

NEWSLETTER

Department of Metallurgy and Mining Engineering

University of Illinois at Urbana-Champaign

February 1979

STAFF CHANGES

Professor E. Neville Pugh has announced that he will resign from the University at the end of this summer's term in order to accept an appointment as a scientist at the National Bureau of Standards at Gaithersburg, Maryland. It is with a great deal of regret that we accept Neville's leaving. Neville came to the department in 1970 from RIAS where he had established an outstanding reputation in the area of corrosion studies. His work and acclaim increased during the years at UIUC, and he will continue his work in the field of corrosion at the Bureau. Nev is an excellent teacher as well, and it was perhaps the conflict between the time required to excel in both teaching and research which caused him to accept the position at NBS, where he can concentrate on research. We wish continued success to Neville and his family and will miss them as good friends and colleagues. ●

While we are saddened to see old friends leave, we do enjoy the pleasure of welcoming new members to the staff. Dr. Haydn Chen joined us last fall as assistant professor. He received his B.S. in physics from National Tsing-hua University in Taiwan and came to the U.S. where he received an M.S. in physics in 1973 at Northwestern. He then joined Cohen's group in materials science and completed his Ph.D. in 1977. Haydn was then on the staff at Argonne National Lab until July 1978. His fields of interest are x-ray and neutron diffraction, x-ray absorption fine structure, structure of alloys and amorphous systems, phase transformations, thermodynamics, and superconductivity. He is a member of ASM, AIME, American Crystallographic Association, and Alpha Sigma Mu. ●

Dr. Barry Muddle joined our staff as assistant professor in the spring term. Barry's academic work was at the University of New South Wales, Australia, where he did his doctoral

work under Bowles on martensite transformations in steels. After completing his Ph.D. in 1974, he accepted a postdoctoral fellowship at NSW where he studied hydride formation in vanadium alloys. He comes to us now from another postdoc appointment at Cambridge University in England where he had been working on liquid phase sintering of tungsten alloys.

He is teaching our undergraduate course in mechanical metallurgy and continuing his research interests utilizing the electron microscope facilities of the Materials Research Laboratory. This laboratory is now one of the best equipped in the nation with major equipment including the JSM 35C, JEOL200 with STEM capabilities, and a UGH-B5. ●

Enrollment Up

We are glad to report that our undergraduate enrollment has continued to increase, and at a rate greater than that of the College of Engineering as a whole. This fall, we enrolled 91 undergraduates, which is an increase of about 10% over last year, and almost 100% over four years ago. Part of this increase is due to our constant efforts to publicize careers in the metals industry at the high schools and junior colleges of the state. These efforts would not be possible without the help of concerned industries whose grants have established no-need financial aid for prospective students. The latest company to join this effort is the Alloy Engineering and Casting Company of Champaign, which established an annual \$1,500 grant in memory of Mrs. Hortense Page, who was president of Alloy for many years and who had a strong interest in the University. Last May's graduates in metallurgy received average starting salaries of \$1,513 per month. This is the highest average for any curriculum in the College, and exceeds the *highest* starting salary for many curricula. ●

Alumni Meet

Attendance at our traditional alumni gatherings during the fall meetings has suffered as the size of the meetings has shrunk over the years and particularly since the AIME and ASM now hold separate meetings. Nevertheless, we did plan get-togethers for both ASM and AIME meetings last fall, and those who were able to come had a great time. In St. Louis we had 34 alumni for dinner, and probably another dozen who came by to say hello but had conflicting meetings for the evening. In Philadelphia, a luncheon was planned that emphasized quality over quantity. The ten people who were able to make that session (including two metallurgists from Chicago Circle now working for Caterpillar), and with apologies to Bill Becker '57, were all old-timers: Joe Lane, '43, Roland Carreker, '45, Johnny Snyder, Forrest Williams, '40 (who was general chairman of the congress), Lewis Kovaks, '39 (and his lovely wife, Elaine; Lew is now retired and living in Newark, Delaware), and Bob Bohl, '46. ●

