

THE NUCLEUS

90th Anniversary Issue of The NUCLEUS

November 2011

Vol. XC, No. 3

Monthly Meeting

*2011 James Flack Norris Award to Prof. Peter Mahaffy
Meeting at Astra-Zeneca, Waltham*

Mala Radhakrishnan

An Interview by Mindy Levine

ACS Governance

A Summary from the Fall ACS Meeting

Arno Heyn Award

2011 Award to Harvey C. Steiner





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Cover: *2011 James Flack Norris Awardee, Professor Peter Mahaffy of King's University College, Edmonton, Alberta. Professor Mahaffy is also director of the King's Centre for Visualization in Science. (Photo courtesy of Professor Mahaffy).*

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Mala Radhakrishnan – An Interview

By Mindy Levine

“You can really think of chemistry like a soap opera,” said Dr. Mala L. Radhakrishnan, physical chemistry professor at Wellesley College and published chemistry poet. “It’s all about the atoms and molecules getting together, and breaking up, and cheating on each other.”

While this may not be the typical way of looking at atoms and molecules, Dr. Radhakrishnan has spent many years thinking and writing about chemistry in precisely this way. She first started using such personification while teaching high school chemistry in California through Teach for America. Dr. Radhakrishnan found that such analogies helped the students to better understand difficult concepts in chemistry.

When Dr. Radhakrishnan decided to continue her chemistry education as a graduate student at MIT, she continued to use such analogies to help her

and fellow students understand chemistry. As a natural outgrowth of this creative perspective, Dr. Radhakrishnan began to write chemistry poetry. A collection of her poetry, entitled, “Atomic Romances, Molecular Dances,” was recently published by lulu.com and reviewed in last month’s issue of “The Nucleus.”

Much of the poetry is based on stories that Dr. Radhakrishnan used while teaching high school chemistry. For example, at the end of the academic year, several of Dr. Radhakrishnan’s students made a mural entitled, “One Half-Life to Live,” which chronicled a soap-opera-esque tale of atoms and molecules.

During graduate school, Dr. Radhakrishnan regularly read her poetry at open microphone nights in Cambridge. She became known as the “chemistry poet,” and eventually participated in a poetry troupe called “Dr. Brown’s

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Traveling Poetry Troupe.” During this time, poetry “worked the other side of my brain,” said Dr. Radhakrishnan, and provided a much-needed stress reliever during graduate school.

Following graduate school, Dr. Radhakrishnan immediately began her current position, as a tenure-track professor of chemistry at Wellesley College. Although most newly appointed chemistry professors have prior post doctoral research experience, Dr. Radhakrishnan was fortunate to obtain a faculty position without such experience. Dr. Radhakrishnan had been applying to various post-doctoral positions concurrently, but felt like she “likely fit the need of the department at that time.”

In her current position, Dr. Radhakrishnan does not have much time to compose new poetry, although she “would like to go back to it when I have more time.” Her colleagues at Wellesley are well-aware of her poetry,

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Monthly Meeting

The 918th Meeting of the Northeastern Section of the American Chemical Society

Presentation of the James Flack Norris Award for Outstanding Achievement in Teaching Chemistry to Professor Peter Mahaffy, King's University College, Edmonton, Alberta

Thursday, November 10, 2011

Astra-Zeneca, 35 Gatehouse Drive, Waltham, MA 02451

4:30 pm Board Meeting

5:30 pm Social Hour

6:30 pm Dinner

7:30 pm Award Meeting, Patrick Gordon, NESACS Chair, Presiding
Presentation of the Arno Heyn Book Prize to Harvey C. Steiner
Mary Mahaney, Chair, Board of Publications, NESACS
Reflections on James Flack Norris

Introduction of the Norris Award Winner:

Margaret-Ann Armour, University of Alberta, Edmonton, Alberta, Canada

Presentation of the Norris Award:

Kathleen Browne, Chair Norris Committee, NESACS

Norris Award Address:

Should Atoms Come First? Teaching Chemistry from Rich Contexts Peter Mahaffy, PhD, Professor of Chemistry, The King's University College, Edmonton, Alberta, Canada

Dinner reservations MUST be made no later than NOON on October 21st. **Please specify if you prefer a vegetarian entree.** Please call Anna Singer at 781-272-1966 between 9am and 9pm or respond by email (preferred) to secretary@nesacs.org. Reservations not canceled at least 24 hours in advance will be invoiced and must be paid. Members, \$30; Non-members, \$35; Retirees, \$20; Students, \$10. Anyone who needs handicapped services, please call a few days in advance so that suitable arrangements can be made.

