sup>th</sup> on ***Thinking Ahead: Supporting New Technologies in Engineering Libraries***. It's Library 2.0 playtime for Darcy Duke of the Barker Engineering Library. Duke discussed MIT's response to a graduate student council mandate encouraging the libraries to adopt innovative practices. Based on the Google Labs concept (<http://labs.google.com>), librarians have developed a technology sandbox to beta test technological initiatives: Library 2.0 [beta]. Visit <http://libraries.mit.edu/betas> to explore the latest betas featured. A beta moves into official launch only if specified criteria are met. The application must receive positive user feedback, a significant portion of community must demonstrate use of the tool and it has to be in the beta zone for at least one semester. In addition, technical support for the new technology must be solid, including a commitment to support from the vendor or creator of the tool. Lastly, documentation must be in place. Duke shared examples of technologies in the beta zone and some that have graduated to a fully supported service. The LibX Firefox toolbar is one. Developed by Virginia Tech University Libraries and their Department of Computer Science (<http://www.libx.org>), the toolbar, after a quick download, allows users searchable access to the MIT library catalog, their electronic journals/databases, and Google Scholar. The toolbar also facilitates the process of connecting users through the library proxy server if off campus. A working version was set up within 1-2 hours and positive feedback was informally gathered. After LibX was in beta for 1 semester (Fall 2006) and user documentation was developed for the MIT libraries site the toolbar moved to full implementation.

Three areas for future development within the Library 2.0 [beta] include: podcasts & screencasts, a new version of Vera (MIT's journal/database search) which will include a metasearch feature, and an iGoogle gadget for customized Google interfaces (<http://www.google.com/ig>) specifically for searching the MIT library catalog.

Bruce Reid shared his experiences in working with faculty and the main campus of Penn State to create a spatial data/geographic information systems space at the Wilkes-Barre campus library. In collaboration with Dr. Frank Derby, Associate Professor of Surveying and Geographic Information Systems (GIS), Bruce identified a need for a data center and training. Despite challenges faced, such as delay of a planned GIS degree program and faculty personnel changes, Bruce forged ahead. They now have a GIS computer system in place and forthcoming staff training on the software (ArcView and others) and datasets. Reid stressed the importance of libraries aligning with faculty and institutional initiatives and the fruits of his labor will be demonstrated by a GIS room planned for the new library scheduled to open January 2008. He suggests we seize opportunities to align with priorities of our institutions. Future planning for Reid and the Wilkes-Barre library includes not only delivering GIS training/resources to their own campus but possibly expanding to offer GIS to other universities and local high schools by tapping into grant funding opportunities to pull the effort to a new level.

So, how many patents have been granted in the nanotechnology realm? No quick answer for this one. Charlotte Erdmann of the Siegesmund Engineering Library at Purdue University discussed her ongoing challenges with searching and analyzing Nanotechnology patents. Since fall 2006 Erdmann has been attempting to work with various sources to acquire meaningful statistics on nanotechnology patents granted globally. She also shared her expertise in dealing with patent classification schemes and her knowledge of the process of developing a new United States Patent and Trademark Office 'classification' scheme for nanotechnology. As of March 2007, a new USPTO classification has been added for nanotechnology, see 700 and the cross reference art collection Class 977 for Nanotechnology.

Researchers should keep in mind that more than 31 *other* classes may represent nanotechnology patents. In addition, the International Patent Class (IPC) has a classification of H01F for nanotechnology (see PCT published applications at <http://www.wipo.int/pctdb/en>), and the European ECLA Y01N classification shows more than 100,000 patents globally in the area of nanotechnology.

Erdmann suggested comparing US Patent 7,112,315 Molecular Nanowires from Single Walled Carbon Nanotubes with the US published *application* for the same (2001). This exercise demonstrates that published applications which have only machine generated classification, have limited classification numbers assigned. The granted patent, after inspector review, will have more useful classification codes. Keyword searching for published applications may be the best approach but it is also important to be aware that not all applications are published.

Erdmann found Alan L. Porter and Scott W. Cunningham's 2004 book *Tech Mining: Exploiting New Technologies for Competitive Advantage* (<http://dx.doi.org/10.1002/0471698466>) worthwhile as well as their affiliated VantagePoint site (<http://www.thevantagepoint.com/resources.cfm>) however warns their analytic software is expensive. New to patent searching? Erdmann and others suggest the online tutorials at Penn State University (<http://www.libraries.psu.edu/instruction/business/Patents/>), University of Texas at Austin (<http://www.lib.utexas.edu/engin/patent-tutorial/index.htm>), the USPTO's web site (<http://www.uspto.gov>), and the European Patent Office, esp@cenet (<http://www.european-patent-office.org/wbt/espacenet/>).

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