



2007 honors banquet

*Sponsored by the
University of Illinois at Urbana-Champaign*

**Department of Nuclear, Plasma
and Radiological Engineering**

and the

American Nuclear Society

(student chapter)



Thursday, April 26, 2007

Alice Campbell Alumni Center

5:30 p.m. Reception

6:30 p.m. Dinner

Thank you for coming!

The NPRE Honors Banquet is a highlight of our academic year as we celebrate the excellence and dedication of our students and faculty. Your attendance and participation enhances the recognition we bestow upon our awardees.

While corporate partners and government agencies provide many of the scholarships and fellowships we announce this evening, NPRE also is fortunate to have a number of gift funds that alumni and friends have established to reward outstanding students. ***In fact, all of the Department's gift funds are used for student programs.*** As we enter the age of nuclear renaissance, we encourage you to consider a gift to NPRE to support our future generation of nuclear engineers. You can do so online at **http://www.engr.uiuc.edu/alumni/gift/give_online.php**, or by mailing your gift, the name of the Fund you wish to support, and your contact information to the **University of Illinois Foundation, P.O. Box 3429, Champaign, IL 61826-9916**. If you have any questions regarding making a gift or about this evening's proceedings, please contact Susan Mumm at (217) 244-5382, s-mumm@uiuc.edu, or Rita Bates at (217) 333-1149, rjbates@uiuc.edu.

***Thanks again for coming and we hope
you have a wonderful evening!***

PROGRAM

Welcome & Opening Remarks

James F. Stubbins, NPRE Department Head
Steven A. Weiss, President
American Nuclear Society, Student Branch

Dinner

Student Awards, Scholarships, and Fellowships Faculty Awards

James F. Stubbins and Steven A. Weiss

Presentation of Alpha Nu Sigma Society Initiates

James F. Stubbins
Daniel F. Hang, Faculty Advisor, Alpha Nu Sigma

Recognition of Chancellor's Scholars

James F. Stubbins

Recognition of James Scholars

Rizwan Uddin, James Scholars Faculty Advisor

Recognition of Dean's List

James F. Stubbins

Recognition of Engineering Open House Awards

Steven A. Weiss
Luke M. Gotzsling, EOH Representative

Recognition of 2006-2007 ANS Officers

Steven A. Weiss

Introduction of 2007-2008 ANS Officers

Steven A. Weiss

Banquet Address

"The Engineer as a Servant to Society"

Kenneth D. Lewis, Ph.D., P.E.
Dean of the College of Science, Mathematics, and
Engineering Technology, South Carolina State University

Awards, Scholarships, and Fellowships

Each year the Department of Nuclear, Plasma and Radiological Engineering and the American Nuclear Society, Student Branch, honor outstanding students with awards, scholarships and fellowships for academic achievement, leadership, service, and initiative.

NPRE Department Awards

NPRE Outstanding Academic Achievement Award to a Graduating Senior

The NPRE Outstanding Academic Achievement Award to a Graduating Senior is awarded to the graduating senior with the highest cumulative GPA.

Steven A. Weiss

NPRE Outstanding Undergraduate Research Award

The NPRE Undergraduate Outstanding Research Award is presented to an undergraduate student who has performed exemplary research in the Department.

John R. Sporre

Catherine Pritchard Undergraduate Scholarship

The Catherine Pritchard Undergraduate Scholarship is presented to a student who has shown academic ability and activities leadership during his or her first three years, to be used during the senior year of study.

Benjamin A. Holtzman David K. Lartonoix

Roy A. Axford Undergraduate Scholarship

The Roy A. Axford Undergraduate Scholarship is presented to a continuing student of high academic ability and achievement.

Ryan J. Craffey Dean C. Knox

George H. Miley LENR Undergraduate Scholarship

The Low Energy Nuclear Reactions (LENR) Undergraduate Scholarship is presented to a highly motivated, continuing undergraduate student in the Department.

Jeffrey N. Cardoni Ian M. Percel

Bruce W. Spencer Graduate Fellowship

The Bruce W. Spencer Graduate Fellowship is presented to a PhD candidate of high academic standing whose experimental research will advance the state of nuclear engineering, especially as it relates to reactor safety.

Hitesh Bindra

American Nuclear Society, Student Branch Awards Undergraduate Outstanding Service Award

The Student Branch of the American Nuclear Society selects the ANS Undergraduate Outstanding Service Award recipient. The undergraduate student who has most actively supported the ANS branch and its program throughout the academic year is honored.