Directions to AstraZeneca, 35 Gatehouse Drive, Waltham

<http://www.astrazeneca-us.com/research-and-development/north-american-randd-sites/?itemId=1423316>

From the North or South on Rt. 128: Take exit 27B for Wyman St toward Winter St 0.2 mi. Keep right at the fork to continue toward Wyman St. Keep right at the fork, follow signs for Wyman St/Winter St and merge onto Wyman St. 0.3 mi. Turn right onto Winter St 0.8 mi. Turn left onto Gatehouse Ln. Destination will be on your right. ◇

Biography

Peter Mahaffy is known for his deep commitment helping students, educators, scientists, and the general public see the intricate webs that connect chemistry and science to so many other aspects of life. He was born in East Africa, obtained his Ph.D. in Physical Organic Chemistry from Indiana University, and is now Professor of Chemistry at the King's University College in Edmonton, Alberta, Canada and Co-director of the King's Centre for Visualization in Science. He carries out research in the areas of chemistry education, visualization in science, and organic chemistry - much of which is done with undergraduate student research collaborators. Mahaffy chairs IUPAC's Committee on Chemistry Education (CCE), is a member of IUPAC's Bureau, and he led the IUPAC team that worked to obtain UN designation of 2011 as an International Year of Chemistry. His recent awards for contributions to chemistry and chemistry education include a Fellowship of the Chemical Institute of Canada (CIC); the CIC National Award for Chemistry Education; and Canada's highest teaching honour, the 3M National Teaching Fellowship. His work on IYC-2011 enables him to give further expression to his desire to see the tools of science used in concert with those of other disciplines to improve the human condition and the sustainable well-being of our planet. ◇

in meeting the challenges set out in the UN IYC-2011 resolution?

In this presentation, we will explore ways we can restructure our general chemistry curriculum to place content in rich and motivating learning contexts for our science majors. This means thinking outside the boxes that presently separate content and context, and trying new ways of facilitating deep learning through motivating connections to the lives of learners and to the well-being of our planet.

Perhaps our students of chemistry will live and learn best somewhere between our fixation on teaching

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Abstract

The UN resolution declaring 2011 as an International Year of Chemistry sets a compelling agenda for chemistry educators to contextualize our teaching and learning to address global challenges such as the provision of food,

potable water, pharmaceutical products, modern materials, and cleaner energy. Do the logical approaches that chemistry educators of my generation were asked to use when we learned chemistry adequately equip the next generation of scientists and citizens to understand and address our planetary boundaries and the role for chemistry

NESACS Members to Receive ACS Awards

Five members of NESACS (and all from M.I.T.) have been designated as recipients of ACS awards, which will be presented (with the exception of the Cope Scholar Awards) on Tuesday, March 27, 2012, at the 243rd ACS national meeting in San Diego.

- ACS Award for Creative Work in Synthetic Organic Chemistry sponsored by Aldrich Chemical Company, **Gregory C. Fu**, Massachusetts Institute of Technology.
- Arthur C. Cope Scholar Awards sponsored by the Arthur C. Cope Fund, **Timothy F. Jamison**, Massachusetts Institute of Technology.
- Priestley Medal sponsored by ACS, **Robert S. Langer**, Massachusetts Institute of Technology.

- E. Bright Wilson Award in Spectroscopy sponsored by the ACS Division of Physical Chemistry, **Robert W. Field**, Massachusetts Institute of Technology.
- Ahmed Zewail Award in Ultrafast Science & Technology sponsored by the Ahmed Zewail Endowment Fund established by Newport Corp., **Keith A. Nelson**, Massachusetts Institute of Technology.

In addition, the James Flack Norris Award in Physical Organic Chemistry, which is sponsored by NESACS, will go to **Hans J. Reich**, University of Wisconsin, Madison. ◇

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www.nesacs.org/seminars

Report from Denver

Revamping the MCAT Exams

Morton Z. Hoffman, Boston University [hoffman(at)bu.edu]

Proposed changes to the Medical College Admission Test (MCAT), which is a standardized examination for prospective medical students in the United States and Canada, were discussed at the meetings of the Society Committee on Education (SOCED) and the Committee on Professional Training (CPT) at the Denver ACS meeting. Designed for use in 2015, the new MCAT exams will emphasize the measurement of competencies rather than material from specific courses, such as general and organic chemistry. The changes are being inspired by the 2009 report from the Association of American Medical Colleges (AAMC), *Scientific Foundations for Future Physicians*, and have important implications for chemistry departments at colleges and universities that teach pre-medical students in their courses.

Currently, a 22-member committee (MR5) of AAMC is starting to map out the kinds of questions that will be used on the new exams, which will have four sections:

- Molecular, Cellular, and Organismal Properties of Living Systems
- Physical, Chemical, and Biochemical Properties of Living Systems
- Behavioral and Social Sciences Principles
- Critical Analysis and Reasoning Skills

Questions related to these four areas will call for the application of:

- Scientific reasoning skills
- Scientific research
- Statistical methods

A subcommittee, which also includes an outside consultant with expertise in scientific learning, will consult with MR5 over the next several months; the full plan will be

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Historical Notes

Virginia C. Chamberlain 1938-2010

We are sorry to report the death of Virginia Childs Chamberlain on August 31, 2010 at the age of 72. She was born in New London, CT to Elbert and Catherine Fussel Childs on January 25, 1938.

