

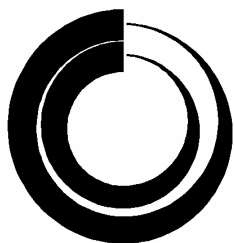
Chemical Bond

**Volume 54
Number 5
May 2003**

St. Louis Section, American Chemical Society



**Chemistry Technician Awardee
David Masters-Moore with
ACS Chair Leah O'Brien at
Recognition Night 2003**



Novus International, Inc., a global leader in the animal agriculture industry, is a privately held corporation headquartered in St. Louis, Missouri. Formed as a joint venture in 1991, the Novus corporate mission is to help feed the world affordable, wholesome food by supplying goods and services to the leading commercial food producers worldwide. Employing about 160 people globally, Novus does business in over 70 countries and has satellite offices around the world. Our web address is www.novusint.com.

Novus manufactures and markets Alimet[®] Feed Supplement, the world's leading source of supplemental methionine. Novus also manufactures and/or distributes other animal nutrition and health products including antioxidants, organic acids, hatchling supplements and vaccines. We are seeking an experienced, motivated Chemist with Formulation/Analytical expertise to work at our excellent research facilities in St. Charles, Missouri. Novus International is an Equal Opportunity Employer with competitive salary and benefits.

Chemist – Formulation/Analytical chemist

Position summary:

- ◆ Work closely with marketing to establish profitable new products, product forms, and product formulations in the field of animal nutrition and health
- ◆ Lead new product teams in early stages of discovery, research trials, customer trials, pilot scale production, plant qualification. through full-scale production including market development
- ◆ Work with regulatory to establish product registrations by providing technical information
- ◆ Participate as a member of industry standard setting boards
- ◆ Promote new products at industry technical and marketing meetings
- ◆ Provide technical service and troubleshooting for new product commercialization
- ◆ Offer proven technical management skills

Required skills and education requirements:

- ◆ Chemist (Organic or Analytical), minimum of master's degree, (PhD preferred)
- ◆ At least 7 years of experience in product form and formulation, preferably but not limited to agriculture
- ◆ Proven track record of commercializing new products, new product forms, and/or new product formulations
- ◆ Published in peer reviewed journals
- ◆ Works equally well with customers and in the laboratory
- ◆ Good project management skills
- ◆ Track record of establishing alliances – for example, with customers, suppliers, academic, industry trade groups, standard setting boards
- ◆ Previous managerial experience of bench level scientists

Desired skills:

- ◆ Powder and liquid product experience
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- ◆ Antioxidant chemistry/biochemistry
- ◆ Analytical assay validation experience

For consideration, e-mail your resume with cover letter and salary history to csscha@novusint.com

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No. 5

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Meeting & Seminars

Board of Directors

St. Louis Section–ACS Board of Directors meets the second Thursday of each month, usually 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 Leah O'Brien (lobrien@siue.edu or 618-650-3562) 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 compliments of the section.

Date: May 8

Social hour: 5:30 pm

Dinner: 6:30 pm

Business meeting: 7:15 pm

Future meeting: Sept. 11

St. Louis University

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

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@jinx.umsu.edu

Midwest Mass Spec Discussion Group

Wednesday, May 14th

6:30 pm Refreshments

7:00 pm Presentation

Dr. Arthur Mosley

GlaxoSmithKline

The Synergy of Proteomics and Genomics in Drug Discovery and Development

Laboratory Science Building

Washington University Campus

(immediately south of parking garage on Throop Drive)

Computational Chemistry Discussion Group

Meetings are held at Tripos, Inc., 1699 South Hanley Road. Parking is available in the rear of the building. Refreshments at 4:30, seminar at 5 pm. For more information, or if you would like to make a presentation at a future meeting, contact Philippa Wolohan, 314-647-8837 x3201, pwolohan@tripos.com or Mitchell Polley x3358, mpolley@tripos.com

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 Thomas P. Vaid, vaid@wuchem.wustl.edu



David Masters-Moore is a member of the Mass Spectrometry Group at Pharmacia Corporation in Chesterfield, MO. He provides mass spectrometric support to almost every project in the Discovery area through performing high quality low- and high- resolution analyses of chemical compounds. He determines accurate mass of compounds that is required for chemical entity conformation as well as performs analysis of unknown samples for determination of putative elemental compositions.

