

NEWSLETTER

Department of Metallurgy and Mining Engineering

University of Illinois at Urbana-Champaign

January 1981

ENROLLMENT AT NEW HIGH

The reports of increasing enrollment and quality of students may seem to be an annual feature of this Newsletter, but the facts are true, and we are pleased to be able to continue to report them.

Undergraduate enrollment reached 110 this Fall, up from 95 last year. This is the first time enrollment in metallurgy has exceeded 100. Engineering college enrollment reached 5362 last Fall, about

a 2 1/2% increase. Because budget restraints do not allow increased admissions in spite of increased applications, the cut-off for admission is phenomenally high. Minimum qualifications for next Fall's entering freshmen are an ACT score of 28 and upper 10% class rank.

Our commitment to admit well-qualified junior college students, as well as the fact that these better students have a higher retention rate, means even fewer openings at the freshman level.

Some departments, particularly EE and ME, are just not able to cope with increased numbers, but so far there has been no decision to restrict enrollment by department. We continue to negotiate with the Dean's Office for special consideration of applicants in metallurgy, where space and demand for graduates justifies further growth.

We also consider our recruiting efforts to be as important as ever. With such competition for admission, we must be sure that these bright students are aware of the opportunities for careers in the metals industry.

We are very pleased to have Jones & Laughlin Steel join our financial aid program this year with an annual gift of \$1000. In addition to the special award from Texaco, the list of current contributors to the financial aid program includes: Abex, Armco, ARCO-Anaconda, Alloy Engineering & Casting, Caterpillar, Conoco, Chicago Bridge & Iron, Deere & Co., Fansteel, Inland Steel, Interlake Steel, Olin, and Republic.

Last year's recruiting effort for graduate students was directed by Marvin Wayman, and was quite successful. Our total graduate enrollment is now 81, compared to 59 last year. This reverses a downward trend that existed over the last few years.

Directory Out Soon

We are putting the finishing touches on a new alumni directory, and expect to have it in the mail to you within the next few weeks. The office staff has put a great deal of effort into this project. The Alumni Association records, from which mailing lists are prepared, were full of errors, and we hope we have corrected the great majority of these. Please tell us if you spot additional mistakes that have escaped our attention. We have the directory on tape now, so corrections should be easy to make to keep the listings up-to-date.

A new format has been used which should make the directory more useful to you. A cross indexed system of entries has been used. Names and addresses will be in an alphabetical listing, with a separate listing of names according to year of degree earned.

M & M Alumni Officers

The Mining & Met Alumni Constituency Group of the U of I Alumni Association now conforms with the guidelines for formation of constituency groups by the formation of officers. Glen Wensch, '46, is President, and Bob Bohl, '46, is Secretary-Treasurer. Members appointed as directors are Russ Duttweiler, '60, Jonathan Smith, '47, Joseph Darby, PhD '58, and Ted Wilken, '73 MS '75. Russ has bounced around the country over the years solving crises for GE, and has just left the Evendale plant to manage a new investment casting plant in Middletown, Rhode Island. Jonathan is vice-president of Sunbeam in Oak Brook, Joe is at Argonne National Lab, while Ted does R & D for UOP in Des Plaines.

The establishment of this Board raises the possibility of more direct participation by alumni in planning and carrying out future events. We urge all graduates to become members of the Alumni Association. Each membership carries automatic affiliation and partial allotment of dues to the M&M group (to help sponsor such activities as this Newsletter) as well as all the advantages of the Alumni Association.

Berner Memorial

The Louis R. Berner Metallurgy Fund has been established in the form of a \$5000 gift presented by Mr. Berner's widow, Martha Berner of Nashville, Indiana. The income from this endowment will be used to support financial aid grants to undergraduate students in metallurgy. The expectation is that members of the Berner family may augment this endowment with additional gifts in the future.

Mr. Berner studied metallurgy in the chemistry department and following his graduation in 1919 had a very successful career at Inland Steel Company. We are very pleased that Mrs. Berner thought to perpetuate Mr. Berner's memory in this very significant fashion.

DEPARTMENT NOTES

After a 15-months stint with United Technologies in Connecticut, Hamish Fraser has returned to Urbana to pick up his career as Associate Professor of Metallurgy and Technical Director of the EM lab in the Materials Research Lab. Hamish missed the excitement of teaching and student contact, and Marion too missed the campus life and her friends here. During his time at UT, Hamish visited frequently to supervise the work of his graduate students still completing their work. In fact, many didn't realize Hamish had left, thinking he'd only increased the pace of his traveling somewhat. It may take an equal time to convince some of his return, since he will be traveling to UT to consult on problems initiated while at their lab. The Frasers are now settling down in the home just purchased at 502 Florida in Urbana. Hamish brought Mike Kaufman back from UT to begin graduate study. Hamish's principal research activity will be in rapid solidification technology.

