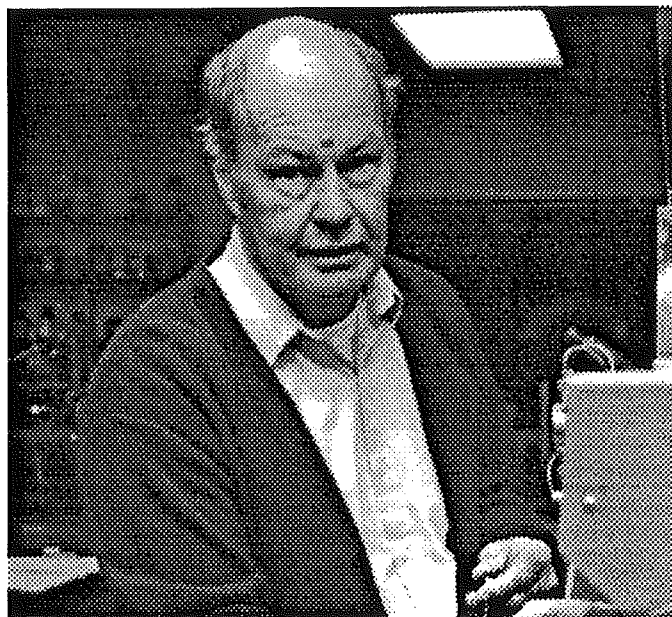


TRANSITIONS

Ron Caple preparing for an experiment in his research laboratory.



Our Man in Russia: Ron Caple

Over the past 18 years, our own Ron Caple has developed what is generally acknowledged to be one of the most productive collaborative research programs involving American and Russian organic chemists. The effort began in 1974 when Ron and his family spent a sabbatical leave in Moscow. This was followed by return visits of 12 research chemists to UMD from the Zelinsky Institute of Organic Chemistry, Moscow State University, N.N. Semenov Institute of Chemical Physics, the Institute of Physiologically Active Compounds, and the Shemyakin Institute of

Bioinorganic Chemistry. Thirty-five scientific papers have resulted to date, with other manuscripts at various stages of development. It has been a true exchange with Ron having spent nearly 3 years in Russia during 15 separate visits.

"Glasnost" brought an easing of tensions and also opportunities for further "person-to-person" contacts with the Russian people. In the spirit of his scientific exchange, Ron found himself immersed in a host of initiatives such as the development of the Duluth "Sister City" relationship with

Caple, Continued on Page 7

Casmir Ilenda Award

Dr. Casmir Ilenda is a 1969 honors graduate currently employed at Rohm and Haas in Philadelphia. This past year he received the Otto Haas Award for Scientific Achievement and he has now presented this \$5000 award to the UMD Chemistry Department. Because Dr. Ilenda was actively involved in research as an undergraduate, the Department has decided to use the income generated by this gift to fund an award to be presented to the graduating senior who carried out the outstanding undergraduate research project in chemistry while a student at UMD.

Also, inside this issue . . .

Jim Maguire
Scholarship

p. 3

Nichol Retires

p. 3

Ode to Bill Maupins

p. 7

What's news with Dr. Tsai

Dear Friends of the Department of Chemistry,

I send warm greetings to you on behalf of the Chemistry Department and invite you to visit us whenever you are in Duluth. You will find many familiar faces among the twelve faculty members, and the halls and laboratories will, I am sure, bring back many memories. However, changes will also be evident. In May we congratulated Dr. Charlie Nichol on his retirement and celebrated his 35 years of fine service to students, the department, and the campus. This fall, we also welcomed Dr. John Fulkrod from the Waseca Campus of the University. On a sad note, this past spring the department lost a valued former employee and friend, Bill Maupins, to cancer.

As you well know, the last few years have been fiscally difficult years throughout the country. The state of Minnesota, the university and this department have also felt the economic recession. However, the number of students enrolled in our courses, from general to organic to physical chemistry, has grown rapidly in the last three years, although the total campus enrollment remained constant at about 8000 students.

