Noyes Lab
Centennial

In September 13-15, over 200 alumni, former and current faculty, friends, and students from around the country converged at Noyes Lab to commemorate the 100th anniversary of the building’s construction.

The Centennial celebration opened with a slide presentation by Professor Emeritus Nelson Leonard, who provided personal reminiscences of the significant figures who worked in Noyes Lab, including William Noyes himself and luminaries such as Roger Adams, William Rose, and Harry Drickamer.

The Centennial’s keynote address, the inaugural Parr Lectureship in the Department of Chemical and Biomolecular Engineering, was given by alumnus Steve Miller, former CEO of Shell Oil. Other speakers included Nobel Prize winner and former faculty member Rudy Marcus and U of I Director of General Chemistry Steve Zumdahl. More information about the Centennial events, including numerous photographs and reminiscences, is available at http://www.scs.uiuc.edu/centennial.

The celebration concluded with the designation of Noyes Lab as a National Historic Chemical Landmark by the American Chemical Society. The ACS website contains historical data, photographs, and biographies, as well as the text from the dedication plaque (http://center.acs.org/landmarks/landmarks/noyes/).

The plaque commemorating Noyes Laboratory as a National Historic Chemical Landmark reads:

Noyes Laboratory occupies a central place in the development of chemical sciences in the United States. Four departments of national and international stature—Chemistry, Biochemistry, Chemical Engineering, and the Illinois State Water Survey—were at one time simultaneously located within its walls. Generations of scientists and engineers trained here under the leadership of renowned chemists such as William A. Noyes and Roger Adams. Chemical sciences in the United States have been immeasurably strengthened by the important and continuing interdisciplinary research conducted by Noyes Laboratory scientists.
Inaugural Parr Lectureship

As part of the Centennial celebrations, the Department of Chemical and Biomolecular Engineering began a lecture series honoring Samuel W. Parr, the father of Chemical Engineering at the University of Illinois. The Parr Lectureship was initiated by faculty in the Department to recognize outstanding chemical engineers who have had significant societal or technological impact. Nominations are solicited from the faculty, who then vote on the recipient. The award will be given approximately once a year.

The inaugural lecture was given by UI alumnus Steven L. Miller, CEO, President and Chairman of the Board of Shell Oil Company. Mr. Miller’s talk, “Crucible of Change,” focused on the role of land-grant colleges in the development of future leaders and the fiscal challenges facing those land grant colleges. Mr. Miller challenged his corporate peers to work with academic leaders to develop fiscal responsiveness and to assist land-grant universities in meeting the challenges of diversity and multiculturalism in the new global economy.

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New Faculty

Chad Rienstra joined our Chemistry faculty this year following a NIH postdoc at Columbia University with Anna Mc Dermott. Rienstra grew up in western Michigan and graduated from Macalester College in 1993. His received his PhD under Robert Griffin at MIT in 1999.

His research interests are in NMR spectroscopy of membrane protein structure and dynamics. Says Rienstra, “Some of the most important advances in NMR and MRI have occurred at U of I. The common link is a culture that recognizes the value of enabling technologies for fundamentally new science and encourages risk-taking and the development of new paradigms.” He continues “For me, the wonderful history of NMR, the intellectual environment, and the infrastructure and support for junior faculty offered an unbeatable combination.”

Rienstra lives in Champaign with his wife, Jennifer Gartsie, who supervises student-teachers part time, and their nine-month-old daughter Elizabeth, a skillful crawler and “future spectroscopist.”

Remembering Harry Drickamer

Professor of Chemistry, Harry G. Drickamer, scientific pioneer and longtime educator and colleague in the School of Chemical Sciences, died May 6, 2002 at the age of 83.

Drickamer was Center for Advanced Study Professor of Chemical Engineering, Chemistry and Physics at the University of Illinois at Urbana-Champaign. His experiments utilized ultra high pressure as a tool for understanding electronic behavior in condensed systems.

Drickamer received his bachelor’s degree in 1941, his master’s degree in Chemical Engineering in 1942, and his doctorate in Chemical Engineering in 1946, all from the University of Michigan. He joined the Illinois faculty in 1946 and became a full professor in 1953. During his career, he trained more than 120 doctoral students and postdoctoral researchers. Several years ago, his former students honored him by establishing the Drickamer Graduate Fellowship for students in the departments of Chemical Engineering, Chemistry and Physics, reflecting Harry’s broad interests.

Drickamer was associated with materials research programs of the U.S. Department of Energy, and among numerous other awards, he received the DOE Award for Outstanding Sustained Research and the National Medal of Science. He was a member of the National Academy of Sciences, the National Academy of Engineering, the American Philosophical Society, and a fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, and the Royal Society of Chemistry. He was appointed professor in the University of Illinois Center for Advanced Study, the highest recognition the university bestows upon members of its faculty.

Born Nov. 19, 1918, in Cleveland, Ohio, Professor Drickamer is survived by his wife, Mae Elizabeth McFillen, whom he married in 1942, and five children.