Gift to Department

Andrew Kohler, class of '78, presented the department with a \$400 check this month. Andy ran into financial problems during his last semester in school, and was helped by a grant from our financial aid program. Although no obligation was implied, Andy wanted to return the money, and Jerry Fisk, our business manager, has set up an account in the U of I Foundation for such funds. This is an unrestricted account, and can be used for any purpose: refreshments for seminars, field trip travel expenses, materials for student projects, mailing the *Newsletter*, etc. If anyone else out there has a similar appreciation for what the department has done for them, a tax-deductible donation of any amount to the U of I Foundation designated for the Metallurgy General account will find a myriad of important uses to help the department better serve its students. ●

ALUMNI NOTES

We were delighted to hear from Bertrand Lindley, '22, who thinks he may be the surviving member of the classes of '21 and '22. Bert says he followed mining for about four years after graduation until he found out there were no women in mining camps, so he switched to civil engineering. He retired from the Mississippi River Commission in 1966; and when he's not traveling for pleasure, he lives at 3200 Washington St., Vicksburg, Mississippi.

*

Charles Squarcy, '36, retired from Inland Steel following a 42-year career with the company. His final position was assistant to the vice-president, steelmaking. Chuck was awarded the 1978 T. L. Joseph Award of the Iron and Steel Society of AIME last April; a fitting recognition of Chuck's contributions to steel-making technology over the years. We understand that his retirement party was an elaborate affair that was a real tribute to his illustrious career at Inland. Following a trip around the world after retiring, Chuck decided he was too full of energy to retire, and has joined Vic Kirsch Construction and Red Top Trucking, Inc., in Hammond as marketing manager. His new home address is 7247 Knickerbocker, Hammond, IN 46323.

*

C. Walter Beattie, '37, was made an honorary member of the ASTM during ceremonies hosted by ASTM Committee A-5 on metallic-coated iron and steel products last May. He was cited by ASTM president McAdams for his dedication to the promulgation of standards and his technical leadership and personal qualities that have advanced the standards program for steel, galvanized and other metallic-coated products. Walter has a long record of service to ASTM, as well as being active in AISI, ANSI, SAE, ISO, and ASM, and in many community service organizations such as the Red Cross, YMCA, and the U.S. Bond Committee. Walter joined Armco Steel Corporation upon graduation, and retired in 1977 after 40 years of service in the research and technology division. Walter still lives in Middletown, Ohio, at 302 Aberdeen Dr.

Juan Ferrer Baniqued, '40, wrote an extremely interesting letter from his retirement home in Zamboanga Del Sur, Philippines. He returned to the Philippines after graduation, where his rapidly advancing career in mining was interrupted by the war. Juan joined and helped organize the resistance movement in his part of the country. Following the war, Juan was assigned to prospect for minerals, and discovered deposits of chromite, manganese, and iron which were mined. In his retirement, he farms a few hectares of riceland, coconuts, and rubber, and recommends that miners and metallurgists consider the potential of his country.

*

Robert Hogue, '40, has been named manager of sales development in the graphite electrode marketing organization of Union Carbide's Carbon Products Division. "Tiny" has been with Carbide since 1940, mostly in sales activities in Cleveland, Kansas City, New York, and then Canton, Ohio, where he was district sales manager, and will continue to headquarters. He also informed us that C. R. Brummett, '40, retired this year.

*

Ray Eriksen, '41, has moved to 1324 Pleasure Village One, Camarillo, CA 93010. Ray retired from China Lake and spent six years in Washington, before returning to California. With the aid of the Alumni Directory, Ray has gotten together with a number of old friends who are also in California, and would like to know if anyone knows where Sol Martin is living.

*

Herman J. Maurer, '43, is now chief engineer, research and development, for J. I. Case Construction Equipment Division. Herman's new address is 2557 Surrey Road, Burlington, IA 52601.

Otto Turnovsky, '46, had early retirement forced on him when Youngstown's Research Center in Youngstown, Ohio, was closed. "Tiny" is keeping busy as a volunteer worker at a local nursing home.

*

Glen Wensch, '46, who in 1949 was the first to receive the Ph.D. degree

from the department, retired from the U.S. Department of Energy last year, and moved to Champaign where he lives at 2207 Noel Dr. Glen spent his career in the nuclear energy field, and was particularly involved in the nation's fast reactor program. He enjoyed many interesting experiences, including serving as principal aide to Milton Shaw and representing the U.S. in many international conferences. Glen recently presented an extremely interesting seminar describing the early history of this aspect of nuclear energy development.

