



No. 78 October 2007

Lisa M. Balbes, Editor

## Message from the Chair

Ray O'Donnell

As mentioned in the last newsletter, we now have 5 subdivisions to broaden our membership. These subdivisions are Younger Chemists, Women Chemists, Minority Affairs, Chemists with Disabilities, and Ethics. We rely on our members to get new members. Please let your colleagues know about our new subdivisions, and encourage them to join by sending their \$10 annual dues to Chris Bannochie, Treasurer, ACS Division of Professional Relations, 419 Waverly Drive, Augusta, GA 30909.

I would also encourage all members to vote...both in our Division election and in the ACS National election.

## Divisional Elections Coming Up

Barbara E Moriarty

One of the factors driving the revision of our bylaws was the ability to conduct our elections electronically. This year, we will be using a third party to conduct our elections. We hope that this will help make the process of choosing our division leaders easier for all of us. The third party company that we are using is Vote-Now.com. This company has been used by a number of other ACS divisions such as the Division of Analytical Chemistry and the Rubber Division. You should be hearing from the third-party company, Vote-Now.com, soon. If you do not hear from them by the end of October, please contact the chair of the division for help.

## Nominations Due for Lou Sacco Award

The Lou Sacco Award recognizes persons who have served DPR in a meritorious and exemplary manner over a significant period of time. Nominations are due to Barb Moriarty (bmoriarty@nalco.com) by October 15<sup>th</sup>.

## Open Innovation Symposium Offers Much Food for Thought

By John K. Borchardt

Open innovation is changing how many firms develop new products and processes. DPR and the ACS Committee on Economic and Professional Affairs held a symposium on the subject at the August 2007 ACS National Meeting.

Open innovation is “leveraging the global brain to solve problems” according to Bernard Munos, advisor in corporate strategy at Eli Lilly and Company. “Companies that cannot rely entirely on their own research may seek solutions from outside sources. Internal inventions that are not being used in a company’s business may be licensed to interested parties,” said symposium chairperson Lynne Greenblatt. This symposium highlighted how open innovation is changing R&D at major pharmaceutical and chemical companies and included presentations from representatives of companies specializing in bringing together parties seeking solutions and parties offering solutions.

Munos noted that the rationale behind open innovation includes:

- Often problems in one discipline have already been solved in another. Some problems require novel approaches integrating various sciences.
- Cross-pollination between different disciplines and different organizations (companies, universities, government laboratories, etc.) can drive innovation.

Munos spoke on “Transitioning your R&D toward open innovation.” He believes that open innovation could revive the pharmaceutical industry; R&D spending continues to increase while the number of new drugs approved by the

U.S. Food and Drug Administration has been decreasing almost continuously since 1994. Meanwhile drug sales growth, both in the U.S. and worldwide, is flattening.

Munos recognized that intellectual property is an important issue in open innovation. If a patentable invention results from brainstorming by multiple scientists around the world, who owns it? Munos suggested that intellectual property issues are “not a show-stopper” since most open innovation projects are conducted at the pre-commercial stage.

#### *Importance of company culture*

Tom Balsano Technology Manager, New Product Lines & Innovation for Solvay Advanced Polymers (SAP) stressed the need for companies to access under-utilized internal resources for innovations. He said, “Company culture is a critical enabler and success factor for open innovation. Open innovation requires a culture where collaboration, knowledge sharing, co-development, etc. are highly valued.” Balsano said, “Organizational culture is the personality of an organization. It is the shared values, norms, attitudes, traditions, etc. that people in an organization firmly believe in. Employees’ behavior towards each other and toward people outside the organization is driven by these shared values. “Corporate culture must be aligned with the organization’s strategy, goals, vision and business model for long-term success,” noted Balsano.

Researchers must beware of a “not invented here” bias against external innovation. In addition, effective leadership and innovation processes are required to increase and maintain an organization’s innovation capacity.

Getting specific, Balsano noted that SAP has posted ten InnoCentive (see below) challenges since 2006 and is sponsoring research at universities and research institutes. SAP is also networking and sharing learnings with experienced open innovation practitioners in various industries. Mechanisms for this include the Industrial Research Institute’s External Technology Directors Network and the American Productivity & Quality Council.