The School of Chemical Sciences will sponsor a symposium in Dr. Drickamer’s memory later in 2003. Memorial donations to the Drickamer Fellowship Fund can be made online at www.scs.uiuc.edu/chem_eng/alumni/makea gift.htm or sent to the School of Chemical Sciences.

Department of Chemical Engineering Announces Name Change

In September 2002, the Department of Chemical Engineering officially changed its name to the Department of Chemical and Biomolecular Engineering. The addition of “biomolecular” to the name reflects the growing faculty and student interests in biological applications of chemical engineering’s systems approach. The department continues to maintain a significant presence in polymer, materials, and semiconductor processing as well as fluid dynamics and control theory.

The name change recognizes the department’s significant activity in the biological arena, including at present, drug delivery, biocatalysis, and bioenergetics. Students can choose between two degrees: one in Chemical Engineering, as before the name change, and a new degree in Chemical and Biomolecular Engineering. For the latter track, students will take biochemistry-oriented courses for their technical electives.

The name change was foreshadowed several years ago when Professor Deborah Leckband created a course called “The Physical Basis of Life,” a popular sophomore-level class that surveys biochemical and cellular processes from the perspective of a chemical engineer. The vitality of the more traditional Chemical Engineering degree is reflected in the creation, under the guidance of Professors Mark Kushner and Ed Seebauer, of a new laboratory course in Materials Processing. Look forward to the next newsletter for a feature article on this innovative coursework and the corporate partnerships that are making it possible.

Department of Chemical & Biomolecular Engineering

THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
Noyes Lab Centennial Celebration

The designation of Noyes Lab as a National Historic Chemical Landmark occurred on Saturday morning, September 12. The keynote lecture was delivered by Sharon Bertsch McGrayne (above). Ms. McGrayne’s address included a history of the building itself as well as describing many of the significant scientists who worked in the building and some of the most notable achievements that occurred here.

Throughout the day, visitors viewed a list of the more than 13,000 alumni who have graduated from the School of Chemical Sciences degree programs since 1872, the first graduating class from the Department of Chemistry. Visitors also viewed displays which described the history of the Chemical Sciences at the University of Illinois. You can see many of these images in the enclosed ACS Historic Chemical Landmark brochure on Noyes Lab.

Celebration participants registered at the door of the 100-year-old Noyes Lab (left). All registrants received a commemorative paperweight made from original bricks removed during the renovations of Noyes Lab Room 100.
Professor Emeritus Nelson Leonard presented his talk "Signal to Noyes: Voices Still Hear" to assembled guests in the recently renovated Noyes 100 (top). Professor Leonard joined the faculty at the University of I in 1963 and has been a Faculty Associate in Chemistry at Cal Tech since his retirement in 1992. Centennial participants enjoyed a wine and cheese reception (above) following the inaugural centennial lecture.

Visitors enjoyed seeing old friends at the continental breakfast in Noyes Lab (left) first thing on Friday morning. A dinner (above) concluded Friday's activities. Professor Bill Hammack of the Department of Chemical and Biomolecular Engineering presented the after-dinner remarks: Professor Hammack produces a weekly radio essay called "Engineering and Life" that is syndicated nationally on National Public Radio.
Chemistry Alumnus Receives National Medal of Science

In a ceremony at the White House on June 12, President George W. Bush awarded Dr. Charles Keeling the 2002 National Medal of Science. Dr. Keeling graduated from the U of I in 1948 with a degree in Chemistry. After a PhD from Northwestern and a postdoc at CalTech, he joined the Scripps Institution of Oceanography.

The National Medal of Science is awarded by the National Science Foundation for lifetime achievement in the sciences. Dr. Keeling was recognized for key research for understanding the carbon cycle and global warming. Keeling was the first to measure the accumulation of carbon dioxide in the atmosphere and his resulting data set is named the "Keeling Curve."

Keeling's latest research, with Scripps colleague Timothy Wharf, discusses the coincidence of major tidal fluctuations and significant global phenomena, proposing an 1800 year cycle of strong tidal forces that increases vertical mixing in the oceans and causes cooling at the sea surface.

- adapted from the LAS alumni newsletter, Summer 2002
1990s
David Benson, PhD ’97 Chemistry (Suslick), was appointed as an Assistant Professor in the Department of Chemistry at Wayne State University in Detroit, MI, in the Fall of 2002. His main interest is in metallodr protein design with emphasis on catalysis and biosensing.

Andrew French, PhD ’92, Chemistry (Katzeneukenbogen), received tenure at Albion College in April 2002.

David Huffman, PhD ’94, Chemistry (Suslick), accepted a position as an Assistant Professor in the Department of Chemistry at Western Michigan University in Fall 2001 after completing postdoctoral studies with Professor Thomas V. O’Halloran at Northwestern University. He and his wife, Ruthann, will celebrate their 20th wedding anniversary in 2003.

