An Improved Program in General Chemistry

In the Fall of 1985 a departmental committee comprising D. Barnes, J. Chandler, R. Day, J. Ragle, and O. Zajicek was charged with the task of recommending modifications to the General Chemistry Program "with the dual goals of alleviating the impending shortage of faculty and improving the program." During the last twenty years our faculty has included 6-8 faculty members who, because of outstanding ability and interest in teaching, carried extensive teaching commitments but were relieved of research and service obligations. As these faculty retire, and are replaced by research-oriented assistant professors, we will find it increasingly difficult to staff the beginning courses. Also, improved technology in the areas of audiovisuals and computer-assisted instruction, suggests better ways of helping students master chemistry.

The new Chem. 111, 112 will have three hours of lecture, no discussion, and one 3-hour lab every other week. We foresee no significant change in the lab content of the course. Of some concern has been the elimination of the discussion section. This will be compensated for by: (1) more thorough coverage of conceptual material in the expanded lecture format; (2) a number of scheduled, structured, problem-solving sessions (optional attendance); and (3) a resource center available for student usage during staffed hours. Students will have access to microcomputer courseware, including pre-lab assignments and laboratory simulations; microcomputer resource programs, including symbolic mathematics, plotting and curve-fitting, numerical computation; PLATO access; sample "on-line" tests from a test data bank; reporting and computer grading of laboratory unknowns; viewing of videotaped materials; hard-copy materials (models, displays, exhibits) for references; and posted information of a course-specific nature.

Two classrooms will be renovated for the resource center, which will provide: a microcomputer laboratory with about 50 stations, a classroom area equipped with a video projection system, about 10 individual and small group video playback stations, a staffed drop-in area for individual or small group tutorials, an area in which staff can prepare videotaped material, and an area con-

Future of Chemistry Conference

With the recruitment of Professor Louis D. Quin as Head, the University committed itself to a major thrust in the field of chemistry. Within the last eighteen months we have added six new faculty members, and will add four more within the next three years. Following that, during the next decade we will be replacing a significant fraction of our current faculty as they retire. These dramatic changes in teaching and research personnel, along with sharp increases in logistic support, demanded that we look hard at the future of chemistry and formulate a plan to guide the development of the Department.

In a faculty-wide discussion of the chemistry of the next decade or two, it was suggested that we could benefit from the advice and views of distinguished members of the chemical community. This suggestion was greeted with considerable enthusiasm, and Professor Quin appointed a committee to plan for and implement a "Conference on the Future of Chemistry."

The following served as panelists at the October 25, 1986 Conference on the Future of Chemistry:
Dr. Russell S. Drago (UM B.S.), U. of Florida,
Dr. Arthur F. Findeis, National Science Foundation,
Dr. Alan L. McClelland, E. I. duPont de Nemours & Co.,
Dr. Lawrence W. McKenna (UM Ph.D.), Monsanto Chemical Corp.,
Dr. Kenneth J. Wynne (UM Ph.D.), Office of Naval Research.

The ideas presented were far reaching yet, at times, specific to the present posture and future capabilities of our Department. At the November faculty meeting Professor Quin presented a proposal for the filling of Assistant Professorships in each of the years 1987, 1988, and 1989, and this was, in a sense, a limited summary of the lessons gleaned from the Conference. The proposal called for adding a new research thrust to the Department, by making all three appointments in the single area that interfaces chemistry with biology. This area is currently underrepresented in the Department, has great appeal for students, has numerous problems where fundamental chemistry can be practiced, will continue to be continued on page 5
DEPARTMENT NOTES

The department will be host to the 49th annual Summer Conference of The New England Association of Chemistry Teachers, August 17-21, 1987. The theme this summer is Inorganic Chemistry (with a few sub themes). The activities will comprise daily lectures and two afternoons of workshops for about 100 high school, college, and university chemistry teachers from (mostly) the Northeast area of the U.S.

