

### **Sci-Tech News**

Volume 61 | Issue 3

Article 5

August 2007

### Materials Research & Manufacturing Section

**Betsy Aldridge** 

Follow this and additional works at: https://jdc.jefferson.edu/scitechnews

Part of the Physical Sciences and Mathematics Commons
<u>Let us know how access to this document benefits you</u>

### **Recommended Citation**

Aldridge, Betsy (2007) "Materials Research & Manufacturing Section," *Sci-Tech News*: Vol. 61: Iss. 3, Article 5.

Available at: https://jdc.jefferson.edu/scitechnews/vol61/iss3/5

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's Center for Teaching and Learning (CTL). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Sci-Tech News by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.

### Materials Research & Manufacturing Section

### Betsy Aldridge, Chair

Members of the Materials Research and Manufacturing Section of the Chemistry Division share information concerning all phases of materials procurement, production, applications, and handling by means of educational activities, cooperative programs, publications, and Section-sponsored events at annual conferences.



Thanks to all for your involvement in the Section this year. The transition to Section is going well. The Chemistry Division officers, especially Ben Wagner, have been tremendously supportive.

I attended the 2007 Leadership Summit in Reno, NV on behalf of Materials Research and Manufacturing (MRM) Program Planner appointee Nora Stoecker.

Bette Finn, membership chair, reports that we have 57 members as of 5/2/07. This is up from January, when we had 41, and June 2006 when Bette found only 31 in the SLA membership directory. Progress has been made. Thanks to Bette and Jim Martin, Chemistry Division (DCHE) Membership Chair, for getting us this far.

Patrica Cromi, Listserv manager, reports 158 members (up from 149 last year) on the List. This is not an active forum but it gives nonmembers a chance to learn what we're doing and some Section news. We encourage all members to join the MRM and DCHE listservs.

Thanks to Teri Vogel for updating the MRM webpage. Any MRM member(s) interested in being involved with MRM webpage design, content development, and coordination with the DCHE webmaster please contact Teri.

Earl Mounts has a draft of the MRM strategic plan which members and DCHE board have had a chance to review. Thanks Earl. I appointed Nora Stoecker as 2008 MRM Program Planner

(she's also been backup for 2007 planning) Nora has gotten involved in a wonderful way this year, including volunteering for the DCHE marketing initiative (Idea Showcase). Great job, Nora.

We have a 2009 Program Planner nominee lined up. Thanks to Marty Rhine and Linda Senkus for their efforts.

See Carol Tower's findings on other associations' resources about composites elsewhere in this issue. Good start, Carol! Is there interest in similar investigations for other material/ manufacturing topics? Ideas? Volunteers?

I've brought several appointees/volunteers into a team to study mentoring activities for the Section. They have been very helpful to me with ideas and feedback. I think Nora will build on that foundation and hope you will all add in your hands so it's lighter work for all (and more hands make it merrier, too).  $\diamond$ 

Betsy Aldridge PACCAR, Inc. Betsy.Aldridge@paccar.com



Attendees at the Materials Research and Manufacturing Section Business Meeting and Breakfast. Left to right, Margarete Bower, Nora Stoecker, Linda Senkus, Earl Mounts, Betsy Aldridge, Lee Pedersen and Marty Rhine

1

### Materials Research and Manufacturing (MRM) Section Business Meeting

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

By the time of the meeting, we had 36 signed up for the IHS tour. The report is also posted on our MRM website at <u>http://units.sla.org/division/</u> <u>dche/mrm/index.htm</u> and at the Chemistry Division (DCHE) website - <u>http://units.sla.</u> <u>org/division/dche/2007/reports.htm</u> See Nora's report on page 32.

Attending the meeting were: 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 and Alan Engel, Paterra, DCHE program sponsor.

Formal minutes were taken by Margarete Bower, DCHE Secretary (thanks Margarete) and will be posted soon. Below are highlights.

It was great to be able to report a 40% Section membership increase so far this year. See a profile of one of our newer members, Richard Behling in this issue. Welcome, Richard!

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

Nora was voted unanimously as MRM Chairelect. She was also approved at the DCHE Board meeting. There were also no objections in the MRM meeting to Catherine DiPalma's appointment as 2009 Program Planner (see a profile of Cathy). Congratulations to both Nora and Cathy. Marty Rhine and Linda Senkus were the Nominating/Search committee.

I reported for Carol Tower that she had compiled results of her search for associations' composites

information. See page 30 for her "What's New in Composites from Associations" – we appreciate that, Carol. This is also posted on the MRM webpage at <u>http://units.sla.org/division/dche/</u><u>mrm/2007/composites.pdf</u>. If other members would like to build on this beginning and provide similar hot "What's New" listings on other types of materials and/or manufacturing topics for our members, to be posted on the webpage and in *SciTech News*, please contact me (betsy. aldridge@paccar.com).

At the MRM business meeting, member Lee Pedersen volunteered to focus on the MRM website. Thanks, Lee.

DCHE Board Meeting: Our compliments to DCHE Treasurer Robert Buchanan on being responsive to a need we had felt about budgeting. The MRM Chair will be allowed to appoint a designee for the Leadership Summit, should that be necessary. We learned that virtual meetings are already paid for to some extent by SLA, so Nora will be looking more into that for future Section communications improvements. Our own Bette Finn will be part of an International Members Initiative Task Force instructed to make recommendations to the Board about recruiting new international members. A new Awards Committee was created to establish criteria, processes, etc. for DCHE Distinguished Service Award. Watch for details.

Nora's Idea Showcase poster for the Chemisty Division was very creative, featuring tag clouds about the Division, including the MRM Section. Super job. She also attended the DCHE Newcomer's lunch, meeting some wonderful new attendees. Nora rocks.

