

NEWSLETTER

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
Department of Metallurgy and Mining Engineering

January 1975

UNDERGRADUATE ENROLLMENT INCREASING

Last year we expressed our concern over declining enrollments, but were optimistic about the future. We are pleased now to report that our optimism was justified. Because of the financial support of a number of companies, we were able to vigorously promote careers in metallurgy among the high schools and junior colleges of the state of Illinois. As a result, a class of 20 exceptionally well qualified students entered as freshmen in fall 1974, compared to just nine the year before. The number of inquiries regarding our program indicates a similarly sized group will enter during fall 1975. In addition, as interest in our program has grown, ten on-campus students transferred from other curricula to metallurgy during the fall semester. Thus, we can expect between 40 and 50 underclassmen in 1975, compared to only 20 two years ago.

If we extrapolate this trend to the "steady state," when we have been able to recruit four new entering classes, we hope to have between 80 and 100 total undergraduates. This compares to the minimum enrollment reached during spring 1974, when we had a total of only 40 undergraduates.

In order to maintain this level of recruiting, we need to increase the financial support we receive from industry. The companies that are concerned about the supply of graduate metallurgists have already increased their level of sup-

port to about \$15,000 per year. We feel we need to make at least ten grants each year to prospective students, implying an annual need of \$20,000. We would also like to increase the amount of each grant from the current \$500 if we can find additional resources.

This recruiting effort also has spin-off benefits. High school teachers that know of our program encourage their better students to consider metallurgy, so the quality of the new class is very high. In addition, as enrollment increases, we are able to offer a wider variety of courses that otherwise could not be taught due to minimum registration restraints. We were forced to cancel some key elective courses this semester due to low enrollments.

In addition to increasing our enrollment, we are also trying to give new students an early introduction to the field and to the department. A credit course for freshmen was offered for the first time this fall. It consisted of a series of lectures and lab demonstrations designed to give a broad view of metallurgy, as well as to permit the students to get acquainted with each other and with the staff. We hope this experience will increase the retention of students in the department by developing an early interest and knowledge of metallurgy.

We again appeal to our alumni to help us with this program. If you feel your company should be supporting this effort, tell us who we should contact. It will take a great deal of effort by many people, but the results will be well worth it.

WERT ON LEAVE

Professor Charles Wert has been on leave this year in order to serve as head of the metallurgy and materials section in the Division of Materials Research of the National Science Foundation. Charlie is kept very busy in this new assignment, and while he doesn't have much time to relax, it is a change of pace from the problems of academic administration. In Charlie's absence, Professor Carl Altstetter is serving as acting head, and doing a fine job of keeping the department running smoothly until Charlie's return next fall.

GRADS GIVE HIGH MARKS

We recently received the results of a survey conducted among graduates of the University six months after graduation dealing with their degree of satisfaction with various aspects of their career preparation. Among the 50 departments analyzed, metallurgy ranked near or at the top in almost every aspect.

We were particularly pleased to have ranked high in response to questions dealing with such topics as achievement of anticipated goals, preparation in comparison with graduates from other schools, effectiveness of faculty guidance, and effectiveness in preparation for a career.

These results give us a great deal of satisfaction that we are doing well by our students, and is a challenge to continue to merit the regard in which our graduates seem to have for their undergraduate preparation.

NEWS OF THE DEPARTMENT

Professor William Chedsey, who retired as professor of mining in 1955, died last April at the age of 87. Bill was on our staff for ten years, and served as acting head for two years during that period.

Bill Chedsey was a respected teacher and leader in his profession and in the community. He had a long and illustrious career. He had taught at the University of Virginia, University of Idaho, and Penn State, and was president of the Missouri School of Mines from 1938 to 1942. During World War II, he was a consultant to the Navy. In 1959, he received AIME's Legion of Honor.

We remember him as a thoughtful and cheerful friend and colleague, and extend our deepest sympathy to his wife, Elizabeth, and the Chedsey's four sons and daughter in their loss.