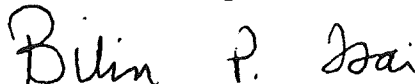
We continue our strong commitment to excellent undergraduate education. With the Department of Biochemistry and Molecular Biology in the School of Medicine, we will be offering a new B.S. degree in Biochemistry/Molecular Biology next fall. Our graduate student enrollment has grown to twenty students, with most of them supported on teaching assistantships.

The members of the chemistry faculty have participated in a campus planning process to identify goals and objectives. Two major goals are:

- Strengthening undergraduate education by providing more undergraduate research opportunities for our majors; increasing and improving the physical resources to support undergraduate instruction (equipment, computers, instruments, classroom facilities); and developing strategies to retain more students.
- Enhancing graduate education by improving the recruitment and training of teaching assistants; updating the curriculum; and increasing the physical resources to support graduate education.

There are many ways you can support our mission including making a contribution to the department development fund, serving as a resource for our students and faculty, making a presentation in the department, or recruiting undergraduate and graduate students who are interested in our chemistry program. I would be happy to hear from you to discuss your involvement in our efforts.

Yours sincerely,



Bilin Tsai, Professor and Head,
Department of Chemistry

James H. Maguire Award

The friends and family of Dr. James H. Maguire have made available a substantial award to support an academically gifted, but physically handicapped, student majoring in chemistry or biochemistry. Honors undergraduate students in their final two years who intend to pursue graduate studies or incoming graduate students will be eligible for the award according to the following criteria:

- (a) Academically gifted student with severe type A (classical) hemophilia.
- (b) Academically gifted student with any other severe type of hemophilia.
- (c) Academically gifted student with other type of substantial physical disability or disabling disease, excluding learning disorders, dyslexia, deafness, or cognitive disorders.
- (d) Any other academically gifted student with promise of outstanding ability in research.

Dr. Maguire was an undergraduate at UMD from 1966-1970, graduating *magna cum laude* with honors in Chemistry. He earned the Ph.D. in organic chemistry in 1974 at the University of North Carolina. After postdoctoral work, he joined the faculty of the University of North Carolina School of Pharmacy in the Division of Medicinal Chemistry. At the time of his untimely death on July 31, 1989, he had risen to the rank of Associate Professor.

Although Dr. Maguire had hemophilia, he lived his life to the fullest and was a true inspiration to his fellow students and the faculty at UMD. His affliction could not affect his spirit, and his passion for sailing on Lake Superior was legendary. This award is a fitting tribute to his memory.

LCT

Nichol Retires After 30 Years

The spring of 1992 marked both the 70th birthday of Professor J. C. Nichol and his retirement from the Department of Chemistry at UMD. Charlie was born in Onoway, Alberta (a few miles west of Edmonton). The difficult times in the late twenties saw the family move into Edmonton.

In 1939, he entered the University of Alberta from which he graduated with a B.Sc. (1st Class) in 1943. After receiving his M. Sc. he continued as Sessional Instructor and worked on mustard gases as part of the war effort. Following the war, he went to the University of Wisconsin and received his Ph.D. in physical chemistry with Professor Williams in 1948. In the same year he married Eleanor Wournell (also from Edmonton) and they subsequently had two children.

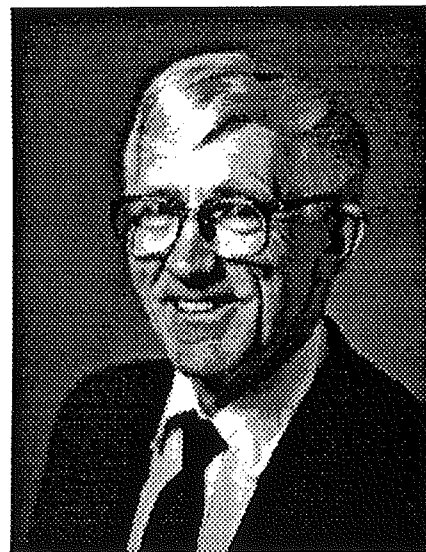
Following a year of post-doctoral work at Wisconsin he accepted a position in the chemistry department of Willamette University in Salem, Oregon. In 1957 he was enticed by Dr. F. B. Moore to join

the chemistry faculty at UMD and to help establish a research atmosphere and research-based graduate work in Duluth. He has been successful in both areas.

