Since our last Newsletter there have been three Social Hours at widely separated places. The attendance has not increased as much as we might like but it is always a pleasure to know that our alumni and friends of the Department are getting together whenever possible to renew old acquaintances and meet others who are interested in the Department.

CHICAGO, September 1970
Conrad Hilton Hotel

Among those who came to the Social Hour were Richard AWL (PhD '63) from East Peoria, David BARNES (PhD '47), Richard ELLIS (PhD '67), and Henry ROTHROCK (AB '26) from DuPont in Wilmington, Maxwell BROCkMAN (PhD '46) U.S. Army Natick Labs, Richard (PhD '67) and Betty Jo Remus (MS '67) BROWN from Queens University, Mary K. CAMPBELL (PhD '66) now at Mount Holyoke, Frank CHENG (PhD '57) from University of Iowa, Cedric CHERNICK (Post-PhD '57-'59) from River Forest, Illinois, Ronald COLLINS (PhD '62) from Eastern Michigan University, Arthur DUSENT (MS '56) now at Liggett and Myers in North Carolina, Melvin DRUELLINGER (BS '62) from Indiana State U. in Terre Haute, David DUNHAM (Post-PhD '67-'68) from Monmouth College, Ralph O. KERR (AB '49) from Houston and Martin WAGNER (PhD '58) from Dallas. From Dow Chemical came Duane LEHMAN (PhD '59) and Wendell MEYER (PhD '62), Max MARSH (BS '47) from Eli Lilly, Marshall MEAD from the ACS Office in Washington and Marvin YATES (PhD '64) from the U.S. Geological Survey also in Washington, Robert PATRICK (PhD '50) Palos Park, Illinois, John PERA (PhD '60) from Buckman Labs in Memphis, Robert ROWELL (PhD '60) from U. of Massachusetts, Saul SCHEPARTZ (AB '57) from the National Cancer Institute, J. O. STOFFER from Rolla, Missouri, Richard WEDDLETON (PhD '65) from Schenectady, Richard WELLS (PhD '62) from Duke University, and James WOLFE (PhD '63) from Virginia Polytech in Blacksburg. The current faculty were represented by George Hartwell and Mrs. Hartwell, Jack and Reva Shiner, Riley Schaefier, Ernie Camicia, Mrs. and Mrs. Neberall, Prof. and Mrs. Carmack, and Harry G. Day. Sarah Zimmerman, Fred Scell, and Leo Burka were also present.

LOS ANGELES, March 1971

Los Angeles on March 30, 1971 was the site of the Spring AIUC meeting with 35 signing the guest book. They included: Robert C. ANDERSON (MA '51) from Diamond Shamrock in Redwood City, California, Franklin BLOOD (PhD '63) from College of Idaho, Caldwell, Louis BURNELL (Post-PhD '59-'60) from New York University, Karen BUSH (PhD '69) University of California at Santa Barbara, Donald (PhD '70) and Nancy (MS '69) CLARK from Pasadena (Don at Caltech and Nancy at Blair High School), Ronald COLLINS (PhD '62) Eastern Michigan University, Donald GAINES (PhD '63) University of Wisconsin, Philip KELLER (PhD '66) University of Arizona, Alfred LEVINSON (PhD '63) from Portland, Oregon, Kenneth MANTEI (PhD '67) from Boulder, Colorado, Don. R. PAUSEN (PhD '68) from California State in LA, John SALZMAN (Post-PhD '63-'64) from Denver, CA, Daniel W. SEREGELY (BS '49) now in Los Angeles, Peter SPRAGUE (Post-PhD '69-'71) now at California State College in San Bernardino, R. J. WATKINS (PhD '69) Cornell College (Iowa), J. E. WHITE (PhD '58) Southern Illinois University at Edwardsville, Joseph WILSON (PhD '61) University of Kentucky, and Marvin YATES (PhD '64) U.S. Geological Survey in Washington.

Very welcome guests at the Social Hour included Professor Robert Fischer, formerly a member of the faculty and now with the California State College, Dominguez Hills, and W. Darrell McDaniel and his wife who now reside in LA. Darrell, you may remember, was the chemistry major who had a diving accident a few years ago and was severely injured. He has good handicaps but has completed training as a lawyer and is now working for the Bureau of Internal Revenue in the LA area.

