

# SLA Chemistry Division E-Newsletter

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July 2007

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## MESSAGE FROM THE CHAIR

**BEN WAGNER**

Denver was fun, wasn't it? There was great weather, great food, great networking, and great programming. I will resist the temptation to give an extended report of the conference for fear of leaving someone or something out. It was gratifying to see everything go off with nary a hitch. The planning was, for Marie Fraties-Block and me, 18 months in the fashioning. My thanks to all the volunteers who lined up sponsors, made travel plans, organized one of the best open houses ever, moderated, and presented. We are in the process of getting permission to mount the presentations at our web site: <http://units.sla.org/division/dche/2007/schedule.htm>.

Congratulations are due our newly elected 2008 chair-elect, Luray Minkiewicz, and our 2008-09 and current secretary, Margarete Bower. Margarete is in the process of finalizing the minutes to our June board meeting and annual membership meeting. As per usual, these will be posted to web as soon as they are reviewed.

So what will our division be up to now that Denver is over?

- We are developing a central awards committee to review the criteria for and oversee the Sparks Award, the ACS Publications New Publications Award, and the newly authorized occasional DCHE Distinguished Service Award.
- Jim Martin has agreed to lead the International Members Initiative Task Force to brainstorm about ways to attract more international members to our division. This dovetails perfectly with SLA's goals to increase their international presence significantly.
- Our Materials Research & Manufacturing (MRM) section has developed a strategic plan. We need to play catch up and revise our divisional strategic plan by early next year. By the

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The Editor welcomes readers' contributions. Items wanted include: Articles of interest to the community of chemistry information specialists, book reviews for new reference materials, citations for new journals, accomplishments & accolades for the Members' Corner and website recommendations for "Beyond the Chemistry Web..." If you have something you would like to contribute, please contact the Editor or send it via e-mail as a text file or Word document.

Copy deadline for October issue:

*October 5, 2007*

way, please note above the correct name of our section. There are several "creative" variants out there, sometimes even in official SLA material and directories.

- We are planning a board meeting at the January 2008 Leadership Summit in Louisville, KY. This will help keep our division moving forward. Please consider attending this summit if you are on the board, have any interest in leadership positions, or simply want to see how SLA operates. The summit is open to all members.
- I hope to finally have time to contact with members and potential members. We are a membership organization so this is fundamental. I know times are changing and tough for libraries, but that is all the more reason to maintain a strong division and convince people of the value of the services and networking provided by our division.

Again, many thanks to all that contributed to making Denver a great success. Feel free to pick up the phone or send me an e-mail at any time. ❖

## FROM THE EDITOR'S DESKTOP

This issue is filled with content from the 2007 Annual Meeting in Denver. You will find pictures, reports on sessions, and an essay from a first-time attendee on his impressions. We're already starting to look ahead to Seattle in 2008 as you will see in Sue Cardinal's Chair-Elect column. There is also a piece on new books, CDROMs and other resources on composites from materials-related associations. As always, your feedback and suggestions are welcome! ❖

Meghan



## A NOTE FROM THE CHAIR-ELECT

SUE CARDINAL

Greetings from your Chair Elect,

Denver was a really superb conference in all respects. Ben Wagner and Marie Fraties-Block did a great job! I renewed old acquaintances and met many new people. I was excited to hear Al Gore speak. Scott Adams was hilarious. We ate at several top-notch restaurants and walked many miles between conference center, hotels and receptions. The open house was set at the historic Byers-Evans House. Ted Baldwin and Judith Currano entertained us with their period costumes and songs. If you are wondering about the programs, Meghan Lafferty did an excellent job of recruiting reporters to summarize them for us.

Not surprisingly, the major focus of my conference experience was planning for 2008! Rachel, Nora and I met with other Seattle Planners and have shared our ideas and plans. Now we are actively collaborating and developing the following programs:

- Hot Science Technology Petting Zoo
- Collaborative Communities in Physical and Virtual Environments Poster Session in conjunction with All Sciences Reception
- E-notebooks
- Nanomaterials / Nanotechnology
- Science of Coffee
- Alternative fuels
- Corporate Round Table
- Vendor Round Table on materials resources
- Chemistry Academic Round table: Exploring the Generational Element
- Speed Networking Reception or Happy Hour
- Chemistry No-Host Dinner
- Chemistry Open House
- Newcomers lunch
- MRM section breakfast or dine-around

We need your help in making these programs successful. We need speakers, poster presenters, moderators, reporters, social event planners and Seattle experts!

Also, if you are feeling the urge to get involved with the Chemistry Division in a major way, we are looking for a new web manager and an assistant newsletter editor. Additionally a new Awards Committee is forming and needs members.

Let us know what you are interested in and we will find a spot for you.