Chemistry Technician Award

David is recognized as having made significant contributions in formulating medicinal and combinatorial chemistry support strategy and then reducing those plans to practice.

He is noted for his experience in configuring, operating and maintaining numerous instruments, including mass spectrometers and high performance liquid chromatographs.

David is considered to be very skillful in analytical method development and validation, sample preparation and data analysis under Good Laboratory Practice (GLP) guidelines. He has also demonstrated superior computer skills. He is proficient in Microsoft DOS, Windows 95, NT, and 2000, as well as in a variety of lab instrument software programs.

David is an author of 15 company-internal reports and one scientific article published in the Proceedings of the National Academy of Sciences. Currently, he is a member of the American Chemical Society, Division of Analytical Chemistry, and American Society of Pharmacognosy.

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The Voyage of Discovery Controversy

by Jack Bornmann

When and where was the start of the Lewis and Clark Expedition? I have lived in St. Charles since 1965 and the citizens here insist that the expedition began right here in St. Charles. But let us examine the question more closely.

Letters & More Words & More

Thomas Jefferson had many interests. He collected data such as the times of sunrise and sunset, the moon phases, the annual appearances of plants, bugs, birds and animals. He also had a collection of animal bones that he liked to study. Although he himself never traveled far, he encouraged others to make distant travels and describe their experiences to him. Like many other learned men of his day, he believed in a Northwest Passage that would permit boats to move from the Mississippi River to the Pacific Ocean. He hoped the Missouri River would flow into another river that flowed into the Pacific Ocean. He also thought that the Northwest Territory contained many new and strange creatures, perhaps even a dinosaur or two.

Before 1800 Jefferson hoped that someone would explore that great western territory. In 1802, after becoming president, he made plans to send his secretary, Meriwether Lewis, on the journey. There was a problem, however, Lewis was a captain in the army and the western territory was owned by Spain (until it was given to France). American

trappers, traders and explorers were permitted in the territory, but a group of soldiers was an invasion. Captain Lewis and a small band of soldiers would have to travel as civilians and sneak into the territory.

Fortunately, the United States bought the Louisiana Territory from France early in 1803, before Captain Lewis set out on his mission. Did the Expedition begin when Jefferson gave Lewis the Commission? Did the expedition begin when Lewis set out overland to Pittsburgh where a keelboat was being built for him? But Clark was not with him at this time and some might argue that the Lewis and Clark Expedition could not begin if Clark was not along.

In Pittsburgh, Lewis waited for "a bunch of drunken, lazy louts" to complete the keelboat. Almost before it was completed Lewis loaded the boat with supplies, some soldiers and several specially picked boatmen who knew the Ohio River. Did the Expedition begin when Lewis set sail from Pittsburgh? Again, Clark was not yet with him.

In spite of some difficulty because of low water and rocky rapids Lewis finally arrived in Louisville (in what is now Kentucky). It was at Louisville that William Clark joined the crew as co-captain. Clark had recruited some men to join the army and the expedition. Was the start of the Lewis and Clark Expedition at Louisville? But President Jefferson's commission to them called for the exploration of the Missouri River and points west.

The group sailed down the Ohio River to the junction of the Mississippi and then north to St. Louis. St. Louis was under the command of a French military officer who had heard

Continued on page 8

St. Louis Section-ACS Request for Nominations for 2004 Officers

The St. Louis Section of the American Chemical Society requests nominations for officers, directors, councilors, and alternate councilors to stand for election in the fall of 2003. If you would like to nominate someone for any or all of these offices, please fill in this nominating ballot and mail it, postmarked no later than May 31, 2003 to:

Dr. Keith J. Stine
Department of Chemistry and Biochemistry
University of Missouri-St. Louis
St. Louis, MO 63121

You may also e-mail your nominations. While it will be difficult to assure your anonymity as a nominator, your identity will be removed from the e-mail before it is forwarded to the Nominating Committee. Send e-mail nominations to lobrien@siue.edu.

