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2005 SLA Annual Conference Session Reports

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2005 Annual Conference Session Reports

Academic Librarians Roundtable

Sunday, June 5, 2005 7:30 – 9:00 AM
Presented by: Chemistry, Biomedical and Life Sciences and Science and Technology Divisions
Sponsored by: American Chemical Society Publications Division and EBSCO Information Services
Moderator: Margaret Lafferty, University of Minnesota

Dana Roth, from Cal Tech, began the program with his serials cost report. By looking at the cost per page/impact factor, instead of just the cost per page, and then normalizing the cost per page/impact factor, one can gain additional information on whether a journal or package subscription price is justified. Contact Dana at dzrlib@library.caltech.edu for more information on how he arrived at his figures.

The next part of the program was a discussion on three separate topics, each assigned to a third of the attendees to discuss and then to report out to the group as a whole.

TOPIC: Instruction and outreach in the sciences and engineering: 1) does instructional outreach for the sciences and engineering require different strategies than for other disciplines? 2) what new and/or interesting things have you been doing for instructional outreach; 3) what are some of the ways you are assessing their effectiveness?

REPORT OUT:
Yes, there are differences: humanities and social science students do a lot more papers than the sciences & engineering; sci-tech classes are more textbook driven; more papers are done when students are juniors and seniors.

Each sci-tech discipline has different needs; cultivate the TA's and RA's and get into the labs, using wireless if possible; more training is needed for support staff in academic departments; create "library survival" notebooks for library staff as well as other academic staff.

Librarians have more success on one on one, or with online modules with getting faculty to use blackboard/course/lib and link to library; copyright issues need to be addressed; inequities are more obvious to students who have electronic access to databases in school vs. outside; statewide consortiums can help; when training, use PUBMED rather than the Ovid/Silverplatter versions because Pubmed will be what most people use when they leave school.

Outreach librarians are becoming more popular, they are bringing Native Americans in for training and giving extension service classes on how to search; librarians should try to get into seminar series and on curriculum committees -- anything that can get you out of the library and into the faculty's realm.

The California State University system has created a tool to assess juniors or seniors - across all disciplines – in information skills (this is a competitor to the SAILS project).

TOPIC: Virtual Reference and the Future of Reference: 1) Is virtual reference (VR) changing the way that you do reference? How so?; 2) what marketing strategies have worked best for alternative reference models (e.g., off-site, distance)? And 3) does it seem likely (or possible) that virtual reference will lead to outsourcing of reference services? Why or why not?

REPORT OUT: There are mixed views on VR; software is frustrating; a consortium can make a difference; positive cost efficiencies are possible; being able to push pages is a plus.

Outsourcing is only possible part of the time; real time demonstrations to faculty are very important; commercial companies that had 24/7 librarians have evaporated over the years; FAQs often don't give you enough information; sources that are not electronically available from off

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campus can also lead to frustration.

U of Miami (Florida) gave up chat because it expanded service too much; what happens when an engineering question is given to humanities librarian (and vice versa), especially when the two libraries are at different locations and schools; a positive of VR is that it can work well across time zones

Some libraries do VR at the Reference desk. UCLA found that many questions were already in the electronic FAQ list and are better answered in person rather than electronically.

TOPIC: Scholarly communication issues with faculty/researchers

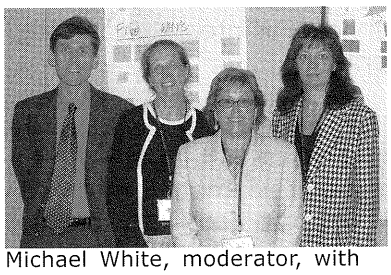
There is a mixed level of knowledge and interest about scholarly communication among faculty and pure researchers; copyrighting infrastructure is important; some faculty will deposit papers into library only if papers are picked up; many faculty are ignoring whatever governmental mandates are in place for archiving; some of the commercial publishers are a bit more receptive to archives; low level of faculty awareness about open access is low; for the success of an institutional repository, need to know what faculty want to deposit for the success of an institutional repository. ❖

Reported by Pam Enrici, University of Minnesota at Duluth, penrici@d.umn.edu
and Susan Fingerman, Johns Hopkins University Applied Physics Laboratory, susan.fingerman@jhuapl.edu

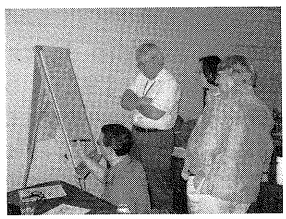
Systems Thinking for Librarians

Sunday, June 5, 2005 8:00 AM – 5:00 PM
C.E. Course Presented by the Engineering Division and Biomedical and Life Sciences Division
Moderated by Michael White, Queens University, Ontario, Canada

Mention "Systems Thinking" to a room full of librarians and most will assume that you're talking about library management systems, computer networks and proxy servers. However, Systems Thinking isn't about information technology or digital libraries. Systems Thinking is about understanding and helping others to understand the complex interconnectedness of actions, decisions and relationships within an organization, and using that knowledge to enhance decision-making and management practices.