Regards,

Sue Cardinal, DCHE Chair Elect, [scardinal@library.rochester.edu](mailto:scardinal@library.rochester.edu)

Rachel Ellison, DCHE Program Planner 2008, [Rachel.Ellison@ecolab.com](mailto:Rachel.Ellison@ecolab.com)

Nora K. Stoecker, MRM Section Program Planner 2008, [nstoecker@nksinfo.com](mailto:nstoecker@nksinfo.com) ❖



## BEYOND THE CHEMISTRY WEB...

BOB BUCHANAN

Feel free to send recommendations to me at [buchara@auburn.edu](mailto:buchara@auburn.edu).

### FUN

- Science with an attitude – anyone who has ever worked in a lab ought to be amused by the 74 badges of the **Order of the Science Scouts of Exemplary Repute and Above Average Physique**. Warning: some of the humor is a bit off-color.  
<http://www.scq.ubc.ca/sciencescouts>
- Want to listen to an audio version of an out-of-copyright book? Search **LibriVox**. The subtitle says it all: “acoustical liberation of books in the public domain.”  
<http://librivox.org>

### GENERAL

- Two wikis combine the open participation of [www.wikipedia.org](http://www.wikipedia.org) with some oversight. **Scholarpedia** offers signed articles that are curated by (gasp) a subject expert. **Citizendium** uses a similar approach with editors.  
<http://www.scholarpedia.org>  
<http://www.citizendium.org>
- View a growing collection of free video podcasts from **TED: Ideas worth spreading**. The site covers a range of perspectives within the broad topics of technology, entertainment, and design.  
<http://www.ted.com/index.php>

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## NEW MEMBERS

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## NEWS FROM THE MRM SECTION CHAIR

BETSY ALDRIDGE

### Business Meeting Highlights

The venue for the Materials Research and Manufacturing (MRM) Section Business meeting at the Denver conference lived up to its name, "The Delectable Egg." We had a very delicious and productive meeting.

The meeting agenda is at <http://units.sla.org/division/dche/mrm/2007/agenda.pdf>. Find the complete Chair's report on the MRM website at <http://units.sla.org/division/dche/mrm/2007/chair.pdf> and at the DCHE website at <http://units.sla.org/division/dche/2007/reports.htm>. It includes some last-minute updates of statistics. For example, we had 36 signed up for the IHS tour by the time of the meeting. Nora's full report is at <http://units.sla.org/division/dche/mrm/2007/planner.pdf>.

Margarete Bower, DCHE Secretary, took formal minutes. They will be posted soon. Thanks Margarete!

We were happy to report a 40% section membership increase so far this year. See a profile of one of our newer members, Richard Behling, on page 12. Welcome, Richard!

We discussed, edited, and approved the updated Strategic Plan at this meeting and the DCHE Board meeting. Special thanks to Earl Mounts for compiling and presenting the plan and, especially, for a speedy updated version in time for the DCHE membership/business meeting! We will post the updated Strategic Plan soon.

Nora's appointment as MRM Chair-elect was unanimously approved; it was also approved at the DCHE Board meeting. Catherine DiPalma was appointed 2009 MRM Program Planner; she was named by the Nominating/Search committee, Marty Rhine and Linda Senkus. There were no objections to her appointment at the MRM meeting. See a profile of Cathy on page 12. Congratulations to both Nora and Cathy!

I reported that Carol Tower had compiled "What's New in Composites from Associations" (on page 13 and at <http://units.sla.org/division/dche/mrm/2007/composites.pdf>). Thanks Carol! Let me know if you would like to provide similar "What's New" listings for other hot materials and/or manufacturing topics for our members.

Lee Pedersen volunteered to work on the MRM website; she thinks she will begin later this summer. Thanks, Lee!

### Meeting attendees:

- Margarete Bower, DCHE Secretary
- Nora Stoecker, MRM 2008 Program Planner & Chair-elect
- Linda Senkus, MRM Nominations/Search
- Earl Mounts, MRM Strategic Planning Betsy Aldridge, 2007 Chair, MRM of DCHE
- Lee Pedersen, MRM member
- Marty Rhine, Nominations/Search
- Alan Engel, Paterra (machine translation company which was a DCHE program sponsor).

*Continued on page 12*



## IMAGES FROM SLA ANNUAL 2007

(Clockwise from left to right):  
Chemistry Division Business Meeting and Breakfast;  
Panelists at “How Hybrid Vehicles Will Move You” session;  
Ted Baldwin and Judith Currano performing at the Chemistry  
Division Open House at the Byers-Evans House;  
Phil Abrahams of RSC presenting at the Vendor Roundtable;  
and Chemistry Division poster created by Nora Stoecker  
(Photos by Ted Baldwin)



## FIRST TIME IMPRESSIONS

### MICHAEL PEPER

Going to SLA for the first time was very exciting for me, but there were certainly feelings of anxiety as well due to my inexperience and the size of the conference. Everyone seemed to know everyone else, or at least *someone* else. I'd been a part of the library community for less than a year and traveled alone and certainly did not know any librarians outside of North Carolina. And where were the other students? I guess we were all cowering separately.

