



Chemical Bond

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St. Louis Section, American Chemical Society



**Bijan Khazai
2004 Section Chair**

Message From the Chair 2004

Bijan Khazai

When Donna asked me to help oversee the section's day-to-day business in 2004, I was ambivalent. Honored to accept, yet apprehensive, as I had real concerns about whether or not I would be able to put in the time demanded by the job. In her great wisdom, Donna must have sensed my hesitation, as she hit me with the sizzle and said not to worry about anything.

After spending a year studying the section's operation and listening to the problems and concerns that some other Chair-elects across the country face, I finally realize what Donna meant when she said not to worry. We are light years ahead of ourselves and there is nothing to worry about!

It is truly remarkable, the great job that the past chairs and the section's active volunteers have done over the years. They have literally put together a well-oiled, well-maintained machine that could run itself for years without an operator. Perhaps, that is also the reason when I sought the advice of my "spiritual chemical advisor" on what would be a good formulation for my goals for the section in the coming year, she said: "make it a goal not to screw things up too badly".

Well, Lisa, I have taken your advice to heart, and am not going to fix something that is not broken. What is more, I plan not to break it just so I'll have something to do fixing it! What I would like to do, however, is to build on the things that we already have and are blessed with.

We have a large pool of members, almost eighteen hundred strong with a good percentage of that being comprised of active members, the single most important reason for our success. But, no matter how good we are, we can be better. We can have more members, and I believe we should have more **active** members. Some of the reasons we don't have more members actively involved may be obvious: hectic schedules, family obligations, the ever-increasing workload, and the dynamics of the economy. To sum it all up, it is the craziness of the times. But, that is exactly the reason why, we as chemists, need to band together even more closely. We should ban together not only to share knowledge, as we do at the national and regional meetings, but also to share common experiences that may affect the well-being of us locally.

We need to improve and expand our outreach programs. Not only as a way to promote chemistry as a discipline and help dispel misconceptions about the field in the public eye, but also to generate enthusiasm and excitement for chemistry among the young. This is in the hope of attracting more bright minds to the physical sciences and chemistry in particular. The value of these worthy programs can not be underestimated, as they can close the gap between the



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Meeting & Seminars

Board of Directors

St. Louis Section–ACS Board of Directors meets on 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. If you want to attend the dinner, please contact Bijan Khazai (bkhazai@sentortech.com or 314/497-8629) at least one week prior to the meeting date. The usual cost of dinner is \$15. Members wishing to become active in section activities are welcomed for their first dinner for free, compliments of the section.

Date: Jan. 8

Social hour: 5:30 pm

Dinner: 6:30 pm

Business meeting: 7:15 pm

Future meeting: Feb. 12

University of Missouri- St. Louis

Seminars are held on Mondays at 4:00 pm in Room 451 Benton Hall unless otherwise specified. Refreshments 15 minutes prior to seminar time. (www.umsl.edu/chemistry)

January 26

Andrea Franken

Vanderbilt University
Nashville, TN

*New Monocarbaboranes:
Synthesis, Structure and
Potential Applications*

St. Louis University

Seminars start at 3:30 pm in Room 204 Macelwane Hall, unless noted otherwise. Refreshments follow. For more information, contact Paul Jelliss, jellissp@slu.edu.

Washington University

Seminars are in McMillen 311 at 4 pm unless otherwise noted. Coffee is available 20 minutes prior to the talk, and refreshments follow. For information, contact:

Amy Walker

walker@wuchem.wustl.edu

An up-to-date list of seminars is available at:

[www.chemistry.wustl.edu/
~seminars/seminars.html](http://www.chemistry.wustl.edu/~seminars/seminars.html)

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***Synthetic Organic
Chemistry (SOC)
Discussion Group***

The newly created Synthetic Organic Chemistry (SOC) discussion group will hold its fourth meeting on:

Wednesday, January 21

St. Louis University
Lee Lecture Hall 1 (LH1)
(lower level lecture halls,
just next to Chem. Dept.)

and will feature its present Chair:

Prof. Olivier Nicaise
St. Louis University
*"Studies in Asymmetric
and Non-Asymmetric
Organic Synthesis"*

Please convene for refreshments at
5:30 pm, general remarks and

comments/suggestions from the participants will start at 6 pm, and the presentation will follow.

Parking will be available at the Olive Parking Garage, corner of Olive Blvd. and N. Compton Ave. The lower level lecture halls and Chem. Dept. are located just behind the soccer stadium. If you need directions, contact Olivier Nicaise at 977-2853 or nicaiseo@slu.edu.