Howard Birnbaum has had a busy but not untypical year. He has served as member of review boards for CMB Division of Los Alamos Lab and the DOE on nuclear waste disposal. He was a participant in the US-France exchange on x-ray topography and the US-Japan exchange of deformation and fracture of bcc metals. Howie gave invited lectures on hydrogen effects at the Gordon Conference last July and the International Conference on Hydrogen in Metals at Jackson Hole, Wyoming last August. He was named a Case Centennial Scholar and spoke at the Al Troiano Festchrift last June. Howie is now planning to attend a NATO summer school on fracture in Corsica France next May. During the current academic year, Howie became a member of the Urbana Center for Advanced Study, which relieved him of teaching duties in order to concentrate on his research.

We are pleased to report that Richard Wool's promotion to the tenured status of Associate Professor has been approved, and

will be effective next Fall. Richard joined us 3 1/2 years ago from New York University, and has been a key feature in the growth of the polymers program in the department, especially in the development of a polymers laboratory facility and course. Richard's principal areas of research interest deal with crack healing and molecular deformation of polymers.

Richard Gaylord, who joined the staff in 1974, was promoted to Associate Professor last Fall. Richard was the pioneer member of our polymers group, and is principally concerned with the theoretical study of confined polymer chains.

Ron Hutchings, who joined our faculty last year, has resigned his position as assistant professor and taken a position with Brown-Boveri in Baden, Switzerland. Ron was a bright and energetic teacher and we were sorry he decided not to stay in the academic field.

Carl Altstetter spent the Fall semester in Berkeley, California, as a visiting professor in the Materials Science and Mineral Engineering program. The experience convinced Carl of the virtues of our program and of small town living, which more than compensate for the absence of vineyards. The Altstetters returned to Urbana in time for the Holidays and the ongoing work of the department, as well as to finish getting used to the beautiful new home they built in Mahomet. While at Berkeley, Carl saw Gary Crumley, '78, frequently. Gary is chairman of the department's graduate student association, has finished his M.S., and is starting a doctoral program in Ceramics.

Charlie Wert will start a seven-month's sabbatical on Feb. 1 to be spent at Stuttgart in the Max Planck Institute and at Munich in the Physics department of the Technical University of Munich. Charlie received a Senior Scientist Award of the Humboldt Foundation. This is a prestigious honor, and carries a significant

stipend. The recipient is encouraged to visit other universities and attend meetings in the German Republic, which is part of Charlie's plans. Paul Beck has also received this award two years ago. Lucy will also take a sabbatical leave and carry out research on the materials science literature of Western Europe. Marvin Wayman will serve as acting department head while Charlie is away.

Mike Rigsbee has begun a research program on laser processing of surfaces. His objectives are to produce novel non-equilibrium microstructures with improved erosion, wear, and corrosion resistance. The experiments are designed around the AVCO 10 KW CO₂ laser, the largest of any University in the country.

The UIMS, our undergraduate professional society, won Honorable Mention in the AIME 1980 Outstanding Student Chapter competition. Richard Wool and Ron Hutchings shared the advising of the chapter last year; Mike Rigsbee is this year's adviser. The students plan a full program of social, technical, and plant visitation events, as well as coordinate the Open House exhibits.

A \$2000 award to enhance our undergraduate program was received last Fall from Texaco, and presented on a trip to the campus by Dan Benac, '78. It is the custom of Texaco to make these awards to schools whose graduates are particularly successful in their work with the company, and Dan's outstanding impression resulted in our selection for this award. We plan to use these funds in our undergraduate financial aid program to attract students to metallurgy.

We all shared an anxious holiday season with Fred Lawrence, who underwent surgery in Nashville, Tennessee last month for a brain tumor. The operation was successful, the tumor benign, and though Fred will suffer some hearing loss, we're grateful it wasn't worse.

ALUMNI NOTES

S. Franklin Swain, '28, sent a check to the U of I Foundation and a reminder that the college was doing a pretty good job of preparing students for the engineering profession in his day as well as now. Mr. Swain is now living at 5555 Gulf Blvd., Apt. 114, St. Pete Beach, FL 33706.

Bill Craig, '41 MS '46, is enjoying his retirement as he and Martha (who just retired from teaching) tour the country in their trailer and visit friends. They came through Urbana last summer to see old friends here. Can anybody top this Craig record: between their children John and Rhea they claim eight doctoral degrees, both have MD and PhD degrees, and each married spouses with the same degrees.

