



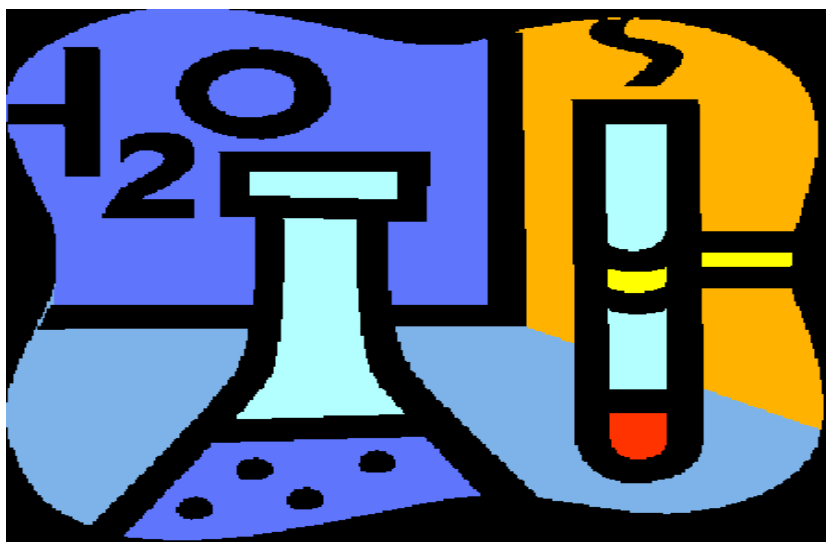
# **Chemical Bond**

**Volume 59  
Number 5  
September 2008**

**St. Louis Section, American Chemical Society**

# *Welcome*

# Back!





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**SECTION MEMBERS TO VOTE ON PROPOSED BYLAW  
AMENDMENTS**

Amendments to the St. Louis Section bylaws have been proposed in accord with current bylaw procedures. The proposed amendments

will a) bring Section bylaws in agreement with SOCIETY documents and the Section's Articles of Incorporation b) enable, but not require, the use of electronic balloting in elections c) provide a more reasonable date for reporting of the Audit Committee to the Board of Directors, and d) enhance clarity.

The amendments have undergone a preliminary review by the ACS Committee on Constitution and Bylaws, and have been approved by the St. Louis Section Board of Directors.

Proposed bylaw amendments are published in this Bond issue. The entire bylaws document can be viewed on the Section website. Anyone wishing a hardcopy of the proposed bylaw amendments may obtain one by contacting Donna Friedman at [dfriedmanacs@aol.com](mailto:dfriedmanacs@aol.com) or by phone, 314-513-4388.

Section members will vote on the amendments as a block at the next general business meeting of the Section. The meeting will be held at 5:30pm on December 11, at CJ Muggs in Webster Groves. Adoption of the proposed amendments requires an affirmative vote by two-thirds of the members present and voting.

# Chemical Bond

Volume 59

NO. 5

September 2008

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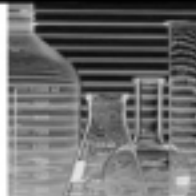
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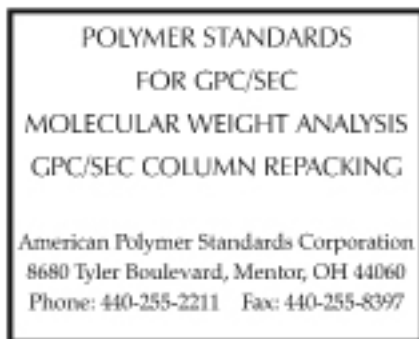
2672 Metro Blvd., Maryland Heights, MO 63043