If you are interested in participating, and would like to make suggestions regarding the organization and some additional activities of the SOC discussion group, or at best would like to make a presentation at a future meeting, then please contact one of the organizers listed below:

Prof. Olivier Nicaise - SLU
(314) 977-2853/nicaiseo@slu.edu

Prof. Kevin Moeller - WashU
(314)935-4270
moeller@wuchem.wustl.edu



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Linguists Debate the Roots of Language

by Jack Bornmann

By studying fossils scientists have determined that we human beings originated in Africa. By studying relics from archeological digs scientists have been able to trace writing back to origins in Sumeria, Egypt and China. Before man began to write, mankind must have been speaking. We have no fossil relics of prehistoric conversations. Or do we? Perhaps the relics exist in the very language we speak today.

Letters & Words & More

Those of us who had to learn a second language know that learning a third language is easier than learning that second one, especially if the third language is related to the second. German and Yiddish are related. Learning Portuguese is easier if you already know Spanish. And learning Finnish is easier if you already know Hungarian. Linguists determined that Greek, Latin, Italian, French, Spanish,

Portuguese, German, Celtic, Slavic, Indo-Iranian, Romanian, and English are all considered branches of Indo-European.

For example in Sanskrit the word for father is “petar”, in Greek it is “peter”, in Latin it is “pater”, in German it is “vater” (pronounced *fah-ter*), and in English the word, of course, is “father”. These words are all similar, especially when one considers the types of consonants used. P and F are the two explosive consonants, meaning a puff of air leaves the mouth when one sounds out these letters. Put your hand in front of your mouth and make these sounds: *puh, fuh, duh, and guh*. When you sound the *puh* and *fuh*, you can feel the puff of air on your hand. But when you sound out the *duh* and *guh*, you do not feel the puff.

People who become separated and isolated may easily shift from one consonant sound to the other and “pater” (pronounced *pah-ter*) could easily shift into “vater” (pronounced *fah-ter*). Another interesting relationship of words is: fist, finger, and five. (the fist consists of five fingers.) Thus we have:

English: fist, finger, five

Dutch: vist, vinka, vitch

German: faust, finger, funf

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from p. 10 of April 2003

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Linguists look at similar relationship between other words and seek to determine the original Indo-European language, the basic language from which all the Indo-European languages arose. This original language is called Proto-Indo-European. Another family of languages is the Afro-Asian group that includes Arabic, Hebrew, Finnish, Hungarian, Estonian, Mongolian, Japanese, and Korean. Linguists working with these languages have worked out the original vocabulary of Proto-Afro-Asian.

By examining the similarities in the proto-languages linguists have tried to discern the vocabulary of the earlier language that was the source of the proto-languages. Russian linguists have been more successful at finding the words in the original language, which they called Nostratic. Nostratic comes from the Latin *noster*, *nostra*, *nostrum* (the masculine, feminine, and neutral forms) meaning "ours" and *dictum* meaning "word". The Russians theorized that certain words would be important to primitive humans and, therefore, these words should be in Nostratic and should appear in subsequent languages. These words were I, me, two, pair, Thou, Thee, you, who, what, tongue, name, eye, heart, tooth,

no, not, fingernail, toenail, louse, tear (as in weeping), water and dead. These things would be important in the lives of primitive human beings. Not every linguist accepts the hypothesized existence of nostratic, some vehemently disagree with the idea. The battlelines seem to be drawn upon lines of nationality. The Russian linguists tend to support the idea of nostratic, while the Americans oppose it. One Russian linguist teaching in an American university was adamantly told not to even mention nostratic in his classes. This sounds a lot like the battle between creationists and evolutionists.

One person wondered if nostratic is the linguists version of cold fusion. And like cold fusion, time will tell.

By the way...

Sethuraman Subramanian informed me that there was a mistake in this column in the November issue of the Chemical Bond. The mitochondria make the energy molecules, adenosine triphosphate (ATP) and does not manufacture proteins. It is the ribosome that produces the proteins using the blueprint provided by the DNA. I greatly appreciate the email from Sethuraman Subramanian and from any other readers. -Jack

*The Editor would also like to thank the readers' messages regarding this error.



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The St. Louis Public Schools 21st Career Awareness Fair

The St. Louis Public Schools 21st Career Awareness Fair is scheduled for May 4-5, 2004 at the America's Center. By investing in a world class workforce, the Career Awareness Fair reinforces the Missouri Assessment Program (MAP) by showing students how academic skills are applied in the work environment. Volunteers are needed to demonstrate the relationship of the things we do as chemist at our jobs and school skills. You can make the difference in the early career choice of 8th grade students. If you have any questions or would like to volunteer, contact Greg Wall by telephone at 800-325-5832 ext. 3139 or e-mail at gwall@sial.com.

Public Disclosure: Does It End the Ownership Rights?

