FROM THE CHAIRMAN

After three years of tumultuous faculty additions and staff changes, the Department has begun to settle into a normal routine, interrupted for the next several months by a national search for a new faculty member to fill the vacancies left by Mike Van de Mark's resignation two years ago and the retirement of Henry Hubinger last year. During the academic year just completed 49 students received baccalaureate degrees in chemistry, somewhat fewer than in the recent past. The decrease reflects a national trend of declining numbers of students who choose careers in either chemistry or medicine. The reduction at UM has been exacerbated by our new requirements of calculus-based physics and two semesters of physical chemistry for all our BS majors. The more rigorous requirements, however, have made the BS a more valuable chemistry degree and will greatly benefit our graduates. One of the characteristics of a private university is the special relationship which exists with its students and alumni. One of my goals has been to foster this relationship with our undergraduate majors by providing facilities and events which will bring undergraduates together with our faculty and graduate students. This is not an easy task, since time pressures on students and faculty are severe and interests are often different. Partly to achieve this goal we have established a Student Resource Center for our undergraduates, staffed by teaching assistants and was under the supervision of Curt Hare. This year the University has provided support for undergraduate tutors in the Center. We hope it will soon become a beehive of intellectual activity in the Department. In addition we have provided a fall reception for our majors, with special attention to our entering freshman, and an informal luncheon at which we introduced our undergraduates to one of our more popular seminar speakers. Moreover, a reactivated Chemistry Club, under the direction of Al Mills, sponsored a picnic for faculty and students at Crandon Park. One of the best ways to build strong student-faculty relationships is through undergraduate research, and I am pleased that several of our faculty have undergraduates working with them on various projects.

The number of graduate students has grown to 47 full and part time students, up from 14 in 1982. Last year two Ph.D. and three M.S. degrees were awarded in Chemistry. These numbers have already been

Continued overleaf.

Reneé Knez receives award from Jeanette Hernandez
Investigators on the grants funding these instruments are Luis Echegoyen and Carl Hoff. We are especially proud of the NMR, since it will distinguish us with the highest resolution NMR in Florida. Its presence will be extremely valuable in attracting and keeping first-class faculty, not only in Chemistry, but in other science departments in the University.

Finally I thank all of you who have given to the Chemistry Alumni Fund. It is through the Alumni Fund that we are able to provide many of the activities that are so enriching for our students. The Fund covers the expenses for student receptions and awards, and partially covers the cost of the seminar program, the hardware and software costs in the SRC, and many other activities, including the cost of the printing of this newsletter. Thank you for your support.

C. M. Criss
Chairman

FROM THE EDITOR

Once again the faculty and staff of the Chemistry Department greet you, wish you the very best for the new year, and tell you about some of the events of the 1986-87 academic year. This year's newsletter is a long one, with little room for editorial comments. I think it best to let this issue speak for itself. Let me say only that we depend very heavily on you, our alumni, for news of your own activities during the year. Please do keep in touch with us by cards and letters and, if at all possible, by stopping by and saying hello whenever you are in town.

Carl H. Snyder
Editor, UMCHEM

DEPARTMENTAL NEWS

Comings and Goings

CELIA SIMON, who arrived as departmental receptionist in October, 1986, left this past June to become Assistant to the Director of Financial Aid at the university. We will all miss Celina very much and we wish her great success in her new post.

She has been replaced by HAROLD ROBINSON, who comes to us from the School of Medicine, where he was purchasing agent at the Mailman Center. Harold is currently a graduate student in the School of Music, studying for an MA in jazz performance.

Also joining the staff are COURTNEY GRANT and SHERRIE BRETTON. Courtney joins us as Staff Assistant and supervises the receiving area for Biology, Chemistry and Geology as well as all the basement storerooms in the Cox Science Building. Sherry is serving as a half-time secretary, helping George Gokel with the correspondence involved in graduate admissions, a function transferred recently from the central administration to the individual departments.

Awards and Honors

A biographical sketch of graduate student IRIS PAYAN is included in the latest Who's Who Among Students in American Universities.