# Meetings & Seminars

**St. Louis University**  
**Department of Chemistry**

Time: Fridays at 4:00 pm

Location: Room 12, Monsanto Hall



## **Department of Chemistry & Biochemistry** **University of Missouri-St. Louis** **Colloquia – August/September 2008**

Monday August 25	Robert Hanson St. Olaf College, Northfield, Minnesota Green Chemistry” or “Computer Simulations in Chemical Education”
Monday September 1	Holiday
Monday September 8	Amy S. Mullin University of Maryland, College Park, Maryland “Dynamics of High Energy Molecules: Collisions, Energy Transfer and Chemical Reactions”
Monday September 15	Xuefei Huang Michigan State University tba
Monday September 22	Ekaterina Kadnikova University of Missouri-Kansas City “Adventures in Dynamic Kinetic Resolution of Esters”
Monday September 29	Joseph Lambert Northwestern University, Evanston, IL tba

*Please check our website at <http://www.umsl.edu/chemistry>*

Coffee: 3:45 PM, Seminar: 4:00 PM

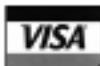
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## Call for Nominations — High School Chemistry Teaching Award

The St. Louis Section of the American Chemical Society is seeking nominations for the High School Chemistry Teaching Award, sponsored by the St. Louis Section, for the 2007-2008 school year. The award winner will receive a \$500 check and a plaque, presented at an awards dinner and program next April.

Please consider nominating a teacher in the Greater St. Louis Area who exemplifies excellence in the teaching of high school chemistry. In addition to outstanding classroom work, the nominee should be one who has contributed successfully in other aspects of teaching — such as professional growth, curriculum development, course materials preparation, workshop participation, chemical or educational research, publications and other activities.

The nomination packet must contain the following items:

1. A letter of nomination, which should include information on the qualifications of the nominee with respect to:
  - a. The quality of the nominee's classroom teaching.
  - b. The ability to motivate and challenge students.
  - c. Extracurricular work with students in chemistry, including science fairs and student projects.
  - d. Efforts made to keep current with developments in chemistry and in teaching through professional activities and continuing education.
2. Two letters seconding the nomination from anyone that you consider appropriate, such as, a science colleague, a principal, a former student, or a parent of a former student.
3. The official nomination form, which provides background biographical and educational data on the nominee.

To submit a nomination, please send the original and five copies of the nomination packet by November 15, 2008, to:

Virginia Kirwin  
High School Teaching Award Subcommittee  
974 Century Oaks Drive  
Manchester, MO 63021  
636-225-5513  
[vkirwin@earthlink.net](mailto:vkirwin@earthlink.net)

*Proposed amendments: additions underlined, deletions struck through*

**BYLAWS OF THE ST. LOUIS SECTION ~~of the~~ OF THE  
AMERICAN CHEMICAL SOCIETY**

**BYLAW I—Name and Objects**

Section 1. This organization shall be known as the ST. LOUIS SECTION, ~~INC. of the~~ OF THE AMERICAN CHEMICAL SOCIETY, hereinafter referred to as the “Section.” The Section is an incorporated organization duly organized and existing under the “General Not-For-Profit Act” of the State of Missouri.

Section 2. The objects of the Section shall be the promotion and advancement of chemistry in all its branches and the improvement of the qualifications and usefulness of chemical ~~practitioners~~ professionals through high standards of ~~professional~~ ethics, education, and attainments.

Section 3. No provisions of the Section bylaws shall be inconsistent with the Charter, Constitution, and Bylaws of the AMERICAN CHEMICAL SOCIETY, hereinafter referred to as the “SOCIETY.”

**BYLAW III—Members and Affiliates**

Section 1. The members of the Section shall be all MEMBERS and ASSOCIATE MEMBERS of the SOCIETY residing in the territory of the Section; exceptions to this rule shall be consistent with the Constitution and Bylaws of the SOCIETY.

Section 2. ~~National Society~~ Society Affiliates of the SOCIETY are assigned to the Section by the SOCIETY. ~~National Society~~ Society Affiliates of the Section shall have the rights and privileges accorded in the Constitution and Bylaws of the SOCIETY.

Section 3. Upon approval of the Board of Directors, any person interested in the proceedings of the Section but not a member or ~~National Society~~ Society Affiliate of the SOCIETY may become a Local Section Affiliate. Local Section Affiliates shall be entitled to all the privileges of membership in the Section as provided in these bylaws, except those of voting and serving on the Board of Directors.