Professor B. G. Ricketts has recently announced his retirement as of the end of the current academic year. Barney came to the department in 1939 and has been here continuously except for a wartime assignment with the Bureau of Mines in Nevada in the 1940s. Barney's retirement, coming just after that of Earl Eckel, marks the end of an era, since they are the last of the "original" faculty developed when the metallurgy program was established in the late 1930s.

The Ricketts plan to move to the state of Washington, which is home to both Amy and Barney. The many alumni from over the years who remember Barney's conscientious and helpful contributions to their careers will join us in wishing him a well-deserved rich and full retirement.

The department has expanded into the broad area of materials science and engineering with the development of new courses in polymers. This is part of a College-

wide coordination of its effort in the broad area of materials. Two new staff members have been added to the department faculty this year to develop polymer science and engineering.

Dr. Paul Predecki has joined us as professor. He was formerly at the University of Denver, and more recently was on the staff of the National Science Foundation in Washington, D.C. His interests are in the solid-state processing of polymers, polymer recrystallization, and the behavior of polymers as implant materials.

Dr. Richard Gaylord has been appointed assistant professor, and comes to us after a year's post-doctoral research at the Polymer Research Institute at the University of Massachusetts. Richard plans to continue his work on theoretical and experimental studies of bulk polymer properties, particularly elastic and optical properties, and the recrystallization of polymers in the presence of stress.

Paul and Richard will interact with Professor Ted Rowland, who has been studying molecular relaxation processes in polymers. The group will offer an introductory course for graduate and undergraduate students this semester, and have planned additional courses for students at the graduate level.

We have great confidence that this teaching and research are in capable hands and will develop to make us a true materials department.

Professors Joe Greene and Harry Cook, who share appointments between metallurgy and mechanical engineering, have developed a process of applying adherent thin films on substrates by a sputtering technique. This process, which has significant advantages over vapor deposition or evaporation, has some very exciting applications. They are now looking at improving tool wear by

depositing TiC films on steel, and at the possibility of producing wear-resistant low friction surfaces by co-depositing a polymeric lubricant together with abrasion-resistant substances.

Professor Howard Birnbaum began a sabbatical leave this semester, and will be at the Atomic Energy Research Laboratory at Harwell, England. At Harwell, he will be working with Brian Eyre and Ron Bullough, both old friends of the department who have had extended visits with us in the past. The Birnbaums will be living in Oxford while in England. This leave, which has been a long time in planning, did not become official until recently when Howard finally found a "sitter" for their 150-lb canine.

Harold Walker (formerly head of the department to you more recent graduates), was last reported living at Route 4, Box 1549K, Edmond, OK 73034. Harold retired from the University of New Mexico in 1970, but the tumbleweed pollen in Albuquerque was not compatible with his allergies and emphysema, and the Walkers decided to move from that area.

Our apprehension about the success of the annual alumni meeting, in view of the decreasing attendance at the Fall ASM-AIME meetings, proved to be unfounded. We had 50 faculty and alumni meeting in Detroit last October to renew friendships, talk over old times and future trends, and in general have a wonderful time together. We are looking forward to another good meeting next year in Cincinnati.

ALUMNI NOTES

A few of us were fortunate to be here to enjoy a visit this fall with Hjalmar Johnson, '22, now retired from his position as president of Inland Steel. Mr. Johnson was here for a meeting of the U. of I. Foundation.

Another "old-timer" who hopes to attend a Foundation meeting and visit us is R. E. Murton, '25, now living at 1532 Granville, Winter Haven, FL 33880.

Charles Dodge, '24, now retired for several years but still busier than most of us, has enriched us with his recent letter recalling early days in the profession and in the department, and his comments about current problems in encouraging young people to choose careers in engineering fields.