RENEE KNEZ received the 1987 Phi Lambda Upsilon Award for superior academic achievement by a professional chemistry major. The Award consists of an inscribed plaque and a copy of the CRC Handbook of Chemistry and Physics.

The Beta Nu Chapter of Phi Lambda Upsilon inducted new members on 26 September. Initiated were KARON ANDERSON, TARAKESHWAR ANKLEKAR, KRISTIN ARNOLD, LIBERO BARTOLOTTI, GEORGE FISHER, SASWATI GHOSAL, CHRISTOPHER HANLON, JEANETTE HERNANDEZ, MIN SOOK KIM, JESUS MALLEN, STEVEN MILLER, SHAKTI MUKERJEE, YAW OBENG, ANDREW SANDLER, DANIEL TAVERAS, HYUNSOOK KIM YOO, and ANTHONY VISCARIELLO.

In December, 1986, the departmental faculty, staff, graduate students, spouses and friends gathered in the lobby of the Science Building for our annual end-of-year party. As part of the festivities Cecil Criss announced the Chemistry Department Awards for superior achievement by our graduate students. In recognition of their first scholarly publication, each of the following received a copy of the American Chemical Society publication "The ACS Style Guide" and a check for $25: SANJAY R. CHEMBURKAR, MILAGROS DELGADO, LOURDES ECHIVERRA, NANCY M. GARCIA, GEORGIA C. HART, MARTA E. PAPPAS and ARTHUR L. SMITH. Awards of $50 went to DANIEL F. TAVERAS for achieving the best academic record as a first-year graduate student and to KARON K. ANDERSON, CHRISTOPHER J. HANLON and ANTHONY M. VISCARIELLO as our best teaching assistants.

Cecil presented a special plaque to retiring HENRY HUBINGER for his innumerable and valuable services to the Department and for the wise council he has afforded to the several chairmen who have guided us during the years of Henry's tenure.
On behalf of the Society of Assistant and Associate Professors, Carl Hoff and Robert Gawley then distributed the SAAP Awards. These awards, presumably for distinguished chemical achievements of some sort, went to KARON ANDERSON, SANJAY CHEMBURKAR, VINCENT GATTO, SCOTT HUBINGER, DAVE HUDSON, YI LI, JAMIE NIEVES, YAW OBENG, ART SMITH, and DANIEL TAVERAS. A special SAAP award went to our chairman, CECIL CRISS, for reasons no one quite seems to remember.

At Honors Day ceremonies in March the Chemistry Alumni Award for the Outstanding Premedical Chemistry Major went to PABLO QUINTETEA.

GEORGE FISHER was honored again this year for his vigorous efforts on behalf of our annual Alumni Telephone Campaign. George received the Alumni Association’s Golden Finger Award for recording the greatest number of individual contributions during the campaign.

**Professional and Community Activities**

Our faculty contributed considerable time and effort to the success of the 1987 Dade County Science Fair. Judging the exhibits and student papers were LEE MARTOLOTTI, BOB GAWLEY, GEORGE GOKEL, CURT HARE, CARL HOFF, ANGE KAIFFER, and KEITH KYLE. AL MILLS served as general chairman of the Science Fair Judging Committee, Senior Division.

BOB GAWLEY and KEITH KYLE delivered invited talks at the 5th annual Florida Organic Faculty Conference in Gainesville.

The Beta-Nu Chapter of Phi Lambda Upsilon welcomed new chemistry graduate students with a picnic in Matheson Hammock Park on October 4, 1986.

On the afternoon of April 10, 1987, the chapter held its First Annual Dimitri Mendeleef Volleyball Tournament at the Campus Sports and Recreation Center, with the organic graduate students battling the physical chemists. Neither side won.

In 1986 the Chemistry Depart-ment once again served as host to the UM Medical School Admissions Committee for its annual on-campus interviews of premedical students. We are particularly grateful to ZELDA LIPMAN of the Committee on Premedical Studies for coordinating the interviews and making this year’s program a success.