Eventually, I did dive in and found that librarians are not as scary as they seem. I wasn't so sure about those people in suits, however, and did not venture to the exhibitors hall for two days. "I don't have a budget," I reasoned, and "I really don't need any more pens." After making my way up to the second floor, however, I realized how much can be learned in the exhibits and that sometimes they have ice cream. I have only been exposed to those products licensed by my university so I was able to see demonstrations of many of those products that I had heard about, but never experienced directly.

It was very comforting to ease my way into the conference by attending smaller sessions. On my first day, I attended the Chemistry Sources CE course and the Science Divisions Newcomers Lunch. At both sessions, I met many welcoming people who were eager to help out the new guy and who I saw throughout the rest of the conference. In fact, throughout the entire conference, I consistently enjoyed the divisional sessions where I was able to really get to know those around the table and have good discussions about their work.

Despite all I learned and the good times at the conference, I found that it can be tiring as well. I had read advice to first-time attendees to make time for activities *away* from the conference. This seemed silly beforehand, but I quickly began to understand its wisdom. There really is a limit to the number of successive sessions at which one can continue to absorb information. So, all told, I am glad to be back home on familiar ground and excited to start putting all that I learned into practice in my work and sharing new ideas with my colleagues when classes resume in August. ❖



Michael Peper receiving Sparks Award from Cory Craig (Photo by Ted Baldwin)



Geri Olmstead, ACS Publications Scholarship recipient, with Adam Chesler, ACS Publications (Photo by Ted Baldwin)

## SCIENCE EDUCATION VIA GRAPHIC BOOKS

### REPORT BY THEO JONES-QUARTEY

Dr. James Kakalios, Professor of Physics and Astronomy at the University of Minnesota, uses comics to free his students from the fear of science. He says insecurity about science and math causes people to put up shields which come down when science and math is explained using comics. For years he has taught a popular freshman seminar titled "Everything I Know of Science I Learned from Reading Comic Books."

After his essay on the plausibility of Spider-Man's powers was published in the (Minneapolis-St. Paul) Star Tribune in May of 2002, Kakalios was thrust into the limelight; he received calls from CNN, BBC, and the London Times and numerous interview requests. He is the subject of a "Trivial Pursuit" question and was featured in a 2003 *People Magazine* article. His book, *The Physics of Superheroes*, was published in 2006.

Kakalios explores the science behind the powers of popular comic superheroes to illustrate real scientific principles and finds that comic books sometimes get the science right. For his purposes, however, he cherry picks examples. Superman's strength and ability to leap over a tall building in a single bound can be explained by understanding the gravity on Krypton, Superman's home planet. The question to contemplate here is how strong gravity on Krypton would need to be for Superman's muscles to be strong enough. All the factors needed to calculate this are provided in the comics. In the Spiderman edition, "Amazing Fantasy," Newton's Laws of Motion can be examined when Wall Crawler's girlfriend, Gwen, falls off the George Washington Bridge. The question here is whether the fall or Spider-man's webbing caused her death? In *Marvel Comics Universe*, the magnetic properties of matter are illustrated when Magneto, the evil mutant master of magnetism, is able to levitate himself and others because water molecules are diametric. When a comic superhero's feats fail to stand up to scientific scrutiny, Kakalios calls them "scientific bloopers."

Lois Gresh, Technical Communications Director for Science, Technology, Engineering, & Math, University of Rochester, has authored 14 science fiction books, translated into many languages; was nominated for national fiction awards six times; and is a staff book reviewer for [www.scifiweekly.com](http://www.scifiweekly.com), Science Fiction Cable Channel. Her mindset is similar to Kakalios'; she finds comics are filled with thought provoking science topics. Her books *The Science of Superheroes* and *The Science of Supervillains*, co-authored with Robert Weinberg, explore the facts behind comic superheroes to determine what is logically possible. She explained that today's comics were spawned from early science fiction and displayed a series of covers of modern comics such as Conan juxtaposed with those of original/classic novels such as *The Forgotten Planet* to show the amazing similarity.

Gresh related some comic world situations she has explored. Can a woman kill a man using lipstick? In Batman's *Poison Ivy*, chemistry suggests the possibility of chloroform in the lipstick. Can a person turn himself into a lizard? Knowledge of biology, gene therapy and tissue regeneration can be used to examine this question in *The Lizard* (Spiderman). In *Vandal Savage and Apocalypse*, biology, nanotechnology, biotechnology, stem cell science and cryonics will help determine whether it is possible not to die. Some situations are downright impossible such as the case of *The Hulk*, alter ego of Dr. Bruce Banner, a nuclear physics genius who, exposed to gamma radiation, turned into the *Incredible Hulk*. Strength and gravity show it is scientifically impossible for Superman to be that strong. To make his story work he had to be from another planet, Krypton. Donald Duck comics are loaded with thought-provoking scientific escapades. In the 1940s *Sunken Yacht* episode, a boat was raised after being filled with Ping-Pong balls. Subsequently, a 1964 patent claim by Kroeger, a professor, dealt with using buoyant bodies to raise a sunken vessel.