WASHINGTON, September 1971

September 14, 1971 in Washington, D.C. the AIUC Social Hour saw a greater number stopping by with 49 signing the guest book. The Department at Bloomington was represented by the Hartwells, the Days, Dr. Campagnie, and Dr. Schaefier. Students James Mail and George Bodner also signed in. The IUPI campus was present in the persons of Paul Labini and Richard Wynn. The alumni who signed the book included David BARNES (PhD '47) DuPont, Max BROCkMAN (PhD '46) Brookline, MA, Robert COLLINS (PhD '64) Walnut Creek, CA, Ron COLLINS (PhD '62) Ypsilanti, MI, Chester DAVIS (BS '44) Newport, Ky, Mel DRUELLINGER (BS '62) Terre Haute, Bruce DUNLAP (PhD '69) Columbia, SC, Yukiko EBISUZAKI (PhD '62) Los Angeles, Richard ENRONE (PhD '62) Cincinnati, Dale FISHER (PhD '51) and his wife from Oak Ridge, Stanley GOLDBERG (PhD '57) New Orleans, Ted LARGMAN (PhD '52) Morristown, NJ, Joe LEAL (PhD '53) Maplewood, NJ, John MEADE (AB '67), Marshall MEAD from the ACS Washington Office, Fritz H. MARQUARDT (PhD '60) Summit, NJ, Jerry ODOM (PhD '68) U. South Carolina, R. PATRICK (PhD '50) Pennsylvania, Don PAUSEN (PhD '68) Los Angeles, John PERA (PhD '60)
FACULTY ACTIVITIES

Adam ALLERHAND presented a lecture, "Fourier Transform Nuclear Magnetic Resonance in Chemistry and Biology," to Departments of Chemistry of California Institute of Technology and three campuses of University of California (Riverside, Los Angeles, and Santa Barbara).

John H. BILLMAN presented a lecture, "Recent Advances in Cancer Chemotherapy," at Xavier University, Cincinnati, Ohio.

Russell A. BONHAM gave a seminar, "The Measurement of Charge Densities in Atoms and Molecules," at Centro Brasileiro de Pesquisas Fisicas and Department of Chemistry, University of Brazil in Sao Paulo, Brazil, and at Department of Physics, Sao Paulo State University, Sao Carlos, Brazil.

Ernest E. CAMPAIGNE serves in the American Chemical Society in the following capacities: Chairman of the Joint Board-Council Committee on Copyrights, member of the Joint Board-Council Committee on Patents, and member of the Public Policy Committee of the Division of Medicinal Chemistry Section of the Organic Division of the International Union of Pure and Applied Chemistry.

He is on the editorial board of the International Journal of Heterocyclic Chemistry and on the editorial advisory board of the International Journal of Sulfur Chemistry.

Jack K. CRANDALL was partially supported by a Guggenheim Memorial Foundation Fellowship during his sabbatical year (1970-71) at the French National Center of Scientific Research at Gif-sur-Yvette, France.

Harry C. DAY has been elected President of the American Institute of Nutrition. He continues to serve as a member of the American Chemical Society Examinations Committee and as a Vice Chairman he is in charge of Graduate Level Examinations.

Frank T. GUCKER presented a paper, "Comparison of Three Series for Calculation of Light-Scattering Intensity Functions," at the 161st American Chemical Society National Meeting at Los Angeles, California.

Frank R. N. GURD chaired a session on "Cytochromes - Structure and Reactivity" at the American Society of Biological Chemists Federation meeting in San Francisco. At the same meeting he gave a symposium address "Natural Abundance Carbon-13 Spectra of Some Proteins," coauthored by Adam ALLERHAND.

He also serves as an Editor of the Journal of Biological Chemistry.
George E. HARTWELL presented a paper, "Characterization of the Dimetric Compounds Containing a Metal-Carbon Bond Prepared from PtCl₄ or PdCl₄ and Quinoline Derivatives," at the Central Regional Meeting of the American Chemical Society in Cincinnati, OH.

He also presented a paper, "The Hydrogenation and Isomerization of Unsaturated Tertiary Phosphine Complexes of Rhodium(I)," at the 160th National Meeting of the American Chemical Society.

Felix HAURWITZ chaired a session on "Antigenic Determinants" at the meeting of the Federation of American Biological Societies in Chicago. At the same meeting he presented a paper, "Tracer Studies on Gamma Globulin Light Chains."

He also serves as an Editor of the international journal Immunology.

John M. HAYES is an associate editor of Geochimica et Cosmochimica Acta, the journal of the Geochemical Society.

Gary M. HIEFJE presented a paper, "Flame Spectrometric Techniques Utilizing an Isolated Droplet Sample Introduction System," at the American Chemical Society Meeting in Los Angeles.


W. Terry JENKINS presented a paper, "A New Mechanism of Enzyme Activation--Facilitated Ligand Displacement," at the Department of Chemistry, Wayne State University, Detroit, MI.

He also chaired a session on "Physical Methods in Biochemistry," in the Division of Biological Chemistry at the 160th National Meeting of the American Chemical Society.