Michael White, moderator, with instructors Rebecca Corliss, Sara Tompson and Lorri Zipperer

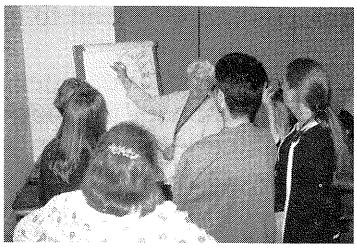
At SLA 2005 in Toronto, seventeen information professionals from Canada, Great Britain, Saudi Arabia and the United States participated in an all-day course on Systems Thinking sponsored by the Engineering Division (ENGD) and Biomedical and Life Sciences Division (DBIO). The course instructors were Rebecca Corliss, senior library relations specialist at Thomson/West in Chicago; Lorri Zipperer, an independent medical information consultant, author and patient safety advocate based in Illinois; and Sara Tompson, science and engineering interdisciplinary team leader in the University of Southern California Library, Los Angeles. Michael White, professional development chair for the Engineering Division, served as moderator.


Students working on a diagramming exercise.

Lorri, Rebecca and Sara have worked as a team on a variety of projects since 1994 and are leaders in applying Systems Thinking techniques to library and information center management. They conceived the concept for this course in the summer of 2003 and first delivered it at the SLA 2004 conference in Nashville, where it received outstanding reviews. Their first co-written article on the topic, "Systems Thinking: a Stepping Stone to Information Professional Integration," appeared in the November/December 2004 issue of *Business Information Alert*. SLA awarded Lorri and her collaborator Jan Sykes an Endowment Grant to develop an online Systems Thinking community based on the course. The project is sponsored by the BioMed Division.

Systems Thinking proliferated in the business and management literature in the 1990s but is most closely associated with the work of MIT professor Peter M. Senge, author of *The Fifth Discipline: the Art and Practice of the Learning Organization*

(1990) and *The Dance of Change: the Challenges to Sustaining Momentum in Learning Organizations* (1999). Lorri, Rebecca and Sara did an outstanding job of conveying the fundamentals of Systems Thinking and linking them to SLA personal competencies. Throughout the day students had many opportunities to interact with each other and the instructors through skits, role playing and group exercises. The morning session focused on basic concepts, communication skills and the characteristics of a Systems Thinking leader. Students engaged in listening, discussion and personal assessment exercises. In the afternoon session, Lorri, Rebecca and Sara covered archetypes, organizational behaviors and two related methods for identifying and exploring problem situations and their underlying causes: diagramming and the Five Whys. Students worked in teams on diagramming exercises and presented their finished projects to the entire class.



Rebecca Corliss helps a group with their "causal loop" diagram.

For more information about Systems Thinking, visit the DBIO Systems Thinking Perspective Project at http://www.sla.org/division/dbio/Systems/. ❖

Reported by Michael White, Queen's University, whitem@post.queensu.ca

Vendor Update: Document Delivery for Science & Technology

Sunday, June 05, 2005, 11:30 AM - 1:00 PM
Presented by: Science and Technology and Engineering Divisions
Moderator: Valerie Hatten, Librarian, Ontario Science Center.

To a full house, Naomi Krym of Canada Institute for Scientific and Technical Information (CISTI), Michele Lahey of the Linda Hall Library and Barry Smith of the British Library (BL) presented on their document delivery services.

Naomi Krymm described the CISTI collection, built since 1924, outlining it's 2005-2010 strategic plan for content, technology and service. Their goal is for seamless and permanent access to content utilizing various linking tools. Technology-wise, they aim at client functionality including self-service, content integration and information management capability. CISTI promises reliable, flexible, less-than-24 hour-turnaround, and 24/7 access service, with no price increase for a 2-hour turnaround guaranteed Urgent Document Delivery Service. They offer tracking using ORDERTRACKER, customizable services including permissions management support, and electronic format delivery of copyright-cleared documents.

Michele Lahey of Linda Hall began with a tour. Recounting the history and mission of the library, she displayed several beautiful slides of its buildings, grounds and library collections. Ms. Lahey then focused on their document delivery service, DocServ, reviewing its ordering, delivery, customer service, cost and payment options, all of which were well presented on her handout.

Barry Smith gave the background of BL whose collections of over 150 million items, if arranged by item, would apparently run the distance from London, England to Frankfurt, Germany. Mr. Smith elaborated on new, 2005 services at the BL including its fee-based Research Services in which teams of experts do the research for you; British Library Direct with free searching of its multi-disciplined catalog; and credit-card purchasing of articles either instantly or within as little as two hours. The new BL Research Pack, incorporates three services: the Document Supply Deposit Account, Research Services and BL Inside (a web service that integrates alerting, searching and ordering).

From responses to audience questions we learned that BL Direct will be URL compliant in a number of weeks and that payment is by credit-card only, though deposit accounts may be considered later. Asked about any advantage to using BL directly as opposed to through CISTI, Mr. Smith indicated the speed of service. Ms Krymm interjected that CISTI has most items ordered in-house, provides one-stop shopping and forwards requests to BL that are already BL-coded, resulting in fast turnaround. ❖

Reported by Theo Jones-Quartey, W.R. Grace
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Computer Science Roundtable

Monday June 6, 2005, 11:30 AM – 1:00 PM
Presented by: PAM and Science and Technology Divisions
Sponsored by: Association for Computing Machinery (ACM)
Moderator: John Dupuis, Steacie Science and Engineering Library, York University

Agenda items included the changing enrollment figures in computer science departments; how to provide information literacy instruction to computer science students; how open access has transformed information seeking behavior; the pros and cons of several e-book packages; and finally a discussion on the pros and cons of having the Springer *Lecture Notes in Computer Science* in both print and online or opting for one or the other format.

The discussions began with some disputing the idea that enrollment in computer science departments was shrinking. The consensus was that there has been a shift in the type of programs being offered and these "multi-disciplinary programs" were actually increasing in enrollment. This led to a discussion on how this growing trend in interdisciplinary programs affects collection development and budget issues.