*Continued on page 11*

## COLLECTION DEVELOPMENT IN THE ELECTRONIC AGE

### REPORT BY MICHAEL PEPPER

This session was very well attended and even forced your intrepid reporter to stand and take hurried notes in a series of increasingly contorted positions. The organization of presenters and the quality of each of the presenters added to the interest in the session. The speakers were a well-balanced group of electronic resource enthusiasts and print loyalists all hailing from unique types of institutions.

#### **The Life Cycle of Digital Reference Resources: Asking the Right Questions**

Dr. Lesley Farmer, from UC-Long Beach, began the session by laying out all the issues and considerations that we are now dealing with electronic resources. She noted that most of the key issues to consider when selecting electronic resources are not concerned with the content of those resources, but instead revolve around the technological, legal and financial resources available to the institution. For example, she suggested that the interface be tested with all (especially the oldest) machines and software to ensure that all users will have an equal and quality experience with the product.

Another key issue surrounds the demands placed upon each user to use a given product. Will users be required to download plug-ins? Is it accessible to users with special needs? And, can users do all that they need with the materials provided, such as downloading, printing, saving and viewing?

Instead of providing all the answers, this presentation encouraged librarians to constantly consider the important aspects of collection decisions and to ensure that they attend to all relevant details. Some of these can be small, but all have big consequences for our users.

#### **Electronic Science Resources at the University of Auckland Library: The Impact on Collection Development and Service Delivery**

Setting the scene, Sonya L. Donoghue described her institution, the University of Auckland, a large university with over 38,000 students and a significant amount of electronic resources. She emphasized the importance of creating documentation for all decisions through established and explicit policies. While e-resources can solve the problem of space for many institutions, they create their own host of challenges as well. In many ways, the challenge changes from providing objects and making them accessible in physical space to providing delivery of a service.

She displayed how quickly her institution has adopted these new services. In the past 8 years, the number of e-journals in their collection has increased 20 times and the number of e-books has increased 1000 times! Users have certainly followed and accelerated this trend and there is now an expectation that resources will now be available and that full-text literature will be available from any computer.

#### **Til Death Do Us Part: Linda Hall Library's Commitment to Print in the Electronic Age**

This presentation came as a bit of a shock to many of the attendees and certainly was unique for this session. Michelle Lahey set herself apart not only with the content of her talk, but by the fact that she eschewed the customary PowerPoint presentation as well (is that legal?). She presented the perspective of the Linda Hall Library in Kansas City, whose commitment to print resources provided a contrasting example to the other presenters and most of those in attendance.

*Continued on page 17*

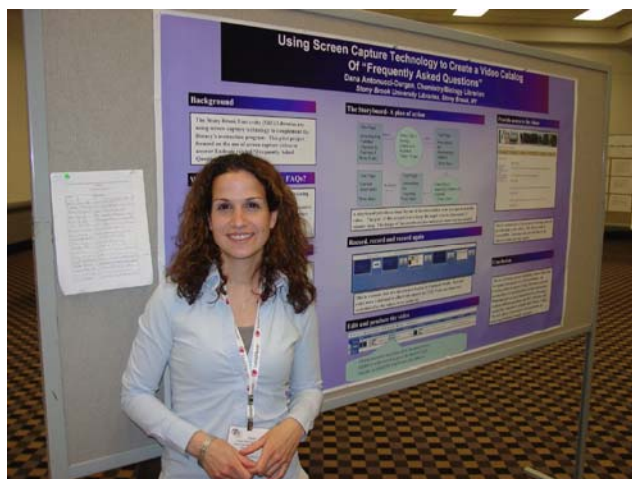
## POSTER SESSION: NEW TECHNOLOGIES IN INSTRUCTION & TRAINING

### REPORT BY MITCHELL BROWN

The program was a lively session of twenty poster presentations that explored use of new technologies in instruction and training. Blogs, wikis, podcasts, webinars, RSS feeds, and personal response systems (clickers) are just some of the technologies that have everyone talking. The posters gave a view of how colleagues actually use new technology to communicate with and educate their patrons. The session included two presentations on classroom teaching with “clicker” technology, video tutorials, survey tools using SurveyMonkey, and distance training using video and remote desktop software. Abstracts of the poster session are available at <http://units.sla.org/division/dche/2007/poster.htm>. ❖



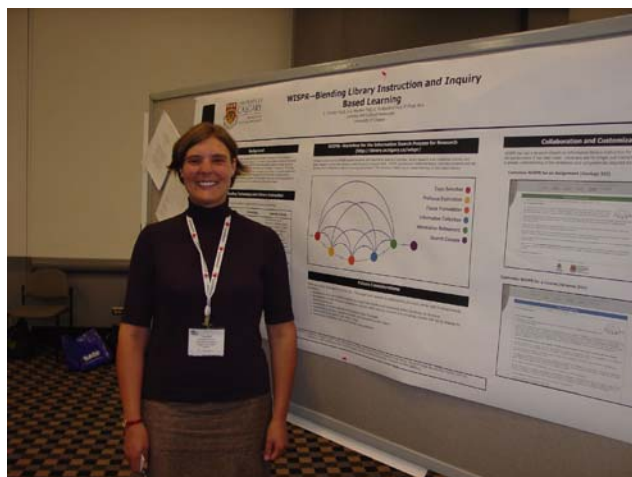
Sara Russell Gonzalez & Valrie Davis, University of Florida