Her primary schooling was in Hastings-on-Hudson, NY and she obtained a BS degree in chemistry at Connecticut College. Additional study led to a Masters degree in Biochemistry from George Washington University and a Ph.D. degree in Chemical Toxicology from American University at the age of 50. Her career in biochemistry started at NIH, followed by the Center for Devices and Radiological Health at the FDA, from which she retired in 1996. She worked for several years as a consultant in sterilization for the medical device industry.

She was the founding chairperson of the International Organization for

Standardization, Technical Committee 198 for Sterilization of Health Care Products. She was an important contributor in the preparation of internationally accepted voluntary consensus sterilization standards.

Virginia is survived by a son, Steven M. Ross, and his wife Nancy, a daughter, Linda Ross Girard, and her husband, Thomas, three grandchildren, and a longtime companion, Henry G. Edmonds.

James Noel Little 1940-2011

Dr. James Noel Little, of Charlestown, passed away Sept. 14, 2011. Dr. Little was born in Kansas City, MO., July 3, 1940, the son of Noel and Isabelle (Smart) Little. He graduated from Center High School in Kansas City in 1958 and the University of Kansas in 1962, with a B.S. degree in chemistry. He received his Ph.D. in analytical chemistry from M.I.T. in 1967.

Jim worked for Hercules Powder Company in Wilmington, Del., as a research chemist before joining Waters Associates, then located in Framingham, where he advanced to vice presi-

dent of sales and marketing. He later became senior vice president of Millipore Corporation, after the acquisition of Waters. He left Millipore in 1981 to help form Zymark Corporation in Hopkinton, where he served as senior vice president. He joined Cetek Corporation in Marlborough, in 1998, where he served as president.

In 2009, while consulting and serving on the boards of directors of various corporations, he founded a new company, i2Chem, in Cambridge, which provides state-of-the-art flow chemistry services.

Jim is survived by three children, David Little and his wife, Kerri, of Westborough, Matthew Little and his wife, Kate, of Northborough, and Sarah (Little) McDevitt and her husband, Paul, of Charlotte, N.C.; a sister, Karen Peyton and her husband, Roger, of Drexel, Mo.; and his mother, Isabelle Little of Kansas City, Mo. He also leaves six grandchildren, Autumn, Jasmine, Skye, Isabelle, and Jack Little of Massachusetts, and Connor McDevitt of Charlotte, N.C. He is also survived by Barbara Killeen-Little, his longtime companion. ◇

Report from Denver

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presented to pre-health advisors, medical schools, admissions officers, and other interested parties (including the ACS) in a symposium at the AAMC annual meeting in November. Formal approval from AAMC to revise the MCATs will be requested at the AAMC board of directors in February 2012.

ACS is organizing symposia for its 2012 national meetings and the Division of Chemical Education's (CHED) Biennial Conference on Chemical Education (BCCE) to provide an overview of the AAMC report, consideration of chemistry in the MCATs, the involvement of the Howard Hughes Medical Institute (HHMI), and the development of innovative chemistry curricula for pre-professional students. ◇

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SUMMARY OF GOVERNANCE ACTIONS/REPORTS

AMERICAN CHEMICAL SOCIETY
242nd ACS NATIONAL MEETING
DENVER, CO
AUGUST 28- SEPTEMBER 1, 2011

The following summary is provided to help Councilors report to their local sections and divisions on key actions and discussions of the ACS Council and Board of Directors at the 2011 fall national meeting.

ACTIONS OF THE COUNCIL

Election Results

- The Committee on Nominations and Elections presented to the Council the following slate of candidates for membership on the Committee on Committees beginning in 2012: Matthew K. Chan, Richard S. Danchik, Rigoberto Hernandez, Roland F. Hirsch, James M. Landis, Jr., Helen (Bonnie) A. Lawlor, Zaida C. Morales-Martinez, Howard M. Peters, Sara J. Risch and Jason E. Ritchie. By electronic ballot, the Council elected Rigoberto Hernandez, Helen (Bonnie) A. Lawlor, Zaida C. Morales-Martinez, Howard M. Peters and Sara J. Risch for the 2012-2014 term.
- The Committee on Nominations and Elections presented to the Council the following slate of candidates for membership on the Council Policy Committee beginning in 2012: Spiro D. Alexandratos, Lawrence Barton, Michael J. Brownfield, John W. Finley, Mark D. Frishberg, Peter C. Jurs, Mamie W. Moy, and Eleanor D. Siebert. By electronic ballot, the Council elected Lawrence Barton, Peter C. Jurs, Mamie W. Moy, and Eleanor D. Siebert for the 2012-2014 term.
- The Council Policy Committee presented to the Council the following slate of candidates for membership on the Committee on Nominations and Elections beginning in 2012: R.