Nominating Ballot St. Louis Section-ACS 2004 Officers

Chair-Elect _____

Secretary _____

Treasurer _____

Directors _____
(up to three)

Councilors _____
(up to two)

Alternate Councilors _____
(up to two)

Continued from page 6

by word of mouth from traders and trappers about the sale of the Louisiana Territory, but he had received nothing official from the consulate in New Orleans. Until he was officially relieved of his duty to guard and protect St. Louis, no foreign, i.e. American, military presence would be allowed in St. Louis. With military courtesy, the French officer received Captain Lewis but his men were not permitted to stay. Thus, the Lewis and Clark Expedition did not start from St. Louis.

Instead Captain William Clark took the keelboat and his men to the American side of the Mississippi River, in what we now call Illinois. They set up an encampment at Wood River, but don't look for evidence of the encampment at Wood River. The river moved! In those days a military encampment was called a fort. The

men spent the winter of 1903-4 in Fort Wood. In May of 1904 Captain Clark and his men set forth across the Mississippi into the mouth of the Missouri River. Did the Lewis and Clark Expedition begin at Fort Wood in Illinois? But Captain Lewis was not with them; he was back in St. Louis collecting more information, goods and smiles from the ladies.

Clark and his men arrived in a small village now called St. Charles. The citizens there greeted the men with a welcoming dance and parties while they waited for the arrival of Captain Lewis.

Finally Captain Lewis joined his men and the two captains with their crew of soldiers and rivermen set out from St. Charles. The group was finally complete and therefore present-day St. Charles maintains that the Voyage of Discovery (the official name) started out from our city.



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Awards Night 2003

Awards Night 2003 was held on April 7 at Kemoll's Restaurant. It started with opening remarks from Leah O'Brien, Chair of the St. Louis Section of the American Chemical Society. This was followed by dinner and a Keynote address given by Angela Knickmeyer of Buckeye International, Inc. entitled "Characteristics of a Quality Cleaner". Then came the Presentation of Awards.

The Outstanding College Junior Student Award was presented to the following students: Laura Mecker of Lindenwood University, Kerri Kubernat of Maryville University, Michelle L. Kovarik of St. Louis University, Patrick Bell of Southern Illinois University at Edwardsville, and Karen Ruff and David Strasfeld of Washington University. The Outstanding Chemical Technology Student Award was given to Chelsea L. Jarrell of St. Louis Community College at Florissant Valley. These awards are sponsored by the St. Louis Section of the American Chemical Society.



Outstanding College Junior Student Award winners with Leah O'Brien (Chair, ACS), Cathy Murphy (ADACION), and Mike Hauser (SLCC-Meramec)

The next Awards presented were for the winners of the Greater St. Louis High School Chemistry Contest. Ranking 1st through 5th in the Regular Division were: (1st) Sonalee J. Ravi of John Burroughs School, (2nd) Evan D.

Sadler of Clayton High School, (3rd) Intelly S. Lee of Parkway Central High School, (4th) Michael Avery of St. Louis Priory School, and (5th) Dianna Liu of Parkway Central High School. The winners of the Advanced Division were: (1st) Jonathan W. Ray of Clayton High School, (2nd) Karthikeya Ponnusamy of Parkway South High



Greater St. Louis High School Chemistry Contest winners with Leah O'Brien (ACS), Cathy Murphy (ADACION), and Myron Reese (McKendree College)

School, (3rd) Peter Scully of Parkway Central High School, (4th) Eddie F. Schlafly of St. Louis Priory School, and (5th) Julia A. Zhu of Clayton High School. Many other students in both divisions received Honorable Mentions. This award is sponsored by ADACIOM (Associated Drug and Chemical Industries of Missouri, Inc.).