The Chemistry Seminar Program continues to attract a distinguished list of outside speakers. First semester speakers included: Robert Bergman (University of California), Steve Burke (University of South Carolina), John H. Burns (Oak Ridge National Laboratory), Adriana Cantillo (NASA-Southern Technology Applications Center, FIU), James Chien (University of Massachusetts), Stephen DiBlase (The Lubrizol Corporation), G.W.J. Fleet (Oxford University, England), Essie Kariv-Miller (University of Minnesota), R. Bruce King (University of Georgia), Alan P. Kozikowski (University of Pittsburgh), David K. Lavalle (Hunter College, CUNY), Jesus Lopez (Florida International University), Frank Quina (University of Sao Paulo, Brazil), Towner Scheffler (University of South Florida), Franklin Schultz (Florida Atlantic University), Manuel Soriaga (Texas A&M), William C. Stwalley (University of Iowa).
Among our second semester and summer speakers were: Jerry Atwood (University of Alabama), Steven W. Baldwin (Duke University), Paul Caubere (University of Nancy, France), Marcetta Y. Darenbourg (Texas A&M), David J. Duchamp (Upjohn Corp.), Kenneth B. Eisenthal (Columbia University), Edward R. Grant (Purdue University), Alois Haas (Ruhr University, Germany), Theodore Kuwana (University of Kansas), Yizhak Marcus (Hebrew University of Jerusalem), Stanley Miller (University of California, San Diego), Gerald Stevenson (Illinois State University), Steve Vitti (Key Pharmaceuticals).

Also on our roster of spring semester speakers were the ACS Tour Speaker, Robert Osteryoung of the State University of New York and the Atlantic Coast Lecturer in Organic Chemistry, Eckhard Winterfeld of the University of Hanover.

On January 30, the Department served as host to the South Florida Chapter (American Chemical Society) Annual Family Night. After a buffet dinner at the Whitten Student Union, Professor Emeritus HARRY P. SCHULTZ presented an illustrated talk on "Newton Manross: Scientist and Citizen," a biography of an American professor of chemistry at Amherst College who fought in the American Civil War and died at the battle of Antietam. Following Harry's presentation CURT HARE and HENRY HUBINGER staged their famous Chemistry Magic Show, with brilliant demonstrations and spectacular chemical magic. The evening, which attracted chemists from throughout southeastern Florida, was a rousing success.

In a special summer program, the Department joined with the South Florida Chapter of the ACS and the Florida American Institute of Chemists to sponsor a talk on "Scientific Exchanges—China 1986" by Jack E. and Dottie Benham. Jack Benham is Vice President of Commercial Coatings Corp., Miami.

Along with a growing recognition of the high quality of research carried out in our department comes a growing cooperation in the research activities of other divisions of this University and other organizations. This spring a mutual exchange of professional and social visits took place between members of our department and the Department of Marine and Atmospheric Chemistry, Rosenstiel School of Marine and Atmospheric Sciences. We look forward to the vigorous development of research interests between the two departments.

**Summer Research**

With overall coordination by GEORGE FISHER, the summer of 1987 was a very productive time for chemical research by minority students. Supported by the NIH Minority Access to Research Careers Program, AVERY STEPHENS (Univ. of Arkansas, Pine Bluff, AR) worked with LUIS ECHEGOFYEN and GEORGE GOKEL; RICHARD GUARDO (St. Mary's Univ., San Antonio, TX) carried out a research project with KEITH KYLE; UM undergraduates DALIA LORENZO and SERGIO SILVA worked with GENE MAN under the sponsorship of the UM College of Arts and Sciences Minority Summer Research Fellowship program. Several Miami Central High School students benefitted from minority research support grants. The NIH Minority High School Research Apprentice Program supported TARA ROLLE and CRISTAL WALKER, who worked with ANGEL KAIFER and NITA LEWIS, respectively, while ACS Project SEED sponsored BALKYS PIERRE-Paul and MICHELLE ALEX- ANDER in their work with GEORGE FISHER and NITA LEWIS, respectively.