Both S. Franklin Swain, '28, and John Bevan, '40, have taken G. R. Dellinger off our missing address list; he is with Cummins Engine Co., and his address is 2821 Tulip Lane, Columbus, IN 47201. Mr. Swain retired in 1970 as vice president of Golden Foundry in Columbus after 40 years with the company. He still lives in Columbus, but winters at 5555 Gulf Blvd. #114, St. Petersburg Beach, FL. John Bevan has been with Climax Molybdenum as senior research associate for the past several years, and is involved in programs to improve strength and elevated temperature properties of ductile iron.

John Snyder, '37, who is still in project engineering for DuPont in Wilmington, sent us the sad news of the sudden death of Robert Bayer, '45, who had been with DuPont since his graduation from the University. John has thoughtfully offered his technical books to the department as a memorial to Bob.

L. H. McCreery, '37, has retired from LTV Aerospace and has moved to 3112 Hallmark Pl., Tyler, TX 75701.

Ray Lorenz, Jr., '39, has been appointed director of the Chattanooga Metallurgical and Materials Lab of Combustion Engineering. The laboratory is responsible for R & D in materials and fabrication, processing, materials evaluation, nondestructive examination, technical services, and specifications.

Jack Hanson, '40, has moved to 65 Cottonwood Circle, Rolling Hills Estates, CA 90274. Jack still flies 747's to Hawaii for United and is a real estate broker in his spare time. After 35 years of service, he faces mandatory retirement in a few years and then will become a full-time realtor. If you're looking for property in that area, look first for Honest Jack.

Harry Czyzewski, '41, president of MEI-Charlton, Inc., was awarded the Past President's Award by the American Consulting Engineering Council last June for outstanding service to consulting engineering.

John Bell, '43, was elected president of the Wire Association, an international technical association serving the wire and wire products industry. In 1970, John received the association's Mordica Award for his outstanding contributions to the industry. John is senior staff engineer at Western Electric's Hawthorne Plant.

Another voice out of the past: Houston Meyer, '47, is now works manager at the Aliquippa Works of J & L Steel and lives at 1531 Scenery Ridge, Upper St. Clair, PA 15241.

Jonathan Smith, '47, who is president of Sunbeam Equipment

Corp., has recently been appointed general manager of all heat treating operations in the industrial/commercial group of the Sunbeam Corporation.

Burt Person, '47, is now vice president of the Resource Sciences Corp., in Tulsa, Oklahoma.

Ed Gempler, '49, is now staff metallurgist for United Aircraft Products in Forest, Ohio.

We have recently received word that John Lauder, '49, died last year.

Edward Gale, '50, is now vice president of Hi-Temp, Inc., a division of Beatrice Foods, and has moved to 315 Kenmore Ave., Elmhurst, IL 60126.

Jorge Quiros, '52, is general director of mineral resources in Panama and very enthusiastic about the prospects for mineral development in his country. Jorge's address is P.O. Box 4775, Panama, Panama. His son is now a junior in civil engineering at the U. of I.

We enjoyed a brief visit from Ralph Bennett, '55, who was on the campus conducting some business with the TAM department on behalf of his company, Manitowoc Engineering in Manitowoc, Wisconsin.

Don Kizer, '57, has been named manager of plutonium and fuel cycle technology research at Battelle's Columbus Labs. He will direct and coordinate studies on advanced nuclear fuels and isotopic heat sources.

Joe Darby, '58, has a new responsibility at Argonne National

ALUMNI NEWS (cont.)

Lab: he is in charge of the lab's CTR program. Joe reports on one of our "missing" alumni: B. N. Das is in the Metallurgy Department of the Naval Research Lab in Washington, D.C.

Norm Lindblad, '58, is with GE's Gas Turbine Division in Schenectady and manager of the materials development group. Norm is living at 2249 Grand Blvd., Schenectady, NY 12309.

Wandering Glenn Canfield, '59, is now with Lone Star Steel as superintendent of the mechanical tubing department, and is getting used to carbon steels after his prior experience in specialty products. Glenn is now living at 303 Ramblewood Pl., Longview, TX 75601.