In 2004 – 2005, SAP created an innovation infrastructure called the Innovation Café intended to stimulate a culture change by unleashing the innovation potential in all employees. The firm created innovation challenges, a process designed to focus innovation on strategic challenges facing the business. To promote idea generation, 40 idea generation facilitators were trained to help innovators generate ideas.

In 2006-2007, 35 innovation challenges were conducted. Besides R&D, these were in other corporate functions such as manufacturing, human resources and supply chain management. More than 40% of Solvay’s employees contributed ideas. The results include >\$1.75 million in cost savings, increased production and many product offshoots.

#### *The role of the World Wide Web*

Munos stated that a website provides a means for scientists around the world to communicate quickly and easily. Open innovation providers are based in the World Wide Web. InnoCentive is one such company.

In addition to a number of open innovation biology sites, there are several open innovation chemistry sites on the World Wide Web. These include

- Collaborative Drug Discovery ([www.collaborativedrug.com](http://www.collaborativedrug.com))
- eMolecules ([www.emolecules.com](http://www.emolecules.com))
- Jmol ([jmol.sourceforge.net](http://jmol.sourceforge.net))
- The Chemistry Development Kit ([sourceforge.net/projects/cdk/](http://sourceforge.net/projects/cdk/))

Peter Lohse formerly active in drug development research and management is Director, Scientific Operations, at InnoCentive. He noted that this scientific service business has successfully completed over 180 Technology Transactions between InnoCentive’s global community of over 120,000 scientists and client companies in the pharmaceutical, agricultural chemical, chemical and consumer product Industries.

Lohse spoke on “Engaging a global scientist community in extra-organizational innovation.” Formerly under-utilized sources of chemical and pharmaceutical innovation now being tapped by

InnoCentive include scientists in other industries; faculty members at universities around the world; researchers in Russia, China and India; and retirees. Just as most of an iceberg exists under the water, these nontraditional pools of skills and knowledge are larger than traditional scientific networks that companies tap.

InnoCentive works with Seeker companies to identify and formulate appropriate challenges. These are posted on the InnoCentive website. InnoCentive then works to match Solvers with challenges and coaches Solvers in preparing submissions. These submissions are forwarded to Seekers for review. InnoCentive works with both Seekers and Solvers to facilitate payment and intellectual property transfer. InnoCentive can help seekers understand a scientific problem; identify new methods, materials and technologies; identify new applications for known materials and technologies; and identify consultants, suppliers and collaborators and building partnerships.

According to Lohse, keys to success for a Seeker company include management support, scientist acceptance of the process, adequate budget, cooperation of the legal department, an effective champion for the process and creating lots of challenges. Lohse reported that while solvers spent an average of 40 hours on a solution, winning solvers spent an average of 74 hours. About 90% of the solvers worked alone and without consulting others. Nearly three-quarters of the solvers reported that their submission was partly or fully based on previously developed solutions. However, 55% reported making major modifications to previously developed solutions before submitting their solution.

Additional papers explained the operations of another website-based innovation facilitator, NineSigma and discussed how open innovation is creating new opportunities for chemists and other scientists.

### **DPR Receives Programming Grant**

Dave Chesney

DPR received a \$7,500 grant through the Innovative Projects Fund for Divisional Enhancement. This grant will be used to sponsor ethics symposia at next year's Mid-

Atlantic Regional Meeting (MARM) and Southeastern Regional Meeting (SERMACS).

Co-sponsored by the ACS Committee on Ethics, the ethics symposia are intended to connect with students and young professionals in particular. DPR has already sponsored two very successful Ethics symposia, at SERMACS in November 2006, and recently at the Rocky Mountain Regional Meeting (see following story). The grant will pay travel and meeting expenses for the team presenting the symposia at these two meetings.

"Our experience in Denver really solidified our conviction that the ethics symposia have a receptive audience," said Dave Chesney, one of the symposium presenters and Chair-Elect of DPR. "We had requests from two additional regional meeting representatives to come and present similar symposia."

Chesney hopes the new DPR Subdivision on Ethics will prompt local sections and regional meeting organizers to consider organizing Ethics symposia. The ACS Committee on Ethics has developed a template and compiled the materials needed to put on a presentation, to a class, a community event, or an ACS meeting.