Steven A. Weiss

Graduate Outstanding Service Award

The Student Branch of the American Nuclear Society selects the ANS Graduate Outstanding Service Award recipient. The graduate student who has most actively supported the ANS branch and its program throughout the academic year is honored.

Jose M. Caro

Students' Award for Excellence in Undergraduate Teaching

The Student Branch of the American Nuclear Society each year presents the Students' Award for Excellence in Undergraduate Teaching to an outstanding faculty member.

Rizwan Uddin

American Nuclear Society, National Scholarships and Awards Undergraduate Scholarship

Undergraduate scholarships are awarded to students who are pursuing a degree in nuclear science and engineering studies and whose academic and leadership accomplishments show promise of contributions to the nuclear field.

Benjamin A. Holtzman

John and Muriel Landis Scholarship

Named for John Landis, a Fellow, founding member, and past ANS president, this scholarship is awarded to undergraduate and graduate students planning a career in nuclear science, nuclear engineering, or a nuclear-related field.

Richard A. Boettcher

Student Literary Award

The Student Literary Award is presented to recognize the student that has presented the best full-length materials-oriented paper contributing to the development of nuclear energy at the Annual or Winter ANS Meeting, and subsequently submitted a full paper for publication in Nuclear Technology or other ANS journal. The paper was entitled, "Modeling Tensile Response and Flow Localization Effects in 316SS after Exposure to Spallation and Fission Irradiation Environments," and was published in the *Journal of Nuclear Materials*.

Xianglin Wu

2006 ANS-PHYSOR Conference Best Poster Award

Poster on "Computational and Experimental Physics Performance Characterization of the Neutron Capture Therapy Research Facility at Washington State University," presented at the September 2006 conference.

Patrick E. Sloan

Other Scholarships and Fellowships 2006-2007 Exelon Scholarship

This scholarship program was established to encourage talented students interested in a career with Exelon. It is awarded to select engineering students entering their junior year. Exelon has been honored as the "Top Utility in the World" by Platt's Publication, "the nation's leading utility and energy services company" by Business Week, and as "Best of Breed" by Forbes.

Drew G. Griffiths

Nuclear Power Engineering Education Program (NPEEP) Scholarships

Scholarships initially are awarded based on strong high school academic records. These merit-based scholarships are then renewable provided recipients maintain a semester 3.0 GPA and progress toward their degree in the NPPE curriculum. Exelon Corporation contributes to these scholarships.

Abayomi O. Alalade	Aaron B. Ball	Marsahl O. Buroff
Stephan R. Burtschi	Jeffrey N. Cardoni	Gabriel A. Chavez
Michael K. Collins	Ryan M. Collins	Lauren M. Coutant
Ryan J. Craffey	Jason D. Draper	Anil G. D'Souza
Jennifer M. Gall	Luke M. Gotszling	Benjamin A. Holtzman
Michael M. Hull	Rachael W. Jabusch	Stephen F. Kohlase
David K. Lartonoix	Cheuk Y. Lau	Joseph A. Lucido
Thomas Martino	Jack R. McMillin	Jarred W. Meyers
Melissa Montoya	David J. Papke	Nathan D. Peld
Alexander W. Rehn	Jared S. Reynolds	Jose M. Rivera
Lizette Sanchez	Steven C. Schlepffhorst	Thomas E. Sowinski
Jorge Tamayo	Stephen W. Theis	Steven A. Weiss

**National Academy for Nuclear Training
Institute of Nuclear Power Operations**

In 1980 INPO recognized the need to plan for the future by helping provide an ongoing supply of entry-level engineers to fill the future employment needs of the nuclear industry. With funding provided by utilities, the National Academy for Nuclear Training was established to award scholarships and fellowships to engineering students demonstrating outstanding academic achievement and interest in careers in the nuclear power industry.

Scholarships:

Richard A. Boettcher Drew G. Griffiths

Continuing Scholarships:

**Jennifer M. Gall Benjamin A. Holtzman Rachael W. Jabusch
Stephen F. Kohlhasse**

Fellowship:

Rebecca R. Romatoski

U.S. Department of Energy

Nuclear Engineering Scholarships and Fellowships

The DOE established the Nuclear Engineering Scholarships and Fellowships to encourage talented students to continue their education in a related nuclear energy field. This program assists in preparing students for leadership roles in fission technology and supports the broader objective of advancing fission energy through the research.