Thomas R. Brown, '59, has switched careers. He resigned his position as superintendent of U.S. Gypsum's board plant at Sperry, Iowa, and is now practicing law at 211 Kresge Bldg. in Burlington, IA 52601. Tom received his law degree from the University of Iowa in 1963.

G. Ronald Morris, '59, is now director of corporate planning and development for Federal Mogul, and is located at the corporate headquarters in Southfield, Michigan. Ron's home address is 5918 Barnstable Ct., Orchard Lake, MI 48033.

Dennis Carroll, '63, is now principal materials engineer, tractor operation, for Ford in Troy, Michigan. Dennis now lives at 322 Tannahill, Dearborn, MI 48124.

Lowell Hoffman, '63, has been elected vice president for materials by National Can Corp. in Chicago. Lowell is a loyal alumnus of the University, and we are glad to be able to maintain close contact with him. He was recently honored as a JCI Senator in recognition of his years of activity in the U.S. Jaycees.

Ken Boris, '63, has been promoted to metallurgical manager of Anaconda's Buffalo plant. The Boris family now live at 28 Ranch Trail West, Williamsville, NY 14221.

Art Ytterhus, '64, was in town this summer visiting relatives and old friends in the department. Art is now with the Chamberlain Co. in Waterloo, Iowa.

Fred Fabricant, '64, was in town recently visiting relatives and took time to call and report that he is enjoying his position as division metallurgist in the Weirton Works of National Steel.

Dr. Dave Franklin, '65, who was at Argonne's Idaho Division, worked briefly for Texas Instruments, and has since joined the staff of Combustion Engineering's nuclear division in Connecticut.

Paul Trester, '65, after seven years with McDonnell-Douglas in Huntington Beach, has moved to San Diego and is now metallurgist with General Atomic.

Dr. K. K. Chawla, '67, has been promoted to professor titular at the Institute Militar de Engenharia in Rio de Janeiro. Krish says he can now give a pretty good lecture in Portuguese: his son has taught him the language.

George Harth, '68, left Battelle-Columbus in 1973, and is now a welding engineer for Babcock and Wilcox in Barberton, Ohio.

Bidyut Ganguly, '68, is now working at the Coxe Lab, Lehigh University in Bethlehem, Pennsylvania, and is living at 1301 Mickley Rd., Apt. M-2, Whitehall, PA 18052. Bidyut invites his friends to look him up when in the vicinity.

Larry Schmidt, '70, has been promoted by Trane Co. in La-Crosse, Wisconsin, from research metallurgist to assistant vice president of engineering. Larry was in town early last summer to replenish his supply of Illini T-shirts.

Dr. B. Keith Moore, '71, was appointed director of the Division of Biophysics at the American Dental Association Research Institute in Chicago last year. Keith will coordinate studies dealing with biomaterials and instrumentation used in dentistry. Keith was formerly in the Department of Biological Materials at Northwestern's Dental School.

Chuck Rosenberg, '71, is now with Yankee Atomic Electric in Westborough, Massachusetts, having resigned his position with United Nuclear in New Haven. Chuck is planning to begin part-time work on a graduate degree in business.

Mel Bluem, '72, was among those who had to send their regrets to the alumni meeting invitation. Mel is enjoying his work with Esso Production Research in Houston, and continues to play rugby in his spare time.

Bob Karz, '72, is now living at 1202 Fox Hollow, Webster, NY 14580. Bob, like the department, is also expanding into nonmetallic materials; his work at Xerox involves high-temperature mechanical behavior of polymers.

Ivan Cornelis, '73, who stayed with us as a post-doc after completing his Ph.D., is now returning to his native Belgium and will work at Westinghouse Research Lab-Europe in Brussels.

Dennis Niemeyer, '74, who took a job as a welding engineer with Chicago Bridge & Iron is back in Chicago after field assignments in Minnesota and South Dakota. Dennis recently took the EIT exam for the professional engineers license, and recommends that this is better done while still in school.