**BYLAW VI—Finances**

Section 1. The fiscal year of the Section shall be from January 1 to December 31, inclusive.

Section 2. Section dues are payable at the beginning of each fiscal year. Section dues for members and ~~National Society~~ Society Affiliates are voluntary, and no differences in privileges or Section services shall result from non-payment. The dues of Local Section Affiliates shall be determined by the Board of Directors, but shall not be less than \$2.00 per annum. However, a regularly matriculated student specializing in a chemical science may be accepted as a Local Section Affiliate on payment of \$1.00 per annum. Local Section Affiliates shall pay dues by June 1 to maintain Section affiliation, except that the Board of Directors may waive Section dues in granting affiliate status to Student Affiliates of the SOCIETY.

Section 3.

(a) Through the Board of Directors, the Section may accept gifts or bequests, hereinafter referred to as “Special Funds.” The Special Funds and other investments shall be administered by the Investment Trustees on behalf of the Section in accordance with the instructions of the donor or donors. Withdrawals and appropriations from the Special Funds and other investments, for purposes other than reinvestment, shall be authorized by the Board of Directors, consistent with the terms of the gifts or bequests.

(b) The Board of Directors shall appoint no less than three Investment Trustees from the Section membership. At least one Investment Trustee shall be a Director. The term of each ~~Investment~~ Investment Trustee shall be three years. Provision may be made by the Board of Directors to stagger the terms of the ~~Investment~~ Investment Trustees. The Board of Directors may replace any Investment Trustee at any time.

(c) In January, the Investment Trustees shall report to the Board of Directors, in writing, all investment transactions of the previous year and the status of the Special Funds.

~~(d)Section 4.~~ In December, the Chair shall appoint an Audit Committee of three members. The Audit Committee shall examine the books and annual financial report of the Treasurer, and the assets of the Section. The Audit Committee shall report its results at the Board of Directors meeting in January at the February meeting, or as early as practical. If authorized by the Board of Directors, the Audit Committee may employ a certified public accountant to make the audit.

#### **BYLAW IX—Meetings**

Section 3. Section members, National Society Affiliates, and Local Section Affiliates shall be notified of each meeting of the Section in advance of such meeting. Upon request, the Secretary may send a notice of any meeting to any person who may be interested. Notices shall not be sent regularly for a period longer than one year to any person who is neither a member of the SOCIETY nor an affiliate of the Section.

#### **BYLAW X—Elections**

Section 1. All members of the Section shall be eligible to vote.

Section 2. All balloting shall meet the requirements of (1) fair balloting that is open to all eligible members of the Section, (2) anonymity, (3) protection against fraudulent balloting, (4) ballot archiving, and (5) timely reporting of results.

~~Section 23.~~ The officers, Directors, Councilors, and Alternate Councilors of the Section shall be ~~chosen~~ elected ~~from among the MEMBERS~~ by ~~mail~~ ballot in October and shall take office the following January 1. All officers shall hold office for one year; all Directors for two years; all Councilors and Alternate Councilors, for three years. No MEMBER shall be eligible to hold more than one elective position on the Board of Directors at one time. In event of a vacancy, except that of the office of Chair, the Board of Directors ~~may call a special election or make an appointment for the unexpired term~~ shall appoint a MEMBER to fill the vacancy until the next annual election.

~~Section 34.~~

(a) The Chair shall appoint a Nominating Committee of three members and select its chair before or at the February Board of Directors meeting.

(b) The Secretary shall prepare a nominating ballot for the elective officers, the three Directors, and the Councilors and Alternate Councilors by April 1, and have this ballot ~~in the hands of the~~ distributed to Section members by May 1.

(c) The Secretary shall ~~turn over~~ transmit all nominating ballots received by May 31 to the Chair of the Nominating Committee.

~~Section 45.~~

(a) The Nominating Committee shall tally the nominations and prepare an election ballot. For each office to be filled, there shall be not more than two candidates; for Directors, Councilors and Alternate Councilors, not more than twice as many candidates as vacancies to be filled.