### **DPR Sponsors Ethics Symposium at Rocky Mountain Regional Meeting**

Dave Chesney

DPR sponsored "Ethical Issues in the Chemical Profession" at the Rocky Mountain Regional Meeting. Organized by Sue Schelbe from the ACS Committee on Ethics, which also co-sponsored the event, the symposium was well attended and the audience actively involved in discussion.

The Committee on Ethics is making a concerted effort to bring ethics programming to regional meetings, which have traditionally had a strong showing from students and young professionals. This demographic is most likely to encounter ethical issues in the laboratory and classroom without experience in dealing with such issues. Ethics symposia do not preach a "right" or "correct" answer, but seek, rather, to draw out opinions and observations from the audience members. The sharing of differing perspectives

causes audience members to reflect on their own position and illustrates just how “gray” many of these seemingly “black and white” issues actually can be.

Keith Vitense began the session with his talk on the “Ethics of sports officiating.” This very popular talk introduces the audience to the use of “clickers” for anonymous responses and points out parallels between the ethical dilemmas encountered in the lab and in sports (or in life, for that matter.)

Amy Flammer, a graduate student at the University of Colorado at Denver and Health Sciences Center, presented “Case studies concerning academic ethical issues in teaching laboratories.” Focused on the experiences she and her peers have encountered as graduate teaching assistants, her talk clearly struck a chord with several audience members.

Sue Schelbe spoke on gender and cultural conflicts in academe. Her talk takes actual instances, anonymizes the individuals, and then presents the facts as a case study. Using the response clickers, she is able to get a polling of the audience that would otherwise be impossible. The reality of what some of our colleagues are subjected to in the course of their careers is disconcerting to all and leads to some very animated discussion.

Dave Chesney presented two AAAS “Integrity in scientific research” case studies. Lively discussion again indicated differing opinions with respect to the conduct and actions of the various characters portrayed.

A panel discussion was held at the close of the symposium. The audience was again very engaged, bringing up ethical issues that they had observed or experienced, which is exactly the kind of free-ranging discussion that these symposia attempt to foster.

## **Councilor Report from Boston Meeting**

John Massingill and John Borchardt

### **Selected Highlights:**

Thomas H. Lane, Dow Corning Corporation, and Howard M. Peters, Peters, Verny, LLP were announced as candidates for President-Elect.

The Council received three Petitions for consideration. The first on Election Procedures for President-Elect and District Director seeks a preferential ballot, both to make balloting more uniform and to avoid the complications and expense of run-off elections.

The second petition provides options other than run-off elections to local sections and division for resolving tie votes.

A Petition on Membership Categories would revise the qualifications for membership and for affiliate status in the Society.

The Committee on Economic and Professional Affairs submitted its latest version of the Academic Professional Guidelines for consideration.

### **New Technologies**

The newly re-designed ACS website launched September 30 at <http://www.acs.org>.

A social news and bookmarking site was launched at [chemistry.org/exchange](http://chemistry.org/exchange). The site allows people to share articles with a larger community, tag and save articles.

A new podcast, Science Elements, is available. It describes research reported in ACS’s journals and Chemical & Engineering News.

### **Errata:**

The article in the previous issues entitled “Division Creates Five New Subdivisions” was written by Chris Bannochie, whose byline was accidentally omitted. The Editor greatly regrets this oversight.

## Division of Professional Relations Biographies for 2007 Election

### For Chair-Elect (choose 1)

#### 1. Adam Christopher Myers, Ph.D.

I received my Ph.D. in organic chemistry from Purdue University, having focused on design and synthesis of peptidomimetic protease inhibitors. I then became the senior manufacturing chemist of a diagnostic device company called Quadraspec in West Lafayette, Indiana. In addition, I also served as the chemical safety officer, developing the company safety system from the ground up.

I have served in several leadership roles, including those within the ACS. I am in my seventh year serving on the YCC nationally. While on the YCC, I have served as chair of the National Meeting Activities subcommittee, as a program chair for multiple meetings, and as a symposium organizer for several symposia at many national meetings. I have also been a liaison to multiple other committees of the society. Locally, I have been active within the Purdue Local Section of the ACS, serving currently as the Vice Chair. During graduate school I was the chair of our Graduate Student Advisory Board of the chemistry department. I have also served on the Science Alumni Board of Purdue University, currently as its president.

