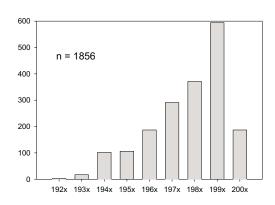


St. Louis Section, American Chemical Society



What's Graphed Here?

See Page 11

### Meet the New Asst. Ed.

David Baker, a new member of the ACS and the St. Louis Section, is also the new assistant editor of the Chemical Bond. Lisa Balbes, chair-elect, met David during a visit to Tripos. David expressed a desire to join and become active in local section activities. His interests and abilities seemed a perfect match for the Bond staff, and the rest is history.

David, 34, has had an interesting and far-flung history. He joined the Marine Corps straight out of high school in 1985 because, as he tells it, "I was young and cocky and I didn't want anyone telling me what to do." That didn't work out quite as he expected. Nevertheless, he spent six vears in the

Marines as a helicopter crew chief. He visited 52 countries and spent two years at sea.

While in the USMC he married Amy, and shortly before leaving the Marines, his daughter Amanda, now 11, was born. A little older, a lot wiser and less cocky, he saw the need for further education. While working nights at a Sam's Club, he attended SIU-Edwardsville during the day. He earned a B.S. in chemistry with a minor in mathematics, then a Masters in chemistry with a specialization in computational chemistry. During those seven vears, his most vivid memory was a severe lack of sleep. Somewhere

in there, he remembered his wife, and son Daniel joined us in 1996.

His first post-graduate positions were as a Chemistry Instructor at SIUE and SWIC. In December, 2000, he interviewed at Tripos and was hired as a Scientific Marketing Specialist.

At Tripos, David writes and illustrates discovery software marketing materials and "Tripos Buzz,"



David Baker with some tools of his trade

Tripos' bimonthly Internet newsletter. Other responsibilities include testing software and gathering competitive intelligence.

A long-time computer hobbyist, David is delighted to have found an employer who will pay him to do what he loves. For a taste, visit www.tripos.com and follow links to Tripos Buzz and Discovery Software. FlexS™, a program for performing shape-based screening of ligands, is running on the work station behind David in the photo.

- ✓ Solid writing credentials...check
- ✓ Strong computer skills...check-+

see Baker, p. 5

### **Chemical Bond**

### Volume 52 No. 9 December, 2001

The *Chemical Bond* is published in January through May and September through December by the St. Louis Section–American Chemical Society. It is mailed free of charge to members of the section at their address on file at ACS National Headquarters. Changes of address for members will be made automatically upon notification to National ACS Headquarters; send old and new address with zip codes to ACS Subscription Service Department, 1155 16th St. N.W., Washington, DC 20036 or visit www.acs.org and find M embers Only | Online Address Update. Allow eight weeks for change to take effect.

The domestic subscription rate for non-members/affiliates is \$8.00 per year. Subscription orders and changes of address for non-members/affiliates should be mailed to Editorial Production Office, 125 West Argonne Drive, St. Louis, Missouri 63122 or e-mailed to the Editor.

Editor Eric Ressner 314-962-6415 (H) 314-286-6600 x2199 (O)

Assistant Editor David Baker ressner@worldnet.att.net 618-659-1954 (H)

dsbaker@charter.net

Advertising Manager Sue Saum 636-949-4735 saum@lindenwood.edu

Business Manager Donna Friedman 314-595-4388

dfriedman@stlcc.cc.mo.us

Staff Writer John Bornmann 636-946-5161 jbornmann@msn.com

World Wide Web http://www.umsl.edu/~acs Webmaven Lisa Balbes lisa@balbes.com

Correspondence, letters to the Editor, etc., should be sent to

Correspondence, letters to the Editor, etc., should be sent to St. Louis Section–American Chemical Society 125 West Argonne Drive, St. Louis, MO 63122

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# **Meeting Seminars**

#### **Board of Directors**

St. Louis Section–ACS Board of Directors meets the second Thursday of each month at the Alumni Center, University of Missouri–St. Louis. Meetings are open to all members, and all are encouraged to attend. Elected officers and chairs of major committees have the right to vote; others in attendance have voice but no vote. For more information or to make a reservation for dinner, call the Section Chair, Sue Dudek, at 314-694-2464.