Gerald Bass, Cherlynlavaughn Bradley, William H. (Jack) Breazeale, Jr., Catherine C. Fenselau, Lydia E. M. Hines, Robert L. Lichter, Anne T. O'Brien, Robert A. Pribush, Andrea B. Twiss-Brooks, and Steven W. Yates. By electronic ballot, the Council elected William H. (Jack) Breazeale, Jr., Catherine C. Fenselau, Lydia E. M. Hines, Anne T. O'Brien, and Andrea B. Twiss-Brooks for the 2012-2014 term.

Candidates for President-Elect and Board of Directors

The candidates for the fall 2011 ACS national election were announced as follows:

Candidates for President-Elect, 2012

- Dr. Dennis Chamot, Associate Executive Director, Division of Engineering and Physical Sciences, National Research Council of the National Academy of Sciences, Washington, DC
- Dr. Marinda Li Wu, Founder and President, Science is Fun!, Orinda, CA

Candidates for Directors-at-Large, 2012-2014

- Dr. Ken B. Anderson, Professor of Geochemistry, Southern Illinois University at Carbondale, IL and CEO, Thermaquatica Inc., Carbondale, IL
- Dr. William F. Carroll, Jr., Vice President, Industry Issues, Occidental Chemical Corporation, Dallas, TX
- Dr. Charles E. Kolb, President/CEO Aerodyne Research, Inc. Billerica, MA
- Dr. Barbara A. Sawrey, Associate Vice Chancellor, Undergraduate Education, University of California, San Diego, CA

Candidates for District III Director, 2012-2014

- Dr. Pat N. Confalone, DuPont, Vice President, Global R&D, Crop Protection, Wilmington, DE
- Dr. David J. Lohse, Retired, Distinguished Research Associate, Exxon-Mobil Research & Engineering Co., Annandale, NJ

Candidates for District VI Director, 2012-2014

- Dr. Bonnie A. Charpentier, Vice President, Regulatory and Quality Metabolex, Inc., Oakland, CA
- Dr. Carlos G. Gutierrez, Professor of Chemistry, California State University, Los Angeles, CA

Petitions

(For Action)

- The Council received one amendment (petition) to the ACS Constitution and Bylaws for action: The Petition on Position Statements. The Council VOTED to approve the Petition on Position Statements, which allows for clear and consistent position development for the Society. The petition assures that the Board of Directors has sole authority in issuing position statements that establish policy for the full Society; and that Society bodies other than the Board may issue statements on issues that fall solely in their jurisdiction so long as they do not impair other Society bodies' ability to do the same. The Board of Directors will vote within 90 days on whether to ratify the approved petition.

(For Consideration)

- The Council also received two amendments (petitions) to the ACS Constitution and Bylaws for consideration: Petition on Market Data Collection and Petition to Amend

Governance

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Recorded Vote Request Procedure. The Petition on Market Data Collection seeks to add a provision to allow for controlled market testing to collect data before the Society changes benefits, dues, or membership categories. The Petition to Amend Recorded Vote Request Procedure provides that a call for a recorded vote after clicker voting has commenced will be out of order, as would a call for a recorded vote after the initial clicker voting has taken place. Both the Petition on Market Data Collection and the Petition to Amend Recorded Vote Request Procedure will be on the Council agenda for action at the 2012 spring meeting.

Committee Review

- As part of a regular performance review, the Council VOTED to continue the joint Board-Council Committees on Community Activities and on Publications. Continuation of these two committees also requires Board of Directors concurrence.

Meeting Registration Report

- As of September 1, 2011, the ACS fall national meeting had attracted 10,076 registrants. Totals in select categories are as follows: Regular attendees 6,088; Students 2,376; Guests 218; Exhibit Only 394; and Exhibitors 1,000.

Membership Activity

- Despite the challenging economy and continued high unemployment, the Society's overall membership number remains stable at near 163,000. The number of new undergraduate student members is growing rapidly, and as of July 31 the total stands at 15,702. The committee is concentrating its efforts on retaining current members.

Special Discussion Item

A special discussion item was put on the Council agenda for this meeting. ACS President Nancy Jackson presented and moderated a discussion on how ACS can best cultivate a culture of safety in US universities and col-

leges. At the 2011 ACS national meeting in Anaheim, the Committee on Chemical Safety launched an effort to identify ways to assist academia in strengthening and building strong safety cultures. Devastating incidents in academic laboratories and observations by many that graduates do not have strong safety skills have elevated concerns about the safety culture in academia. Following Dr. Jackson's presentation, Councilors engaged in robust discussion on this very timely topic, with numerous suggestions by 42 different Councilors.

Changes in Technical Divisions

The Council VOTED to grant full division status to the previously probationary Division of Catalysis Science and Technology, and to approve the proposed bylaws of this division.