I now look to bring my leadership experience to the division as PROF chair-elect. My overarching goal is to demonstrate the relevance of PROF to all members of the ACS. The first target group I would like to approach is the young chemists of the society, who often seek development of professional skills beyond their area of technical expertise. With my position within the YCC, I would serve as an excellent bridge between that group and the division. I look forward to the opportunity to serve within the division and the society.

#### 2. Keith R. Vitense, Ph.D.

**Education:** B.S., Chemistry and Mathematics, Black Hills State College (1982); Ph.D., Chemistry, Oklahoma State University (1988).

**Employment:** Professor, Cameron University, 1988-present; Faculty Intern, Halliburton Research Center, 1991.

**National ACS:** President's K-12 Education Taskforce (2001); Associate and Member of the Committee on Economic and Professional Affairs (2004-present); Chairman, CEPA Employment Services Subcommittee (2006-present); Associate and Member, Ethics Committee (2006-present); Committee on Awards (2006-present).

**Local ACS Section:** *Wichita Falls - Duncan Section* Secretary Treasurer (1989), Chair-Elect (1990), Chair (1991), Alternate Councilor (1992-1998), Councilor (1998-present).

**Honors and Awards:** Phi Kappa Phi; Phi Lambda Upsilon; 2004 Chi Eta Sigma Chapter of PKP Distinguished Faculty Award; 2001 Cameron University Professor of the Year; 1991 Lawton Area Softball Association All-Star Shortstop.

### For Secretary (choose 1)

#### 1. Allison Aldridge, Ph.D.

**Education:** BS Biology, University of Illinois at Urbana-Champaign, IL; Ph.D. Chemistry, Loyola University-Chicago, IL.

**Present Position:** R&D Analytical Supervisor at Mikart, Inc., Atlanta, GA

**National ACS:** Secretary for PROF 2004-2007; Associate and Member of Committee on Minority Affairs 2005-2007; Associate of Committee on Community Activities 2005

**Local ACS Section (Chicago):** Chair-elect 2005, Councilor 2004-2005; Chair of Minority Affairs Committee 2003-2005, Co-chair of Younger Chemists Committee 2000-2002

## **2. Peter (Pete) Smith, Ph.D.**

**Born:** 1974

**Academic Record:** University of Tennessee, Knoxville, B.S., 1997; University of Tennessee, Knoxville, Ph.D., 2000

**Honors:** McCandless Scholar, 2006-07; Research Site for Educators in Chemistry Fellow (University of Tennessee, Knoxville), 2005; Franklin Postdoctoral Fellow (University of Georgia), 2000-02; Gleb Mamantov Graduate Chemistry Scholar, 2000

**Professional Positions:** Assistant Professor of Chemistry, Westminster College, 2002-present; Visiting Assistant Professor, University of Georgia, 2000-02

**Service in ACS national office:** Younger Chemist Committee, Associate Member, 2007-present

**Service in ACS local office:** Penn Ohio Border Section: Member-at-large, 2002-05; Chair-elect, 2005; Chair, 2006; Immediate Past Chair, 2007; Secretary, 2007-present

**Member:** Council on Undergraduate Research, Spectroscopy Society of Pittsburgh, Society for Analytical Chemists of Pittsburgh. *ACS Divisions:* Chemical Education, Industrial and Engineering Chemistry, Inorganic Chemistry, Professional Relations

### **Candidate Statement:**

I am very excited about this opportunity to serve as the Secretary of the Division of Professional Relations. I am an experienced leader on the ACS local level, serving as Chair and Secretary of the Penn Ohio Border Section and I have recently become active on the national level by accepting an appointment to the Younger Chemists Committee (YCC). I serve on the Communications and Society Interface and Outreach subcommittees of the YCC. I also serve as the YCC liaison to the Meetings & Exposition committee and the Division Industrial and Engineering Chemistry.

As Secretary of DPR I would work with the leadership and members of the Division in implementing and evaluating the Strategic Plan for the Division. Being in the early stage of my career, I am keenly aware that professional development is necessary for success. The Division of Professional Relations is uniquely designed to help members manage and advance their careers through professional development. DPR can only be successful in its mission if communication with its members is effective. My goal as Secretary would be to not only communicate the opportunities for professional development to our members, but to also be involved in the planning and programming of those opportunities. My experience as Secretary of the Penn Ohio Border Section has prepared me to be successful as Secretary of the Division of Professional Relations.