Throughout his career he has been a careful and productive chemist. Students who had the good fortune to work with him came away well-schooled in both techniques and philosophy of carrying out first-rate research. The quality of his own research is indicated by the co-authors of his papers and include such names as Alberty, Deutsch, Fuoss, and Gosting.

Charlie is held in high-esteem not only by the chemistry department but by the entire UMD faculty and on a number of occasions he was tapped to serve on select committees to bring forth a recommendation on some all-campus problem. He also served a stint as the Acting Assistant Dean of the Graduate School which surely attests to his diplomatic skills.

Moreover, the care and devotion that he gave to his instruction resulted in his recognition as an out-



J.C. "Charlie" Nichol

standing teacher on a number of occasions.

Although he is officially retired, he will maintain a work area in the department. His presence will not only provide us with able advice and counsel, but also a cheery "My it's a nice day" when it is -30 degrees Celsius and the wind is howling at 40 miles per hour.

LCT



1992-1993 Chemistry Faculty: Standing (L to R) R. Carlson, T. Bydalek, R. Caple, D. Eide, W. Salo, P. Anderson, V. Magnuson, L. Drewes, D. Harriss. Seated (L to R) D. Poe, B. Tsai, J. Fulkrod, P. Siders, J. Prohaska, L.C. Thompson. Missing are B. Groh, T. Huntley, and D. Samkoff.

Chemistry Faculty

ANDERSON, P. M., Ph.D. 1964, University of Minnesota, Mechanism of Enzyme Action, Nitrogen Metabolism in Fish.

BYDALEK, T. J., Ph.D. 1961, Purdue University, Determination of Metal Ions at Low Levels, Voltammetry.

CAPLE, R., Ph.D. 1964, University of Michigan, Stepwise Electrophilic Additions in Organic Synthesis.

CARLSON, R. M., Ph.D. 1965, Princeton University, Synthetic Methods in Organic Chemistry, Environmental Chemistry, Toxicology.

DREWES, L. R., Ph.D. 1970, University of Minnesota, Biochemistry of the Central Nervous System.

EIDE, D. J., Ph.D. 1987, University of Wisconsin, Molecular Biology of Transition Metal Metabolism.

FULKROD, J., Ph.D. 1971, Iowa State University, Organic Chemistry.

GROH, B. L., Ph.D. 1985, Iowa State University, Organometallic Chemistry, Reactive Intermediates.

HARRISS, D. K., Ph.D. 1963, Northwestern University, Quantum Chemistry, QSAR.

HUNTLEY, T. E., Ph.D. 1970 Iowa State University, Development and Regulation of Bone Metabolism.

MAGNUSON, V. R., Ph.D. 1968, University of Illinois, Organometallic Chemistry, X-ray Crystallography.

POE, D. P., Ph.D. 1974, Iowa State University, Chromatographic Theory, Supercritical Fluid Chromatography, Environmental Analysis.

PROHASKA, J. R., Ph.D. 1974, Michigan State University, Trace Element Biochemistry.

SALO, W. L., Ph.D. 1967, University of Minnesota, Polymerase Chain Reaction, Paleomolecular Biology, Protein Structure/Function.

SAMKOFF, D. E., Ph.D. 1981, University of Illinois, Synthetic and Mechanistic Organometallic Chemistry.

SIDERS, P., Ph.D. 1983, California Institute of Technology, Theoretical Physical Chemistry.

THOMPSON, L. C., Ph.D. 1960, University of Illinois, Spectroscopic Studies of Rare Earth Compounds, Coordination Chemistry.

TSAI, B. P., Ph.D. 1975, University of North Carolina, Experimental Spectroscopy of Gas Phase Ions, Chemical Physics.