After a lively discussion, the Council VOTED 53% - 47% to dissolve the Division of Petroleum Chemistry and to combine its assets and members with those of the Division of Fuel Chemistry under the new name of the Division of Energy and Fuels, effective December 31, 2011. The discussion centered largely around the name, rather than the merger.

Employment, Economic, and Professional Activities

ACS has created new programs to assist unemployed members and new resources for all members, from students to seasoned professionals. The first ever fully integrated onsite and virtual career fair in Denver offered job seekers and virtual participants via webcam the opportunity to interact with each other and to connect with prospective employers and programs to sharpen their career skills. The number of employers was up from Anaheim.

The Presidential Task Force on Innovation and Job Creation released their report, entitled, "Innovation, Chemistry & Jobs." The report contained four recommendations to stimulate innovation and job creation in the US chemical industry. The Committee on Economic and Professional Affairs (CEPA) and Corporation Associates co-sponsored a new program funding request to establish an entrepreneurial initiative, which

would implement two of the four recommendations. First, it establishes an educational program to guide budding entrepreneurs through the creation of new chemical businesses. Second, it supports the formation of new chemical companies by providing access to the unparalleled informational resources of the Society, as well as other professional resources. The initiative was approved by the Board, and will be implemented early next year.

CEPA is also working with ACS President Nancy Jackson, members of the Board, and other committees on the "Paying It Forward" campaign. Dr. Jackson kicked off the campaign with her comment in the August 8 issue of C&EN, emphasizing the need for, and importance of members helping members. She asks each of the Society's more than 163,000 members to help unemployed members by taking specific action now. Dr. Jackson's comment will be followed by four other C&EN comments.

Because networking is especially important in a down economy, CEPA and ACS Career Services co-sponsored the largest networking event in ACS history. The ACS Global Networking Reception allowed Denver attendees and others to attend a seminar entitled "Networking 101 – Making Your Contacts Count," and then practice networking with local sections, student chapters, international chapters, and individuals all over the world joined electronically.

In another exciting initiative, the Chemical Entrepreneurship Council (CEC) has assembled. The group consists of the Women Chemists Committee, the Committee on Science, the Division of Small Chemical Businesses, the Division of Business Development and Management, the National Collegiate Inventors and the Innovators Alliance. This self-organized working group is concerned with providing the resources and skills necessary for chemists to translate research into innovations which can become commercial products. The outputs for the CEC decided at the Denver meeting to include education and training, a

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Governance

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roadmap to inventory resources, and outreach for member engagement.

Update on ACS vs. Leadscope Litigation

The Chair of the Board gave an update on the Leadscope case. She reported previously that ACS had appealed to the Ohio State Supreme Court and that the Court has agreed to hear the case. In written briefs filed in support of the Society's position (that the lower court rulings were both unfair and unconstitutional), ACS has been joined by several prestigious organizations. In April, the Leadscope defendants filed two motions seeking to dismiss the Society's appeal. In June, the Ohio Supreme Court denied their motions and has scheduled oral arguments for September 7 in Columbus, Ohio.

ACTIONS OF THE BOARD OF DIRECTORS

The Board's Committees and Working Groups

The Board of Directors received reports from its committees on Professional & Member Relations (P&MR), Grants and Awards (G&A), Planning, Executive Committee (EC), Executive Compensation, and Budget and Finance (B&F).

On the recommendation of the Committee on Professional & Member Relations, the Board VOTED to approve guidelines for weighing selection and engagement in human rights cases, wherever they occur.

On the recommendation of the Committee on Grants and Awards, the Board VOTED to approve nominations for the AAAS Scientific Freedom & Responsibility Award and the NSF Waterman Award.

The Planning Committee reviewed the components of the 2012 strategic plan and a possible change to the committee charter.

The Board's Executive Committee discussed an overlap in scheduling of the June 2012 Board of Directors meeting (May 31- June 3) and the Middle Atlantic Regional Meeting

(MARM - May 31- June 2) to be held at the University of Maryland Baltimore County (UMBC) campus, which is approximately 20 minutes away from the Board hotel. The committee agreed that the Board should retain its meeting dates but attend as much of the MARM meeting as possible, including its banquet, social events, and possibly open session.

The Board received a briefing from its Committee on Executive Compensation. The compensation of the Society's executive staff receives regular review from the Board.

On the recommendation of the Committee on Budget and Finance (B&F), the Board VOTED to approve an advance member registration fee of \$360 for national meetings held in 2012. The Board also considered several program funding requests, and on the recommendation of B&F VOTED to reauthorized funding for inclusion in the 2012 proposed budget for the following programs:

- ACS Fellows
- ACS Leadership
- ACS Scholars
- ACS Global Research Experiences, Exchanges, and Training Program (GREET)

The Board also VOTED, as recommended by B&F, to include funding in the 2012 and 2013 budget for a new program – the ACS Entrepreneurship Initiative.