The next topic of discussion was methods to provide library instruction to Computer Science students. While computer science students are technically savvy they still need instruction in research methods. A short discussion ensued on what time of academic year to provide instruction and how to collaborate with faculty to meet the instructional needs of students.

When the discussion turned to the topic of open access and Google there were several interesting points raised. ACM and IEEE are allowing total spider crawling from Google. There was also discussion on institutional repositories and the indexing of gray literature.

An IEEE representative brought to our attention that the *Xplore* interface has been revised with a guest login allowing one free search.

The roundtable ended with the discussion on *Lecture Notes in Computer Science*. There was a mixed response as to whether this material should be kept both in print and online, print only or online only. Some libraries move the print to storage once they have the online available. Springer has compiled a spreadsheet of all *Lecture Notes* series that are available online that will be updated quarterly. The conclusion was made that there needs to be a better alerting system for new online series. ❖

Reported by Diane Foster, Florida State University, dkf8166@mailer.fsu.edu

Standards Roundtable

Monday, June 6, 2005, 11:30 AM – 1:00 PM
Presented by: Engineering and Science and Technology Divisions
Sponsored by: American Society of Civil Engineers, American Society of Mechanical Engineers, ASTM International, and Information Handling Services
Moderator: Randy Reichardt, Science & Technology Library, University of Alberta

The Standards Roundtable captured a standing room only crowd. Moderator Randy Reichardt welcomed twelve speakers representing the U.S. Government, Canadian industry, a UN agency, standards developers and standards vendors. A vigorous question and answer period followed the presentations. Selected highlights from each speaker are presented here.

A representative from the National Institute of Standards and Technology (NIST) Research Library discussed the standards and standard reference data available for free from NIST. Their products and services can be found at http://www.nist.gov/public_affairs/products.htm.

The Canadian Standards Association (CSA) discussed their work with academic institutions to provide students access to standards and codes. In Fall 2005, 3000 documents will be available from their online subscription service. www.csa.ca

The Standards Council of Canada (SCC) described itself as a Canadian equivalent of ANSI, with a mission to encourage standards use in Canada. The Council also accredits standards labs, and approves voluntary Canadian standards. www.scc.ca

The International Atomic Energy Agency (IAEA) develops nuclear safety standards, which may

be downloaded from their site or purchased from standards vendors. It can take three or more years to produce an IAEA standard, as all member nations must agree. Their standards cover safety issues, nuclear plants, etc. and are free on the IAEA site at www.iaea.org or can be purchased in hard copy.

The American Society of Civil Engineers (ASCE) noted that its ACSE 7 standard, *Minimum Design Loads for Buildings and Other Structures*, has recently been updated. Since different ASME Institutes create the standards, future standards will indicate the Institute involved in their development. www.asce.org

The American Society of Mechanical Engineers (ASME) would like to hear from its library customers as to whether they would prefer to get ASME standards directly from ASME or through a vendor, and why. Internal discussions are underway to determine if ASME will provide IP-protected access to their codes. www.asme.org

The American National Standards Institute (ANSI) is working to offer redlined (historical) standards. Their online store has 70,000 U.S. and international standards. They are updating their standards searching and ordering site, www.nssn.org, and working with the U.S. Department of Homeland Security.

ASTM International is expanding to cover standards in the areas of homeland security and biotechnology. They will be adding e-book content by the end of 2005, as well as two new digital libraries. They have several subscription models. www.astm.org

IEEE will add draft standards to the *IEEE/IEE Electronic Library* and also integrate "smart objects", such as mathematical equations, into their publications. In 2006 they are moving all e-products to the *IEEE/IEE Electronic Library* platform. Superceded standards back to 1998 are included in the database. www.ieee.org

The Techstreet standards vendor was purchased by Thomson Scientific and has created individual industry stores. (www.techstreet.org) ILI Infodesk has a new website, introduced the Logicom military related database, and offers a 40% discount to academic libraries. (http://www.ili-info.com/) IHS will soon offer historical SAE standards (www.ihs.com.) Topics raised during the question and answer period covered digital rights management, document management software, and the availability of online taxonomies. ❖

(Editor's Note: This is a "blended" version of the reports received on this session. Randy Reichardt's complete version can be found in the SLA Western Canada Web Journal, *Wired West* v8 n4 at http://www.sla.org/chapter/cwcn/wwest/wwest.shtml)

Reported by Keith Martin, NIST, keith.martin@nist.gov and Randy Reichardt, University of Alberta, randy.reichardt@ualberta.ca

Who Owns Scientific Knowledge and Who Deserves To: Are Patents an Incentive for Innovation or an Obstacle to Further Development?

Monday, June 6, 2005, 11:30 AM - 1:00 PM
Presented by: Science & Technology and Biomedical and Life Sciences Divisions
Sponsored by: IEEE, Dialog, Portland Press
Moderator: Tom Turner, U.S. Patent and Trademark Office

A panel of four internationally recognized experts examined the key issues and the wide-ranging consequences of scientific knowledge ownership. This session was very well attended, with standing room only. The well-rounded discussion of broad topics more than made up for the space inadequacy.

Members of the panel were:

- Dr. Anthony So, M.D., M.P.A. Director, Program on Global Health & Technology Access, Duke University, Terry Sanford Institute of Public Policy.
- Dr. Miriam Shuchman, M.D. Core Faculty, Center for Clinical Ethics and Humanities in Health Care, State University of New York at Buffalo, School of Medicine
- Dr. Richard Gold, Director, Center for Intellectual Property Policy, McGill University
- Mr. Richard Elliott, Director, Legal Policy & Research, Canadian HIV/AIDS Legal Network, Toronto Office

Dr. So gave a definition of patents, and examined the interests of various constituencies with

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regards to the use of patents in medical research and diagnosis. For example, scientists are interested in promoting public domain access to genomics research. Human genome information (deoxyribonucleic acid sequence data) was released freely under the "Bermuda rules" and made available to scientists around the world. Researchers in the biotechnology industry have adopted "working solutions" to circumvent the limitations of intellectual property rights (Walsh, 2003).