(b) Should any MEMBER receive nominating votes sufficient to entitle the MEMBER to be a candidate for more than one elective position, the Nominating Committee shall notify the MEMBER. The Nominating Committee, after consulting with said MEMBER, shall decide for which office the MEMBER shall be a candidate.

(c) Under the title of each position on the election ballot, the Nominating Committee shall list alphabetically the names of the candidates without any other designation.

(d) The list of candidates for each office shall include the name of the consenting MEMBER receiving the largest number of nominating votes for that office, provided that the number of votes so received equals or exceeds three percent of the number of eligible voters. For the second candidate, the Nominating Committee may choose the consenting MEMBER securing the second highest number of nominating votes or a candidate of its own selection. The Nominating Committee shall name at least one candidate for each office when none is determined by the nominating ballots as herein provided.

(e) The list of candidates for Directors shall include the names of the three consenting MEMBERS receiving the largest number of nominating votes, provided that the number of votes so received equals or exceeds three percent of the number of eligible voters. To this list the Nominating Committee shall add the names of consenting MEMBERS, either from those receiving the next highest number of nominating votes, or a candidate or candidates of its own selection. The Nominating Committee shall name at least one candidate for each position of Director when none is determined by the nominating ballots as herein provided.

(f) For each position to be filled, the list of candidates for Councilors and Alternate Councilors shall include the name of the consenting MEMBER receiving the largest number of nominating votes, provided that the number of votes so received equals or exceeds three percent of the number of eligible voters. For the second candidate for each position, the Nominating Committee shall add the name of the consenting MEMBER receiving the second largest number of nominating votes, or a candidate or candidates selected by the Board of Directors. The Board of Directors shall name at least one candidate for each position of Councilor and Alternate Councilor when none is determined by the nominating ballots as herein provided.

(g) The Nominating Committee shall certify the election ballot to the Secretary.

#### Section 56.

(a) ~~The Secretary shall authorize the printing of election ballots and their inclusion with the October issue of the Chemical Bond. On or before October 10<sup>th</sup>, election ballots shall be distributed to all members of the Section. Ballots transmitted to the Secretary on or before October 31 and received on or before the date of tabulation shall be included.~~

(b) The candidates for each office and position of Director, Councilor, and Alternate Councilor shall be noted in the Chemical Bond. With the name of each candidate shall be printed the candidate's professional affiliation, together with any offices and committee positions previously held in the Section and the SOCIETY.

(c) ~~The voter shall mark the election ballot, seal it in a plain envelope marked "Ballot," and place the sealed envelope in another envelope, which shall bear the voter's handwritten signature. The voter shall mail, transmit or deliver the signed envelope to reach the Secretary on or before October 31.~~

#### Section 67.

(a) On or before October 31, the Chair of the Section shall appoint three tellers. The tellers shall meet with the Secretary on or before November 7 to judge the election and tabulate the votes. ~~First they shall check the signatures on the envelopes received not later than October 31 against the eligible list of voters, and set aside, unopened, those not eligible. The eligible ballots then shall be opened and the valid ballots tabulated. Only official printed ballots are valid.~~ All eligible and ineligible ballots shall be held retained for sixty days by the Secretary to permit a recheck and a recount, if demanded.

(b) The Secretary shall certify the tabulation to the Section Chair. The Secretary then shall declare duly elected the candidate receiving the highest number of votes for each office and position of Director, Councilor and Alternate Councilor. In the event of a tie vote, the names of those involved shall be certified to the Board of Directors, who shall resolve the tie by simple majority vote. The Chair shall announce the election results at the November Board of Directors meeting. The Secretary shall certify the election to the Executive Director of the SOCIETY no later than ~~November 15~~ December 1. The Secretary shall publish the election results in the Chemical Bond.

(c) Any candidate shall have the right to demand a recount within ten days after the official announcement of the election results at the November Board of Directors meeting. In such event, the same tellers, unless new ones are designated by the Section Chair, shall officiate with the Secretary.



Section 78. If, for any reason, it shall be impossible to execute the provision of these bylaws regarding times and dates of nomination and election, the Board of Directors shall arrange for nomination and election in accordance with the spirit of these bylaws so far as possible.