B&F considered a proposal from the Council Policy Committee (CPC) regarding the Committee Travel Expense Reimbursement Policy approved by CPC in March 2011. The policy would allow reimbursement of travel costs to committee meetings held during the ACS national meetings for non-councilor committee members. After some discussion, the Board VOTED, as recommended by B&F, to adopt the non-councilor reimbursement policy as presented by CPC (at the rate of 50% of the Councilor travel reimbursement) effective 2012.

Financial Planning Conference Recommendations

The Board reviewed and VOTED to accept several recommendations

from its Financial Planning Conference, held June 1-3, 2011. The purpose of this conference was to conduct a comprehensive assessment of the Society's current financial position; review the appropriateness and adequacy of the Society's current financial guidelines; and assess the Society's changing risk profile and the potential implications for major ACS funding sources over the next three years.

The Executive Director/CEO Report

The Executive Director/CEO and her direct reports updated the Board on the following: the status of recommendations from the Executive Director/CEO's report on "Challenges Facing ACS 2011-2015;" and the activities of CAS (Chemical Abstracts Service), the ACS Publications Division, and the Society's General Counsel. The General Counsel report included an update on the ACS vs. Leadscope litigation.

On the recommendation of the Committee on Publications, the Board VOTED to approve the reappointment of two journal editors and the appointment of a new editor. The Board also VOTED to approve an appointment to its Governing Board for Publishing.

Other Society Issues

The Board agreed to accept an invitation from the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCCChE) to meet with representatives of the ACS Board of Directors in 2012 to discuss further areas for collaboration. Members of the Board's Executive Committee and the chair of the Committee on Grants and Awards will be meeting with NOBCCChE at a mutually agreed time and date in 2012.

International dignitaries representing the Canadian Society for Chemistry, the German Chemical Society, IUPAC and the Royal Society of Chemistry briefed the Board on their activities and plans to continue and sustain the momentum started during the International Year of Chemistry. The Board also received an update from the ACS President-Elect on his

Governance

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activities and priorities during his presidential year.

By consent, the Board VOTED to approve several actions since its June meeting, including: a resolution in memory of former Board member C. Gordon McCarty and a nomination for the 2012 Othmer Gold Medal.

The Board held a lively, well-attended open session which featured a special forum on what the ACS is doing, or can do, to assist members who are facing employment challenges in uncertain economic times. Members attending this standing-room only session received a brief overview of current and planned resources available to members who are facing employment challenges, followed by an open discussion on how the Society might offer greater assistance.

ADDITIONAL INFORMATION FOR COUNCILORS

The following is a list of URLs and email addresses presented on slides at the Council meeting. You will find the information noted on these sites helpful.

www.acs.org/acspresidents - Information on ACS past presidents

prehistory@acs.org – contact information for inclusion or correction of errors on the ACS presidency website

www.acs.org/creatingjobs - Location for the ACS Task Force on Innovation report, “Innovation, Chemistry and Jobs”

www.acs.org/iyc2011 - Location for International Year of Chemistry activities

ACS Network

<https://communities.acs.org/message/8125#8125> – A link on the ACS Network for ACS Strategic Plan Discussion – public

<https://communities.acs.org/docs/DOC-6168> - A link to the Councilors group – Councilors only

www.acs.org/goalsurvey - Location for the ACS online goal survey for helping to develop the 2012 strategic plan

Harvey C. Steiner to Receive 2011 Heyn Book Award

Harvey Steiner has been selected to receive the 2011 Arno Heyn Book Prize. This prize was created in 2005 to honor the late Arno Heyn. Previous winners of the award have been Mark Spitler and Sam Kounaves (2005), Vincent Gale (2006), Vivian Walworth (2007), Myron Simon (2008), Arthur Obermayer (2009) and Donald Rickter (2010).

Harvey has been a critical part of *The Nucleus* team for twenty years as the owner of Art Related Technology. His job has been to work closely with *The Nucleus* editor and to transform the original content and rough layout pro-

Strategicplan@acs.org – Contact information for questions/comments regarding the Society’s strategic plan

www.acs.org/councilreports - Location for all Council reports of the current meeting (fall reports to appear after September 12)

safety@acs.org – Contact information for questions/comments about laboratory safety

www.acswebinars.org/vcf2011 - Information on the ACS webinars and virtual career fairs

bylaws@acs.org – Contact information for questions/comments about the Society’s bylaws

www.acs.org/bulletin5 - Location for the Society’s governing documents (Constitution, Bylaws, Regulations)

www.acs.org/bechemists - Information on a campaign to remind recent graduates of the benefits of ACS membership

outreach@acs.org – Contact information on outreach activities through the Committee on Community Activities ◇

vided by *The Nucleus* editor into final files for submission to the printer and the NESACS webmaster. Harvey has been the main interface between the printer (currently Turley Printing of Palmer, MA) and *The Nucleus*.