**Faculty Activities**

The University's Research Council awarded grants to ANGEL E. KAIFER for his study of counterion complexity effects in surfactant micelles and to KEITH S. KYLE for synthesis of radioactive probes as suicide inhibitors of aromatase. Funds came from the National Institutes of Health. Keith has also received a research award from the American Heart Association.

Departmental faculty continue to give their time freely in volunteer efforts for the College of Arts & Sciences. CURT HARE, KEITH KYLE, NITA LEWIS, GENE MAN, CARL SNYDER and KEITH WELLMAN participated in April's telephone campaign to recruit superior high school students for our freshman class.

WALTER DROST-HANSEN spent the summer of 1987 at the Bio/Molecular Engineering Branch of the Naval Research Laboratories, Washington, DC, as an invited Distinguished Summer Faculty Fellow. His activities included computer modeling of the structure of water near lipid bilayers and the presentation of a seminar series on the structure of water in living cells.

In July, 1986 GEORGE GOKEL delivered the plenary lecture to the Fourth International Symposium on Inclusion Phenomena at the University of Lancaster, England. He has also spoken to the Florida Organic
Chemists Club at the University of Florida, Gainesville; at Liverpool and Oxford Universities, England; The University of Florida and Florida International University; Seal Sands Chemical Company, Stockton-on-Tees, England; and Stauffer Chemical Corporation, Dobbs Ferry, New York. In April at its annual banquet Alpha Epsilon Delta, the premedical honor society, presented CURT HARE with its Teacher of the Year Award.

CARL HOFF has received grant funds for acquisition of a Fourier Transform infrared spectrometer and accessories.

A description of ANGEL KAIFER'S research and its potential for developing a new, inexpensive and efficient method for the separation of isotopes by electron transfer reactions, appeared in the November 1986 issue of Science News. This publication is dedicated to bringing to the general public news of the latest and most exciting developments in science. Angel has delivered two invited lectures recently, at Florida International University and at the University of Puerto Rico, and has obtained a grant from the Research Corporation to study the electrochemistry of liposome embedded substrates.

NITA LEWIS has returned from her von Humboldt Fellowship studies at the University of Frankfurt (Germany) Institut fur Physikalische Chemie, where she studied the chemistry of high pressure reactions (up to 1500 bar) in the laboratory of Dr. Rudi van Eldik. While on the fellowship she visited the NATO Advanced Study School in Corfu, Greece.

GENE MAN, Chairman of the Science Committee of the Metro-Dade Council of Arts and Sciences delivered the keynote address, "Biscayne Bay Overview", to the Conference On The Restoration Of Biscayne Bay: A Decade of Progress Toward a Better Bay, held in Miami, October 1986. He also delivered an invited paper, The Effect of Aluminum on Racemization in the Protein of Rat Brain, at the NIH conference on Trace Metals, Aging and Alzheimer Disease, Bethesda, MD, September 1986. Gene continues to serve as the chairman of the Science Committee of Dade County's Council of Arts and Sciences.

AL MILLS has been busy in committee and administrative activities.

He has been re-elected treasurer of the UM chapter of Sigma Xi, the scientific research society; continues to serve as chairman of the ACS Florida Section Award and the Civic Service Award; and was section chairman for physical chemistry papers at the November southeastern regional ACS meeting in Orlando.

In October, 1986, CARL H. SNYDER described the chemicals we consume in our daily lives in an address to Phi Delta Kappa, the education honorary society; in March, 1987 he addressed the Alumni College on the topic Are Health Foods Placebos? At the College of Arts & Sciences retreat in December he delivered an address on methods for the evaluation of classroom teaching. He was also reappointed to membership on the Environmental Quality Control Board of Dade County. On Honors Day, March 26, 1987, a plaque was unveiled in the lobby of the Ashe Building commemorating his efforts leading to the restoration of Honors Day on our campus.

ALUMNI NEWS

We've Heard From

WILLIAM BORDEAUX (DA '76) has joined the faculty of Huntington College, Ft. Wayne, IN., to teach general and organic chemistry.

BRUCE J. BRENNER (BS '72) holds appointments as Research Biochemist at Miami's VA Hospital and as Assistant Instructor in Physiology at the UM School of Medicine.