Date: Dec 13 (Continuity Dinner)

**Social hour:** 5:30 pm **Dinner:** 6:30 pm

Business meeting: 7:15 pm

Future meetings: Jan 10, Feb 14

### Saint Louis University

Seminars start at 3:30 pm in Room 204 Macelwane Hall. Coffee and doughnuts before the seminar; refreshments after in Room 115 Monsanto Hall. For more information, contact Dana Spence, spenced@slu.edu or call 314-977-2836.

### University of Missouri– St. Louis

Refreshments at 3:45; seminars at 4 pm in B-451 Benton Hall. For further information, Contact Prof. Keith Stine, 314-516-5346, kstine@iinx.umsl.edu.

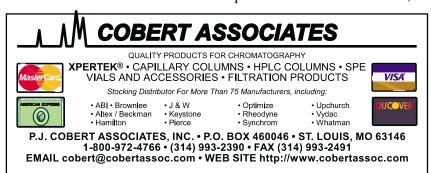
### Washington University

Seminars are in McMillen 311 at 4 pm unless otherwise noted. Coffee is available outside the seminar room 20 minutes prior to the talk, and refreshments follow. For up-to-date information, check wunmr.wustl.edu/Events/seminars.html

Monday, Dec. 3
CBI Seminar
Prof. Peter A. Tipton
Univ. of Missouri–Columbia
Department of Biochemistry
Chemical Mechanism and
Biological Function of Urate Oxidase:
A Revisionist View

### Computational Chemistry Discussion Group

Locations vary, but the time is generally 5:30 for refreshments, and 6 pm for the talk. For more info,



contact Philippa Jayatilleke, 314-647-1099, pjayat@tripos.com

### NMR Discussion Group

All seminars are in 241 Compton, Washington University. For more info, call Mark Conradi at 935-6418 or 935-6292. Seminars are followed by an informal discussion over beer, soda, and chips.

Baker, from p. 2

- ✓ Knowledge of publishing...
  check
- ✓ Tolerance for sleep deprivation ... see ¶ 3.

David will begin sharing *Bond* editorial duties with the January, 2002, issue. To keep it simple, contributors will be reminded to submit content to both David and Eric. Please welcome a fresh face and fresh perspectives: David Baker, Assistant Editor.



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### **Gender Rules**

by Jack Bornmann

In 1908 L. W. Andrews was the first Chairman of the St. Louis Section of the American Chemical Society. L. W. Andrews was a man. The St. Louis Section was a maledominated society. That was not

### Letters More Words

surprising; on the national level the American Chemical Society was male-dominated as was the whole of American society. Women's Suffrage did not become law until after the end of WW I.

The 19th Amendment was not ratified until 1920. But the establishment of women's suffrage did not bring true equality to American women, certainly not in science education. Men attempted to drive women away from careers in science. Only the most persistent women managed to graduate from college and the few most stubborn obtained doctorate degrees.

It was not until 1952 that the St. Louis Section showed enough wisdom to elect Desiree S. Le Beau its chairman. Desiree Le Beau came from an international family; her four grandparents were all born in different countries. Desiree, herself, was born in Teschen, Poland, and was educated in Austria. After obtaining her doctorate she came to the United States and became a U.S. citizen. Desiree's remarkable personality was guided by her belief "Be yourself! Don't worry about your gender." 1952 was the "Year of the Woman."