### **For Member-At-Large (choose three)**

#### **1. Lisa M. Balbes, Ph.D.**

Lisa M. Balbes founded Balbes Consultants (formerly Osiris Consultants) in 1992 to help companies produce better scientific documentation. She provides scientific writing services and custom workshops to more than 50 client companies, including Bausch and Lomb Surgical, Divergence, SigmaAldrich, Stereotaxis, and the FDA. Dr. Balbes is the author of *Nontraditional Careers for Chemists*<sup>2</sup>, published by Oxford University Press in 2006. She earned her Ph.D. in chemistry from the University of North Carolina at Chapel Hill, and her undergraduate degrees in chemistry and psychology from Washington University in St Louis.

Dr. Balbes is currently a councilor for the St Louis local section of ACS, newsletter editor for PROF, webmaven for the COMP division, and chairs the Careers Committee for the CINF division. She was chair of the St Louis Section in 2002, and received both an Outstanding Local Section Achievement Award and a Salute to Excellence Award for her work there. She has been an ACS volunteer career consultant since 1993, and a national career presenter since 2001.

#### **2. David W. Ball, Ph.D.**

David W. Ball is a professor of chemistry at Cleveland State University in Cleveland, Ohio. He received his bachelor's degree from Baylor University and Ph.D. from Rice University. Following post-doctoral

research at Rice and Lawrence Berkeley Laboratory, he joined Cleveland State, where he has been for his entire academic career. Dr. Ball's research interests are low temperature spectroscopy, computational chemistry, and various topics in chemical education. His publication list has 143 items to date, equally split between research papers and articles of a more educational nature, including 6 books. Dr. Ball has served as chair of the Cleveland Section ACS (in 1998) and as Councilor for the Cleveland Section since 2001. He lives in the eastern suburbs of Cleveland with his wife and two grade-school sons.

**3. David Katz** (no information received)

**4. R. Daniel Libby, Ph.D.**

Dan Libby received his undergraduate education at Colby College in Waterville, Maine, where he earned a BA degree in chemistry in 1968. He received his Ph. D. in organic chemistry from Penn State University in 1974. Dan and his wife, Carol, then shared sabbatical replacement faculty positions at Oberlin College, Oberlin, Ohio ('74-'75) and Kenyon College, Gambier, Ohio ('75-'77) before accepting a continuing position as a couple at Skidmore College, Saratoga Springs, NY in the fall of 1977. Dan shared this position with Carol teaching organic and biochemistry for two years before assuming the position full-time when Carol moved to an industrial research position. At Skidmore, Dan developed an innovative "learning cycle" approach for teaching undergraduate organic chemistry.

In 1980 Dan accompanied Carol to her new research position in Decatur, Illinois and he accepted a post doctoral position in Lowell Hager's laboratory at the University of Illinois in Urbana. He spent two years doing research on chloroperoxidase at Illinois before accepting a faculty position at Barnard College in New York City in 1982. At Barnard Dan developed and equipped an undergraduate biochemistry laboratory and taught the first undergraduate biochemistry laboratory course serving Barnard and Columbia undergraduates. He also taught organic chemistry at Barnard.

In the fall of 1985, Dan returned to a faculty position at his alma mater, Colby College, to teach introductory and advanced courses in organic chemistry. He served as the organic chemist in the six person chemistry department at Colby, an undergraduate institution with 1700 students.

In the fall of 1992, Dan was named chair of the Chemistry Department at Moravian College in Bethlehem, PA. Moravian College is an undergraduate institution with 1300 students and an ACS approved chemistry major. He has taught organic chemistry, continuing to develop his learning cycle approach, and conducted undergraduate research at Moravian College since then. For the last 5 years Dan has been affiliated with the POGIL Project, an NSF funded program that disseminates the Process Oriented Guided Inquiry Learning approach, a learning cycle based method, for teaching undergraduate chemistry courses. Dan has also been a member the ACS Women Chemists Committee for the last 6 years, serving as its program chair for 5 years, before accepting appointment as the program chair of PROF this past spring.