Harvey has provided many years of continuity in the production of *The Nucleus*, which has been a key factor enabling stable and timely production of *The Nucleus*. This was especially true during the unsettled time when Arno Heyn’s illness resulted in multiple changes in editors (Chorghade, Spitler, Filosa) over a one-year period. Harvey’s long history producing the final *Nucleus* copy simplifies the editor’s job to managing content and layout. The editor does not have to worry about the technical details of producing a professional newsletter.

Harvey has played a critical role in bringing new editors up to speed and deserves a great deal of credit for the continued excellence of *The Nucleus*.

In addition to our awardee, our section has been fortunate in having many skilled, conscientious people who have created what has been long considered the best newsletter among the local sections of the ACS. Vince Gale, Mark Spitler, Sam Kounaves, Mukund Chorghade, Don Rickter, Sheila Rodman, Mindy Levine, Myke Simon, Vivian Walworth, and Mike Filosa are just a few of these talented people. Arthur Obermayer made the historic step of starting the NESACS website in 1996. It was one of the first local section websites in the ACS.

Many people are needed to put together *The Nucleus* as reporters, photographers, copy editors, writers, and proofreaders. New volunteers to maintain and improve it are welcomed.

The Heyn Book Prize will be awarded at the November monthly meeting, to be held at Astra-Zeneca in Waltham. ◇

What’s Yours?

Many local employers post positions on the NESACS job board.

Find yours at
www.nesacs.org/jobs

BUSINESS DIRECTORY

Mala Radhakrishnan

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and several have used her poems in their chemistry curricula. In fact, many students report that they really appreciate and enjoy the chemistry poetry.

Dr. Radhakrishnan also hopes that the poetry has value beyond education. "It can be entertaining for everyone," she said. "There are a lot of people who like to read nerdy scientific poetry."

Dr. Radhakrishnan's book was self-published on lulu.com in April 2011 and has been available on amazon.com since the summer. So far, much of the feedback has been positive. For example, a reviewer on amazon.com gave the book five stars, and wrote, "Chemistry in this form is anything but dry!" Another reviewer (<http://dougholder.blogspot.com>) wrote, "It is a clever compilation of word play fun for scientists, poets who find science fun to study, as well as a tool for science teachers."

Dr. Radhakrishnan is optimistic about the success of her poetry book. "One thing that makes the book unique is that I really try to humanize the atoms and molecules," said Dr. Radhakrishnan in conclusion. "I think you can really learn some life lessons through learning about chemistry." ◇

Abstract

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'atoms first', and the assertion of American Poet Muriel Rukeyser that "the universe is made of stories, not of atoms." Perhaps atoms, too, have stories to tell, if we can learn how to listen. ◇

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Being an active participant in NESACS activities will enable you to network with major institutions and corporations in our area and can open up new career opportunities.

The NESACS Board of Publications, which is responsible for both the *Nucleus* newsletter and the NESACS website, is looking to increase its activities in this arena.

We would like to expand our capabilities for keeping our membership informed on what is happening in our field and how to adapt to changing times and new technologies.

You can help us do that. All we ask of you is a few hours a month and a smile.

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contact -- Vivian Walworth
NESACS Board of Publications
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Email vwalworth@comcast.net

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- www.mboservices.net
- www.nesacs.org

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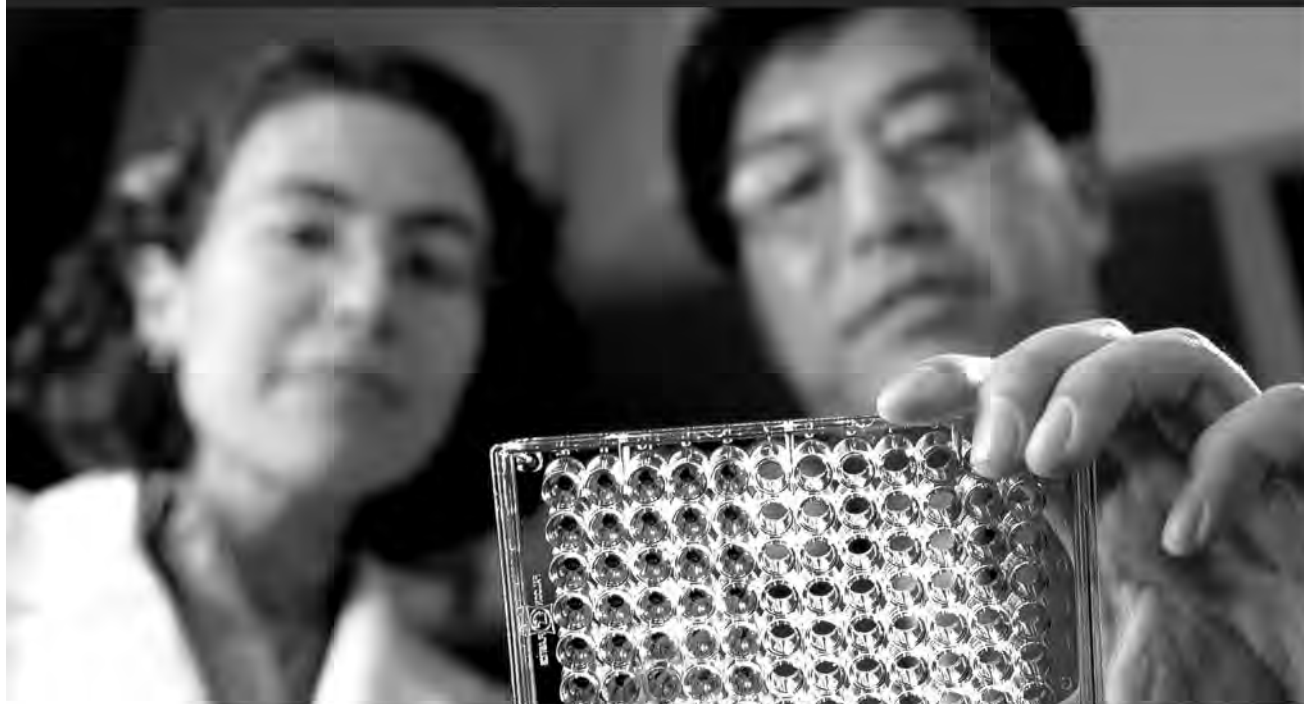
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Prizes will include **Mala Radhakrishnan's book of
chemistry poetry: *Atomic Romances, Molecular Dances***
and a set of **2012 Red Sox tickets** (To be determined
when they become available).