The securing of funding for the new Polymer Center building has almost been completed. State and federal grants totalling $21 million have been awarded toward the estimated $24 million needed. The facility will be a low-rise building forming part of the Lederle Graduate Research Center Complex and will provide about 100,000 gross square feet. It will house the Polymer Science and Engineering Department and will also provide facilities for polymer research in the Departments of Chemistry and Chemical Engineering. Feasibility studies by the state's Division of Capital Planning and Operation are in progress and completion is scheduled for early 1991. This will "free" space in the GRC towers for use by Chemistry and other departments.

Classified and professional staff members, Mathilda Boulanger, Walter Yando, Linda Warren, Dan Keedy, and Carly Zinnoski were presented with service pins by Dean Byron at a luncheon in their honor in February 1987.

Evan Miller completed a theoretical senior honors thesis with Professor John Ragle on the topic of basicity, field gradients and quadrupole coupling at nitrogen and hydrogen in imidazole and imidazolium ion, and has moved on to the University of Chicago for his Ph.D.

Many changes are occurring in the Department of Chemistry as a result of the University making major commitments to enhance its performance and increase its stature. Six outstanding new faculty members have been appointed since 1985, with generous budgets to get them off and running. Searches are currently underway for two 1987 appointments, and additional new faculty are to be added in 1988 and 1989. Non-faculty appointments have been made or authorized to improve the operation of the Department (for example, see the item on our new Director of Operations, Dr. Paul Drummond, on page 6). Major acquisitions of equipment and instruments have been funded; within the last year two new FT-NMR spectrometers and an FT-IR spectrometer have been purchased, the administrative offices are being outfitted with new word processors, printers, and copying equipment, funds are being provided for a computerized resource center for a revised General Chemistry Program, and substantial amounts of equipment have been purchased for undergraduate laboratories. It is probable that another high-field NMR spectrometer will be added in the very near future. Clearly, we are moving forward, and with a spirit that matches the logistics.

Despite the above, many of our needs are not easily met with the State budget. We have singled out two areas that are of vital importance to the growth of the Department and we now are asking our Alumni to join our campaign and give their support in addressing these needs. The first concerns the continued development of a seminar and visiting lecture program that brings in world-class chemists from across the nation. The second is the creation of fellowships for specially-talented graduate students. Our graduate program is the life of the Department. While our Teaching Assistant stipends have been raised to a level that makes us competitive with our peers, to compete for the exceptional students we need exceptional attractions.

We know from experience that our Alumni care about the Department; unsolicited gifts have come in every year, and when a modest program was announced in the 1986 Gazette asking for help in the Seminar Program, the response was excellent with contributions ranging from $25 to $1500. Also during the year came the establishment of our first endowment fund, in the name of Donald and Phyllis Kuhn. This is described elsewhere in the Gazette; it is a wonderful indication of the loyalty of our Alumni, and it will be of great significance to our program. We are now formalizing the opportunity for our Alumni to join with us in our development program. With the approval of the University, we are creating a Chemistry Annual Fund, soliciting contributions specifically for the two programs noted above. We ask you to designate to Chemistry your annual gift to the University. A pledge card and envelope are enclosed. Our faculty and students urgently need your help and look forward to your response. Of course, inquiries about other forms of support are welcome and can be directed to the Department Head, Professor Quin.

If your employer has a matching-gifts program, your personal contribution becomes doubled or tripled. In many cases, with your help, the employer will designate the matching gift for the use of Chemistry. Please help by sending in a matching gift from your employer along with your pledge card.

We know that you will help us to the extent of your means. Any contribution, however large or small, is important because it indicates your support of our efforts to provide an exceptional program.
Here is a letter from an alumnus that we would like to share with Gazette readers.

An Open Letter to the University of Massachusetts Administration, Chemistry Department Chairman and Faculty and Alumni
c/o Dr. C. Peter Lillya
Professor, Chemistry Department
Lederle Graduate Research Center
University of Massachusetts
Amherst, MA 01003

Dear Pete:

Since receiving our doctorate degrees at UMass Amherst, Phyllis and I have developed an even greater appreciation of the benefits of a good education.