**5. Barbara E. Moriarty, Ph.D.**

**Education:** BS Chemistry, Univ. of N. Carolina, Chapel Hill, Ph.D. Chemistry Univ. of Minnesota.

**Present Position:** Research Associate, Nalco Company

**National ACS:** Committee on Awards 97-98; Committee on Econ. & Prof. Aff. Assc 97, Member 98-03; Secretary 99-00; Emp. Srvs Subcom. chr 01-03; Divisional Act. Mem. 04-07; Annual Rep. Subcom. co-chr 04-07.

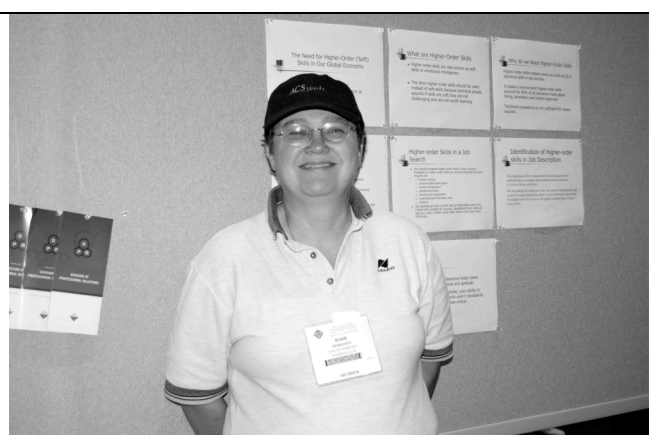
**ACS Activities:** CHICAGO SECTION: Chair 97-98, 06; Chair-Elect 96-97; Vice Chair 95-96, 05; Sec 93-95; Director 99-03; ; Memb. Aff. chr 94-97; Elem. Ed 90-92; Emp. chr 92-94; Pub. Aff. 97-08; co-chr 99-05, 07; Long-Range Plan. 97-07; Chem. Week 94-99, 06-07; Nom. 96-00,04, chr 00; Chemical Bulletin Editor 99-00, Contributor 99-07 Distinguished Service Award 2005-07. Councilor (1996 – Present), Alt. Councilor 93-96; **Div. Prof. Rel:** Chair-elect 03, Chair 04.; Past Chair 05, webmaster 04-07  
**Awards:** Distinguished Service Award 2007.

## 6. Joseph P. Stoner

**Academic Record:** Georgia Tech, Bachelor in Chemical Engineering, 1966, University of Georgia, M.B.A., 1971. **Honors:** Phi Kappa Phi, Beta Gamma Sigma, Recipient, Director's Award for Advancing ACS Public Policy in R&D Funding, 1998, Georgia Tech Alumni Association Ramblin' Wreck Volunteer Award, 1998. **Professional Positions** (for past ten years): Habitat for Humanity – DeKalb, Resource Development Manager, 2005-Present, Alcott Chromatography, Sales Manager, 2002-2005, PerkinElmer Instruments, Sales Specialist, 2001, Shimadzu Scientific Instruments, Sales Engineer, 1991-2000. **Service in ACS National Offices:** Committee on Economic & Professional Activities, 1995-6, 1999, Chair, Sub-Committee on Professional Standards & Ethics, 1996. Chair, Middle Atlantic Region Caucus, 1995-6. **Service in ACS Offices:** Georgia Section: Secretary, 2004-2006, Chair, 2003, Chair-Elect, 2002, Committee on Legislative & Government Affairs, Member, 2000-01. North Jersey Section: Chair 1995, Chair-Elect 1994, Councilor 1994-96, 1998-99, Public Affairs Committee 1995-2000, Continuing Education Committee 1993, Nominating Committee 1992, 1997-98, Chromatography Topical Group, Chair 1992-93, Treasurer 1991-92, Secretary 1990-91, Executive Committee 1988-94. **Member:** ACS: Analytical Division, Professional Relations Division. Atlanta Enterprise Center, Board of Directors, Common Cause Georgia, Board of Directors



DPR secretary Allison Aldridge presenting her Sci-Mix poster.



Barb Moriarity presenting her DPR poster at Sci-Mix.

Photos courtesy of John Borchardt.

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