Leopold Marcus Awardee Jared Jones and finalists (Christine Moore, Alex Price and Kenise Jefferson) with Leah O'Brien (ACS) and Bruce Kowert (St. Louis University).

The 2003 Leopold Marcus Award was presented to Jared Jones by Bruce Kowert of Saint Louis University. The finalists for the Award were Christine

Moore, Alex Price, and Kenise Jefferson. The last two presented were the High School Teacher Award and the Chemical Technician Award. The 2003 High School Teacher Award was given to Jeanette Hencken of Webster Groves High School and the 2003 Chemical Technician Award was given to David Masters-



High School Teacher Awardee Jeanette Hencken with Leah O'Brien (ACS).

Moore.

It was a wonderful evening with great food. Thank you to everyone who helped for their time and hard work to pull the evening together.

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Bond Briefs

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Distinguished Alumni Lecture

**Monday, May 5
Distinguished Alumni Lecture**

Jerry K. Ronecker, Attorney
Husch & Eppenberger, LLC
St. Louis, MO

*Legal Reactions to Chemistry:
Experiences as a Chemist/
Attorney practicing
environmental toxic law and
product liability.*

Flinn Workshop

The Flinn Workshop for science teachers will take place from June 16 to the 20th. There is no deadline for applications, but availability is limited and fills quickly. This year will feature Lee Merck.

For more information visit the Flinn website: www.FlinnSci.com and click on: Flinn Foundation.

- **Lol Barton and Samir El-Antably** for coordinating facilities and reservations for Recognition Night
- **Sue Dudek** for coordinating the Chemistry Technician Award
- **Joe Ackerman** for coordinating the St. Louis Award
- **Virginia Kirwin** for coordinating the H.S. Teacher Award
- **Ed Hiss** for helping with the Career Workshops
- **Angela Knickmeyer** for being the Keynote Speaker at Awards Night
- **Alexa Serfis** for coordinating the Undergraduate Research Symposium
- **Leah O'Brien** for coordinating the Women Chemists Luncheon
- **Samir El-Antably** for coordinating facilities and reservations for Awards Night and the St. Louis Award Banquet
- **Gordon Anderson, Lisa Balbes, Jim O'Brien and Keith Stine** for their work on Career Day
- **Billie Bright, Jeff Kammermeyer, and Kevin Tibbs** for their talks at the Career Development Workshops
- **Sadiq Shah** for coordinating the Technology Transfer Symposium/ Teleconference
- **Myron Reese and Donna Friedman** for running the High School Chemistry Olympiad
- **Al Byington, Adrienne Mazdra, Dana Sadikovic, Aixue Huang, Eboni Delaney, and Kimberly McCullough** for helping with the High School Chemistry Olympiad

2003 St. Louis Section Chemical Technician Award Call for Nominations

The St. Louis Section Chemical Technician Award is presented to a chemical technician in the St. Louis area who has demonstrated a high degree of professionalism as a chemical technician. Criteria used to judge the award include technical skills, safety and housekeeping, relationship with co-workers, presentations, reliability, communication skills, contribution to team efforts, and additional professional activities. The award will consist of a plaque, a check for \$250.00, dinner for the awardee and a guest at the Chemical Progress Week Awards Night ceremony, and nomination for the National Chemical Technician Award. The award will be presented at the Awards Night Banquet in April of 2004.

A chemical technician is a person whose training includes successful completion of an Associate or Bachelor Degree in chemistry or a chemistry-related curriculum, or the equivalent knowledge gained by experience. The primary work of a chemical technician is conducting experimentation and/or correlating information to assist in the solving of chemical problems.

Letters of nomination must be received by Sue Dudek, Pharmacia Corp., mail code T2J, 800 N. Lindbergh Blvd., St. Louis, MO 63167 by October 31, 2003. Nominations, including seconding letters, must not exceed six pages. The nominating letters should address each of the criteria above. A current work address, phone number and fax number must be provided for each nominee. Please include an e-mail address if one is available.

Chemical technicians need not be a TECH Division Affiliate or ACS member to be eligible for this award. This award is administered by the St. Louis Section of the American Chemical Society (ACS).