1992-1993

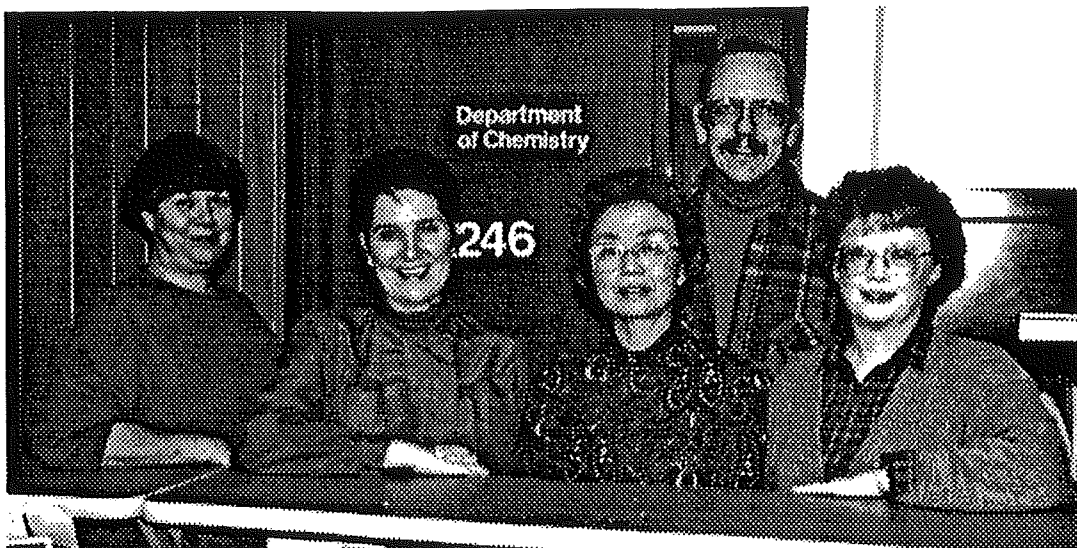
Chemistry Staff:

(L to R)

E. Tahtinen, S.

Mowbray, S-C Kuo, R.

Liukkonen, K.Dahl



Meet the Civil Service Staff

At the heart of our program is the commitment of our faculty and staff to our students. Nowhere is that more evident than with our staff. Some of the faces are new, but the positive attitude remains the same. Let me introduce them to you:

- **Kay Dahl.** Kay is our senior secretary who generates most of our typed products.
- **Shu Chen Kuo.** As a laboratory services coordinator, Mrs. Kuo has managed the activities of the teaching laboratories for fourteen years.
- **Bob Liukkonen.** Although a longtime mainstay of Bob Carlson's research group, "Luke" represents a major "all-department" asset.
- **Sue Mowbray.** Sue began work with the department as executive secretary this past fall after several years of experience in the library.
- **Evie Tahtinen.** Evie is our laboratory services coordinator who is responsible for the stock-room and related activities.

News Notes

- Don't forget about the UMD Physics, Math, and Chemistry Alumni reunion this summer! It is on July 2-3 1993. For more information or reservations please contact Lucy Kragness, Alumni Director at (218) 726-7110.
- Dorothy and Moses Passer gave \$250,000 to UMD for a scholarship program. Dr. M. Passer taught chemistry at UMD from 1948 to 1964.
- Dr. John Fulkrod is the newest addition to our faculty. John transferred from the Waseca Campus when it closed operations in July 1992. We share John's many talents with the athletic department where he also has duties as a track coach.
- International scientific activities continue to flourish in the department with Tom Bydalek having visited Petrosovodsk State University in Russia during fall, 1991, Ron Caple and Bob Carlson traveling to Finland, Russia, Mongolia, and China this past June, Vince Magnuson continuing to work with his inorganic colleagues in Thunder Bay, and Larry Thompson heading back to Brazil in 1993.
- Professor Tom Huntley, a longtime political activist in the DFL party, was elected to the Minnesota State Senate this past November.