It took another 33 years before the St. Louis Section elected another woman, Phyllis R. Bennet, to lead the section. Carol S. Aubuchon was the Secretary and Donna Friedman was the Treasurer. Claire L. Schlosser was Editor of the *Chemical Bond*. A woman held every major office except one. This was also the year that Desiree Le Beau returned to St. Louis to be recognized as a 50-year member of the ACS. 1986 was indeed the "Year of the Women."

Phyllis Bennet got her start in chemistry by "borrowing" her older brother's chemistry set. A biography of Madame Curie fixed her interest in chemistry, and a bachelor's degree from Miami University of Ohio turned her into a professional chemist with a job at Monsanto. After moving around a bit she came to St. Louis where she married Bill Bennet. An antiquated anti-nepotism rule at Monsanto forced her to give up her job and go into semi-retirement. This gave her time to raise a family and to satisfy her natural scientific curiosity by reading and taking courses. This led to a master's degree from the University of Missouri-St. Louis and a job with Ralston-Purina. With the encouragement of her husband who was already active with the St. Louis Section (Secretary in 1976 and 1977) Phyllis began to work on the Chemical Bond eventually becoming the Editor. After serving as Chair of the **Publicity and Public Relations** 

see Gender Rules page 15

### NMR ANALYSIS

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Page 6 Chemical BOND

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### Nominate a Local Colleague

The St. Louis Award, sponsored by the Monsanto Company, is presented to an individual who has made outstanding contributions to the profession of chemistry and demonstrated potential to further the advancement of the chemical profession. The award, consisting of a \$1,500 honorarium and a plaque, is presented at the St. Louis Award Banquet, the final event of Chemical Progress Week in April.

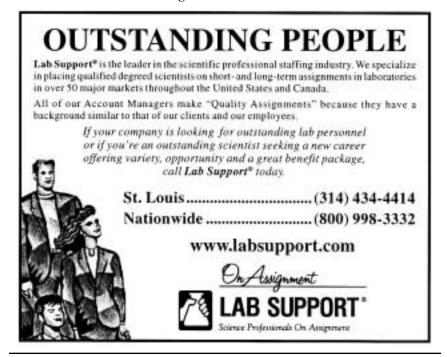
Please help the Awards Committee identify outstanding chemists in the St. Louis Section by submitting your nominations to the St. Louis Award Chair. The nomination should include a nominating letter, two or more seconding letters from individuals who have had a close profession affiliation with the nominee, a brief biogra-

phy, a description of the nominee's accomplishments, and a list of publication and patents.

At the time of the nomination, the nominee must not have previously received the Midwest Award or any national ACS-sponsored award. The nominee must be a member or affiliate of the St. Louis Section of the ACS. The deadline for nomination packets to be received is December 10, 2001. Please send nominations and inquiries to:

Dr. Joseph Ackerman St. Louis Award Chairman Department of Chemistry Campus Box 1134 Washington University 1 Brookings Drive St. Louis, MO 63130-4899 Phone: 314-935-6593 FAX: 314-935-4481

ackerman@wuchem.wustl.edu



Page 8 Chemical BOND

### Bond Brießs

### Board Funds Flinn Foundation Workshop

At the October BoD meeting, there was wide-ranging discussion of a suggestion that we invite the Flinn Foundation to hold one of their summer workshops in St Louis.

The Flinn Foundation organizes roving bands of master teachers to visit cities around the country and conduct workshops for high school teachers. The workshop programs are highly regarded and often attended by participants from near and far.

To demonstrate community support, the host organization has to come up with \$4,500 (only about 11% of the actual cost). Attendees' tuition covers another 20% of the cost, and the Flynn Foundation covers the rest.

The St Louis Section–ACS pre-approved a \$1,000 line item in the 2002 budget to support a workshop next summer. Corporate support is being sought to cover the rest. Pending acceptance of our invitation, the University of Missouri–St Louis will provide the venue (laboratory and classroom space) and dormitory facilities for out-of-towners.