Dan Klingenberg, MS ’89/PhD ’91, Chemical Engineering (Zukoski), is a member of the Chemical Engineering faculty at the University of Wisconsin, happily demonstrating that fibers form bundles in paper making because they have surface friction.

Eunji Sim, PhD ’97, Chemistry (Makri) holds a faculty position at Rutgers, the State University of New Jersey, and was married last year to Dr. Donghyun Kim. They announce the birth of a son, Sebastian Kim, in July 2002.

Chris Ziegler, PhD ’97, Chemistry (Suslick), accepted an appointment as Assistant Professor at the University of Akron.

1980s
William F. Banholzer, MS ’81/PhD ’83 Chemical Engineering (Masel), President, Global Technology, GE Plastics in Pittsfield, MA, was elected a member of the National Academy of Engineering for breakthroughs in stealth materials, contributions to the isotope effect in solid-state physics, and for business leadership.

Eric Chronister, PhD ’80 (Dlott), Professor at the University of California, Riverside received the 2002 Senior Scientist Fellowship from the French Ministry of Research.

Lara Dennis, BS ’89, Chemistry, MD ’93, was named Medical Director of Breast Imaging for Providence Hospital and Medical Centers, Southfield MI.

Steve Gammon, PhD ’89, Chemistry (Rauchfuss/Smith), recently accepted an appointment at Western Washington University as Director of General Chemistry.

John Hoots, PhD ’83, Chemistry (Rauchfuss), was awarded the Chairman’s Lifetime Achievement Award in May 2002, for his work in developing the innovative TRASAR program at ONDEO Nalco Corporation.

1970s
Donald S. Mueller, PhD ’73, Chemistry (Beak), has been elected Chairman of the Industrial Research Institute in Washington, DC.

1950s
Mary Dell-Chilton, MS ’60/PhD ’67, Chemistry (Beak), was awarded the 2002 Benjamin Franklin Medal in Life Science. Dr. Dell-Chilton accepted the award at the prestigious 2002 Franklin Institute Awards Ceremony and Dinner, held at the Institute in the Benjamin Franklin National Memorial on April 25, 2002.

Richard Treptow, MS ’64/PhD ’66, Chemistry (Brown/Piper), was the recipient of the Passer Award from the American Chemical Society in Spring 2002.

Pre-1950s
Sister Joan M. Preising, MS ’37/PhD ’40, Chemistry (Reedy), celebrated her 100th birthday on January 18, 2002.
Chemistry Alumnus Endows Chemistry Fellowship Fund

The late Lester Coleman, MS ’53, PhD ’55, former CEO of Lubrizol and loyal supporter of the Department of Chemistry, has left a bequest that will support new fellowships in the Department. The $500,000 gift will reward excellence in graduate education and provide fellowships for outstanding graduate students.

“We are very grateful to the Coleman family for their generosity,” says Tom Rauchfuss, director of the School of Chemical Sciences. “Not only does this bequest honor Lester’s memory, it enables the most deserving students to receive the very best training available in the United States.”

Chemistry Library Announces Scientific Volumes Collection

The SCS Chemistry Library announces the creation of the “Eugene P. Bertin Scientific Volumes Collection.” The collection will be developed from a gift of more than 900 volumes of Chemistry-related books donated to the library by Dr. Eugene P. Bertin (BS ’48, MS ’49, PhD ’52). Dr. Bertin also presented the Main Library with an extensive collection of WWII military memorabilia.

Additionally, the yearly net income from a planned bequest of approximately $250,000 will be divided, and 25% allocated to maintain each of the library collections, with the remaining 50% given to the Chemistry Department to be spent at the department’s discretion.

Dr. Bertin was born in Williamsport, PA and served in the Signal Corps for five years in WWII. Following his graduation in 1953, he held scientific positions with RCA Corp in both Princeton and Harrison, NJ, retiring in 1987. He is an expert in the area of X-Ray Fluorescence Spectrometry. His book, Introduction to X-ray Spectrometric Analysis, is still considered the industry standard. For the past 33 years, Dr. Bertin has lectured at the Annual X-Ray Conference sponsored by the International Centre for Diffraction Data, located in Newtown Square, PA.

The School of Chemical Sciences would like to thank Dr. Bertin for his thoughtful generosity and foresight.

Submit Your Memories to the Centennial Website

More than 200 alumni and friends of the Departments of Chemistry, Biochemistry, and Chemical Engineering participated in the Noyes Centennial. Images of the events can be viewed on the Centennial Celebration website. The site also contains reminiscences and images sent in by alumni. There is a place for you to submit your memories as well.

www.scs.uiuc.edu/centennial

Did You Know?

The first Native American chemist, Carlos Montezuma, was educated at the University of Illinois, graduating with a degree in chemistry in 1884. A new book on his life, Carlos Montezuma and the Changing World of American Indians by Peter Iverson, was recently published by the University of Arizona Press.