Dana Antonucci-Durgan, Stony Brook University



Maureen Longstreth & Sue Jones, Rohm & Haas



Claudette Cloutier, University of Calgary

Co-Sponsored by the Physics-Astronomy-Mathematics and Sci-Tech Divisions and Information Instruction Partner, ACM - Association for Computing Machinery. Moderated by William W. Armstrong, Louisiana State University, and Irene S. Laursen, Wellesley College. (Photos by Ted Baldwin)

## CHEMISTRY DIVISION ACADEMIC ROUND TABLE BREAKFAST

REPORTED BY SUE CARDINAL

Dana Roth, California Institute of Technology, shared his thoughts about the open access movement and the Federal Research Public Access Act (FRPAA) (<http://www.taxpayeraccess.org/frpaa/index.html>). His main concern is that the FRPAA bill would jeopardize the value provided by scholarly publishers. Prepublication has not worked in the chemistry field. Articles benefit greatly from copy editing and linking that the publishers provide.

Only the wealthiest can afford access to the expensive commercial journals. Ironically, many less valued papers are published in the most expensive journals. In general, society journals are already reasonably priced and provide high value.

So what is the best way to transition from reader subscriptions to author-pays model that does not have a devastating effect on scholarly publishers? Maybe the author and the subscriber need to share the cost. Maybe the html version should be freely available while the PDF should be subscription.

After Dana's talk we began discussing open access concerns. Moderators Brian Winterman, Indiana University, and Janette Carver, University of Kentucky, kept the discussion on track and passed around the microphone. One issue mentioned was faculty not embracing open access and author costs. Additionally, performance-based publishing is still prominent. It is perceived to be critical for faculty to publish in prestigious journals in the least publishable unit. There is also an underground of sharing and posting articles between faculty. Some librarians in collaboration with legal staff are educating new faculty about copyright and copyright retention.

Library budgets are very tight, and emphasis is often placed on use. With the current model our budgets may not stretch far enough. With the new model, will we pay more for membership fees, author fees and subscription fees? Authors have asked libraries to become members of some societies so that they can get publication discounts. The exchange rate has to be factored in. Overall, we should aim for a sustainable model.

Open access articles are read and cited more. Open articles may readily be data-mined. Publishers aren't always willing to allow this with subscription articles. New projects like Project Prospect (RSC) and Scitopia are taking advantage of full text availability. Most people don't use the html versions of articles. Is there any thought of providing links in PDFs? There are a vast number of articles being produced and journals are turning into full text databases.

Presented by Chemistry Division; Sponsored by ACS Publications

*Science Education via Graphic Books, continued from page 8*

Kakalios tells us that comic books can teach us how to be scientists by challenging us to use our knowledge of scientific rules and laws and to use our critical thinking and problem solving skills. Gresh says comic books teach people about science. This session certainly proved both assertions; while on the surface it was a fun and entertaining hour and a half, I, for one, quite painlessly learned bit of science. ❖

Presented by Chemistry Division, Education Division; Sponsored by Rittenhouse Book Distributors, Inc., Elsevier

# HOW TO FIND SPECTRA/CRYSTALLOGRAPHY

REPORT BY MITCHELL BROWN

## Information Sources in Crystallography

In his presentation Dana covered online databases, journals dedicated to crystallography, professional societies that focus on crystallography data and print sources. Some of the more well-known databases are CSD (Cambridge Structure Database) for carbon containing compounds, ICSD (Inorganic Crystal Structure Database) for solid state inorganic compounds, and PDF (Powder Diffraction Files) for metals, minerals, inorganic compounds and experimental organic compounds. Abstracting and indexing services include Beilstein, Gmelin, CAS/ SciFinder, and the Combined Chemical Dictionary from CHEMnetBASE. For bioorganic compounds there are databases like the PDB Protein Database and the NDB Nucleic Acids Database for structure data and images. For a more complete listing of available databases, see Crystallography Databases, listed below under Further Resources below.

Some of the older data in CSD, ICSD and CRYSTMET (a database for metals) is available in the print reference, *Structure Reports*, and in *Landolt Bornstein*. For old structure reports, see *Structure Berichte*. IUCr's International Tables for Crystallography are now available online through Springer at <http://it.iucr.org/>.

Dana acknowledged Gregory Youngen UIUC for material used in the presentation on crystallography (<http://www.library.uiuc.edu/phx/crystal/CrystalPP.ppt>) and his chapter on crystallography in *Literature Search Strategies for Interdisciplinary Research: A Sourcebook for Scientists and Engineers*, Lanham, Md.: Scarecrow Press, 2007.