Henry R. MAHLER presented a seminar, "Biochemistry of Mitochondrial Genome," at the Department of Pediatrics, School of Medicine, University of Washington, Seattle.

He presented a paper, "Information Content of Mitochondrial DNA," at the meeting of the American Society of Biological Chemists in San Francisco, CA.

John W. MOORE presented a paper, "The Incorporation of Environmental Topics into the General Chemistry Curriculum," at the 161st American Chemical Society Meeting in Los Angeles, CA.

He also presented a paper, "Use of Super-8 mm Color Films in General Chemistry," at the 160th National Meeting of the American Chemical Society.


He gave a lecture, "Irreversible Thermodynamics Applied to the Neuron," at Loyola University, New Orleans, LA.

Riley SCHAFFER presented a paper "Partially Relaxed Fourier Transform NMR Spectroscopy at 51.7 K," coauthored by Adam ALLERHAND, at the American Chemical Society Meeting in Los Angeles, CA.

He serves as Chairman-Elect of the American Chemical Society Division of Inorganic Chemistry.

Vernon J. SHINER, Jr. presented a paper, "The Dependence of Solvolytic α-Deuterium Rate Effects on the Nature of the Leaving Group," at the 160th National Meeting of the American Chemical Society.


He also presented a paper, "¹¹B NMR Studies of Higher Boron Hydrides at 70.6 MHz," at the 161st National Meeting of the Chemical Society Meeting in Los Angeles, CA.

He presented a paper, "Complexes of $[\text{Fe}(\pi-7, 9\text{-} \text{Hg}_{2}\text{CPh})_{2}]^{2+}$ and $[\text{Fe}(\pi-7, 9\text{-} \text{Hg}_{2}\text{CPh})_{2}]^{2+}$ with Group VI Metal Carbonyls," at the Third Central Regional Meeting of the American Chemical Society, in Cincinnati, OH.

He presented a discussion lecture, "Carbon-13 NMR Studies of Some Organometallic Compounds," at the Fifth International Conference on Organometallic Chemistry, in Moscow, USSR.

Ernest WENKERT received the Ernest Guenther Award for 1971 of the American Chemical Society. The award recognizes outstanding achievement in the chemistry of essential oils, isolates, flavors, and related substances.

Members of the faculty on sabbatical leave this year are traveling to California, England, and Australia.

Charles S. PARMENTER has gone to Cambridge University, England, to spend the whole year in research on the theory of excited state relaxation processes in polyatomic molecules. He will work with Professor A. D. Buckingham.

Dennis G. PETERS is spending the year in the Department of Mathematics at the University of Queensland, Brisbane, Australia, studying the kinetics of organic reactions in aqueous media containing micelles, in collaboration with
Professor Ludvik Bass, chairman of the department. Professor Bass spent a semester here as Visiting Professor in 1969.

Walter J. MOORE will also work with Professor Bass at the University of Queensland for the second semester of this year. In May he will go to University College, London to stay until August. During his sabbatical, Dr. Moore will be writing a monograph on the dynamics of brain proteins.

Vernon J. SHINER, Jr. will be at University College, London for the second semester. He will do research on measuring the concentration of C^{12} relative to C^{13} in various chemical reactions, in collaboration with Professor Alan Maccoll.

Eugene H. CORDES will teach and conduct research as a Visiting Professor at the University of California, Berkeley, during the spring quarter.

During the past year Edward J. BAIR, Ernest E. CAMPAIGNE, Jack K. CRANDALL, and Ward B. SCHAAP have been on sabbatical leave. Dr. Bair was at Cambridge University, England, for the first semester; Dr. Campagne visited several universities in Australia during second semester; Dr. Crandall spent the entire year at the French C.N.R.S. in Gif-sur-Yvette; and Dr. Schaap was at University College, London, for second semester.

Three faculty members have left the department recently: John S. GRIFFITH to a position at the Hoffman-LaRoche supported Institute of Immunology, Basel, Switzerland; George D. GUTHRIE to a position as Associate Director of the Evansville unit of the statewide Medical Education Program, which includes an appointment as Associate Professor of Biochemistry in the IU School of Medicine; and John W. MOORE to teach at Eastern Michigan University, Ypsilanti, Michigan.

INDUSTRIAL PROFESSOR

Max MARSH (BS'47) Research Advisor of The Lilly Research Laboratories, Indianapolis, has been named Industrial Professor in the chemistry department effective September 1971.

Mr. Marsh started with Lilly in the Analytical Group in 1942. His work there was interrupted by the Army (he served with the Medical Department of the U.S. Army in the Pacific from 1943-45) and by his studies. Since he resumed his Lilly career in 1947, he has had assignments in Analytical Chemistry, Analytical Research, and Physical Chemistry. Through the years he has also become broadly knowledgeable in the biological, pharmacological, and medical fields which are essential to the pharmaceutical industry. Mr. Marsh currently is interested in the broad area of the theory of drug function.