We are aware of the commitment by the university administration and the dedicated efforts of the chemistry department chairman and faculty to develop the chemistry department into a progressive center for modern chemistry with a reputation for excellence. We encourage and support these goals and wish to actively participate in the development plans for the future. To that end, we are establishing a scholarship endowment in chemistry to aid full-time graduate students who are pursuing a Ph.D. degree in chemistry and are demonstrating outstanding performance in research or teaching. In addition, we are contributing towards travel grants for junior faculty to attend scientific meetings. We will also continue to support the Alumni Seminar Series.

Helping to provide others with the opportunity of obtaining a superior education is our way of expressing our appreciation for the excellent education we received at UMass. It is our sincere hope that our efforts will encourage other alumni to become actively involved in the Chemistry Department development program and help provide the support and funding necessary to achieve the department goals.

Sincerely,

[Signature]

Donald E. Kuhn ('69)
5447 Creek Lane
Erie, PA 16511

The Celerity C1200 computing setup in the Chemistry Department is now one year old, and has quite a number of capabilities. We have a number of useful programs running on it which are available for use by members of the department. Most of these are semiempirical molecular orbital programs of public access nature, such as the CNDO/INDO/MNDO series, although molecular mechanics programs are also available. In the very near future, we hope to add ab initio MO programs and peptide-type molecular mechanics programs to this assemblage as well. In short, good research grade computations are being carried out on the machine already, and we expect that usage and capabilities will grow in the future as the facility becomes more readily accessible.

Ellen Goldman, an undergraduate research participant, completed an experimental study of the solid hydrogen bonded complex of chloroform and pyridine, and the results of this work have recently appeared in The Journal of Physical Chemistry.

I. Moyer Hunsberger Dies at 65; Dean of Arts and Sciences 1961-69

I. Moyer Hunsberger, Vice President for Academic Affairs at the American University of Cairo and former Dean of the College of Arts and Sciences here, died February 1 in Beverly Hospital after an illness at age 65. Private services were held in Emmaus, Pa.

During his tenure as Dean from 1961 to 1969, a period of the University's greatest growth, Hunsberger was responsible for recruiting most of the professors and department heads being added then, according to Professor Emeritus Oswald Tippo, University Provost during that era.

Born Aug. 3, 1921 in Quakertown, Pa., Hunsberger earned B.S., M.S., and Ph.D. degrees in chemistry at Lehigh University and taught at Antioch College and Fordham University before coming to the University in 1960 as Head of the Chemistry Department. He was named Dean of Arts and Sciences a year later.

Hunsberger left in 1969 for a two-year tour as program adviser for the Ford Foundation in Pakistan.

He served as Dean of Arts and Sciences at the State University of New York in Albany and as Provost at the University of Oklahoma in Norman before going to Cairo in 1980.

A Memorial Service was held on April 8 in Memorial Hall at the University of Massachusetts.

Speakers were Oswald Tippo, Randolph Bromery, Robert Glucks-tern, Seymour Shapiro, Bruce Aune, Theodore Bacon, and, representing the Chemistry Department, George Richason. Many of the faculty and administration who worked closely with Dr. Hunsberger, as well as Mrs. Hunsberger and members of the Hunsberger family, attended the service.

continued on page 6
FACULTY NEWS

Professor Richard S. Stein, recently presented two invited papers at a symposium on "Scattering and Deformation of Polymers" at the annual meeting of the Materials Research Society in Boston.

Professor Stein has been invited by the Ministry of International Trade and Industry (MITI) to spend two weeks in Japan in January to discuss industry-university interaction.

Three former associates of Professor Stein at UMass will be receiving national awards this spring. These are: Professor Hiromichi Kawai and Takeji Hashimoto who will jointly receive the American Physical Society Ford Prize in Polymer Physics at the New York meeting in March. Professor Kawai is retired from Kyoto University and spent two years as a visiting professor at UMass. Dr. Hashimoto is an Associate Professor at Kyoto and received his Ph.D. degree from UMass. He and his wife Setsuko had been married in the UMass Faculty Club during their stay in Amherst.