### SIUE ACS Chapter Captures Honors

The ACS Committee on Education has announced the 2000-01 student affiliate chapter awards. These awards are presented to ACS student affiliates to recognize ex-

cellent programs and activities. Locally, Southern Illinois University—Edwardsville has pulled in a "Commendable" award. All winning chapters will be honored at a Student Affiliate Chapter Awards ceremony at the spring national ACS meeting next April in Orlando.

Rita Buen and Kevin Johnson were chapter presidents for a portion of the period covered by the award. Mike Shaw and Manangu Shabangi were faculty sponsors.

### Knowles Honored Here First

A check of the archives, reported by chair-elect Lisa Balbes, turned up the fact that William Knowles, 2001 Nobel Laureate for Chemistry, received the St. Louis Award for his work in asymmetric catalysis in 1977. Though perhaps not as prestigious as the Nobel, our humble award got there first.

### **Board Meeting Bullets**

- A new Biotechnology Topical Group is expected to gel early next year. Watch this space.
- St Louis magazine and the RCGA invited the St Louis section to present a booth at "Classroom Connections" The program promotes cooperation between HS teachers and industry.
- Hal Harris is updating the HS teacher e-mail list. If he doesn't already have you, please let him know you're out there by e-mailing hharris@umsl.edu.
- UMSL and SIUE Chemistry Clubs jointly toured the Human Genome Sequencing Center at Washington U recently.

see Briefs p. 11

### **BoB**

The 9th annual Battle of the Burets was held November 7th at the St. Louis Community College–Florissant Valley in conjunction with National Chemistry Week. Twenty-six teams from 14 area high schools participated in this exciting test of titration skills. Three preliminary heats were held and the winning teams competed in the final round for the grand championship. Teachers and fellow students looked on as teams of two students performed titrations with speed and accuracy.

The first round trophies were awarded to Roxana, Riverview Gardens, and St. Charles West High Schools. The grand champions were **Liz Zerr** and **Chris Coleman** from St. Charles West. All students who participated in this event received certificates of partic-

ipation. This evening not only provides competition but also a chance for the science students from these different schools to meet and share refreshment.

The Battle of the Burets is cosponsored by the St. Louis ACS Section and the Chemistry Department of SLCC–FV. The Battle of the Burets Committee appreciates the time and efforts of **Solutions Plus** for preparing, certifying, and donating the titrants. We would also like to thank Florissant Valley's staff and ChemTech students for their tremendous amount of work to support this event. Refreshment were donated by St. Louis Community College.



Liz Zerr and Chris West, master titrators, with chair Sue Dudek

### **Demographic Tidbits**

Without giving away any private member data, here are some anonymous statistics about the membership of the St Louis section

This first installment is a breakdown of members by the decade in which they joined the ACS. As you can see.

- we have a few members who date all the way back to the 1920s.
- the 1990s beat the next best decade by over 50%.
- but notice the 00s: we're not quite two years into this decade, and already we have one-third as many new members as the whole of the 1990s.

Neither of the latter two points is something you'd guess from

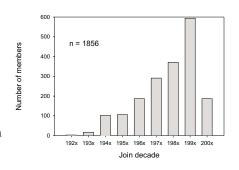
### **Briefs** from p. 11

The Job Manual has been updated. Check it out at the website if you're interested in working with the section. The duties and responsibilities of all standing positions are detailed.

### ChemVolunteering

Minority Scientist Showcase ... Community Science Day ... Kids & Chemistry ... Career Awareness Fair ... Chemistry Expo. All are examples of the activities that we ChemVolunteers have presented this past year.

Demos and hands-on experiments ... WonderScience and ChemMatters distribution ... talking about our careers and sharing the world of chemistry with children and their parents. All are methods we've used to promote



attendance at board meetings or participation in section activities. Though the vast majority of our members are new and presumably young (we'll look at this in a future Demographic Tidbit), most active members are old and presumably ... older.

This is compiled from the St Louis section roster as of 8/31/01. Other sections' results may vary.

knowledge and appreciation of chemistry.