As Industrial Professor, Mr. Marsh will make visits to the department for the purpose of interacting with students, postdoctorals, and faculty members, in order to maximize their knowledge of nonacademic chemical world.

FACULTY RETIREMENT

Professor Christian E. Kaslow retired from his teaching duties in June 1971, having served on the faculty for 30 years, six of them (1963-69) in the capacity of Director of Laboratories.

Dr. Kaslow was born in Mora, Minnesota in 1903. He received his bachelor's degree in 1924 from Hamline University and then taught in high school and college until he received his PhD from the University of Minnesota in 1943.

Dr. Kaslow long ago earned the reputation of being an excellent teacher. Innumerable students in his C341 and C343 (organic chemistry) courses have gone on to medical school and many who had strong records were recommended by Dr. Kaslow. His instruction in the laboratory was characterized by great personal involvement and effective insistence on high standards. During his first 10-20 years here he taught some at the graduate level and he directed the work of several graduate students. One of his most notable students was Dr. Nolan B. Sommer (PhD'44) who is now Executive Vice-President of the American Cyanamid Company.

As Director of Laboratories and chairman of the departmental space committee, Dr. Kaslow has played a major role in the construction of the research wing, which was completed in 1964 and in the plans for a second research wing, which has not yet been started because of lack of funds.

His research is in the areas of hindered rotation in substituted aryquinolines, orientation studies in the nitration of substituted quinolines, and synthesis and reactions of substituted quinolines.

In his "retirement" Dr. Kaslow is again delving into his research, which he had to put aside as Director of Laboratories, and is enjoying it greatly. He has resolved, however, not to continue his twenty-year practice of daily arriving at the Chemistry Building by 6:30 or 7:00 a.m.

FROM THE GRADUATE ADVISOR'S DESK

Forty-nine graduate students were admitted to the Department of Chemistry this Fall. The average scholastic record of the incoming class was the highest in the history of the Department. Two of the students were winners of National Science Foundation fellowships. Of the 46 students enrolled in C500 research the distribution according to areas was as follows: biochemistry, 12; physical chemistry, 12; organic chemistry, 9; inorganic chemistry, 8; analytical chemistry, 5.
MATHERS LECTURESHIP

The 1971 Frank C. Mathers Lectureship was held by Professor H. Gobind Khorana, Alfred P. Sloan Professor of Biology and Chemistry at the Massachusetts Institute of Technology. He delivered three lectures in April, on the general topic, "Synthesis and Biological Functions of Nucleic Acids." The individual titles were "Chemical Synthesis of Polynucleotides," "Polynucleotide Synthesis in Relation to the Genetic Code," and "Total Synthesis of the Structural Genes for Transfer RNA."

The Frank C. Mathers Lectureship was established in 1970 through an anonymous gift of money from a former student of Professor Emeritus Frank C. Mathers. Professor Mathers, at 90 years of age, still conducts research in his laboratory in the Chemistry Building.

FOCUS ON: NEW FACULTY

New faculty members are Frank R. LANDSBERGER, a biochemist, and Milos V. NOVOTNY, an analytical chemist also interested in biochemistry. Both are assistant professors.

Dr. Landsberger's research interest is in using physical chemical methods such as ESR, NMR, fluorescence, and circular dichroism to study the molecular structure of cellular membranes in order to determine the organization and interaction of membrane components and their relationship to membrane function. He has been using spin-label ESR techniques to study the lipid organization of human red cell membranes and of the envelope of both influenza and Rauscher murine leukemia viruses showing, among other things, the ubiquitous presence of a lipid bilayer structure in these diverse systems. He is engaged in similar studies of membrane protein organization. The structural parameters obtained are being investigated in terms of the details of membrane composition and the effects of perturbants such as hormones. He is currently developing theoretical methods for computer simulation of the ESR spectra from first principles. Also in progress are investigations using both ESR and NMR to study the dynamic processes found in biological membranes and model systems.

Dr. Landsberger was born in Amsterdam, the Netherlands. He obtained the BA degree from Cornell University and the PhD from Brown University.

Dr. Novotny is interested in chromatographic methods, biochemical separations, and clinical chemistry. In his laboratory, improvements in efficiency and selectivity of gas- and liquid-chromatographic columns are being achieved through the preparation of surfaces with controlled geometrical and chemical properties. High-resolution glass capillary columns were developed for a use in biochemical analysis on the subnanogram concentration level. New stationary phases for gas-liquid chromatography are being studied for high-temperature applications up to 350°C.