Glen Wensch, '46 PhD '49, has been busier since retiring than he was during his long career with DOE and its predecessor agencies. He has been consulting with Argonne on energy assessments of developing countries, and has spent considerable time in Peru and So. Korea. In addition, he has been an active member of the Advisory Committee to the Nuclear Engineering Program in Urbana, and is now president of the Met Dept's Alumni Constituency.

Paul Shewmon, '52, received the highest recognition the College can bestow in any graduate, the Alumni Honor Award for Distinguished Service in Engineering. Paul was cited for his career as educator, researcher, adviser to government, his contributions to research, and participation in professional affairs of the nation. Paul is Head of the Met Dept at Ohio State, and a member of the Advisory Committee on Reactor Safeguards of the Nuclear Regulatory Commission. Paul received his award in Honors Convocation ceremonies last April.

Bob Draznik, '53, is now working for Carpenter Technology Corp in stainless alloy development in Reading, PA. Bob's home address is 441 Thomas

Pl., Sinking Spring, PA 19608.

Congratulations to Bob Fisher, '53, who is now vice-president-manufacturing for Perfection Spring and Stamping in Mt. Prospect, IL.

We're very proud of Harold Gegel's, '55, election as a Trustee of ASM. Hal is senior scientist at Wright-Patterson Air Force Base in Dayton, Ohio. Hal has been very active in ASM, and also has served as visiting professor at Rochester, Cincinnati, and Wright State Universities. He was Chairman of ASM's 1980 Materials and Processes Congress in Cleveland.

Ernie Huschke, '55, did all he could to organize his class to attend their 25th class reunion, but in spite of his great efforts, the only other classmate attending was Bob Kay, who works alongside Ernie at North American Rockwell in Canoga Park, California, and couldn't escape. Where were Gerry Robinson and Howie Friedman, who said they would attend? Nevertheless, a delightful time was enjoyed, especially a most agreeable dinner party with Bob Bohl and Earl Eckel. Perhaps other classes might be more successful in the future in planning such an event, now that it has been established what a great time it can be.

Mike Monaco, '53, has moved to Inland's downtown General Office in Chicago, where he takes on his new duties as Superintendent of Technical Services.

H. C. Rolseth, '56, is Process Manager of Oxygen Applications for Union Carbide at Tarrytown Technical Center, Tarrytown, NY 10591. He'd like to hear from some of the mining grads of the '50's.

Don Boone, '57 PhD '62, is an Adjunct Research Professor with the Naval Post-Graduate School in Monterey. Don is supervising graduate research but has returned to Lawrence Berkeley Lab as a staff scientist where his interest centers on high temperature materials. Don consults widely, and reports that Norm Lindblad, '58,

whom he sees occasionally, now heads the Gas Turbine Coating Group at GE's Evendale, Ohio plant.

Ron Larson, '58, was one of five purchasers of Chicago Magnesium Casting Company in Blue Island, and was subsequently elected President and Chairman of the Board. The company was bought from its founder, Don Burnett, '50.

Larry Hayes, '59, was here last Fall on a recruiting trip. Larry is manager of materials and process engineering for McDonnell Douglas Electronics Co. in St. Charles, MO. Keith Meyer, who graduated last year is an associate engineer in that department, and is living at 130 River Bluff Dr: #402, St. Charles 63301. Larry's trip must have been successful to pick off one of our top graduates. Larry also recruited Gregg Linn '79 the year before.

Frank Majeske, '59, has moved to 3366 Caminota Vasto, La Jolla, California.

Bruce Auferhaar, '59, has been elected vice president and general manager of Metallurgical Industries Refractory Metals Division. He will be responsible for production, development, and marketing of MI's tungsten carbide, cobalt, and refractory metals at MI's Tinton Falls, New Jersey plant. Bruce was previously with Allegheny Ludlum's P/M operation in Columbus, Ohio.

Jim Perrin, MS '61, has received ASTM's Award of Merit. Jim was recognized for his work on standardization for reliability of nuclear pressure vessel components and structural mechanics in reactor technology. Jim is currently senior research leader at Battelle's Columbus Laboratories.

Lowell Hoffman, '63, has agreed to serve a second term as the department's representative to the College of Engineering's Annual Fund. This campaign last year raised \$150,000.

Bob Zerwekh, MS '63, is now Associate Dean at the Univer-
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ALUMNI NOTES (Continued)

sity of Kansas School of Engineering.