Patients' interests are at risk due to the debate between the pharmaceutical industry and the manufacturers of low-cost HIV/AIDS drugs (generic drugs). Patents are the main reason why the patients in the underdeveloped countries do not have access to these drugs. Also, the debate over human embryonic stem cell research has the potential to prevent patients' access to effective medical treatments and the development of vaccines. A survey of US laboratories' adoption and use of genetic testing for hereditary haemochromatosis indicated that 30% of them have discontinued offering it or not developing genetic testing because of patents (Merz, 2002).

Dr. So continued with an examination of all aspects of a drug's life cycle from R&D through to launch, patent expiration, and introduction of generic counterparts. He argued that it is possible to ensure that the patent system fulfills its ultimate goal of maximizing social benefits and advancing innovation by loosening intellectual property rights (IPRs) to facilitate the approval and entry into the marketplace of generic drugs. He offered some enabling strategies such as: 1) reagent repositories of tissue, cell lines, and other biological materials; 2) "protected commons" approaches, such as "Bermuda Rules" ("Protected Commons" initiatives imply shareable goods as goods that are protected within a community of practice); 3) open access repositories to scientific publications (an issue which is close to our hearts); and 4) "humanitarian license" to protect in advance the possibility of sharing the patent with third parties for the benefit of people in need, and the developing countries.

Dr. Miriam Shuchman addressed the plight of scientists and medical researchers as their intellectual property rights have been violated. She presented several case studies of intimidation, legal threats, dismissal, and outright theft that may ultimately hinder our public interests in promoting and preserving health, civil liberties and individual freedoms. Random House recently published Dr. Miriam Shuchman's book, *The Drug Trial: Nancy Olivieri and the Science Scandal that Rocked the Hospital for Sick Children.*

Dr. Richard E. Gold spoke about how governments can attempt the arduous task of balancing private and public interests. Intellectual property rights are protected globally by the World Trade Organisation's (WTO) Trade Related Aspects of Intellectual Property Rights, Agreement (TRIPS). There is disagreement regarding the perceived unequal application of TRIPS upon poor countries and communities. (For more information on this go to http://www.avert.org/generic.htm). Patents have raised the cost of drugs, putting them out of the reach of the majority of the world's population. Dr. Gold proposed that goverments need to identify short to medium goals and think "outside the box".

Richard Elliot argued that global access to medicines challenges intellectual property rights. The World Health Organization (WHO) Constitution attests that health and access to drugs are fundamental rights of every human being.

References

Merz, Jon F. Et. Al. 2002. "Diagnostic Testing Fails the Test." Nature 415 (6872): 577 – 579.

Walsh John P., Ashish Arora, Wesley M. Cohen. 2003. "Working Through the Patent Problem." Science, 299 (5609): 1021.❖

Reported by Claudia Lascar, City College, City University of New York (CUNY)
clascar@ccny.cuny.edu

Cooperating to Survive and Flourish in the Modern Sci-Tech Library

Monday, June 6, 2005, 3:30 PM – 5:00 PM
Presented by: Science and Technology Division
Sponsored by: Elsevier
Moderator: Roger Beckman, Indiana University

The panel included Jo Ann Calzonetti, University of Akron; Christopher Laursen, Univeristy of Akron/Rubber division, ACS; Cathy Parker, University of Akron/Advanced Elastomer Systems; and Widharto, Seamo Biotrope.

These speakers were challenged by their management to innovate and collaborate on solutions addressing budget pressures, revenue generation, staff pressures, and knowledge sharing.

Practices that were discussed included: increasing visibility of the collection and services provided; serving as back-ups for other staff; sharing searcher and subject expertise; providing cost effective training; and becoming a "library for life" for corporate employees. Industry significant papers and knowledge were made available to the public within a new purchasing framework that included royalties and revenue back to the library. This change alone resulted in a revenue increase of 10% over the last 2 years for the library.

Key to successful partnering included: champions on all sides; sufficient, dedicated staff; tailoring services to client's changing needs; flexibility and innovation; extending services beyond the traditional-bounds; using technology to bridge geographic gaps. The single most significant benefit was that project staff gained topic expertise.

For more information:
http://www.uakron.edu/libraries/
http://www.rubber.org/
http://www.biotrope.org❖

Reported by Robin Jourdan, Ford Motor Co., Information Technology, rjourdan@ford.com

Technology Petting Zoo: PDA's and Beyond

Monday, June 6, 2005 3:30 – 5:00 PM
Presented by: Science and Technology, Engineering, Information Technology, Biomedical and Life Sciences, and PAM Divisions
Sponsored by: IEEE, Factiva, Association for Computing Machinery (ACM)
Moderator: James Monasco, University of Louisville

Dexit? Treos? iPAQ?* Are these names of far-away galaxies from science fiction novels? Not quite. These are just a few of the new technologies to emerge in the marketplace and will likely make their way into your information center in the near future.

With so many new toys and gadgets hitting the store shelves, the choices of technology can be overwhelming. This session, moderated by James Manasco and presented by Hope Tillman of Babson College, focused on several new gadgets that will lead to or have already led to dramatic changes in how information is handled.

