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# Cornell Chemistry

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March 1995  
Issue 62

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## From the Chairman's Office

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Over the past few years, the university has launched a campuswide effort to define a long-range plan for Cornell based on its mission and core values. Several task forces have been hard at work to formulate a "strategic plan" that integrates teaching, research, and outreach, in keeping with Ezra Cornell's founding vision.

One of the debates triggered by this initiative has been the role of research in the education of undergraduates. Participation in research may take several different forms, either through exposure to basic research methods in introductory courses, or in optional departmental programs for supervised lab work, or through requirements that undergraduates engage in an independent investigation of some sort.

The Chemistry Department has long emphasized the importance of research in the majors program. A significant research experience (typically two semesters in a faculty member's lab) is required for an undergraduate to be eligible for a degree with honors in chemistry. Beyond that, many others, both regular and alternative chemistry majors, get involved in research at some point as undergraduates so as to sample

the life of a research scientist before choosing a career path. Such research experiences have paid off handsomely. In a special 1992 report entitled "Undergraduate Origins of Recent Science and Engineering Doctorate Recipients 1985-1990," the National Science Foundation concluded that the undergraduate colleges at Berkeley and Cornell ranked first and second in sending students on to obtain PhD degrees. In fact, over 1,100 ex-Cornell undergraduates were awarded science and engineering PhDs over the five-year period of the study.

Can our undergraduates continue to excel at PhD-granting institutions? To help maintain interest in (and opportunities for) research, the College of Arts and Sciences has organized a formal Undergraduate Research Program, which now involves some 700 research projects spread over 35 departments. The college's Undergraduate Research Forums in the spring and summer provide opportunities for young researchers to organize and present their work in public seminars.

The Chemistry Department believes that research opportunities provide an important complement to classroom

learning and have a lasting positive effect on the college experience. Besides helping young people gain insight into career opportunities in the physical sciences, undergraduate research projects occasionally produce the kind of exciting new breakthroughs that can change the course of an entire research program. We therefore remain committed as part of our mission to involving undergraduates in frontier research.

Fortunately, we continue to attract the resources needed to support such efforts. In FY 1994, Cornell ranked eighth in the National Science Foundation's analysis of research expenditures at U.S. universities. For the first time, these expenditures exceeded \$300 million over all Cornell units, with awards to the Chemistry Department up nearly 10 percent, to over \$10.5 million. The department received an additional \$1.1 million from foundations and industry, as well as from individual alumni and friends. This year initiatives are under way to acquire several research instruments, among them a state-of-the-art liquid chromatography/mass spectrometry system for chemical analysis and a new 600 MHz NMR spectrometer.

—Bruce Ganem

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### E-Mail Addresses Wanted

We would like to have your e-mail address. If you have one, please e-mail Kelly Strickland at [kss1@cornell.edu](mailto:kss1@cornell.edu) with your address so we can put it in our database. While you're at it, send us some news for the next issue of *Cornell Chemistry*!

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## Alumni News

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A big thank you to those who answered our call for lost alumni. The University has also updated quite a few of our "bad addresses" so if it has been awhile since you received *Cornell Chemistry*, welcome back!

**Jack Rines**, BChem '35, sent us a quick note: "You all make *Cornell Chemistry* a pleasure to receive." Thank you, Jack!

**Joseph E. Burke**, PhD '40, writes "I still enjoy reading about the activities at Baker Lab though I haven't called myself a chemist since I left Los Alamos in 1946. I was particularly interested in reading about the Pauling Baker Lectureship lectures in your last issue, since I attended them. Through the golden years of Metals Science I was a metallurgist, first on the Faculty of University of Chicago and then at the GE Research Lab in Schenectady. In the mid-fifties I formed a group there that helped found and define that field now called advanced ceramics and I now usually call myself a ceramist or materials scientist. I retired from GE a number of years ago and consulted vigorously for a number of companies for many years, but that has now decreased to quite a small amount."

**Martha Morse**, AB '41, writes, "I enjoy reading *Cornell Chemistry*. I might also say that the weather in Ithaca during the winter of 1937-38, my freshman year, was normal winter weather; I don't remember it being either milder or fiercer than usual; I grew up in Dundee, New York, and it seemed perfectly natural winter weather to me. I remember hearing Linus Pauling lecture—he was an impressive man. We heard him speak at the University of Houston here two years ago—he was still terrific."

**Leo Mandelkern**, BA '42, PhD '49, the R.O. Lawton Distinguished Professor of Chemistry at Florida State University, has been named one of the recipients of the American Chemical Society, Polymer Materials and Science Engineering Division Award for "Cooperative Research in Polymer Science and

Engineering." He shares that award with two colleagues, Dr. S.C. Speed and Dr. F.C. Stehling of the Exxon Chemical Corporation, Polymer Center, Baytown, Texas.