Professor Garth Wilkes, Professor of Chemical Engineering at VPI, will receive the Creative Polymer Chemistry Award of the Polymer Division of the American Chemical Society in April at the Denver meeting. Professor Wilkes received his Ph.D. degree from the Department of Chemistry of UMass and had been an Assistant Professor at Princeton University before joining VPI.

Professor Stein will be presenting invited papers at both award ceremonies.

We were recently visited by another UMass Chemistry alumnus, Professor Yohji Shindo, of Fukui University, Japan who received his Ph.D. degree with Professor Stein in the Department of Chemistry. He stopped by on his way to a presentation on interfacing of laboratory computers in Atlantic City, NJ. Dr. Shindo and his wife, Masaoka, had also been married in the UMass Faculty Club during their stay in Amherst.

Professor Ronald D. Archer, who is one of the Connecticut Valley Section Councilors to the American Chemical Society has been appointed Chairman of the Society Committee on Education (SOCED) for 1987.

He is also the Chief Reader for the Educational Testing Service Advanced Placement Chemistry Program (1985-8) which served over 15,000 chemistry students last year.

He is currently on sabbatical leave at the University of Vienna doing radiation chemistry on some of the polymers which his students have prepared at UMass. He will also visit laboratories in Poland, East and West Germany, Sweden, Czechoslovakia, and Hungary during the spring.

Professor Robert Holmes will be spending a sabbatical semester at the University of California at San Diego, January 28 - June 1, 1987.

He received NSF grants to up-grade existing X-ray instrumentation and to continue research on "Reaction Mechanisms for Nonrigid Molecules of Main Group Elements." He initiated a new PRF grant on "Polymeric Organotin Compounds."

He also received a 1986 University Faculty Fellowship Award for distinguished research and scholarship. The award provides a year of released time at full pay to devote to research and a $3,000 award check. He also was elected to chair the 5th International Symposium on Inorganic Ring Systems (IRIS V) to be held at the University of Massachusetts, Amherst, August 8 - 12, 1988, and was appointed the first Associate Editor of Phosphorus and Sulfur to cover phosphorus chemistry in the North American continent.

Professor Peter C. Uden, Personal Travels in 1986

As a guest of the Chinese Academy of Sciences, a three week visit was undertaken to the People's Republic of China in May and June 1986. Twelve lectures on a variety of topics in Analytical Chemistry were given in a number of Institutes and Universities. Host institutes were the Institute of Environmental Chemistry in Beijing, the Institute of Chemical Physics in Lanzhou and the Institute of the Salt Lake in Xining. Host universities were Peking University, Beijing and Lanzhou University which are two of the most prestigious in China and have very well established programs in Analytical Chemistry. This visit served to build on existing contacts and to initiate new ones in collaborative research and graduate education. It is hoped to develop specific contacts with a number of Chinese institutions and to make arrangements to bring talented graduate students in analytical chemistry to UMass in the future. Two present analytical graduate students come from the Environmental Institute, Zhu Caobin and Yang Pengyuan; Wang Xiaoru did her undergraduate work at Lanzhou University while Cheng Zuben from the Institute of the Salt Lake spent two years with Professor Uden as a visiting professor. He was invited to spend a further period of a month in China this year or next as a consultant for a World Bank program to enhance the quality of provincial Chinese universities.

As a member of the IUPAC (International Union of Pure and Applied Chemistry) Commission of Analytical Reactions and Reagents, he attended the annual meeting of the Commission near Bratislava in Czechoslovakia in September 1986. This commission which is the senior IUPAC commission in Analytical Chemistry consists of
12 members from countries as diverse as Russia, Hungary, Japan, Belgium, Sweden, the UK and the USA. Its mandate is to develop official IUPAC documents on its subject area which is broadening to include Chromatography. In addition to attending this meeting, he was the guest of the Slovak Institute of Technology, presenting a seminar on Specific Element Detection in Chromatography by Plasma Emission Spectroscopy.