A few of the technologies covered during this session included personal digital assistants, ThinkPad Tablets, Jump/Flash/Pen drives, iPods, and digital cameras. An example of one technology already in place is the use of Blackberry to Blackberry communication for library disaster preparedness so that information can be passed along quickly if power outages or other disasters on campus occur.

Another emerging technology which will impact libraries are pocket scanners, which come in the format of super pen mobile scanners whereby students can highlight to cite materials from books. In the marketplace, there are some new keyboards, mice, and USB ports that require fingerprint recognition, which could easily be incorporated into libraries or information centers as a security measure. Other developing technologies that are at least in the prototype stage include e-ink and e-paper, which allow the user to write with a utensil that records the pen stroke on a chip in the pen. The written information is then uploaded, via a USB port, into a Word document. Keyboards with wall displays may become valuable for instruction classes as well.

As information professionals, it is imperative that we stay aware of new trends and gadgets in

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order to deliver data to our users in the most appropriate format.

Further technology details can be seen from the presentation at: http://www.hopetillman.com/sla/zoo.pdf Links to the presentation will be posted shortly at the SLA IT Division website as well.

* Dexit= personal cash (http://www.dexit.com/Dexit.html), Treo= a palm pilot/phone (http://www.handspring.com/), iPAQ= palm with enough storage space to hold a book (http://welcome.hp.com/country/us/en/prodserv/handheld.html) ❖

Reported by Meris Mandernach, Loyola University Chicago, mmander@luc.edu

The Science of Hockey

Tuesday, June 7, 2005 11:30 AM - 1:00 PM
Presented by: Science & Technology Division
Sponsored by: Chemical Abstracts Service (CAS)
Moderator: Catherine Lavallée-Welch, University of South Florida-Lakeland

Hockey is a sport that unites Canada. As a Canadian, a hockey player, and a physicist, speaker Dr. Haché was curious about the physics of hockey. He found that hockey involves more aspects of science than any other sport. This includes such areas as the physics of ice (why ice is slippery among other things), the biomechanics of skating and of shooting, collision theory, and even psychology.

His book, *The Physics of Hockey*, published by John Hopkins University Press, was inspired by a conversation at a conference in Minneapolis. The publisher encouraged Dr. Haché to keep the book at the popular level rather than at a scientific monograph.

Some of the points Dr. Haché covered follow. Ice is slippery because down to temperatures as low as -250 degrees Celsius, the ice surface contains a thin semi-wet layer so that the co-efficient of friction is low. Without this layer, the friction of ice would be as large as other materials, such as concrete and asphalt.

To create and maintain a good ice surface, one needs to create the proper environment by using the right water quality, maintaining the proper ice temperature (the ideal temperatures vary from hockey to ice skating to curling) and finally mitigating the ice damage. Dr. Haché explained how a Zamboni works.

The energy involved with hockey is greater than other sports. A puck that has been slap shot can produce 240 joules of energy as opposed to say, a golf ball with 110 joules. One of the reasons is that when a player hits a slap shot, he/she uses more muscles than any other sport.

Hockey players have blasted slapshots faster than 100 mph by using a three-stage process. First, a player rotates his torso and stick in an accelerated motion toward the puck. Next, the stick blade touches the ice and the puck as the stick bends for a fraction of a second, storing energy like a loaded spring. The puck accelerates off and the stick returns to its original shape as the player completes the swing. The puck rockets toward the goal as the player converts angular momentum (stick and torso swing) to linear momentum.

This report has covered only a small number of points that Dr. Haché made. For more information, check out his book, *The Physics of Hockey,* John Hopkins University Press, 2002.❖

Reported by Pam Enrici, University of Minnesota, penrici@d.umn.edu

Finding Properties Information

Tuesday, June 7, 2005 11:30 AM – 1:00 PM
Presented by: Chemistry, Engineering and Materials Research & Manufacturing Divisions
Sponsored by: Knovel Corp., Elsevier Engineering Information

Speakers were Linda Shackle of Arizona State University and A. Ben Wagner of SUNY- Buffalo.

It happens. As a science or engineering librarian, inevitably there will come a day when you are faced with a question that sounds like "I need to find the thingamajig for 2,3-dimethyl chicken wire". How can you possibly find such gibberish?

Successful property searching begins with background work. You'll need to find out about the substance, the property, and have some knowledge of what resources are appropriate.

For a substance, determine:

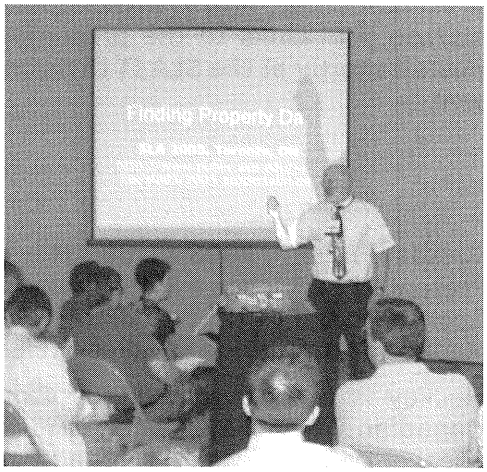
- What's it called? Substances have names (trade names, common or generic names, scientific names), registry names (in particular, the CAS registry number) and molecular formulas (ordered by Hill, alphabetical, common inorganic or line). Not every resource will include all variations, so be prepared to search under any of these items.
- What's its category? Is it a material, pharmaceutical, natural product, biomolecule, or "plain" chemical? Knowing this will help determine which resource to consult.
- What's its physical state? If it's a chemical, is it a solid, liquid or gas? If it's a pharmaceutical, is it oral, injectible, inhalant, or suppository? Knowing this will help determine which resource to consult and/or which format of the substance is being used.
- What's its utility? Is it an adhesive, a building material, a coating, a drug, a food additive, etc.? There are many resources devoted to substances for a specific utility.