Non-extractable stationary liquids chemically-bonded to the surface groups of spherical glass beads are being prepared to improve the state of liquid partition chromatography. He is studying new detection principles for liquid chromatography.

The advances in column technology and detection techniques have been used for the high-resolution analysis of biological fluids. The simultaneous determinations of up to several hundred compounds in a single chromatograph can be made with efficient glass capillary columns. The components of a metabolic network can consequently be studied and their changes due to pathological conditions, drug administration or environmental influence are determined. Gas chromatography - mass spectrometry serves for identification purposes. Metabolic profiles of blood and urinary steroids, volatile body constituents, drugs, lipids, and urinary acids are being studied for an early detection and diagnosis of metabolic diseases.

Dr. Novotny was born in Brno, Czechoslovakia. He obtained the equivalent of a BS degree and the PhD degree from the University of Brno.

OFFICES MOVED

After the remodeling of one of the old freshman laboratories was completed, the offices dealing with students, their courses, and their records were all moved into the old area. The move took place over the summer with the old Room 213 now housing the offices of the Freshman Chemistry Office, the Undergraduate Advisor and Academic Counselor Offices, the Graduate Advisor Office and the Department Chairman's Office. Dr. Mcmasters who has charge of the freshman chemistry laboratories also has a room there. The old area was completely renovated and concrete block partitions built to form the separate offices and the walls were painted a cheery yellow to liven the whole suite of offices. The duct work was put in for air conditioning which we are told may come within the next year or two. The new numbers for the rooms are 115A, 115B, 115C, and D, 113, and 111.

Although Clarice Moser resigned this Fall, the remainder of the staff involved in the move continue to work for the benefit of the students and find the new area larger and more convenient for the students.
The Picture Album
COMPUTERIZED TESTS

For the past year or so, we have been experimenting with a new technique in giving exams to students in the C105 and C106 (Freshman chemistry for science majors) courses. This involves feeding a large computer with hundreds of questions and problems on the courses and then having the computer generate individualized exams containing a random selection of questions from the large pool in the computer. The correct answers are printed out on the right hand side of the computer output. The student is given the left side of the sheet and a blank computer-gradable answer sheet upon which he marks-senses his name, social security number (used only for identification) and his answers to the problems on the exam. As soon as he turns in his answer sheet, he receives the correct answer sheet and he can then see how well he did on the exam.

One interesting feature is that the student is allowed to take an exam over the same material three times on successive days. If he thinks he did not do well enough on the first try, he can try again. Therefore, the exam serves as a great teaching aid, since the student has a better idea of the type of material that will be covered. Then, the best score of all his tries for each exam is recorded for use in calculating his final semester grade.

From the viewpoint of the instructor, it was a huge task to fill the hungry computer with all those questions. But once this is done the instructor can rest a little since he has told the computer exactly what he expects the students to get out of the course. Now at last, the instructor can rest a little since he has told the computer exactly what he expects the students to get out of the course. Now at last, the instructor has decided well ahead of time just what he expects his students to know and how they are to perform on the material that he presents in lecture.

As an indication of the success of computerized and repeatable examinations in teaching, two-thirds of the class of 700 in the first semester chemistry course last Fall received A or B grades with only 2 percent failures for the semester.

ANNUAL HONORS BANQUET

On April 22, the annual Chemistry Honors Banquet was held with a number of students being honored for their past scholastic achievements. As an added feature this year, a daughter of one of the Chemistry Department alumni (Jack Cook, PhD'44) was one of the soloists for the entertainment.

The five freshmen who were honored for their outstanding work in the first year chemistry included: Nancy Lee Hayes from Indianapolis, John J. Homperly from Evansville, Bruce Mallatt from Crown Point, and Bonnie New from Houston, Texas.

Merck again presented a copy of the Merck Index to each of the two top sophomores: Wendy Brown from South Bend and William Keesom from West Lafayette.

Again this year we were pleased to have four students awarded Dow Scholarships for 1970-71: David LaValle from Bloomington, William Keesom from West Lafayette, Thomas Britton from Griffith, and Vaughn Davidson from Valparaiso.

The outstanding junior who was awarded the Courson-Creeves Prize for 1970-71 was Mary Kathleen Johnson Shriver and for 1971-72 it is Nancy Krieger.

Peter Wolynes who came to us from the Northwest Campus with an excellent record, continued to astound not only the other students but the faculty as well with his comprehension of theoretical chemistry and was awarded the American Institute of Chemists Certificate.

Thirty-five of the undergraduate chemistry majors were listed on the Department Honor Roll and fifteen of them were members of Phi Beta Kappa.