Prize winners will be announced in January

Calendar

Check the **NESACS home page**
for late **Calendar additions:**
<http://www.NESACS.org>

Note also the **Chemistry Department web
pages for travel directions and updates.**

These include:

<http://chemserv.bc.edu/seminar.html>
<http://www.bu.edu/chemistry/events/>
<http://www.chem.brandeis.edu/colloquium.shtml>
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www.umassd.edu/cas/chemistry/seminars.cfm
www.uml.edu/Dept/Chemistry/speakers.html
<http://www.unh.edu/chemistry/seminars.html>

Nov 01

Prof. Kara Bren (University of Rochester)
Univ. New Hampshire, NB 104 (L103)
11:10 am

Nov 01-02

Davison Lecture in Inorganic Chemistry:
Fraser Armstrong (Univ Oxford)
MIT, 6-120
4:15 pm

Nov 03

Ara Apkarian (UC, Irvine)
Harvard, Pfizer Lecture Hall
4:00 pm

Prof. Catherine Murphy (Univ. Illinois at
Urbana-Champaign)
"Three Short Stories About Gold Nanorods"
Boston College, Merkert 130
4:00 pm

Nov 07

T.Y. Shen Lectures in Biological Chemistry
(Lecture 1)
Chris Dobson (Univ. Cambridge)
MIT 6-120
4:00 pm

Prof. Gang Zheng (Univ. Toronto)
"Porphyrin-Based Cancer Theranostics"
Brandeis University Gerstenzang 122
3:45 pm

David Collum (Cornell)
Harvard, Pfizer Lecture Hall
4:00 pm

Nov 08

T.Y. Shen Lectures in Biological Chemistry
(Lecture 2)
Chris Dobson (Univ. Cambridge)
MIT, 6-120
4:30 pm

Prof. Jerry Yang (U.C., San Diego)
TBA
Boston College, Merkert 130
4:00 pm

Nov 10

Prof. Samuel Thomas (Tufts Univ.)
"New Polymers with Photoresponsive
Electrostatic and Optical Properties"
U. Mass Lowell, Olney 218
3:30 pm

Nov 11

Prof. T. Don Tilley (UC, Berkeley)
Brandeis Univ. Gerstenzang 122
3:45 pm

Nov 14

Prof. Jose D Faraldo-Gomez (Max-Planck
Institute of Biophysics)
Brandeis University Gerstenzang 122
3:45 pm

Nov 15

Prof. Shannon Stahl (Univ. Wisconsin)
"Overcoming the Oxidant Problem: Strategies to
Use O₂ as the Oxidant in Catalytic C-H
Oxidation Reactions"
Boston College, Merkert 130
4:00 pm

Prof. Xiaowei Zhuang (Harvard)
TBA
Tufts, Pearson P-106
4:30 pm

Nov 17

Dr. Emily Fischer (Harvard)
Univ. New Hampshire, NB 104 (L103)
11:10 am

Nov 21

Prof. Greg Tew (UMass. Amherst)
Brandeis Univ. Gerstenzang 122
3:45 pm

Nov 29

Prof. Regan J. Thomson (Northwestern Univ.)
"The Development and Application of
Carbon-Carbon Bond Forming Reactions"
Boston College, Merkert 130
4:00 pm

**Notices for The Nucleus
Calendar of Seminars should be
sent to:**

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Lowell, MA 01852
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