#### **BYLAW XI—Midwest Award**

Section 5.

(c) It is the intent that the Midwest Award Jury meet confer collectively to ~~discuss~~ evaluate the respective merits of the candidates. Under no circumstance shall selection of the recipient be made by less than six voting members.

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### **Boy Scout Chemistry Merit Badge Clinic**

The 4th annual Boy Scout Chemistry Merit Badge Clinic will be held on Saturday, September 20, 2008 at the Jost Chemical 8150 Lackland Rd. St. Louis, MO 63114 from 8 am to 2 pm. Come join fellow chemists and scouters (scouting volunteers) as we help 40+ boys ages 13-17 conduct experiments, learn about chemistry, and hopefully earn their Chemistry Merit Badge.

For more information or to volunteer to help, contact Lisa Balbes at 314-966-5298 or [lisa@balbes.com](mailto:lisa@balbes.com).

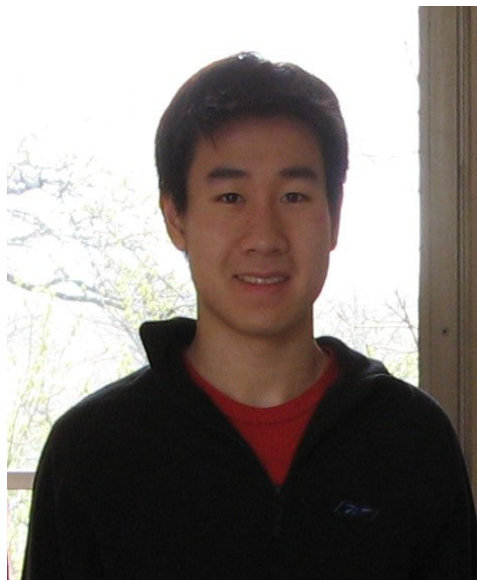
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### **Chemistry Career Night**

The Younger Chemist Committee of Saint Louis (YCC STL) and the Saint Louis Local Section of the American Chemical Society cordially invite you to attend our Chemistry Career Night. This event will be held on September 17, 2008 beginning at 6:00 P.M. at Lab Science Building, Washington University Danforth campus. Our panel will consist of five guests with different educational and work experiences in chemistry, available to answer questions and offer advice. Among our guests will be representatives from private pharmaceutical and chemical industries, chemists working for the government, as well as chemists working in academia as researchers and professors.

This event is free of cost for everyone. Light hors d'oeuvres will be served at the beginning of the activity followed by dinner after the Q&A.

For further questions or inquiries, please contact the YCC STL Chair  
Arindam Roy  
[arindam.roy@covidien.com](mailto:arindam.roy@covidien.com)



# Andrew Liu

United States  
Representative  
and Bronze Medal  
Winner at the  
International  
Chemistry  
Olympiad in  
Budapest

**The Saint Louis Section has the rare distinction this year of being home to Mr. Andrew Liu, a member of the Chemistry Olympiad Team representing the U.S. at the International Chemistry Olympiad in Budapest (July 12-21, 2008). Andrew graduated from Parkway Central High School this year and will be attending Massachusetts Institute of Technology starting this fall.**