Contributing to the pleasure of the evening, one of the chemistry majors, Alan Ascher played dinner music at the piano during the dinner hour and this was followed by songs sung by Christine Cook and a friend, Vicki Huling.

1971 GRADUATES

During the past twelve months, 89 bachelor degrees in chemistry were awarded. Of this group, a large number are continuing their work by enrolling in medical school. At IU are Cyrus ADAMS, Philippe COCHRAN, Victor CONTRI, Mark DOYLE, Sharon EDWARDS, Marilyn EZRI, Larry FLANAGAN, Douglas FLINT, Gregory GIFFORD, Kevin HOLLIS, Michael HOSTETLER, Stephen JEFFERSON, John JOHNSON, John LAMBERTUS, Donald PELSOR, Donald PEREZ, James PIERSON, Gordon ROBBINS, Tom SEEHAUSEN, Dennis STEVENS, Dan STOUT, Dale TAVRIS, Nicholas TIMM, James YOUNGMAN, and Leonard ZEABART. Also, the Department is represented in a number of other medical schools: Gabriella CASTILLO and Thomas MCKEARN at the University of Chicago, Tony CHEUNG at Hahneman Medical College, Carolyn GUBANY at University of Missouri, Norman HUDSON at the University of Illinois, Steven HURT at University of California Medical School at San Francisco, Robert KRAFT, Jr. at the University of Louisville, John STEARLE at Pennsylvania State, and Mark STEVENS at the Ohio State University Medical School. Wiley F. GREEN is attending IU Dental School.
A greater number than usual are now enrolled in law school: Charles SPAETTI is here in Bloomington and Bruce MCDONALD at Indianapolis, in the I.U. Law Schools, Michael JACOBS at the University of Louisville, and Joseph WANKO at the University of Michigan.

James BLUME is now in the IU School of Optometry.

Several of the graduates have reported that they are going on toward advanced degrees: Caryl ANTALIS has a biochemistry traineeship at the University of California (Berkeley) as does Kenneth MICKELSON at the University of Washington. Mary K. Johnson SHRIVER will be doing graduate work in biochemistry at the University of Washington while she also serves as a teaching assistant. Roger GLASGOW is studying rehabilitation and counseling at the University of Arizona while Andrew LOH is at the University of Illinois and Larry MACKY is at Ohio State, both serving as teaching assistants. William GARNER and Richard HARRUFF elected to stay in the Department here to continue their training. John LANE is now at the IU Medical Center going on with graduate work in biochemistry while Thomas R. JONES is now enrolled in the Department of Forensic Studies at Bloomington. Eric BAATZ was admitted to the graduate program in Computer Science at Northwestern and Stephen BYERS is learning more about psychology at West Georgia College. Edward BADGER moved over to the School of Business where Jack NUSSEBAUM is also working on an MBA degree. Peter WOLYNE was awarded an NSF Fellowship and is studying chemical physics at Harvard University. Susan HAMILTON is now at the University of Colorado in Denver.

Gordon BOKELMAN is doing graduate work at Ohio State in the College of Pharmacy while Thomas BORGES is enrolled in the Department of Pharmacology at the University of Hawaii.

The number of those finishing this year who are employed in industry is much lower than usual with Timothy DUGERT with Northwestern Mutual Life, Michael HILL in Akron with Goodyear Tire & Rubber, Alan KLEEMAN at Texaco in Lawrenceville, Illinois, Gary LEET with Lilly Industrial Coatings, and Michael MOHLER with Reilly Tar & Chemical.

Richard ALCORN, John BALHA, Robert MCANALLY, and James WRIGHT are all in some branch of the military and Duane F. GOHEEN is in the Peace Corps.

Susan WARDRIP writes that she is teaching general science to eighth graders in Charleston Heights, South Carolina and Martin HEY says he is assistant manager of the Triangle Mobile Homes and Sales Service in Columbus, Indiana.

We are still awaiting word as to the whereabouts of several of the others who completed chemistry degrees this past year.

Among those receiving advanced degrees in chemistry Walter BLACK (MS) began work last year at the USDA Northern Regional Laboratories at Peoria, William DOWD (PhD) at Dow Chemical and Dwight EDMAN (PhD) at Celanese. Hugh GARDNER (MS) joined the Army and was fortunate enough to be assigned to Redstone Arsenal, in the Science and Engineering Assistants Program doing basic research for the Army Missile Command while Douglas SHEPARD (MS) joined the Navy. Lee HUBBELL (MS) and Joseph WEHLACZ (MS) changed their major fields to Mathematics and Library Science, respectively. Paco PARATORE returned to his home in Lima, Peru, and Richard LEES (MS) is doing research at the Cleveland Clinic in Cleveland, Ohio.