To find substance information, first, **consult your customer**. Also use:

- Free web resources (ex. *ChemFinder*)
- Bibliographic Indexing and Abstracting Services (ex. *Chemical Abstracts*)
- Handbooks and Data Compilations (ex. *CRC Handbook of Chemistry and Physics*)
- Subject Encyclopedias (ex. *Kirk-Othmer Encyclopedia of Chemical Technology*)
- Treatises (ex. *Chemistry of the Elements*)

For the property, find:

- A definition you can understand



Ben Wagner makes a point at "Finding Properties Information"

- Synonyms. While fewer synonyms exist for properties than for substances, symbols or units of measurements as well as names must also be considered. Some resources, particularly those in tabular or paragraph format may only list the symbol rather than the name. For example, see entries in the *Merck Index*.
- The category. Is it electrical, mechanical, optical, thermal, etc.? This will help determine the appropriate resource.
- Single data point vs. table/curve. Sometimes only 1 data item is needed; other times what's needed is how the property reacts to a specific variable (frequently, temperature or pressure).
- Is there another property that will allow calculation of the desired property?

To find property information, first, **consult your customer**. Use Google to get the definition (ex. "Definition: elasticity" or "Define: elasticity") and also consult scientific dictionaries.

Property resources consist of free web pages, data compilations, bibliographic indexing and abstracting services, and full text.

Free web pages are easy to use, contain many different types of data, and in some cases engines will search within full text of documents. However, not every publisher has their full text online nor can Internet search engines search within databases such as *ChemFinder*. The searcher must be familiar with variant terminology

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and construct searches to account for synonyms. The internet is a good place to find a definition of a property, access a known data compilation, especially the free ones, and a quick means of finding one or two pieces of data within journal articles.

Handbooks and other forms of data compilations bring together a lot of data in one place. There are many types of compilations, some focusing on specific properties or substances. Some printed data compilations, particularly older ones, may not have an index and can have unorthodox arrangement. They are best used for finding many properties for one substance or one property for many substances. Don't spend a lot of time bouncing from one data compilation to another. Instead, use resources such as *Knovel*, to search many resources with one search, the free web property indexes (*Thermodex*, etc.), the comprehensive collections of *Beilstein*'s, *Gmelin*'s and *Landolt-Boernstein*, and the bibliographic indexing and abstracting services, such as *Chemical Abstracts* and *Compendex*.

The easiest search is for a common property of a common substance. Usually this information can be found during the preliminary search for more information about the substance. Standard resources such as *ChemFinder*, *CRC Handbook of Chemistry and Physics*, *Merck Index,* NIST, etc. are good starting points. Don't forget Material Safety Data Sheets (MSDS), tech sheets or product literature; manufacturers often provide a number of carefully reviewed properties.

The search for an uncommon property of a common substance or for the common property of an uncommon substance must include the data compilations. Use the free property data indexes such as *Thermodex*, and use your catalog to find handbooks, searching both for the specific substance and property, also searching for broader categories of both the property and substance. If those fail, then search the primary literature through such resources as Google Scholar, *Chemical Abstracts* and *Knovel*.

But what if you have the unfortunate combination of an uncommon property and an uncommon substance? First, try to pass it off on an unsuspecting colleague! If you can't do that, then do an extensive primary literature search, starting with high-powered subscription data services such as *SciFinder*, *Beilstein/Gmelin*, *Landolt-Boernstein* and DIPPR.

In summary, the successful property search can take many routes but it starts with first researching the substance and the property and then using the most appropriate tools.

Program material in PDF is available at:

- Slides (2 per page) http://www.sla.org/division/dche/2005/property-ppt2.pdf
- Slides (3 per page) http://www.sla.org/division/dche/2005/property-ppt.pdf
- Handout http://www.sla.org/division/dche/2005/property.pdf❖

Reported by Linda Shackle of Arizona State University, linda.shackle@asu.edu
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Open Access: Evaluating Quality and Participation

Tuesday, June 7, 2005, 1:30 – 3:00 p.m.
Presented by: Biomedical and Life Sciences, Chemistry, Engineering, Physics-Astronomy-Mathematics and Science and Technology Divisions
Sponsored by: Thomson Scientific, Springer Science and Business Media, Cambridge Scientific Abstracts
Moderator: Lynn Berard, Head, Science Libraries, Carnegie Mellon University.

Three panelists spoke at the well-attended session.

Marie McVeigh, Product Development Manager at Thomson Scientific, discussed citation analysis of open access (OA) journals. The number of journals that are at least somewhat OA is increasing over time and varies by field. In examining 83 medical journals, OA journals tended to be cited more in the first year of publication than traditional journals. OA journals' impact factors ranged from high to low.

George Kendall, product, marketing, and licensing manager for the National Academy of Science, spoke on the Proceedings of the National Academy of Science (PNAS) OA business model. At six months after publication, all content

becomes freely available. PNAS began offering authors the choice to make their articles OA for a $1000 charge in May 2004. On average less than 20% of the articles are published as OA. OA articles are downloaded 50% more often in the first month after publication. PNAS is unsure of the effect that OA availability will have on subscriptions, a key revenue source.