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

We enjoyed M&M candies, which were distributed at the MRM activities throughout the conference, just as a fun reminder of the Section to those who attended. Betsy Aldridge, MRM Section Chair

### Profile of Catherine DiPalma, MRM 2009 Program Planner

- 18 years as an information professional in corporate, government, academic and public libraries
- Past 8 years working with R&D science and technology focused information research
- Currently employed at Saint-Gobain NorPro in Stow, Ohio. She is in a solo position as a 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 was Science

Librarian at the NASA Glenn Research Center in Cleveland, Ohio. At NASA Glenn she was responsible for research, reference and outreach services primarily for the Research and Technology Directorate.

 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.

#### $\diamond \diamond \diamond \diamond$

### New Materials Research and Manufacturing Section Member Profile:

Richard Behling Senior Information Researcher Nalco Energy Services 7705 Highway 90A Sugar Land, TX 77478 rlbehling@nalco.com Office: 281-263-7445

I have 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. I graduated from LSU with an MLIS in 1990.

The Nalco Energy Services library houses about 4,000 books and several shelves of back journals. We use online resources including: SciFinder, Dialog, STN, Encompass API Literature database, Corrosion Abstracts online, etc.

#### $\mathbf{\Phi} \mathbf{\Phi} \mathbf{\Phi} \mathbf{\Phi}$

### *The Materials Research & Manufacturing Section of the Chemistry Division Welcomes its New Members*

Micheline Demont Merck Serono International SA Library 9, chemin des Mines 1202 Geneva Switzerland

Patti McCall Library Director AMRI PO Box 15098 Albany, NY 15098

#### Luray Minkiewicz E I DuPont De Nemours Co Experimental Station PO Box 80301 Wilmington, DE 19880-0301

Marge Rhodes Seagate Technology Research 1251 Waterfront Place Pittsburgh, PA 15220 Nicole Robinson MPR Associates Library 320 King St Suite 400 Alexandria, VA 22314

### SciTech News

29

### What's New - Composites Information from the Associations

Compiled by Carol Tower, Society of Manufacturing Engineers, ctower@sme.org

### **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. \$109

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 peerreviewed 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. \$100

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.

### 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\_Non-member price \$50, Member price \$25

August 2007

### 2006 Structural Composites Conference Proceedings CD-ROM

http://www.acmastore.org/merchant. mvc?Screen=PROD&Product\_Code=31-202-0&Category\_Code=CP\_Non-member price \$50, Member price \$25

# 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&

Non-member price \$60, Member price \$50 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 covers 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.

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

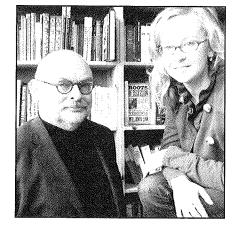
Completely new and enhanced, this second edition includes chapters on matrix properties, polyesters, epoxies, specialty and high performance resins, thermoplastics, ceramic & metal matrix composites, reinforcements, testing & properties, design, sandwich structures, joints & finishing, open molding,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

Continued on page 32...



# Libraries of every type have two common problems:

# **SPACE** There's never enough space to keep every book.



"We went way past the traditional size of bookstores to find the limit of what people would be interested in, and we've never found that limit." -Michael Powell, Owner, with daughter Emily Powell

# There's never enough money to enhance the collection. **MONEY**

Librarians deal with everything from aardvarks to zyzzyvas. So does Powell's. With literally millions of books accessible to our customers, our inventory covers subjects from the sublime to the divine, from geology to theology, from cooking to quantum mechanics. And it's all available online at **Powells.com**.

**Powells.com/librarians** provides access to each of our six Portland-area stores as well as several volume-filled warehouses. Online ordering is available with purchase order, credit card and Powell's Trade accepted as payment options. A world-class inventory of used and new titles (including out-of-print) and worldwide shipping are some of the amenities you'll enjoy as a Powell's customer.

We're always interested in acquiring out-of-print and academic books. Please visit us at **Powells.com/librarians** to learn more about selling gifted books, duplicates, deaccessions, or superceded editions. Libraries in the US and Canada have given their old volumes new life by selling to Powell's. Cash and trade terms available.

## How might we help your library?



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

http://www.sme.org/cgi-bin/get-evdoc.pl?&&0 01690&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.

### 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, ISBN: 1-932078-61-4, 824 pages, \$175 list

- 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 ISBN: 1-932078-62-2, 453 pages \$195 list

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.

### $\diamond \diamond \diamond \diamond$

### 2007 Chair-Elect/2008 Program Planning Notes

Please see the list of Chemistry Division (DCHE) Seattle conference topics in this issue of *SciTech News* [Chemistry Division Chair Elect's message] and on the online Chemistry Division Bulletin. If you have comments or ideas, please contact Nora at <u>nstoecker@</u> <u>nksinfo.com</u>, <u>nkstoec@sandia.gov</u> or at 505/715-0607

The Materials Research and Manufacturing (MRM) Section will sponsor a vendor roundtable and likely host a Section breakfast meeting or dine-around. We are also taking a planning lead, but not sponsorship, of a DCHE nanotechnology program. I will need all kinds of assistance pulling the vendor roundtable together – if you can volunteer, please contact me. Betsy Aldridge is also working on a program on alternative fuels, which we will co-sponsor with the Transportation and Food, Agriculture and Nutrition (FAN) Divisions. If you have ideas please send to Betsy at (360)757-5234 or <u>betsy.aldridge@paccar.com</u> . We have some tentative speakers already lined up.

Please, all MRM members, join the DCHE email list and check the DCHE website, as well as the MRM page, for ongoing communications and information.

Nora K. Stoecker nstoecker@nksinfo.com

[Ed. note: See Nora's full report at http:// units.sla.org/division/dche/mrm/documents. htm]