Ralph Leonard, '63, visited over the holidays while on a family trip back home. Ralph sees a promising future for metals in the steel industry, especially at USS's research laboratory where he works. His son, Reed, got a look at the campus where he begins study next Fall in M.E. Ralph says John Ewing, '62, has been promoted to chief metallurgist at USS's Irvin Works in Pittsburgh, but John had to leave California to accept the new position. John's new address is 137 Candlestick Dr., McMurray, PA 50010.

Asim Chaudhuri, MS '67, is the first chairman of the newly chartered Northeast Ohio Chapter of ASM.

Larry Happ, '68, has recently received an award from the Ozark AWS Section for his contributions to the art and science of welding. Larry has received numerous recognitions for his technical as well as community service. He is welding and materials engineer for Paul Mueller Co. in Springfield, Missouri.

M. S. Rashid, PhD '69, received GM's 1979 "Boss" Kettering Award for his development of the new high strength sheet steel GM980X. Rashid previously received the McCuen Special Achievement Award from GM for extraordinary technical accomplishment.

Sam D'Agostino, '70, has moved to the Jet Propulsion Lab in Pasadena as Senior Engineer, Materials Applications. He is involved with the wide field and planetary cameras for space telescopes. Sam had been with the Navy's Crane Indiana Lab for a number of years.

Louis Katz, '70, is Manager, Market Development for Babcock & Wilcox's fossil power generation division in Barberton, Ohio. We saw Louis at an ASM committee meeting last Spring, and learned that he was recently married.

Michael Valentine, '70 MS '72, graduated last summer from the US Naval War College. Mike is a civilian staff member with the Naval Air Service Command in Arlington, Va. involved in conducting and monitoring materials research. The Course included strategy and policy, defense economics, decision making, employment of naval forces, ancient history, and philosophy.

Don Potter, PhD '70, has left Argonne and is now Associate Professor of Metallurgy at the Univ. of Connecticut, where he joins our former colleague, John Morral.

Harry Keiser, '73, is now Superintendent of the Susquehanna Nuclear Power Plant in Pennsylvania. Harry took his MS in nuclear engineering after completing his BS in metallurgy, and was formerly with Consumers Power in Jackson, Michigan.

Larry Nelson, PhD '76, and John Beavers, '73 PhD '77, were at a recent corrosion meeting in Chicago and visited with Prof. Metzger. Larry is moving to INCO's new lab at Kure Beach, North Carolina with new responsibilities. John is still at Battelle's Columbus Labs.

Dennis Reid, '73, was married last June to Debra Kuehl in Rockford and has since moved to Menlo Park, California. Dennis left Carcam and is now quality control engineer for Roychem Corporation.

We were very saddened to learn that Phillippe Lecocq, PhD '74, passed away June 11, 1979 in Lausanne, Switzerland.

Pat Birnbaum Labun has left Republic Steel in order to devote full time effort to her doctoral studies at Case-Western University. Husband Lance, PhD '76, continues to enjoy his work at GE in Cleveland.

Marvin Mehler, '77, visited last Fall while on a six-week leave from Lockheed-San Jose. Marv came "home" to visit family and relatives and consider returning to school for graduate studies.

Frank Canzalino, '77 MS '78, has left Chrysler and is now working for Sikorsky Aircraft

in Connecticut. While at Chrysler, Frank had a desk adjoining that of Mike Howe, '76.

This Fall, the student society planned a "Career Conference" featuring speakers describing various career paths for metallurgists. Karen Pulka, '79, talked about women in engineering, and Rich Skolly, '78, spoke about the MBA route from his own experience, having stayed at Urbana for the MBA program. Both Rich and Karen are now at Midwest Steel in Portage, Indiana. This program was very successful and informative, and their presentations were especially interesting.

Jeff Bertschinger, '78, has been promoted to Sales Engineer-Steel Division at Timken's Detroit District Office.

Last Spring's Open House was a lot like homecoming. Rick Zook, '78, was here from Alcoa's Warrick plant with a display, and Tom Bond, '77 MS '78, and Bill Taylor, '79, came down from Peoria with a group of high school students. Bill and his (and our) college sweetheart Eileen were recently married in Chicago. Ed Gale, '50, vice president of Hi-Temp, a heat treating company in Northlake, were here visiting his daughter Beth who was finishing her BS in Chem E (she should have been in metallurgy) and son who was finishing up his MS in labor and industrial relations.

Nestor Zaluzec, PhD '78, has moved from Oak Ridge and is now a near neighbor at Argonne Lab. Nestor's brother, Matt, is now in Urbana studying for his BS in metallurgy.

Zvi Flanders, '79, is with Parker Engineering in Naperville, after deciding graduate school was not for him following a period at MIT.

Bob Wiseman, '79, has recently been promoted by Caterpillar, and is now in Pontiac in the heat treat engineering department.