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We noted an interesting article about printed wiring contact metallurgy by Ray McGaughey, '48, in the *GTE Automatic Electric Journal* recently. Ray was with Elgin Watch until 1964, and then manager, metallurgy/materials process engineering for General Time on the Apollo space program. He joined GTE Automatic Electric in 1968, and is now responsible for the Metallographic Laboratory as a senior engineer.

*

Keith Lampson, '49, has been elected a trustee of the American Society for Metals for a three-year term. Keith, who was named a fellow of ASM last year, is director of materials engineering for Marquardt Company in Van Nuys, California. His expertise includes rocket, missile, spacecraft, and aircraft engine materials selection, fabrication, and testing. He has special interest in magnesium, columbium, and cobalt alloys, forging, and fracture prevention. Keith also operates a private consulting firm dealing with medical implant devices and medical equipment.

*

Richard Gaydos, '53, was installed a member of the Board of Directors of the American Society for Non-destructive Testing. Dick is secretary of the Technical Council and was previously chairman of the Industrial Division. Dick joined the Chicago District of Republic Steel following graduation, and served in a number of capacities, was general superintendent of operations when he joined Republic's central offices in Cleveland to coordinate corporate certification procedures and quality assurance. Dick now lives at 1819 King James Parkway, Westlake, Ohio.

DEPARTMENT NOTES

Professor Robert Bohl was elected a fellow of the American Society for Metals and honored at the society's annual meeting in Philadelphia last November. The citation reads: "For dedication to metallurgical undergraduates, outstanding teaching, advising, industrial involvement, and attracting students to study metallurgy." Other members of the faculty already fellows of ASM are Paul Beck, Marvin Wayman, and Charlie Wert. Bob was at least equally honored when the May graduating seniors presented him with a check and instructions to get a new bicycle. The class of '78 will be glad to know that the 20-year-old second-hand wreck that created such an eyesore at the laboratory has now been replaced by a beautiful Raleigh Sprite that rides so well Bob is hardly getting his exercise these days. ●

Marvin Wayman was an invited lecturer at the fall meeting of the Japan Institute of Metals in Toyama, Japan, on October 3-5, 1978. Marvin lectured on "Martensite, the Shape Memory Effect and Related Phenomena." While in Japan, he toured the world's largest steelmaking plant, Nippon Steel Corporation, at Oita in

Kyushu, and also carried out cooperative research with Professors Shimizu and Otsuka at Osaka University. In between professional engagements, Marvin found time for very interesting and delightful touring. ●

Paul Beck was honored by the Humboldt Foundation as recipient of an award made to an American senior scientist for international study. Paul began a year's stay last July at the Physik Department, Technische Universität, Munich (8046, Garching), West Germany. While on this appointment, Paul will continue his research and help his hosts set up a laboratory for magnetic measurements and Mössbauer and micromagnetism studies. This is an ideal assignment for Paul, who has passed the mandatory retirement age here, but is still full of energy and interest in continuing his research efforts. ●

Bob Bohl, who for a number of years has held a 33% appointment in the Nuclear Engineering Program, has been designated as associate chairman in nuclear engineering, and increased his fraction of time to 50%. Nuclear engineering began as an interdisciplinary program 20 years ago

and was administered by a committee. It has grown considerably over the years, and three years ago began an undergraduate program. While still officially a "program," it is larger than a number of departments in the College, and has recently initiated action to be designated as a department to recognize its maturity and operation in all respects similar to the other units of the College of Engineering. ●

Charlie Wert has been named as one of the two ASM representatives to the Engineers' Council for Professional Development. ECPD's principal activity is inspecting and accrediting engineering curricula, and establishing guidelines on which this accreditation is based. ●

Carl Altstetter was named a Distinguished Alumnus of the University of Cincinnati, where Carl did his undergraduate work. The award was presented at a convocation in Cincinnati last April. The distinction of this award is reflected in the fact that there are only about forty Distinguished Alumni in the entire College of Engineering. ●

ALUMNI NOTES

Richard R. Berry, '54, has been named a corporate vice-president of Olin Corporation. Since 1970, he has been vice-president of manufacturing of the Olin Brass Group, directing operations at plants in East Alton and in New Haven and Waterbury, Connecticut, and has been with Olin since his graduation except for a two-year stint in the Army. Dick's son, also a Richard, may follow in his father's footsteps, as he is now a sophomore in metallurgy at UIUC.