## Spectroscopy for the Unpolarized

Elizabeth Brown of Binghamton University started with two questions. What is spectroscopy? Why are spectra taken? Spectroscopy is the study of interactions between radiation and matter, and it is used in order to observe how substances behave at certain energy levels. She talked about the types of spectroscopy: electromagnetic (ultraviolet (UV), visible, infrared (IR), and X-Ray), mass, nuclear magnetic resonance (NMR), electronic, and mechanical (vibrations, acoustics).

Brown's recommended search strategies for locating spectra include making use of IUPAC and common names as well as CAS Registry numbers for chemical substances, CAS Registry numbers, identifying functional groups and other distinguishing features of substances, and asking the patron to identify similar substances as a reference. Asking the right questions will help speed the search for spectra sources. It's important to search both acronyms and full names of different types of spectra in order to find literature sources. Brown recommended searching for journal articles since original research articles frequently have different types of spectra for chemical substances. Some spectra for a group of related substances and preparation papers are more likely to have spectra. SciFinder Scholar and Beilstein/Gmelin are other good places to locate spectroscopy data. In addition, INSPEC, a physics database, is a good place to locate information on spectroscopy theory.

Slides for this presentation can be found at <http://www.slideshare.net/ebrown/spectroscopy-sources-6-1-07/2>.

## Further Resources

- Crystal/Structure Information, Caltech (Dana Roth)  
(<http://library.caltech.edu/collections/chemistry.htm#CRYSTAL>)

*Continued on page 17*

## MRM MEMBER PROFILES

### **Catherine DiPalma, MRM 2009 Program Planner**

Catherine has spent 18 years as an information professional in corporate, government, academic and public libraries. For the past 8 years, she has been working with R&D science and technology focused information research. She is currently employed at Saint-Gobain NorPro in Stow, Ohio in a solo position as Technical Information Specialist providing information services to the engineering R&D staff in the field of ceramics for the refining, chemical and petrochemical industries. Prior to joining Saint-Gobain she was the Science Librarian at the NASA Glenn Research Center in Cleveland, Ohio responsible for research, reference, and outreach services primarily for the Research and Technology Directorate. She is also a member of the Patent Information Users Group and takes special interest in patent analysis and dissemination. Other professional interests include intellectual freedom issues, literacy programs and the group Librarians without Borders.

### **Richard Behling**

Richard is a new MRM Member and Senior Information Researcher at Nalco Energy Services. He has been working as a solo librarian for Nalco Energy Services in Sugar Land, TX for 15 years. The company invents and produces specialty chemicals for the petrochemical and oilfield industries worldwide. The library houses about 4,000 books, several shelves of back journals. They use online resources including: SciFinder, Dialog, STN, Encompass API Literature database, Corrosion Abstracts online, etc. He graduated from LSU with a MLIS in 1990. ❖

*News from the MRM Section Chair, continued from page 5*

### **DCHE Board Meeting**

We were happy to learn that budgeting is being introduced for 2008. Our compliments go to DCHE Treasurer Bob Buchanan for his responsiveness to this need. The MRM Chair will be allowed to appoint a designee for the Leadership Summit, should that be necessary. Nora will investigate virtual meetings for future Section communications since they are already paid for in part by SLA. Our own Bette Finn will be part of an International Members Initiative Task Force instructed to make recommendations to the Board about recruiting international members. A new Awards Committee was created to establish criteria and processes for the DCHE Distinguished Service Award. Watch for details!

Opportunities to work with DCHE abound. Some areas include the bulletin, apprenticing as webmaster, continuing education, and international membership. Please let us know if you'd like to get involved in one of these areas.

Nora's Idea Showcase poster for the Chemistry Division was very creative; it featured tag clouds about the Division and the MRM Section. Super job! Nora also attended the DCHE Newcomer's lunch and met some wonderful new attendees. Nora rocks!

We enjoyed M&M candies which were distributed at the MRM activities throughout the conference as a fun reminder of the Section to attendees. ❖

## WHAT'S NEW IN COMPOSITES FROM THE ASSOCIATIONS

CAROL TOWER

From the **American Ceramic Society** <http://www.acers.org>

***Characterization and Control of Interfaces for High Quality Advanced Materials II: Ceramic Transactions***, Volume 198, Kevin Ewsuk, ISBN: 978-0-470-18414-1, Hardcover, 490 pages, June 2007.

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470184140.html>

Co-published by the American Ceramic Society and John Wiley, this volume includes papers from the Second International Conference on Characterization and Control of Interfaces for High Quality Advanced Materials, and Joining Technology for New Metallic Glasses and Inorganic Materials (ICCCI2006) in Kurashiki, Japan, 2006. Interfaces are critically important to a broad spectrum of materials and technologies. This Proceedings of ICCCI 2006 features 71 peer-reviewed papers on interface characterization and control technology for materials synthesis, powder processing, composite processing, joining, and to control airborne particulates.

***Proceedings of the 30th International Conference on Advanced Ceramics and Composites***, CD-ROM. Andrew Wereszczak, Edgar Lara-Curzio, ISBN: 978-0-470-11702-6, November 2006.