Peter CLARK (PhD) is doing research in the School of Chemistry, ANU, Canberra, Australia, and Armí NOBREGA (PhD) returned to Sao Paulo, Brazil. William COLEMAN (PhD) is on the faculty at the University of New Mexico in Albuquerque and James SHELBACK (PhD) and Lawrence COX (PhD) are both at the University of Georgia, Athens. David JIMerson (PhD) is now on appointment at the Arkansas State University, Philip PERLMAN (PhD) at Ohio State University in the Department of Genetics and Fredric WHITE (PhD) at the University of Colorado Medical Center in Denver.

GETTING TO KNOW

David K. Barnes, assistant general manager of the Electrochemicals Department, E.I. DuPont de Nemours and Company, and Past-President, ATUC

David came to Indiana in 1943 after receiving a BS degree in chemistry from Olivet College where he had been associated with R. V. Cash. When Dave first came to the Department he worked on a research project with Dr. Billman, completing a master's degree under his direction. He found it necessary (by Uncle Sam's command) to interrupt his graduate work for a while to serve in the Army Corps of Engineers. As soon as he was released he returned to Bloomington. He began working on his Ph.D. problem with Ralph Shriner but transferred to Ernie Campaigne at the time of the former's resignation from the Department. He completed his work in 1947 and was awarded a PhD in organic chemistry that year.

While he was at Olivet Dr. Barnes was married to the former Martha Ann Snapp of Coldwater, MI. Not many of our students, graduate or undergraduate, were married in those days but the Barnes were just a little ahead of their time. By the time they had returned to the campus for the second time, they found the number of married students had grown.
They have four children and are indeed proud of their five grandchildren. Dave, Jr. completed law school in Detroit and Dave, Sr. tells us that John teaches in the Delaware State Correctional Institution. The children grew up in a number of locations, since Dave spent several years in Tulsa, OK, working for Stanolind Oil and Gas Company before joining DuPont's Textile Fibers Department plant in Kinston, NC in 1953.

After a successful four years at Kinston, he moved to Seaford, DE, with the position of technical supervisor, and then technical superintendent and on to assistant plant manager. Just a few short years later he was transferred to Wilmington (in 1963) as Manager of the production section of the Nylon Manufacturing Division. Then in 1966 he was named Director of the "Orlon"-Acetate-"Lycra" Manufacturing Division.

Just a year later he was named Director of the Manufacturing Division of the Industrial and Biochemicals Department. And in July, 1969, he assumed his present position as Assistant General Manager of the Electrochemicals Department.

Dave and Martha live in suburban Wilmington and keep busy with a multitude of interests, among them golfing, sailing, and fishing.

NEWSNOTES ABOUT THE ALUMNI

Richard BAYER (PhD'59), head of the Department of Chemistry at Carroll College, sent us a copy of The Free Radical which is their Department Newsletter. Through reading it, we learned that he has been very busy, spending some time at the Argonne National Laboratory, and serving as CSCA visiting professor at Gustavus Adolphus College. He was President of the Midwestern Association of Chemistry Teachers in Liberal Arts Colleges.

John BORMANN (PhD'58) wrote that he spent Summer 1970 at the Manned Spacecraft Center Lunar Receiving Laboratory before returning to Lindenwood Colleges where he is Chairman of the Division of Natural Sciences and Mathematics.

J. B-son BREDENBERG (Post-PhD'61-62) writes that he has been Assistant Director in charge of Research and Development at Neste Oy, the second largest company in Finland for some time now.

William BROMER (PhD'54) is Research Advisor at Eli Lilly and Company in Indianapolis.

George BULBENKO (PhD'58) now with the Princeton Biomedix Labs, served as Chairman of the Trenton Section, ACS, during 1970.

Karen BUSH (PhD'69) tells us she is moving to Chapel Hill, NC to take up her new work as Instructor in the Biochemistry Department of the School of Medicine at the University of North Carolina.

Wilbur CLARK (PhD'62) is head of the Department of Chemistry at Southern University.

Janet R. DEICH (AB'71) was awarded a 1971 Ames Award for Medical Technology.

Lutfi ERGENER (Post-PhD'52-53) has resigned his industrial position to go back to teaching at the Technical University in Istanbul.

William O. FOYE (PhD'48) was awarded the American Pharmaceutical Association Foundation Research Achievement Award for his research in Pharmaceutical and Medicinal Chemistry. He has been a member of the faculty of the Massachusetts College of Pharmacy for the past several years and was named Dean of Faculties last year.

Kenneth A. FROST, Jr. (AB'66) completed a PhD during the past year at the University of California at Davis. He accepted a research position with the Chevron Corp. in Richmond, CA.