The British Royal Society of Chemistry holds triennial conferences on Analytical Chemistry which welcome worldwide participation. Professor Uden and Professor Tan of the UMass Analytical Division attended this year's meeting which was held at the University of Bristol in England in July. These meetings maintain an excellent atmosphere, both scientific and social, and have no direct counterpart in the United States.

Contacts between the UMass Chemistry Department and the State University of Campinas, Sao Paulo, Brazil are continuing. In February 1986, the Department welcomed a visit to the Amherst Campus from Professor Renato Pires daSilva who is the secretary for International Programs at his University. The Department is exploring possible ways to develop a direct interaction between the two chemistry departments. Later this year UMass anticipates welcoming a faculty member from the Institute of Chemistry at Campinas to spend up to a year here in collaborative research and program development.

An Improved Program

continued from page 1

taining molecular models and other teaching aids as well as hard-copy reference materials. We expect other chemistry courses to make extensive use of the resource center.

The General Chemistry Program serves 1800-2000 students in many major areas—we expect them to be better served by our revisions.

FACULTY NOTES

Our faculty is well represented in a broad spectrum of science journals as evident from the following list:


John Brandis: Reviews on Thermal Biology

Robert Rowell: Associate Editor, Langmuir

Richard Stein: Polymer Science, Materials and Design

Peter Uden: North American Advisory Editor, The Analyst

Professor John Ragle attended the Gordon Conference on Charge Densities last summer, and the subject matter of the meeting has figured heavily in his recent research. "This was the best scientific meeting that I ever attended," he said.

Dr. Daniel Kost is spending the 1986-87 academic year at UMass as a Visiting Professor of Chemistry. Dr. Kost, who is an Associate Professor of Chemistry at Ben Gurion University of the Negev, Beer Sheva, Israel, is the author of more than 40 research publications in the area of physical organic chemistry, and is teaching a course in Applications of NMR Spectroscopy in Organic Chemistry during the Spring 1987 semester at UMass.

Awards:

Professor Robert Holmes, recipient of 1986-87 Faculty Fellowship

Professor John Chandler, recipient of 1985-86 Distinguished Teaching Award

Professor William McEwen, Distinguished Faculty Lecturer 1986-87

Daniel Keedy, Staff Assistant, 1986 Chancellor's Citation for Outstanding Service to the University.

Professor Ramon M. Barnes and Gerhard Meyer (Ph.D. 1982) received a patent for the APS-100 Air Plasma Spectrometer. An I-R 100 award will be given to Dow Chemical and the Massachusetts based Baird Corporation by Research and Development Magazine for this instrument. The instrument was based on the Ph.D. research of Dr. Meyer and is a good example of the role of basic research leading to a technological development for the chemical industry and to benefits for a Massachusetts company.
Professor Cheves Walling, Emeritus Professor from the University of Utah, is a world renowned organic chemist and a member of the National Academy of Sciences. He is a former editor of the Journal of the American Chemical Society, the most prestigious chemical research journal in the U.S. Despite his emeritus status he remains active and well informed about the latest developments in his research field, free radical chemistry. His presence in this area created the opportunity of an official visit, as part of which he offered a graduate course in his specialty.

Professor Robert Rowell can be found at most every National ACS Meeting, the annual Colloid and Surface Science Symposium and the polymer colloid Gordon Conference. His first year as Associate Editor of Langmuir the new ACS Journal of Surfaces and Colloids also marked the second year in the life of the journal.

Professor John Ragle has completely rebuilt the data collection system on our nuclear adiabatic demagnetization NMR machine. With Dr. Palmer and Mr. Yoshida, he has been measuring high-resolution deuteron and nitrogen quadrupole coupling data on solid purines, sugars and nucleosides. These data bear on the hydrogen bonding interactions and on the solution dynamics of RNA and DNA, and have led to an interesting collaboration with Professors Regitz and Robert Vold at UCSD. Parts of this work will be presented by invitation at the 28th ENC at Asilomar in April.

Professor Alan N. Hughes is spending his 1986-87 sabbatical leave from Lakehead University, Thunder Bay, Ontario, Canada, conducting research in Prof. Louis Quin’s research laboratory.