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470117028.html>

Co-published by the American Ceramic Society and John Wiley, this CD-ROM is a compilation of seven published print issues of the Ceramic Engineering & Science Proceedings (Volume 27, Issues 2-8, 2006), presented at the 30th International Conference on Advanced Ceramic and Composites (ICACC). The 30th ICACC attracted more than 900 scientists and engineers from 27 countries.

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From the **American Composites Manufacturers Association** <http://www.acmanet.org/>

***2006 Midwest Composites Conference Proceedings CD-ROM***

[http://www.acmastore.org/merchant.mvc?Screen=PROD&Product\\_Code=31-201-0&Category\\_Code=CP](http://www.acmastore.org/merchant.mvc?Screen=PROD&Product_Code=31-201-0&Category_Code=CP)

***2006 Structural Composites Conference Proceedings CD-ROM***

[http://www.acmastore.org/merchant.mvc?Screen=PROD&Product\\_Code=31-202-0&Category\\_Code=CP](http://www.acmastore.org/merchant.mvc?Screen=PROD&Product_Code=31-202-0&Category_Code=CP)

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From the **Society of Manufacturing Engineers (SME)** <http://www.sme.org>

***Composites Manufacturing Update Series CD-ROM***

<http://www.sme.org/cgi-bin/get-item.pl?CD07PUB1&2&SME&>

The CD-ROM contains more than 500 SME technical papers, journal, newsletter, and magazine articles detailing recent advances in composites materials, manufacturing processes, and applications. This CD describes the use of composites in aerospace, automotive, construction/civil engineering, consumer products, marine, medical, and military applications. Papers on quality/reliability/durability and affordability and justification of composites materials will help determine if they are right for a particular application. The CD-ROM also includes how smart composites and nanocomposites are being used in novel applications and how these high-tech materials hold promise for even wider use. Articles and papers on manufacturing processes, such as filament winding, pultrusion, thermoforming, resin transfer molding, compression molding, and electrospinning, as well as post-manufacturing processes are also featured.

*Continued on page 15*

***Fundamentals of Composites Manufacturing: Materials, Methods, and Applications***, 2<sup>nd</sup> edition, A. Brent Strong, **Forthcoming**, Fall, 2007.

Completely new and enhanced, this second edition includes chapters on matrix properties, polyesters, epoxies, specialty and high performance resins, thermoplastics, ceramic & metal matrix composites, reinforcements, testing & properties, design, sandwich structures, joints & finishing, open molding, compression molding, resin infusion technologies, filament winding & fiber placement, pultrusion, thermoplastic molding, damage prevention/repair, factory issues, and economics.

**Selected papers from Composites Manufacturing Conference, Salt Lake City, April 11-12, 2007.**

<http://www.sme.org/cgi-bin/get-evdoc.pl?&&001690&000007&020688&&SME&>

Seventeen papers from this conference are available to download free of charge.

**Composites Manufacturing Technical Group**

<http://www.sme.org/cgi-bin/communities.pl?/communities/cma/cmahome.htm&&SME&>

This group within the Plastics, Composites & Coatings Technical Community of SME provides a forum for members to connect, learn and develop educational resources in composite materials, tooling, processing, post fabrication, joining and assembly, finishing and composite repair.

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From **The Minerals, Metals & Materials Society (TMS)** <http://www.tms.org>

***Advanced Metallic Composites and Alloys for High Performance Applications***

ISBN: 978-0-87339-666-0, 161 pages, 17 papers in pdf format.

A collection of papers from the 2007 TMS Annual Meeting & Exhibition held in Orlando, Florida, February 25–March 1, 2007.

***U.S.–Japan Conference on Composite Materials XII*** (Print Format)

P.K. Mallick and N. Takeda

- Composite materials—special attention to cars and other vehicles
- New work on Japanese materials science advances
- Organized by the Center for Lightweight Automotive Materials and Processing

This volume contains original research on composite materials in the automotive sector. It presents 64 new papers by Japanese and U.S. specialists explaining the applications and performance of composites and nanocomposites. Special attention is given to composite materials as used in cars, trucks, and other vehicles.

***Design, Manufacturing, and Applications of Composites***

Editors: J. Lo, T. Nishino, S.V. Hoa, H. Hamada, A. Nakai, C. Poon

This new volume covers the most up-to-date activities on research and development on composites in Canada and Japan. It contains 45 original papers and 11 shorter articles on composite research first presented in summer 2006 by scientists from leading schools and industry in Japan and Canada. Special attention is given to new work on natural fiber composites and their applications, as well as the role of fibers and other natural materials in nanocomposites. ❖

- More than “simply ... another list of library websites”, **libSite.org** | **A Recommendation Service for Library-related Websites** aims to “explore different arrangements and combinations that the current state of our technology makes possible.” It is worth a look.  
<http://libsite.org>