**Ken Greathouse was Andrew's teacher at Parkway Central. Andrew's journey to Budapest began by taking the local administration of the National Chemistry Olympiad exam at University of Missouri – Saint Louis on April 19th, which was proctored by Section Chair Keith Stine with help setting up the materials from Director Hal Harris. The four students participating on that day took a two-part written examination spanning over 3 hours in length, had lunch, then returned for a 90-minute laboratory practical where they pitted their wits against two problems using the chemicals and materials provided as specified by the exam protocols and nothing else. The four students selected to take the National Chemistry Olympiad exam were chosen out of over 150 students who had previously taken our high school chemistry contest exam on March 6-7 at UM-Saint Louis. These students and a number of others who performed well on this exam were recognized at Awards Night on April 21st at Kemoll's. Myron Reese of McKendree University has been diligently overseeing the high school chemistry contest arrangements for many years for the Saint Louis section. Andrew's test and those of the other three students were sent to USNCO for scoring the Monday after the exam. William Sun of Parkway Central High School, and Mack Su and Dan Halverson, both students at Clayton High School, also took the exam. To the pride of the local section and many others, we were informed that Andrew was among the top scorers of the approximately 900 students who took the National Chemistry Olympiad across the country at many sites. Of those students, 20 were selected to participate in the U.S. National Chemistry Olympiad study camp at the U.S. Air Force Academy in Colorado Springs in June. Out of the participants in that camp, four team members and two alternates were selected, as profiled in the June 16th issue of Chemical and Engineering News. The U.S. National Chemistry Olympiad (USNCO) is sponsored by the American Chemical Society. The International Chemistry Olympiad is attended by teams from over 60 countries and consists of a five-hour theoretical exam and a five-hour laboratory practical. The students are accompanied by mentors on their trip and also engage in site-seeing and cultural activities over the 10 day period of the contest. At press time, we heard that Andrew had been awarded a Bronze medal at the competition. The local section congratulates Andrew for achieving this prestigious distinction and for representing the U.S. and the Saint Louis Section at the International Chemistry Olympiad.**

## **Science Fair Update 4/15/2008:**

All named students received a letter of congratulations, a science book (see appendix) and a framed certificate. First place winners in each division also received a 12-month membership to the St. Louis Science Center. Honorable Mention winners and elementary students received a congratulatory letter and a purple participation ribbon.

Fair Organizers presented the awards at the Illinois Junior Academy of Science Region 12 Science Fair and the Missouri Tri-County Regional Science and Engineering Fair.

### **2008 Illinois Junior Academy of Science Region 12 Science Fair**

#### **Grades 9-12**

First Place: Sara Joseph, "Reducing Acid Mine Drainage with Fluoride Treatment", Grade 10, Alton Senior High School, Alton, IL.  
Second Place: Appie Peterson, "How Active Are Those Ingredients?", Grade 11 Governor French Academy, O'Fallon, IL.  
Third Place: Moomal Shaikh, "Water Electrolysis", Grade 11 Governor French Academy, O'Fallon, IL.

#### **Grades 5-8**

First Place: Thomas Fields, "What's the Relationship between the Greenhouse Effect and Thermal Mass?", Grade 6, Cathedral Grade School, Belleville, IL.  
Second Place: Tricia Brown, "Does Hair Dye Affect Hair Strength?", Grade 6, Grantfork Elementary, Highland, IL.  
Third Place: James Blanton, "How Household Items Affect the pH of Water", Grade 5, Columbus Elementary, Edwardsville, IL.

#### **Honorable Mention**

Ashley Muni, "The Icy Truth", Grade 7, All Saints Academy Catholic Grade School, Breese, IL.  
Kelsey Ebel, "Ice A Salt", Grade 8, Red Bud Elementary School, Red Bud, IL.  
Tanner Yancik, "Viscosity – Thick or Thin?", Grade 8, Virden Middle School, Virden, IL.  
Kristin Masur, "A Sweet Solution", Grade 7, Whiteside Elementary School, Belleville, IL.  
Nolal Ferral, "Chemical Motor Boat", Grade 6, Lincoln Middle School, Edwardsville, IL.

### **2008 Missouri Tri-County Regional Science and Engineering Fair**

#### **International Division**

No awards were given this year. There were no entrants in chemistry or chemistry-related fields this year.

#### **Grades 9-12**

No awards were given this year. There were no entrants in chemistry or chemistry-related fields this year.

#### **Grades 5-8**

First Place: Christopher Walsh, "The Effect of Different Liquids On The Flexibility of Chicken Bones", Grade 6, Fort Zumwalt School District, Dr. Bernard J. Dubray Middle School, St. Peters, MO.  
Second Place: Milika Shahrawat, "Keep Cool Out of School", Grade 6, Fort Zumwalt School District, Fort Zumwalt South Middle School, St. Peters, MO.  
Third Place: Alexis Miller, "Keeping It Hot", Fort Zumwalt School District, Twin Chimneys Elementary School, O'Fallon, MO.