For more information contact Sue Dudek at 314-274-2464,
FAX 314-274-4426, susan.dudek@pharmacia.com

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Notes from the 225th National Meeting

Section Coucilor Donna G. Friedman reported business from the National Meeting in New Orleans, LA.

Membership Affairs Committee

Members can renew their dues online. Unpaid members are now purged monthly.

An Affiliates-to-Membership Faculty Networking Session was held in New Orleans to encourage faculty advisors to enroll their graduating seniors in ACS as full members.

A petition has been drafted for consideration at the Fall, 2003 meeting that would allow fully certified pre-college teachers of chemistry or an allied science to become Associate Members, and fully certified pre-college teachers of chemistry or an allied science with three years of employment as a chemistry teacher to become Members.

Council Meeting

The Council voted to set dues for 2004 at \$120. Dues for 2003 is \$116.

The Council passed the Petition for Division and Local Section Funding. Since the petition involves changes to the Constitution, it will now be submitted to the membership for vote by mail ballot. A two-thirds favorable vote is required for passage. If passed, the total amount of money allocated to Local Sections and Divisions will be 20% of individual member dues paid to the Society. This percentage represents

approximately \$2,602,000. Local Sections will receive 55% of this allocation, Divisions will receive 45% of the allocation. If needed, the additional monies will be funded primarily by a temporary assessment that was approved by the Board of Directors. Members would be assessed \$2.00 in 2004, \$4.00 in 2005, \$6.00 in 2006, and \$8.00 in 2007.

The Committee on Nominations and Elections selected William F. Carroll, Jr., David F. Eaton, Michael E. Strem, and Kathleen C. Taylor as nominees for 2004 President-Elect. Rather than visiting each of the Councilor Caucuses to present position statements, a "Nominee Town Hall Meeting" was held so that questions could be asked of the nominees. The response to this format was favorable. The Council voted to select William F. Carroll and Michael E. Strem as candidates for President-Elect. Ballots will mailed to the membership in the fall.

The Committee on Nominations and Elections selected Dennis Chamot, Nancy B. Jackson, Peter C. Jurs, and James P. Shoffner for candidates for Directors-at-Large for the 2004-2006 term. The election will be conducted by Council in the fall by mail ballot.

A symposium will be held in New York City in September that will focus on what chemists can do to contribute to our nation.

A search is in progress for an Executive Director to replace John Crum.

The Committee on International Activities is planning a Middle East Chemistry Conference in December 2003 in Malta. Six Nobel Laureates have indicated that they will attend.

The Society Committee on Education has will hold a conference in June in which the interdisciplinary nature of chemistry will be considered when examining the prospect of "re-engineering chemical education." The Committee is collaborating with the National Science Teachers Association on the development of new standards for the preparation of teachers of chemistry, K-12.

An online resource center for chemical technicians, supported by an NSF funded project, is available at www.chemtechlinks.org.

The Board of Directors voted to continue support for Project Seed and the Scholars Program. The Society was awarded the U.S. Presidential Award for Mentoring for the activities of these programs.

ACS Petroleum Research Fund supported 510 grants equaling \$25 million in 2002. This represents a 40% increase over 2001.

The Society ended 2002 with a net deficit of \$1.5 million, \$400,000 favorable to the approved budget. Investment losses were \$28.4 million. The ACS pension plan was under funded by \$25.5 million at the end of the year.

The 2003 National Chemistry Week theme is "Celebrating Chemistry: Earth's Atmosphere and Beyond!" It will take place the week of October 19th-25th. The 2004 National

Chemistry Week theme is "The Chemistry of Health."

Local section alumni of the spring leadership conferences will be invited to the Advanced Leadership Conference, which will be held in St. Louis, Oct 3-5. The fall conference will center on developing leadership skills. We ask local section Councilors to strongly encourage section officers to attend these valuable and award winning conferences.

A new award for Best Activity for Local Section/Division Collaboration has been added to the ChemLuminary Awards.

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