The enhancements we have made to scientific literacy in our community have been possible only because chemists like you cared enough to get out and do something positive.

What? not like you? Well, maybe it's finally your time become more active in one of the public outreach programs next year. Details and information on next years events will be found on the Section's website (www.umsl.edu/~acs) and in future issues of the *Chemical Bond*. If you want to be added to the current list of ChemVolunteers and be notified about upcoming events, contact Lisa Balbes, lisa@balbes.com.

Looking forward to seeing you in 2002 proudly representing your profession.

### **Open Invitation: 2001 Continuity Dinner**

Members and their guests are cordially invited to attend the annual Continuity Dinner. This is the event at which new officers and committee chairs and sub-chairs assume their duties from their predecessors. It will take place on Thursday, December 13th, 2001, at Spiro's South Restaurant, 3122 Watson Road.

This special dinner and board meeting celebrates the past year's achievements and the transition to the 2002 slate of officers. The evening will be highlighted, as always, by

the Henry Godt Memorial Lecture.

There is also a general meeting of the St. Louis Sec-

The gavel will be passed from Chair Sue

Dudek to Chair apparent Lisa Balbes.

tion-ACS.



The evening begins with a social hour and open bar (beer, wine, and soft drinks) at 5:30 pm. Dinner will be served at 6:30, and the business meeting will begin at 7:15.

The cost of the dinner is \$20 per person. Place reservations by Monday, December 10th. As always, members who wish to attend the business meeting but not the dinner are welcome to do so.

Member name		
Number attending	x \$20 =	Amount remitted
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### Thar she goes: Sue's parting message

As I get ready to pass the gavel, I want to express my thanks to the St. Louis Section for the honor and privilege of serving as Chair in 2001. It was an exciting opportunity for me to work with so many enthusiastic, outstanding people.

This year has passed by swiftly, and it's largely due to the many events and programs that were offered by the Section. In February we participated in the Minority Science Showcase at the Science Center. In March there was the Career Awareness Fair and Recognition Night. Chemical Progress Week in April honored chemistry students and others for their achievements. The Section was presented with the Outstanding Large

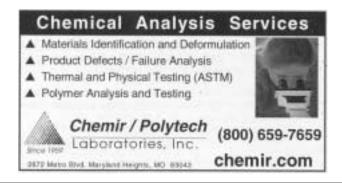
Section Award at the National Meeting in Chicago in August. The Society's 125th anniversary was celebrated and we presented the Midwest Award in October. National Chemistry Week was a big success in November. Those are the just the highlights of all the past year's activities in the Section, I'd need an entire issue to list them all!



As my term comes to a close,

I want to express my sincere appreciation of the 2001 officers, committee chairs and Section members for the tremendous amount of time and energy they put into the Section this past year. Without them, all those events and programs could not have taken place. I would like to encourage all of you to continue your support of the Section and the numerous activities that will be on the 2002 calendar. The 2002 officers and committee chairs are a talented, dedicated group who would welcome your participation. Your participation will ensure the continued success of the award-winning St. Louis Section. Please contact them to find out how you can contribute.

Finally, I wish every success to Lisa Balbes, the 2002 Chair! —Sue Dudek



### Recollections: Fall, 1967

Lol Barton

Bond Editor Frank Mange, in the October issue, reminded members that 1967 was the 60th in the history of the Section. In the November issue he described how the Section compared with other similar ones.

## CHEM ISTRY

With 1445 members, the St. Louis Section was one of the "Large Sections"; 13th largest of the then 167 Sections, 17 behind next larger Detroit.

That fall, Washington University welcomed new colleague Ron Lovett. Eric Block and Dennis Diestler joined UM—St Louis. Jed White returned to SIU-Edwardsville from a sabbatical at University College London and assumed the chairmanship of the chemistry department. UM—St. Louis announced the arrival of Dr. Linda S. Whatley as visiting assistant professor of chemistry. Twenty-two years later, Dr Whatley (then Wilson) became the President of Radcliffe College and served from 1989—1999.