Grades kindergarten-4th: 43 purple participation ribbons & letters

## **2008 Greater St. Louis Science Fair ACS Award Winners**

### **Honors Division**

First Place: Veronica Lewis, "A Tamper-Resistant Form of the Combination of Oxycodone and Acetaminophen", Home Schooled.

Second Place: Joan Michelle Bauer, "The Effects of Sodium Chloride (NaCl) on Bentic Invertebrates", Cor Jesu Academy, St. Louis, MO.

Third Place: Andrew Liu, "Effect of RNA Interference of Isoflavone Biosynthesis Enzymes on Pathogen-And UV-Induced Isoflavone Levels in Soybean Cotyledons", Parkway Central High School, Chesterfield, MO and Donald Danforth Plant Science Center, Chesterfield, MO.

### **Grades 9-12**

First Place: Lisa Xia, "A Comparison of Antioxidant Activity among Various Teas", Grade 10, Parkway West High School, Ballwin, MO.

Second Place: Monica Dryden, "The Effect of Beano® Enzymes on Green Pea Extract", Grade 10, Ursuline Academy, Kirkwood, MO.

Third Place: Hillary Lee, "Taking the Heat", Grade 9, Parkway Central High School, Chesterfield, MO.

### **Grades 6-8**

First Place: Kyle Frayne, "CO2: Is it in you?", Grade 8, Pattonville Heights Middle School, Maryland Heights, MO.

Second Place: Morgan Schettler, "Absorbents", Grade 7, St. John's Lutheran, MO.

Third Place: Suhani Goyal, "To Drink or Not to Drink: That is the Question?", Grade 6, Parkway Central Middle School, Chesterfield, MO.

### **Honorable Mention**

Nick Zintel and Chase Angle. "Can Two Sixth Graders Make Biodiesel to ASTM Specifications?", Grade 6, Andrews Academy, MO.

Monica Fenske and Savannah Murr, "Some Like it Hot, Some Like it Cold", Grade 6, St. Joseph Institute for the Deaf, Chesterfield, MO.

Raveena Boodram, "Effect of Temperature on Solubility of Sugar", Grade 7, Parkway West Middle School, Chesterfield, MO.

Grades kindergarten-5th: 292 participation letters

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## **LEOPOLD MARCUS AWARD REPORT - 2008**

Neil Munjal was named the winner of the Thirty-Eighth Annual Leopold Marcus Award competition held at Saint Louis University on April 16, 2008. Given to a senior chemistry major doing undergraduate research at Saint Louis University, the Marcus Award was established by the late Jack and Gertrude Marcus in memory of his father. It consists of a \$160 cash award and a certificate of merit. In addition to Munjal, Jacob Worsham, Jeffrey Steitz, Mitesh Patel, and Kris Waggoner were finalists in the competition with awards of \$80 and a certificate of merit. The Marcus Award is administered by the Saint Louis University Department of Chemistry and the St. Louis Section of the American Chemical Society. The winner and finalists received their awards and citations at the Awards Night Banquet of Chemical Progress Week, held at Kemoll's Restaurant in downtown St. Louis, on April 21, 2008. Dr. Bruce Kowert was the 2008 Marcus Chair. He can be reached at [kowertba@slu.edu](mailto:kowertba@slu.edu) if more information is required.

## 2008 High School Chemistry Contest Award Winners

### REGULAR DIVISION

	Student	School	Teacher
1st)	Chi Zeng	Clayton High School	Brad Krone
2nd)	David Goldstein	Parkway Central HS	Ken Greathouse
3rd)	Alexander Goel	John Burroughs School	Sandra Mueller
4th)	Kefu Lu	Parkway Central HS	Ken Greathouse
5th)	JJ Liu	John Burroughs School	Sandra Mueller
HM)	Augustine Heil	Clayton High School	Mike Howe
HM)	Yanwen You	Ladue Horton Watkins	Sarah Barton
HM)	Emily Foley	John Burroughs School	Mary Harris
HM)	Radhika Jain	John Burroughs School	Mary Harris
HM)	Jenny Liu	John Burroughs School	Mary Harris
HM)	Nina Oberman	Clayton High School	Brad Krone
HM)	Liron Ganel	Parkway Central HS	Ken Greathouse
HM)	Supriya Hobbs	John Burroughs School	Mary Harris
HM)	Najja Marshall	John Burroughs School	Sandra Mueller
HM)	Gabrielle Inder	Clayton High School	Mike Howe