A Merck Predoctoral Fellowship has been awarded to Ms. Kimberly A. Forbes and will commence in January 1987. Ms. Forbes is carrying out her Ph.D. research in Analytical Chemistry under the direction of Professors Ramon Barnes and Peter Uden. Her dissertation area is in the Interfacing of Chromatography and Atomic Emission Spectroscopy for Specific Element Detection.

LAB UPGRADE
Thanks to an infusion of $55,000 into the Instrumental Analysis teaching laboratory, we can now offer students the opportunity to learn instrumental analysis on equipment they might actually use when they graduate. Thanks to judicious, perspicacious, and astute planning by the Analytical Division, the money was nicely stretched to obtain the following instruments:

1. Perkin-Elmer (P.E) Lambda 3B UV-Vis Double Beam Scanning Spectrophotometer ($7,000).
2. P.E. Model 2280 Atomic Absorption Spectrophotometer ($9,100).
3. P.E. Model 8500 Capillary Column Gas Chromatograph ($9,700).
4. Bioanalytical Systems Model 100A Electrochemical Analyzer ($17,500).
5. IBMPC XT Microcomputer with color monitor and Interactive Microware, Inc. ADALAB/Chromatograph ($4,200).
7. A. W. Sperry Model 620C 20 MHz Oscilloscopes (8; $3,000).
8. A. W. Sperry Model BL-4 Multifunctional Breadboard System (8; $2,400).
9. SSI, Inc. Model 200 Pulse dampener (for last year’s new HPLC system; $0,300).

Edward Voigtman, Assistant Professor of Analytical Chemistry, received his Ph.D. (in Physical Chemistry) from the University of Florida in 1979 and then stayed on, in Jim Winefordner’s Analytical Chemistry group, for seven plus years of postdoctoral research. With apologies to Chief Joseph, “he will post-doc no more, forever”. He has moved to Northampton with his wife Janice Leach. His research interests are in the development, refinement, and proof of new existing ultrasensitive detection techniques; lasers for the study of molecular photophysics, especially luminescence, photothermal techniques, and photoionization phenomena; molecular and atomic trace analysis; applications of signal/noise theory to detection techniques and the design of optimized electronic instrumentation; computer modeling of physical systems.

In October 1986, Dr. Paul Drummond joined the department as the Director of Operations. He brings with him twenty-six years of management experience in Research and Development, product research, administration, budgeting, and patent activities, with the FMC Corporation at their Princeton, N.J. and Middleport N.Y. installations. Dr. Drummond received his B.S. and M.S. from Boston College and his Ph.D. from Vanderbilt University in Nashville, Tennessee.
ALUMNI

Donald Kuhn (Ph.D. 1969) and Phyllis Kuhn visited Amherst and the Chemistry Department August 26. Don is a Senior Research Group Leader at Hammermill Paper Companies, Corporate Technical Center in Erie, PA, with major responsibilities in new products research, analytical services, and paper testing. Phyllis is chief Microbiologist at Hamot Medical Center in Erie.

Arthur Kluge (Ph.D. 1969) is now Director of Medicinal Chemistry at Syntex Research in Palo Alto, CA.

Lothar Franke is owner and operator of LARK enterprises in Hopedale, MA. Lothar started in spring 1986 doing custom synthesis and separations. He has already done projects for groups at UMass.

Brian McDavitt (B.S. 1986) has taken a technical position in organic chemistry at Polaroid Corp. in Cambridge, MA.

Keith Gourley (M.S. 1982) finished law school at Temple University in May 1985 and is practicing patent law with the firm Pennie and Edmonds in New York City.

Thomas Sarubbi (Ph.D. 1986) and Susan Curry were married on Sept. 27, 1986. Tom is working on polymers at Olin-Hunt Chemical Co. in East Providence, RI. He and Susie are “urban homesteading” in one of the less salubrious neighborhoods in Providence.

Professor J. P. Anselme writes with the sad news that a good friend of many of us old timers, John Ferrari died on June 4, 1986. John, who came to UMass from Fordham with Moyer Hunsberger when Moyer assumed our headship, was employed at Polaroid Corp.