06-07 Scholarships:

**Richard A. Boettcher Benjamin A. Holtzman Michael M. Hull
Stephen F. Kohlhasse Thomas E. Sowinski**

Continuing Fellowships:

Scott D. Ramsey Melissa A. Siemens Carolyn A. Tomchik

College of Engineering SURGE Fellowships

The Support for Under-Represented Groups in Engineering (SURGE) Fellowship Program was established to meet the University of Illinois and College of Engineering goals of increasing the number of highly qualified persons for engineering faculty and research positions from groups currently underrepresented in engineering.

Fellowship:

Jose M. Caro

Continuing Fellowships:

Melissa A. Siemens J'Tia P. Taylor

**National Science Foundation
Graduate Research Fellowship**

The NSF Fellowship Program supports outstanding graduate students in science, technology, engineering, and mathematics disciplines. Fellows are expected to become knowledge experts who can contribute significantly to research, teaching, and innovations in science and engineering.

Continuing Fellowship:

Marin Z. Racic

Sargent & Lundy Fellowship

Sargent & Lundy, based out of Chicago, is a worldwide leader in services for the electric power industry. The firm provides consulting and project services for fossil-fuel and nuclear power plants and power delivery systems. Their competitive fellowship is awarded to a graduate student who shows promise of making substantial research contributions in the power design areas and who has demonstrated a strong academic performance.

Hitesh Bindra

Faculty Awards

National Society of Professional Engineers Fellow

The Fellow recognition program honors those licensed members who have demonstrated exemplary service to the profession, the Society, and the community. Involvement in NSPE must include holding at least one office at the chapter, state, or national level and must also include service at the national level to be considered.

Daniel F. Hang

Integrity in Research Award

Cited by the Second International Conference on Future Energy for multiple achievements in the field of fusion, including the dense plasma focus work.

George H. Miley

Giuliano Preparata Medal

In recognition of pioneering research in condensed matter nuclear science. Among the first scientists to study induced transmutations and led in the development of thin film electrolysis techniques. Also cited for innovative use of combined SIMs and NAA analysis techniques.

George H. Miley

Student Recognitions

Alpha Nu Sigma Society

ANS established Alpha Nu Sigma as a national honor society with the objective to recognize high scholarship, integrity, and potential achievement in nuclear science and engineering.

Spring 2007 Initiates:

Jill P. Anderson

Hitesh Bindra

Richard A. Boettcher

Benjamin A. Holtzman

Jessica T. Kubo

Stefano Markidis

Alex E. Prochaska

Jared S. Reynolds

Michael A. Sorice

Jianwei Hu

Continuing Members:

Alan M. Bolind

Jeffrey N. Cardoni

Jose M. Caro

Lauren M. Coutant

Jason D. Draper

Luke M. Gotszling

Michael M. Hull

Prashant K. Jain

David K. Lartonoix

Wayne M. Lytle

Benjamin C. Masters

Maria A. Okuniewski

Ian M. Percel

Scott D. Ramsey

Qinyang Rao

Michael P. Reilly

Steven C. Schlepphorst

Hyung Joo Shin

Melissa A. Siemens

Suneet Singh

J'Tia P. Taylor

Federico E. Teruel

Carolyn A. Tomchik

Steven A. Weiss

Wen Wu

Bei Ye

University Honors Bronze Tablet

Since 1925, the University of Illinois at Urbana-Champaign has recognized the academic achievement of a select group of undergraduate students by inscribing their names on bronze tablets, which are prominently displayed on the first floor of the Main Library. Only the top 3 percent of undergraduate students receive this highly coveted award.

Steven A. Weiss

Senior 100 Honorary

Senior 100 Honorary annually recognizes the top 100 graduating seniors for their academic success and achievement on campus and in the community. The program is sponsored by the Student Alumni Ambassadors of the University of Illinois Alumni Association. Selection is based on academic standing and involvement, initiative, and leadership in both campus and community activities.

Lauren M. Coutant

Luke M. Gotszling

Steven A. Weiss

College of Engineering and Accenture Accenture Outstanding Junior

Awarded to individuals identified as exhibiting outstanding scholastics, leadership abilities, extracurricular involvement and professional presence.