### ADVANCED DIVISION

	Student	School	Teacher
1st)	<b>Mack Su</b>	Clayton High School	Nathan Peck
2nd)	<b>Dakin Sloss</b>	Clayton High School	Brad Krone
3rd)	Daniel Halverson*	Clayton High School	Nathan Peck
4th)	<b>Andrew Liu</b>	Parkway Central HS	Ken Greathouse
5th)	<b>William Sun</b>	Parkway Central HS	Ken Greathouse
HM)	Kristy Yang*	Parkway Central HS	Ken Greathouse
HM)	Paul Orland*	Clayton High School	Nathan Peck
HM)	Steven Yamada*	Clayton High School	Nathan Peck
HM)	Puhan Zhao *	Clayton High School	Nathan Peck
HM)	<b>Dong C. Park</b>	West Junior HS	Catherine Fulkerson
HM)	Kevin Guo*	Parkway Central HS	Ken Greathouse
HM)	Natalia Birgisson*	Clayton High School	Nathan Peck
HM)	Rebecca Poplawski*	Clayton High School	Nathan Peck
HM)	<b>Amelia Chivetta</b>	Visitation Academy	Steven Bockhold
HM)	Jason Liang*	Parkway Central HS	Ken Greathouse

HM: honorable mention

Names in **bold type** qualify to take the National Chemistry Olympiad Exam on April 19. No more than two students from a given high school may qualify for the Olympiad. Other students from that school, listed with an asterisk, are alternates for the Olympiad.

#### *Exam Statistics (2008)*

	<u>Division</u>	<u>Regular</u>	<u>Advanced</u>
•	Questions on exam	100	60
•	High score	86	59
•	Low score	24	17
•	Average score	56	40
•	Lowest for HM*	67	48
•	No. of students	81	70

\*Students having this score but not listed for honorable mention were eliminated by the tie breaker.

## 2008 OUTSTANDING JUNIOR CHEMISTRY STUDENT AWARD WINNERS

Alex Cassmeyer  
Amanda Anne Hecht  
Kenzie Jones  
Justin Sheehy  
Daniel C. Banks  
Todd Crawford  
Intelly Lee  
Dafang Zhang

Lindenwood University  
Maryville University  
Principia College  
Saint Louis University  
SIU-Edwardsville  
University of Missouri – St. Louis  
Washington University  
Washington University

### *Outstanding Chemical Technology Student Award*

Bojana Opacic

St. Louis Community College - Florissant Valley

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### **2008 Undergraduate Research Symposium held at University of Missouri – Saint Louis**

The annual undergraduate research symposium of the Saint Louis section of the ACS was held on Friday, April 18th at University of Missouri – Saint Louis as a part of Chemical Progress Week. The organizers of the symposium this year were Prof. Mike Nichols and Prof. Eike Bauer of UM-Saint Louis Department of Chemistry and Biochemistry. The event was held in Benton Hall and featured 21 poster presentations by participants from UM-Saint Louis, Saint Louis University, Southern Illinois University – Edwardsville, and Principia College. A wide range of chemical disciplines was represented. The crowd of well over 50 people and the participants were welcomed by Section Chair Keith Stine and Prof. Nichols followed by catered refreshments, viewing posters, and interacting for two hours. Each undergraduate presenting their research received a gold ACS pen, Pfizer portfolio, and ACS certificate. Gifts were presented by the Section Chair and organizers at the end of a successful event. Pfizer is acknowledged for providing financial support for the purchase of the gifts for the students.



*“The process of  
scientific discovery  
is, in effect, a con-  
tinual flight from  
wonder”*

**Albert Einstein**

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