#### **GENERAL SCIENCE**

- Is it too cloudy or bright where you live to see the stars? At **WIKISKY.ORG** browse the sky outside our solar system with over one-half billion astronomical objects found by the Sloan Digital Sky Survey (SDSS). Clicking on an object gives more information. Zooming in and out of an object is almost compelling as Google Earth.  
<http://www.wikisky.org>
- With an official launch date in mid-2008, the **Encyclopedia of Life** plans to be the encyclopedia of species, ultimately covering over 1.8 million named species. You can get an idea of the scope of the project and the type of content envisioned at the demonstration pages.  
<http://www.eol.org>
- At **Inventors and Inventions**, browse categories of inventors and inventions.  
<http://www.enchantedlearning.com/inventors>

#### **CHEMISTRY**

- Check out **Depth-First**, a thoughtful blog for Chemical Informatics. The author Rich Apodaca, a Blue Obelisk participant, includes some article-like pieces.  
<http://depth-first.com>
- Dr. David R. Lide, editor of the CRC Handbook of Chemistry and Physics, has provided a list of **Tables Relocated or Removed from CRC Handbook of Chemistry and Physics, 71st through 87th Editions**.  
[http://www.indiana.edu/~cheminfo/CRC\\_Tables\\_relocated\\_or\\_removed\\_2007.htm](http://www.indiana.edu/~cheminfo/CRC_Tables_relocated_or_removed_2007.htm)
- See **CHEMBIOGRID: Chemistry Databases on the Web** for an annotated list of chemistry databases (most free). The list is maintained by the Chemical Informatics & Cyberinfrastructure Collaboratory (CICC) at Indiana University.  
<http://www.chembiogrid.org/related/resources/databases.html>
- Search **eMolecules** by keyword, exact structure, or substructure. Results include links to selectable commercial suppliers, the NIST Chemistry Webbook, PubChem, and the Drug Bank. It appears to compete with ChemFinder.com.  
<http://www.emolecules.com>
- Still in beta, **ChemSpider – Database of Chemical Structures and Property Predictions** ambitiously aims to be a free searchable database of chemistry structures that consolidates access to information in open and commercial chemical databases. See the link for Data Sources for a list of participants.  
<http://www.chemspider.com> ❖

Linda Hall is unique in that it is not attached to any academic, research or corporate institution and exists as an unusual sort of public library yet it is not publicly funded like a typical public library. It is extended this unique model to be a kind of print archive for scientific literature at a time when most libraries, especially science libraries, are shedding their print collections to save space and meet users' information-seeking behavior. The library has added an addition 30,000 square feet to its facility, which it anticipates will allow for 50 years of growth. In addition, it is actively pursuing the discarded print collections of other institutions to make its own print collection even more comprehensive.

Linda Hall Library feels that this role is essential because of its uniqueness and because of the enduring need for print materials. Ms. Lahey pointed to the increased restrictiveness of licenses for electronic resources and the benefit of serendipitous discovery that is more common with print materials than in the current environment of electronic resources. While most libraries rush to clear their shelves of their print materials, Linda Hall Library provides an important alternative model for collection development.

### **Journey into the Digital Age: Strategies for Developing and Managing Collections in a Federal Research Library**

NIST's Information Services Division (ISD), in contrast, is moving towards a model of electronic-only resources, as Susan Makar described. They plan to begin by replacing missing items with e-books, materials in the IT sector, and research priorities at NIST. In addition, they are undertaking a series of pilot projects to test the feasibility of certain methods of electronic resource collection.

The ISD is also interested in creating a better model for electronic resource collection as well. They have formulated a collection development policy for their electronic collection and have taken pains to create standards for their collection as well as being careful to ensure perpetual access to all their materials through licensing agreements with publishers as well as partnering with independent organizations like Portico and LOCKSS.

They have also implemented an extensive system for evaluation of their resources. Collection decisions are based upon usage statistics, impact factors, customer feedback, focus groups, lab liaisons and analysis of ILL requests. In addition, the ISD has identified core journals which are essential to the mission of NIST and its research priorities. ❖

Presented by Chemistry Division; Sponsored by ACS Publications

### *How to Find Spectra/Crystallography, continued from page 12*

One of best information sources on crystallography resources; extensive listing of crystal/structure information for organic and inorganic compounds, minerals, metals and biological compounds (e.g., proteins and nucleic acids)

- Crystallography Databases, Caltech (Dana Roth)  
(<http://library.caltech.edu/collections/rpb/chemistry/CrystallographicDatabases.pdf>) Includes a description of each database, access information, and links to tutorials
- Finding Chemical Spectra and Spectra Data, University of Texas Austin (David Flaxbart)  
(<http://www.lib.utexas.edu/chem/info/spectra.html>)
- Science of Spectroscopy (<http://www.scienceofspectroscopy.info/>)
- SLA DCHE "Information Competencies for Chemistry Undergraduates: The Elements of Information Literacy" (<http://units.sla.org/division/dche/il/cheminfolit.pdf>)  
Appendix includes lists of resources ❖

Presented by Chemistry, Engineering, and Physics-Astronomy-Mathematics Divisions; Sponsored by ACS Publications

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