Sadiq Shah

Office of Technology Transfer
Western Illinois University

After a discovery, for most of us, the natural tendency is to bring the idea to the attention of our peers as quickly as possible. However, ANY public disclosure prior to any legal protection can seriously compromise the patent rights in this global market. Upon public disclosure, the patent rights are lost instantaneously in most foreign countries and the applicant is forever "barred" from obtaining a patent. In the US the law allows a one-year grace period. However, the clock starts ticking from the time the public disclosure is made. It is always advisable to not rely on this grace period. So, what constitutes a public disclosure? Any description of the idea or invention in the form of one or more of the following: publication as an abstract or article, posting it on the internet, a seminar, a private meeting with potential customers, or offering it for sale in commerce. The act of public disclosure involves releasing information to the public domain, hence the loss of ownership rights. There are, however, legal means to protect the idea prior to the public disclosure.

Stay tuned for more on these topics and associated ownership rights in future Chemical Bond issues.

Section Memorabilia

If you have kept old copies of the *Chemical Bond*, please check to see if you have the January and February 1971, and also the October 1977 issues. They are needed to complete sets in the Section Archives at the Thomas Jefferson Library at UM-St. Louis. Any other items such as letters or newspaper articles that may not have appeared in the Annual Reports would also be appreciated. It is important that we make sure the archives are as complete as possible. Anything you have should be given to Lol Barton, Section Historian.

wants and needs of the users, such as academia, private industry, and government labs, to name a few.

Further and foremost, we need to understand what our members' needs are in order to provide better service to them and address their concerns. We need to find out what it would take to encourage more area chemists to become members of the section, and for the current members to become more proactive participants, as opposed to passive bystanders. We all know there is safety in numbers, but there is also reward and recognition in numbers. So, let us find out if we can further increase not only our numbers but also the number of our active volunteer members.

Needless to say, improved service and better response to members' needs require greater access to capital. We are financially sound but we can do better. In fact, we should do better especially in today's environment where return on our available capital is subject to the whims of shaky financial markets. Perhaps it is time to look for innovative ways of increasing the section's assets through direct fundraising and/or finding sponsorship for individual, or groups of programs, whether through active participation or the goodwill of our existing members.

To our volunteers who have been carrying the torch in a variety of capacities, I would like to extend my most sincere gratitude on behalf of the section. At the same time, I would like to note with special appreciation the services of those who have graciously agreed to the more substantial investment of their time, in order to help coordinate the activities of our many committees and subcommittees in the coming year.

To those very dear members who have not been as directly involved in the section's programs, I come with a question: what can or should we do as a section to raise the level of enthusiasm and participation in the section's activities? The answer to that, especially in these changing times, may redefine the way we conduct the business of our section. Please help us serve you, our community, and our profession, better. I anticipate we will be knocking on your doors, or your electronic mail servers, for answers. **Please** respond to the questionnaire you may receive in this regard, to help us better calibrate our actions to your needs.

In the meantime, please do not hesitate to drop me a note with your thoughts, concerns, and most of all insights. I very much thank you in advance for your support in the coming year as we begin a new chapter in the section's long and successful history.

Last, but not least, I would like to thank Leah for her dedication, her skillful chairing of the section in 2003, and for a job well done. We are indebted to her.

I wish everyone a highly rewarding, gratifying, and most of all happy and healthy New Year.

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Continuity Dinner 2003

The Continuity Dinner was held at Chris' Restaurant on Thursday, December 11, 2003. Eric Ressner was given the Salutes to Excellence Award from Lisa Balbes, who was filling in for Leah O'Brien, before handing over the Chair's gavel to our new Chair Bijan Khazai (see picture on page 2). It was also announced at the meeting that Greg Wall will be this year's recipient of the Distinguished Service Award. This award recognizes outstanding,



Eric Ressner receives his Salutes to Excellence Award from Lisa Balbes.



Greg Wall, recipient of the Distinguished Service Award.

long-term participation in Section events and tireless effort. The award will be presented to Greg at Recognition Night on March 13, 2004 at the Glen Echo Country Club. The surprise speaker of the Henry Godt Memorial Lecture was Sue Dudek, the 2001 Section Chair. Sue recapped the past year's events in eloquent style. The dinner was outstanding and dessert, provided by Samir El-Antably, was even better. Special thanks to Samir El-Antably for organizing the event and to all who attended. Congratulations to Eric Ressner, Greg Wall, and our new Section Chair Bijan Khazai. We are all looking forward to a very active year.

Call for Nominations for Midwest Regional Award

The ACS Midwest Regional Award, established in 1944, recognizes outstanding achievement in chemistry done in the midwestern region of the United States. To be eligible, a nominee must have performed the cited work while residing within the Midwest Region of the ACS. (The nominee does not have to reside currently within the Region.) Nominations must include a nominating letter, two or more seconding letters, a curriculum vitae, a brief biography, and documented, objective information regarding the outstanding achievements of the nominee. If the nominee is an academician, a list of persons who have received advanced degrees under his or her direction should be included. Please submit nine copies of all nomination material to:

Leah O'Brien, Chair
Midwest Award Committee
Dept. of Chemistry/SIUE
Edwardsville, IL 62026-1652.

**Nominations must be received on or before the deadline of March 31, 2004.*

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