Richard A. Boettcher

Benjamin A. Holtzman

Accenture 2007 Engineering Council Award for Excellence in Advising

Awarded to advisors who are recognized by engineering students as being among the top 10 percent of the best advisors in the College.

David N. Ruzic

Tau Beta Pi Senior Medallion

The Engineering Honor Society, Tau Beta Pi, bestows this medallion to recognize involvement and contributions to the organization.

Luke M. Gotszling

Chancellor's Scholars

Chancellor's Scholars are strongly motivated, academically gifted students who excel in leadership. Students participate in honors seminars, attend Scholar Adventurers presentations, and participate in social, intellectual and cultural activities, plus maintain a minimum cumulative GPA of 3.25.

Michael M. Hull

Jennifer J. Ong

Richard A. Boettcher

James Scholars

This honors program is named for the fourth president of the University, Edmund J. James who believed that scholarship and research are fundamental to human progress. During his presidency, from 1904-1920, he brought world-class scholars to campus, developed graduate programs, and fostered community among faculty and students. His achievements helped to transform the University of Illinois into a campus of international importance.

Jill P. Anderson

Aaron B. Ball

Richard A. Boettcher

Marshall O. Buroff

Lauren M. Coutant

Ryan J. Craffey

Jason D. Draper

Matthew S. Duchene

Luke M. Gotszling	Paul N. Happ
Michael M. Hull	Byron M. Keller
Dean C. Knox	David K. Lartonoix
Joseph A. Lucido	Thomas Martino
David J. Papke	Ian M. Percel
Thomas V. Quinn	Mary B. Reddington
Jared S. Reynolds	Jose E. Rivera
Steven C. Schlepphorst	Thomas E. Sowinski
Stephen W. Theis	

College Honors — Dean's List

Eligible undergraduates must have achieved a GPA for a given semester that places them in the top 20 percent of their college. The following listing is for Spring and/or Fall 2006.

Jill P. Anderson	Richard A. Boettcher
Patrick J. Bozym	Marshall O. Buroff
Jeffrey N. Cardoni	Gabriel Chavez
George Chen	Lauren M. Coutant
Ryan J. Craffey	Anil G. D'Souza
David C. Donovan	Jason D. Draper
Luke M. Gotszling	Paul N. Happ III
Bryce E. Harrop	Benjamin A. Holtzman
Brian Kleinfeldt	Dean C. Knox
Jessica T. Kubo	David K. Lartonoix
Cheuk Y. Lau	Cheng Ma
Jennifer J. Ong	David J. Papke
Ian M. Percel	Alex E. Prochaska
Alexander W. Rehn	Steven C. Schlepphorst
Thomas E. Sowinski	Eric J. Stein
Corey R. Struck	Nicholas P. Szrama
Stephen W. Theis	Steven A. Weiss

American Nuclear Society, Student Branch

Engineering Open House, now in its 87th year, attracts thousands of visitors each March to campus to experience current innovations in Engineering. This year's ANS exhibits placed in two categories. One project showcased everyday items that are radioactive, dispelled some nuclear-related myths, and explained nuclear power plants. The other exhibit featured current and future developments in the applications of plasmas and fusion.

Engineering Open House 2007

2nd Place: "Atoms Unleashed"

Theme Exhibit – Inspiring Innovation Category

3rd Place: "Futures in Fusion"

Encore - Technical

ANS Student Chapter Officers

ANS Student sections provide a means for students to develop professionally though affiliation with an international organization of nuclear scientists and engineers. There are currently 34 active student sections that include about 1,200 national ANS student members.

The student sections of the ANS are an important segment of the ANS membership. The student members play active roles in public information and professional development and are beginning to play a more important role in the governance of the ANS.

2006-2007 ANS Officers

President Steven A. Weiss
Vice-President Benjamin A. Holtzman
Secretary David K. Lartonoix
Treasurer Heather A. Preston
Engineering Council Representative Anil G. D'Souza
Engineering Open House Representative Luke M. Gotszling
Intramural and Social Chair Robert E. Lofgren
Webmaster Richard A. Boettcher

2007-2008 ANS Officers

President Benjamin A. Holtzman
Vice-President Rachael W. Jabusch
Secretary Rajat Saksena
Treasurer Drew G. Griffiths
Engineering Council Representative J'Tia P. Taylor
Engineering Open House Representative Ryan S. Lenahan
Social Chair Jennifer M. Gall
Webmaster Richard A. Boettcher
Philanthropy April M. Scarbeary

Banquet Speaker

Kenneth D. Lewis, Ph.D., P.E.