**Wolf Karo**, PhD '49, writes, "As for myself, I finally retired from Polysciences, Inc. Besides consulting in polymer synthesis, polymer applications to diagnostic testing, and organic production, I am continuing work on a series of books by Sandler and Karo. The second edition of *Polymer Syntheses*, Vol. 2 has been published and we are busy completing the second edition of Vol. 3. With our *Sourcebook of Advanced Organic Laboratory Preparations* (1992) and the Japanese translation of the first two volumes of *Organic Functional Group Preparations*, we are well on our way to having a 15-volume bookshelf of our own. As a matter of fact, the publisher is already talking about another volume. (Unfortunately, Stan Sandler is not a Cornell alumnus, but let's not hold that against him.)"

**John H. Fried**, PhD '55, is ending his term as a director of Syntex in 1995. He has been a director since 1982 and is a member of the Finance Committee and the Board of Directors; Committee on Science at Syntex. Dr. Fried served as president of Syntex Research from 1976 until his retirement as an executive officer of the corporation on March 31, 1992. He was a senior vice president of the corporation from 1981 until October 1985. Dr. Fried was vice chairman of the board of the corporation from October 1985 until December 31, 1992. Dr. Fried is also a director of Corvas International, Inc., a director and chairman of Alexion Pharmaceuticals, Inc., and a director of Receptor Laboratories, Inc.

**Stephen R. (Bob) Cohen**, PhD '56, writes, "I retired, effective December 8th, from my position as a Research Scientist with the New York State Office of Mental Retardation and Developmental Disabilities. For several years until I retired I was an officer in PEF (the Public

Employees Federation), a union representing professional, scientific, and technical employees in New York State civil service. Although retired, I am on the PEF team negotiation patent policy and employees' rights with several New York State agencies. When I have settled in as a retiree, I intend to do volunteer work educating the public, who badly need it, about science and technology. I feel especially fitted to do this because my first degree, also from Cornell, was BChemEng. I was pleased to learn that Donna graduated from and is returning to the Eastman School of Music. I have always felt that there is a close connection between music and science, going beyond Borodin, and Einstein and his violin. As a child I dreamed of becoming either a scientist or a composer. I had the good fortune to become one."

**Patricia Dunning**, BA '61, writes, "I never worked as a chemist—a woman with only a BA had little opportunity in 1961. But that grounding in science enabled my success at IBM and now as an MA candidate in Anthropology (Archaeology) . . ."

**Alfred Hagedorn, III**, AB '69, writes, "After rattling around in the pharmaceutical industry (10 years at Berlix, 1 year at Xechem), I've returned to the Rutgers University Chemistry Department (I was there full-time from 1976 to 1982). It's a *teaching* position ("Lecturer/Associate Professor"), which is something I enjoy. Happily, it's a part-time assignment, which leaves some time to do a little research. Keep up the good work!"

**Peter Walsh**, PhD '77, sent us a very nice card with a note, "Thank you for the *Cornell Chemistry* newsletter. I enjoy reading about old friends and new members of the Chemistry Dept. . . Have a happy and productive New Year." Thanks, Peter, it is our pleasure!

**Angelica M. Stacy**, PhD '81, who is an associate professor at the University of California, Berkeley, has been named the 1995 recipient of the Francis P. Garvan-

John M. Olin Medal. The medal is awarded in recognition of significant achievements by women chemists in America.

**Scott Edmondson**, AB '91, who is a graduate student at Ohio State University, has received an Industrial Fellowship in recognition of outstanding performance in Ohio's doctoral program.

**Annie Chen**, MS '93, writes "Have a happy holiday and new year."

—In Memoriam—

**Haibin Deng**, a postdoctoral associate in 1993–94, December 29, 1994, Lexington, Kentucky.

**Harold E. Goldsmith**, BChem '22, PhD '26, July 4, 1994, Amherst, New York.

**Ian M. Liddell**, BA '54, July 19, 1994, Waldwick, New Jersey.

**Deborah J. Robertson**, PhD '90, December 19, 1994, Virginia Beach, Virginia.

**Correction:** William McDevit was mistakenly written as William McDevi in the "In Memoriam" section of the last newsletter.