JOSE H. CANTILLO (BS '78) stopped by recently to say hello. After receiving his PhD with Professor Carl Johnson at Wayne State University, Jose joined the Goodyear Tire and Rubber Corp., Akron, OH.

CARL B. FREIDHOFF (BS '81) has completed his work for the PhD at The Johns Hopkins University. His dissertation, "Photoelectron Spectroscopic Studies and Generation of Cluster Ions" was completed under the guidance of Professor Kit H. Bowen.

DEBORAH A. HIMELHOCH (BS '79) has moved from Chicago to Boston, where she is now studying orthodontics at Harvard.

OTIS KITCHEN (BS '75) received his PhD in polymeric organic chemistry at the University of Connecticut and is now working and living in Atlanta, GA.

After having received his PhD from Stanford University, where he studied with Professor James Collman, TOM KODADEF (BS '81) completed two years of postdoctoral studies at the University of California, San Francisco, and accepted an appointment as Assistant Professor of Chemistry at the University of Texas, Austin.

After obtaining her PhD in molecular spectroscopy at Dartmouth University, VALERIE LANG (MS '82) has accepted a position at NASA's Jet Propulsion Laboratory in Pasadena, CA.

ROBERT H. MAIER (BS '51., PhD '84, Univ. of Illinois) is Professor of Experimental Surgery and Director, Trace Element Center, School of Medicine, East Carolina University, Greenville, NC.

Cecil Criss, Angel Kaifer and Keith Wellman
Patricia and MICHAEL MICKLUS (PhD ’71) send greetings from Jeffersonville, PA.

In March, 1986, WAYNE MORRIS (BS ’70; MS, Texas A&M) formed Morris Forensics, Inc., Winter Park, FL, which specializes in forensic chemical analysis. In addition to graduate studies in the physical chemistry of infrared spectroscopy, Wayne brings with him ten years with the Florida Dept. of Law Enforcement Crime Laboratory, 16 scholarly publications and extensive experience in hearings before federal, state and county courts.

After having earned his PhD with Carl Hoff this summer, STEVE NOLAN has accepted a postdoctoral appointment at Northwestern University to study inorganic chemistry with Professor T. J. Marks.

Nancy and DENNIS RANSKI (BS ’75) of Livonia, MI, visited Sarasota over the Christmas holiday, 1986.

MICHAEL J. SHAENBOEN (BS ’76; DO ’79, College of Osteopathic Medicine, Des Moines, IA) has been appointed Assistant Professor of Neurology at the University of Osteopathic Medicine and Health Sciences in Des Moines, IA. After receiving his DO and service as an intern and neurology resident in Detroit, Michael studied at the Sloan-Kettering Cancer Center in New York. More recently he was a member of the Clinical Faculty of the Medical College of Wisconsin.

CHESTER D. SZYMANSKI, PhD, (BS ’57) is vice president for research and development at the National Starch and Chemical Corp., at Bridgewater, NJ.

Loren and RICK TERMINE (BS ’75; PhD ’81) have moved to West Lafayette, IN, where Rick is working with Great Lakes Chemical Company.

RAMON LOPEZ DE LA VEGA (BS ’79; PhD ’85), Assistant Professor at Florida International University, recently received a Knight Foundation Fellowship in support of his research.

BRUCE M. WILLIAMS (BS ’76) is carrying out research on several hematological diseases as he continues toward his PhD in biochemistry and molecular biology at the University of Florida.

Greetings and a thoughtful gift for the Chemistry Alumni Fund came from ROBERT WILCH (BS ’38), who retired some 10 years ago after 20 years of basic research, mostly on cyclopropanes, with the US Depart-

ment of Agriculture’s Agricultural Research Service in New Orleans.

From Spokane, WA, RICHARD D. DOEPKER and Priscilla announce the birth of their daughter, Kirit Janine.

( Editor’s note: Although Richard is a former member of the chemistry faculty rather than an alumnus, we thought that many of you who learned your physical or analytical chemistry with him here at UM would like hearing about his new daughter.)

Dalia Lorenzo and Sergio Silva