The Board of Directors endorsed our Section joining the Midwest Region and participating in the Midwest Regional Meetings. An initial assessment of \$0.05 per member was used to start a new revolving fund to be used for meetings; G. Brooke Hoey was appointed by Chairman Leo J. Spillane to be the St. Louis representative on the Regional Steering Committee.

The Section debated presenting the Midwest Award at the 1968

Midwest Meeting in Manhattan Kansas. That year, the Edward Mallinckrodt Jr. Foundation established a Midwest Award Fund with \$15,000 in honor of the late Edward G. Mallinckrodt. The Section agreed that the name of the award would change to "The Midwest Award, sponsored by the Edward Mallinckrodt, Jr. Foundation and administered by the St. Louis Section of the American Chemical Society".

The Midwest Award for 1967 was given to Professor Frank Spedding of Iowa State University. The address was presented at St. Louis University. A photograph of the banquet in the *Chemical Bond* showed members dancing.

Construction of the new corporate headquarters of Mallinckrodt Inc. was started at Brown Road and I-270 during the fall. Fisher Scientific Co. opened a new scientific supply center at 1241 Ambassador Drive in St. Louis, "designed to facilitate speedy shipment of scientific tools to the central states."

At its October meeting, the Board voted unanimously to present a certificate of special recognition to Mr. Jack Marcus in recognition and appreciation for his outstanding service in the field of continuing education. Jack was a chemical engineer and taught at Brooklyn Polytechnic Institute and at Harris Teachers College in St. Louis. In 1963, he founded Missouri Analytical Laboratories. He also established The Marcus Award, an annual undergraduate research competition at St. Louis University.

Many of us in the late 1960s recall the excellent programs offered at the Washington University Continuing Education Institute, run by Mr. Marcus. Some of the first seminars I attended at UM–St. Louis took advantage of the speakers at the Institute—such notables as Roald Hoffman, Andrew Streitwiezer, and Bob Denning are the only names I can recall, but there were others of equal repute.

This is the third article in the series on Section History based on memory and on the old issues of the Chemical Bond. If you have comments or corrections, or if you would like to contribute to this series, please contact me at |barton@umsl.edu.

#### **Gender Rules** from p. 6

Committee and working on the planning committee for the 1984 National ACS Meeting in St. Louis Phyllis was nominated to become the Chair of the Section in 1986.

In 1992, Donna Friedman became the Chairman of the Section. Donna had previously served as Treasurer and before that she had been Business Manager of the *Chemical Bond*.

The "Years of the Women" began in 2000 when Pauline Bellavance became Chair; she, too, had been Treasurer of the Section and Business Manager of the Bond. Succeeding Pauline: Sue Dudek in '01 and Lisa Balbes in '02. Lisa will hand the job over to Leah O'Brien. What about 2004?

Male chauvinists hear this. Instead of just sitting there mumbling, step forward. There is no magic path to stardom in the St. Louis Section but it starts with becoming involved. Attend some meetings, see what is happening, and meet people. Choose activities that interest you and let your willingness to work be known.

And ladies, don't let the Female Flag droop. You can be a standard bearer in 2004. Just step forward.

### **Section Election Results Certified**

One hundred fifty-three ballots were received, which is 8% of section members voting. The tellers, with the Chair's oversight, had to reject five irregular ballots. Tellers used double-check procedures for every office.



- Chair-Elect: Leah O'Brien
- Secretary: Keith Stine
- Treasurer: Pauline Bellavance
- Directors
  - -Alexa Serfis
  - -Samir El-Antably
  - —Bill Doub
- Councilors:
  - —Lawrence Barton
  - —Tom Layloff
- Alternate Councilors:
  - —Greg Wall
  - —Jed White

Please congratulate the winners when you see them!

*Jerry Hook Secretary of the Section* 



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