**Don't Forget —  
Reunion Open House**

**Faculty Lounge,  
Room 125 Baker**

**Friday, June 9, 1995  
1:30–4:00 pm**

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## Faculty News

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### Chemical Ecology Colloquium Published

The first issue of this year's *Proceedings of the National Academy of Sciences, USA* (PNAS 92, 1–82, 1995) opens with a collection of fourteen papers presented at a recent NAS Colloquium on "Chemical Ecology: The Chemistry of Biotic Interaction." The colloquium was organized by **Jerrold Meinwald** and his long-term collaborator, Thomas Eisner. In addition to three papers in the collection by the Eisner-Meinwald team, there are Cornell contributions by **Jon Clardy** and **Wendell Roelofs** (Liberty Hyde Bailey Professor of Insect Biochemistry). The publication of this set of papers provides a good overview of one of the most exciting frontiers of interdisciplinary chemical research and highlights the scientific work being done by CIRCE (The Cornell Institute for Research in Chemical Ecology), whose founding members are Professors Clardy, Eisner, Meinwald, and Roelofs.

### Chemists Contribute to Cornell's Celebration of Words and Music

On March 14, 1995, Cornell's Department of Music will present a program featuring musical settings of poems by three distinguished contemporary poets: Archie Ammons (Goldwin Smith Professor of Poetry), Denise Levertov (A.D. White

Professor-in-Residence), and **Roald Hoffmann** (John A. Newman Professor of Physical Science). The Hoffmann piece, entitled "The Metamict State," is a setting of five of his poems by Jane Wilkinson for narrator, flute, piano, and viola. This premier performance will be given by David Feldshuh (Artistic Director, Cornell Theater Arts) as narrator, with **Jerrold Meinwald** (flute), Charlotte Greenspan (piano), and Steven Ewer (viola). Steven is a junior in Arts and Sciences with a double major in Chemistry and Biology.

"The Metamict State" was commissioned by Hoffmann and Meinwald in 1993. It is Jane Wilkinson's second setting of a chemist's poems to music. Her first such work, written for the "Presidential Cultural Evening" held at the last San Francisco Meeting of the American Chemical Society, featured settings of poems by Carl Djerassi. It was performed by Djerassi along with Meinwald and Greenspan.

### Awards, Honors, and News

**Floyd Davis** has just received a Young Investigator Award from the Office of Naval Research.

**Bruce Ganem** has been named the Scholars in Chemistry Distinguished Lecturer at Williams College and will present a colloquium there on April 28, 1995.

**Roger Loring** was awarded a Study Visit Grant by the Deutscher Akademischer Austauschdienst (German Academic Exchange Service) to support one month's visit to the Max Planck Institut for Polymer Research in Mainz, Germany. He will spend the month of May there.

**Fred McLafferty** will receive an honorary D.Sc. degree from Purdue University at its commencement exercises on Friday, May 12.

**Harold Scheraga** has been nominated as an honorary member at the General Assembly of the Society of Polymer Science, Japan, and has been invited to give a lecture at the 44th annual meeting of the society in Pacifico Yokohama at the end of May.

**John Wiesenfeld** has accepted a position as Dean of Science at Florida Atlantic University. He came to Cornell in 1972 as assistant professor of chemistry and became full professor in 1984. He was department chair in 1985 and in 1989 became the deputy vice president for research. He was named vice president of planning in 1990 and vice president of academic programs and planning in 1994. He joins Florida Atlantic University on April 1.

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## Department News

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### 1994–95 Debye Lectures

The Debye Lecture series, hosted this year by Chemical Engineering, was given on March 6, 7, and 8 by **Eduardo Glandt** from the University of Pennsylvania. The overall title of the series was “Adsorption: From Theory to Technology.” Individual titles were “Fluids in Random Media,” “Gas Storage and Transport,” and “Equilibrium and Nonequilibrium Processes in Adsorption and Its Applications.”

### 1994–95 Miles Lectures

The Miles Lectures will be delivered by **J. Fraser Stoddart**, Professor of Organic Chemistry at the University of Birmingham, United Kingdom. Dr. Stoddart will speak on Monday, Tuesday, and Wednesday, April 10, 11, and 12. Titles will be “Self-Assembly in Chemical Systems,” “Nanochemistry: Whither and Thither Molecular Machines,” and “Towards Supramolecular Polymers,” respectively.

### Spring 1995 ACS Meeting

If you’re attending the 209th ACS meeting in Anaheim, California, in April, please be sure you come to the Cornell Chemistry breakfast on Tuesday morning April 4 from 7:45–9:00 am in the Orangewood 1 Room of the Quality Hotel.

The Society of Cornell Chemists asks you to support the cost of printing and mailing this newsletter with your voluntary annual dues of \$10. Please make your 1995 check payable to “Cornell Chemistry” and mail it to The Society of Cornell Chemists, Baker Laboratory, Department of Chemistry, Cornell University, Ithaca, New York 14853-1301.

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Cornell University  
Department of Chemistry  
Baker Laboratory  
Ithaca, New York 14853-1301