**Dean, College of Science, Mathematics and Engineering Technology
South Carolina State University**

The Engineer as a Servant to Society

About the speaker...

Kenneth D. Lewis, Ph.D., P.E., is Dean of the College of Science, Mathematics, and Engineering Technology and BWXT Professor of Nuclear Engineering at South Carolina State University. Previously, he was Senior Staff Engineer II with BWXT Y-12^{LLC} at the Oak Ridge Y-12 National Security Complex (formerly operated by Lockheed Martin Energy Systems, Inc.) in Oak Ridge, Tennessee. There his major responsibility was to ensure the safe operation of Department of Energy (DOE) owned nuclear materials processing facilities. Those duties extended to the Atomic Vapor Laser Isotope Separation prototype at Lawrence Livermore National Laboratory, where he was assigned for five years. Dr. Lewis served as manager of the nuclear calculations and packaging group within the Nuclear Criticality Safety Division and as deputy manager of the Facility Safety Division. He also was responsible for the training and qualification of nuclear criticality safety engineers and other technical personnel at the Y-12 National Security Complex.

A native of Newark, New Jersey, Dr. Lewis earned a B.A. in physics from Rutgers College; M.S. degrees in physics and nuclear engineering from Lehigh and Stanford Universities, respectively; and an M.A. in applied mathematics and Ph.D. in nuclear engineering from the University of Illinois at Urbana-Champaign in 1982. He also holds a certificate in Biblical Studies from the Moody Bible Institute of Chicago, and a theology degree from Trinity Theological Seminary in Newburgh, Indiana. He has completed Master of Ministry (M.Min.) studies at Andersonville Baptist Seminary in Camilla, Georgia.

Dr. Lewis has garnered numerous honors and awards in his engineering work. These include a Department of Energy Award of Excellence in July 2001; a second Award of Excellence in May 2003; designation as the Lockheed Martin Energy Systems Engineer of the Year for 1998; the 1998 NOVA Award for Technical Excellence from Lockheed Martin Corporation (the 161,000-employee corporation's highest honor); the Black Engineer of the Year for 1998 President's Award; a Certificate of Merit from the Ohio Society of Professional Engineers and a Plaque of Recognition from the Ohio House of Representatives of outstanding



Kenneth D. Lewis

performance on the Professional Engineer's licensure examination in 1983; a personal letter of appreciation from the President of the United States for expert contributions to the Sapphire project, a secret mission to a former Soviet republic; cash awards for technical excellence in 1992, 1994, 1998 and 2000 from Lockheed Martin Energy Systems, Inc. and in 2003 and 2005 from BWXT; inclusion in Who's Who in Engineering (Ninth Edition) and Who's Who Among African Americans; designation as an Outstanding Young Man of America for 1986; and the University of Illinois' Black Alumni Achievement

Award for 1992. He has been a member of the University of Illinois Nuclear Engineering Alumni/Faculty Advisory Board since 2000. He has authored over two dozen journal articles and technical reports, including works presented in Germany and before China's largest nuclear science association in Shanghai. Dr. Lewis is a member of Sigma XI (scientific) and Pi Mu Epsilon (mathematics) honorary societies. In June 1999 he was named Fellow of the American Nuclear Society, a distinction held by fewer than 5 percent of that society's 11,000 members. In early Spring 2000, he was one of 20 persons from among the nation's four Department of Energy national security technology centers and Los Alamos and Sandia National Laboratories to be named to the Network of Senior Scientists and Engineers (NSSE). He was re-appointed to the Network in April 2003. He won a \$134,000 Y-12 plant independent research award to investigate an original idea for NDA characterization of small containers of fissile materials in April 2002, and was awarded two additional independent research awards totaling over \$600,000 in 2005. He has won over \$1.5 million in external grants during his tenure at SCSU.

Dr. Lewis is an ordained minister and has served as Associate Pastor, Bible teacher and Youth Director at churches in Ohio, California and Tennessee. He has taught mathematics at Shawnee State University, Portsmouth, Ohio, and at the University of the Pacific. From 2001 to 2005 he served as an adjunct professor of physics at Knoxville College.

He has been married to the former Pamela J. Masingale since May 27, 1978. They have two children, Caleb, 22 and Sarah, 18.