1991- 1992 UMD Chemistry Graduates: (Back Row, L to R) Andrew Morris, Mike Lynch, Chris Benedict, Kristine Schmalenberg, Eric Olsen (Middle Row, L to R) Dan Stelck, Dylan MacLean, Marlys Winandy, Cory Bernu, David Giesen (Front Row, L to R) Chad Haraldson, Brice Besser, Stacey Tweed, Christine Jankovich, Laura Luckow (Not Pictured) Anthony Lang, Denise Mills

1992 UMD Chemistry Graduates

| <u>Name</u> | <u>Future Plans</u> (as of 6/92) |
|-----------------------|--|
| Chris Benedict | University of Southern California (Biochemistry) |
| Cory Bernu | North Dakota State University (Polymers & Coatings) |
| Brice Besser | employment |
| David J. Giesen* | University of Minnesota -Twin Cities (Chemistry) |
| Chad Haraldson | employment |
| Christine Jankovich | Washington University (Immunology) |
| Anthony Lang | employment |
| Laura Luckow* | Pharmacy, U of Minnesota |
| Michael Lynch | employment |
| Dylan MacLean | Chromaline Corporation |
| Denise Mills* | employment |
| Andrew Morris* | University of Minnesota Law School |
| Eric W. Olsen | Eco Agri Laboratories, Inc. |
| Kristine Schmalenberg | employment |
| Dan Stelck | Washington State University (Physical Chemistry) |
| Stacey Tweed | University of Nebraska, Lincoln (Analytical Chemistry) |
| Marlys Winandy | UMD School of Medicine |

* - Graduated Cum Laude

Caple, continued from Page 1

Petrosovodsk (Karelia, Russian Federation), the Duluth Peace Center, and interactive research with Russian "Great Lakes" scientists as part of the Institute for Lake Superior's Research. Most recently he led a blue-ribbon committee of chemists to Russia under the aegis of the National Science Foundation and the Russian Academy of Science to ascertain the status of chemistry in the Russian Federation and to make recommendations as to how the chemical community in the United States can

provide assistance during this difficult period of economic and political transition. However, among all these activities, the most important are probably the personal efforts in aiding literally hundreds of people from both countries to experience the friendship and gracious hospitality offered by new friends in the other country. This overall effort is recognized as a significant accomplishment and, as a result, Ron is an honorary citizen in Moscow, Petrosovodsk and in other corners around the Russian Federation.

RMC

Wind Chill

by Bob Liukkonen



"Mr. Maupins"

Our friend and former colleague, Bill Maupins died this past March after a four month battle with cancer.

Officially, Bill was our chemistry laboratory supervisor from 1949 until his retirement in 1982. In that role he shepherded our requests through university purchasing and supervised a cadre of undergraduate employees as they performed a variety of important tasks for the campus.

In reality, his office was the daytime base of operations for: 1) frequent discussion (i. e. "consciousness awakening"), 2) giving a person a reasonable chance at success (i. e. equal opportunity, student recruitment, minority advocacy, ombudsman) and 3) general encouragement (scholarship assignments, support for minority programs and personal counseling). When he

retired, his living room became his office, and his rocker, his telephone and his wit became his tools as he continued his humanitarian activities. He became recognized as "...the patriarch of the Northland's black community and the voice of conscience for the community at large." (Duluth News-Tribune 3/28/92)

Bill received numerous awards and was recognized for his leadership by the NAACP and the Civil Liberties Union. I am convinced, however, that one of his proudest moments was when he received the UMD Chancellor's Distinguished Service Award (1990). It was presented at UMD's spring graduation ceremony and his entire family was present for the occasion.

"Mr. Maupins" was a very special person and, to many of us, his absence leaves a very noticeable void.

RMC

Transitions

Editor: Dr. Robert Carlson
 Writer: Dr. Larry Thompson

Layout: Dan Getschow
 Andrew West

Illustrator:
 Bob Liukkonen

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status or sexual orientation.



Printed on 100% Recycled Paper

Alumni Update

(Please send us a note so we can update our files.)

Name : _____

Class of : _____

What's news? (promotions, special recognitions, civic involvement, family, research activity...)

Detach and mail to the Chemistry Department

Non-Profit
Organization
U.S. Postage
Paid
Permit No. 705
Duluth,
Minnesota

Department of Chemistry
University of Minnesota - Duluth
10 University Avenue
Duluth, Minnesota 55812
(218)-726-7212