Herbert S. GOTOVSKY (AB'40) is now Director of the University of Illinois School of Chemistry and Chemical Engineering.

Robert DUFF (PhD'61) taught a two-week intensive course in electron microscopy at Northeastern University.

George E. HAM (PhD'44) has been appointed Director of Research of the plastics and additives division at Ciba-Geigy Corp., Ardsley, NY. He has been Director of Research of Geigy's Industrial Chemicals Division.

Edward G. HIGH (PhD'50) is now president of the Alumni Association of the College of Arts and Sciences - Graduate School.

Rodney HAMILTON (PhD'64) is on the faculty at Fort Lewis College, Durango, CO.

Jack HOROWITZ (PhD'57) is now chairman of the Department of Biochemistry and Biophysics at Iowa State University.

Cecil KING (AB'19) is President of the Electrochemical Society this year. After many years on the faculty of New York University and retirement as Professor Emeritus, he joined American Gas and Chemicals, Inc. where he is now President and Director of Research and Development.

Daniel KNAPP (PhD'69) is now at the Department of Pharmacology, University of Cincinnati College of Medicine.

Wendell MASON (AM'40) was promoted to the position of Chief Chemist of Huntington Laboratories, Inc. (Huntington, IN). He was formerly Manager of Quality Control and in earlier years was associated with the TVA, Pittsburgh Plate Glass, and the University of Tennessee.

Dana W. "MAYO (PhD'59) Bowdoin College Department of Chemistry chairman has been named Charles Weston Pickard Professor of Chemistry.
Bam MEHROTRA (PhD'64) is now serving as head of the Department of Chemistry at Tougaloo College.

Ahmed MUSTAPA (Post-PhD'55-56) has been appointed Minister of Scientific Research for the United Arab Republic.

Bob PATRICK (PhD'50) opened a new research facility of Alpha at Alverson, PA.

William Paul PURCELL (AB'57) continues as Professor and Chairman of the Department of Molecular and Quantum Biology in the College of Pharmacy at the University of Tennessee Medical Units at Memphis.

Stewart SCHNEIDER (PhD'68) has a postdoctoral appointment at the University of Massachusetts.

Peter STANLEY (Post-PhD'56-58) is research chemist with Colonial Sugar Corporation in Sidney, Australia. He visited us in Bloomington recently.

Jack STOCKER (AM'47) was General Chairman of the Southeast-Southwest Combined Regional Meeting of the ACS in December 1970.

Carl J. VERBANIC (PhD'56) is now Manager of Marketing and Planning for the Celanese Coatings Co., in Louisville, KY, having joined the staff in 1965.

Ned HEHNER (BS'51) visited the University last Fall and reported he is now in the Quality Control Laboratory of the Bridgeport Brass Co. in Indianapolis.

Randolph C. WILHOITE (Post-PhD'52) now Associate Professor of Chemistry at Texas A&M has recently been appointed Associate Editor of JOURNAL OF CHEMICAL AND ENGINEERING DATA, published by the ACS.

VISITORS TO THE DEPARTMENT

Among the visitors to the Department during the past few months were Thomas FINK (AB'65) who is now at the Washington State Univ. in Pullman; V. L. "Bud" MILLER (AB'37) from HP Industries in Pittsburgh; Susan GRAPER Harris (BS'67) who (with her husband) is now living in Bloomington; Richard GREEN (PhD'63) from Concordia College, Moorhead, MN; David BAILEY (BS'67) who is now a student in Yale University School of Medicine; Parmula WEAVER (MAT'65) who is now working at the Fell Marine Science Library at the University of Rhode Island; Robert KELLY (BS'68) from LoJolla, CA; William MAYS (AB'68) who has been working for Procter and Gamble; Robert CAVANAUGH (MA'34) who recently retired after many years at DuPont; William PURCELL (AB'57); Gunter KUHL (Post-PhD '57-59) who came here from Germany and is now at the Mobil Research and Development Center at Paulsboro, NJ; Henry ROTHROCK (AB'26), and Peter STANLEY (Post-PhD'56-58) were also here in the past few months. Noel Jacobsen (Post-PhD'62-63) from Australia is spending some time in the Department this Fall.

NECROLOGY

We were saddened to learn of the deaths of:

Elmer E. O'BANION (PhD'42) March 20, 1971 at Prairie View, TX.

Russell L. HARDY (AM'23) October 19, 1970 at Tucson, AZ.

Mrs. Clarence May (the wife of Professor Emeritus C. E. May) died June, 1971 at LaGrange, IL.

Mrs. Charles S. Rohrer (He was a faculty member during 1947-59) at Commerce, TX, Fall, 1971.

AIUC NEWSLETTER STAFF

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