Edward Miller (Ph.D. 1968) recently transferred to the Additive Development Section of Texaco’s Lubricants Research Department at Beacon, NY. Promoted to Technologist, he now enjoys considerable autonomy in his work to develop new additive packages for motor oils.

Richard Gooding (Ph.D. 1985) has joined Ethicon, Inc. at Somerville, NJ.

Robert Austin (Ph.D. 1968) and Marcia Austin (M.S.) are living in Chillicothe, Ohio where Bob is with the Meade Corporation.

Kevin J. Sheehan (Ph.D. 1987) has joined Borg-Warner Inc. in Parkersburg, West Virginia as a Research Chemist.

Paul H. Terry (Ph.D. 1962) is serving as the President of the Chemical Society of Washington (Washington D.C. section of the A.C.S.) This is a 4200 member section with many activities throughout the year. Paul’s extensive involvement with Toastmasters will no doubt be of use to him in helping the section to function smoothly.

Rich Saia (M.S. 1978) and wife Julie have had a new house built and undertook the interior painting themselves with help from Mark (now 3). Rich is a Supervising Engineer for plasma etching at the G.E. VLSI Lab in Schenectady. He has given two talks at the Electrochemical Society meeting in San Diego and one at a Refractory Metals Workshop in Palo Alto and has had five publications this year on plasma etching.

Bruce Marlow (Ph.D. 1982) and wife Dianne have relocated to Carmel, New York with their children Ryan and Laura where Bruce is Principal Colloid Chemist with PenKem, Inc. of Bedford Hills, N.Y. Bruce travels widely on his major assignment with the development of the new Acoustophoretic Titrator for measuring electrokinetic properties of concentrated dispersions (up to 75 wt. %).

Ray Farinato (Ph.D. 1976) has been promoted to Associate Research Fellow in the Discovery Research Department of American Cyanamid, Stamford, CT. Ray recently returned to UMass on a recruiting visit. He and his wife Margaret celebrated the arrival of son Max this fall.

Steve Vasconcellos (Ph.D. 1980) attended the ACS Meeting in Anaheim and was recruiting for Betz Laboratories in Trevose, PA. Steve and Marguerite welcomed Korey Amanda into the world in July.

Kevin Kidnie (Ph.D. 1982) fights his way through the snow to the Graphics Technology Sector in the 3M Center in St. Paul. Kevin and Maggie announced the birth of Skylar in November.

Al Levit (Ph.D. 1973) has been Technical Director at Azon Corp., Johnson City, NY and as Azon acquires a major competitor, K. & E., Al will become Technical Director of both companies. Al is planning a trip to China in the Spring.
ALUMNI

continued from page 7

Ana Morfesis (Ph.D. 1986) has accepted a post-doc. with Prof. Sandy Asher at the University of Pittsburgh developing some innovative latex gratings for spectroscopic applications.

Lucy Salas (M.S. 1986) has joined the surfactant group at Lever Brothers Research Center in Edgewater, NJ. She took time out last fall to vacation and visit relatives in Peru.

Bob Marganski (Ph.D. 1984) spends a great deal of time on the road working out of the Chemical and Pigments Department of DuPont's DeLisle, Mississippi titanium dioxide plant. Karen is in graduate school at the University of Southern Mississippi.

NOTES

continued from page 6

Mr. Yang Pengyuan, a student of Prof. Ramon M. Barnes, was selected as the outstanding student at the New England Section of the Society for Applied Spectroscopy Meeting, February 19, 1987. Mr. Yang received a $100 award from the society and presented a paper on "The Oxygen Inductively Coupled Plasma for Spectrochemical Analysis".

Conference on the Future of Chemistry

continued from page 1

of interest well into the future, and presents good opportunities for interaction with other strong departments such as Biochemistry, PS&E (in Biopolymers), and departments within the College of Food and Natural Resources.

While the same decision might have been forthcoming without the Conference, it is clear that the Conference reinforced the decision and encouraged wide faculty participation in this decision-making process for the future.