Peter Suber, OA Project director for Public Knowledge and philosophy professor at Earlham College, addressed faculty roles in OA and librarian roles in promoting it. Although librarians are more familiar with the issues, faculty members, as authors, have more control over the situation. Faculty may be slow to respond because of ignorance and a perceived lack of time. In addition to educating faculty about the existence of OA journals and archives, librarians can make it easier for faculty to contribute to digital archives. Discussing the ability to retain key rights is essential. For real change, administrators and tenure and promotion committees will have to get involved, too.

The McVeigh and Suber presentations are available at the following URL: http://www.sla.org/content/Events/confpresentations/05confpresent.cfm❖

Reported by Meghan Lafferty, University of Minnesota, mlaffert@umn.edu

Green Chemistry

Wednesday, June 8, 2005 11:30am-1:00pm
Presented by: Chemistry Division and the Environment and Resource Management Division
Sponsored by: Royal Society of Chemistry and Elsevier
Moderator: Judith Rubis, Librarian, CIIT Centers for Health Research

Speakers:
Prof. Chao-Jun Li (McGill University)
Adrian Kybett (Royal Society of Chemistry)

Dr. Li lead off his presentation with the observation that while chemistry provides many benefits to society, including food, fibers, drugs and electronic materials, public perception more often links the chemical industry with disasters (e.g. Bhopal), pollution and pesticides.

Traditionally, there has been a perceived tradeoff between environmental concerns and economic ones. The U.S. EPA estimates that about 7 billion lbs. per year of toxic waste is produced or about 7 tons per minute. With the development of environmental awareness after the publication of Rachel Carson's "Silent Spring", there has been a shift from an ethic of "make things work" to "make things sustainable and work cleanly, responsibly."

Dr. Li then presented the definition and twelve principles of Green Chemistry as set forth in Paul Anastas and John Warner's 1998 "Green chemistry: theory and practice" (See, for example, http://academic.scranton.edu/faculty/CANNM1/intro.html for a list of the twelve principles.) He gave some examples of the differences between traditional organic syntheses, and the green synthesis emphasis on minimizing the number of steps and the use of organic solvents.

Mr. Kybett began his presentation with a definition of Green Chemistry as "getting chemistry right the first time". He described the creation and growth of the RSC journal "Green Chemistry" and showed a breakdown of the journal's submissions by region of origin and topic. He noted that it is very rare for any process to satisfy all twelve principles at once.

Ms. Rubis presented a bibliography, "An Introduction to Green Chemistry: Recommended Resources", including books, book chapters, journals and journal articles, and key web sites. The bibliography as well as the Li and Kybett presentations are available at the Chemistry Division website: http://www.sla.org/division/dche/2005/green.pdf❖

Reported by Chuck Huber, Chemical Sciences Librarian, Davidson Library, University of California Santa Barbara, huber@library.ucsb.edu

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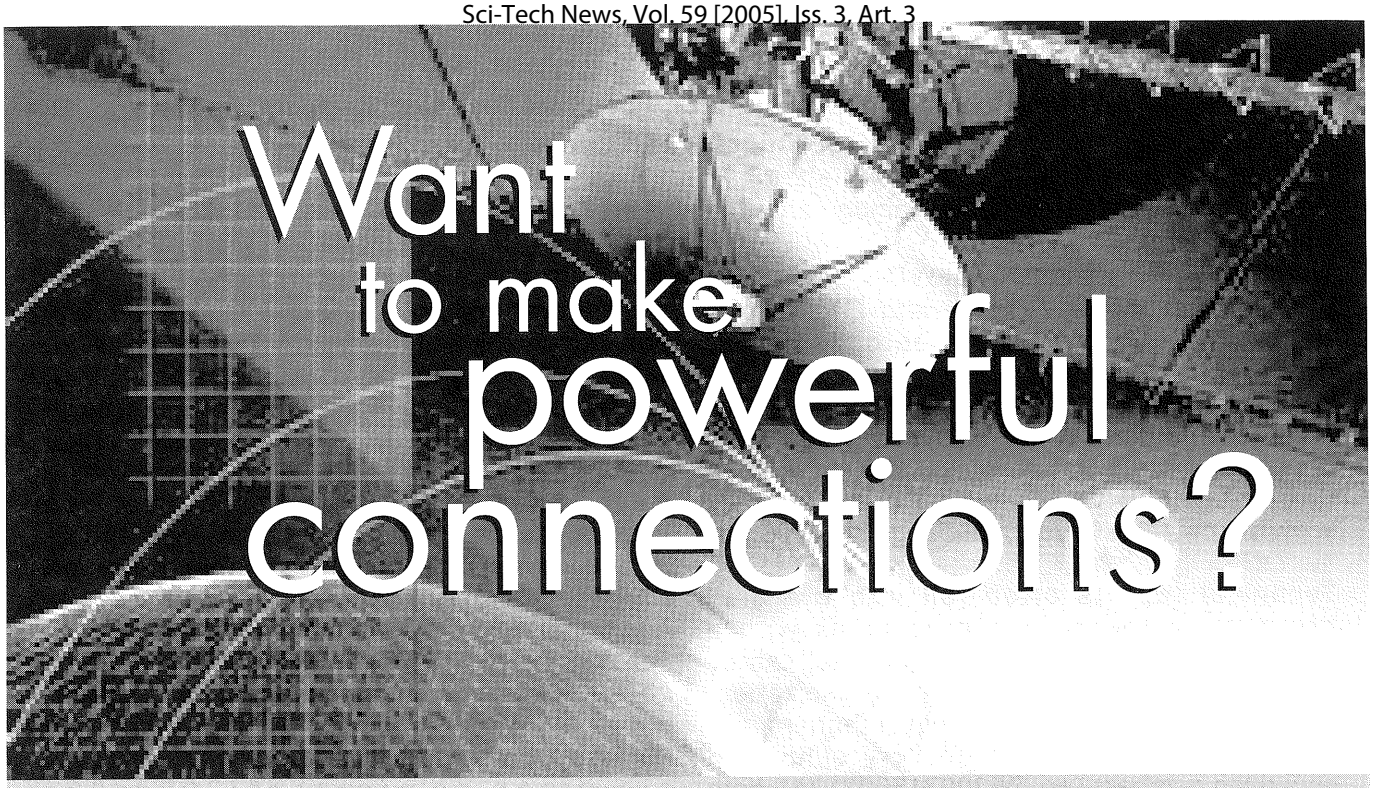

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Science and Engineering Resources 101: Focus on Technical Reports, Patents, Standards, and Codes

Wednesday, June 8, 2005, 11:30 AM – 1:00 PM
Presented by: Science and Technology and Engineering Divisions
Sponsored by: IEEE, Dialog
Moderator: Mary Steiner, University of Pennsylvania

The second annual *Science and Engineering Resources 101* at SLA Toronto 2005 was moderated by Mary Steiner and ably co-presented by Mary Frances Lembo and James Manasco, also known as the "Dynamic Duo". The powerpoint presentation is available on the SLA Engineering Division website at: http://www.sla.org/division/deng/SciEng101_2005.pdf

Technical reports often fall into the gray literature category and present us with a confusing array of report numbers that can be inconsistent and vary within an organization. They can be very elusive. Report numbers (eg. EPA-542-R-04-015) can be very similar to accession numbers (eg. DE200315003124), both of which are useful in tracking down documents. The six free databases discussed all cover various topics, and it is worth checking in all of them!

For example, the Department of Energy (DOE) database *Information Bridge* contains much more than just energy material. The relatively new *science.gov* portal is good but the tip was, "don't trust the coverage to be complete, check the smaller databases as well." It is advisable, when using *science.gov* alerts, to make them very narrow searches or to be selective with which agencies to search. Additional resources mentioned include: *DTIC* (Defense Technical Information Center- http://www.dtic.mil/dtic/), very useful for government copyrighted information; and *CISTI* (Canada Institute for Scientific and Technical Information- http://cat.cisti.nrc.ca/), for hard-to-find Canadian and Commonwealth reports.

Patents, a tricky research area, generated a lot of discussion. Inventors need to check patents, open literature, and technical reports for any previous mention of the topic or item in question. Older patents may be missing graphics, and earlier patents are accessible only through classification numbers (US Patent Office Manual of Classification). Some public libraries provide patent search training. When an inventor gets serious, it's time to hire a patent lawyer and/or do a commercial search, for example through *DERWENT* (http://thomsonderwent.com/). Additional resources mentioned include: *Patent Fetcher* http://bitpass.patentfetcher.com/; *Patent Information Users Group* (http://www.piug.org/); and *Guide to Downloading Patent Copies on the Internet*: http://nip.blogs.com/patent/2004/09/guide_to_downlo.html.

The main message regarding standards and codes was, "keep your old indexes, standards and codes!" Engineers design to the codes at the time of construction so they need to refer back when upgrading or changing infrastructure. Major events and disasters trigger changes in standards and codes. Current legislation may not be consistent with the latest code, and some codes rely on voluntary compliance. Additional resources mentioned include: *Canadian Standards Association* (http://www.csa.ca/); the *Globalspec* search engine (www.Globalspec.com); and free alerts from *Techstreet* (www.Techstreet.com). ❖

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Self-Archiving, Information Repositories, and Knowledge Management: What Can Corporate and Academic Libraries Learn from Each Other?

Wednesday, June 8, 2005, 1:30 PM – 3:00 PM
Presented by: Aerospace Section of the Engineering Division and Science and Technology Division
Moderator: Erika Steffer, Russell Reynolds Associates

The session on self-archiving brought together professionals from corporate, academic and government settings to discuss strategies for archiving scholarly work. Moderator Erika Steffer introduced four panelists: Aimee Ellis of Yukon Energy, Mines and Resources Library; Caroline Lonsdale of the Ontario Ministry of Health and Long-Term Care; Marcia Rodney of Ball Aerospace; and Peter Clinton of the University of Toronto.

Ms. Rodney spoke about the experience of creating repositories of publicly available, unclassified papers written by Ball researchers as well as videos of weekly staff talks. She illustrated how the project preserves corporate memory as workers retire from a multigenerational company.

Ms. Ellis described the challenges of creating a repository for a new department in a young government. She stressed the importance of capturing work done by department employees and by researchers who come north to research in the summer but then go home to complete their work. She also noted that the repository serves both employees of the department and citizens' requests for information under territory law.

Mr. Clinton spoke about the University of Toronto's experience implementing the open source software system DSpace to archive the work of the faculty. He also described how he publicized the benefits of archiving to faculty who want greater exposure for and access to their work.

Finally, Ms. Lonsdale described multiple projects within her ministry which were set up to address the need for coworkers to share information, and to provide doctors with the locally based evidence they value in addition to journal literature. During questions from the moderator and the floor, the panelists discussed the importance of central archives in promoting lasting access to information, methods for letting researchers archive their own material, and ways to make archiving part of institutional policy or encourage voluntary contributions. ❖

Reported by Sarah K. Oelker. Drew University Library, soelker@drew.edu