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Charles Childers, '55, is now vice-president and general manager of IMC, Canada, Ltd., in Esterhazy, Saskatchewan. IMC is the largest independent producer of potash in the world. Chuck previously spent 10 years with the Duval Corporation in New Mexico, and 15 years with IMC's properties also in New Mexico. His home address is Box 1424, Esterhazy, Sask., Canada, SOA OXO.

Earl Carlson, '56, is director of research for Amsted Industries. Amsted's laboratories are located in Bensenville, Illinois. Earl has been recruiting on the campus, and recently hired Jim Laverick, who completed his M.S. in metallurgy last semester.

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Don Boone, '57, Ph.D. '62, is on an 18-month leave from his position as technology manager for Airco Temescal in Berkeley, and is at the Naval Post-graduate School at Monterey, California. Don is teaching classes and supervising graduate student theses, while still keeping in touch with what's happening back home at Airco.

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Don Woodward, '57, is now in Chicago at Kaiser's plant in Dolton. Don was formerly in California, and spent a year in 1976 at Woodbury, Long Island, to set up an extrusion plant for Kaiser before coming to Chicago in January 1977. Don is looking for

metallurgists to help run the five million pound per month facility at Dolton.

★

Jim Hanafee, '58, had an exciting experience last year when he was appointed a member of the "Operation Morninglight" team sent to Canada to find and investigate the remains of the Soviet satellite that fell over northern Canada. Thousands of square miles were searched in order to find several pieces of debris that survived the fall from space, and were studied in an effort to learn details about the nuclear reactor that powered the instrumentation on board the craft. Recently, Jim visited us and presented a seminar describing his participation in the operation.

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We were late in learning that Marshall Meyer, '59, Ph.D. '65, died in March 1977 following a 2½-year battle with intestinal cancer. Marshall was working on a project concerning holographic interferometry at Liver-

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more Laboratory when his failing health forced him to discontinue his work. Marshall was a brilliant student and scientist, and his death was a severe personal and professional loss.

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Don Neruda, '59, is chairman of ASTM Committee B-7 on light metals and alloys. Don is a senior engineer in the Materials Engineering Department of Western Electric's Hawthorne Works in Chicago. Don completed an M.S. in industrial engineering from Texas Tech in 1974, and is an expert on materials specifications and practices, and the Bell System's representative on the Metals Sector Committee of the American National Metric Council.

*

Paul R. Stewart, M.S. '60, is president of Phoenix Resources Company of Denver, an organization that grew out of the remains of King Resources Company which went into bankruptcy in 1971. Paul joined Phoenix in 1975 as head of operations, and his vigorous oil and gas drilling programs resulted in greatly increased revenues. Early last year, KRC's assets were transferred to Phoenix, and Paul was named president. The company is now so successful that it is the target of a takeover; a move that is being strongly resisted by the management.

*

Ken Boris, '63, has been promoted to Anaconda's Corporate Staff as corporate technology and energy conservation coordinator. Last June, Anaconda moved its corporate offices from New York City to the new Anaconda Tower in Denver, and the Boris family (Sandy and three children) to 7583 South Salida Court, Aurora, CO 80202.

*

Todd Herd, '63, has been promoted to superintendent of the melt shop at Republic's Chicago District. Todd has been with Republic since 1963.

*

Gerald Jeskey, '63, has been promoted to research metallurgist, class A, with Timken in Canton, Ohio. Jerry has been with Timken since his graduation, and is active in ASM chapter activities, currently serving as treasurer of the Canton-Massillon chapter.

Ray Anderson, '61, has been named manager of research for Metaltech Division of Martin Engineering Company. Previously, Ray was senior engineer, special projects for Crucible. Ray is now living in McMurray, Pennsylvania.

*

George Roman, '61, was named publisher last year of the mining unit publications for Miller Freeman Publications in San Francisco. George has been with Miller Freeman since 1969, and most recently was editor of *World Coal*. Since graduation and subsequent military service in the Army, George was an engineer with Truax-Traer Coal Company, associate engineer for Paul Weir Company, and assistant editor for *Coal Age*. He now lives at 329 Kinross Drive, Walnut Creek, CA 94598.

*

Ron Malatesta, '65, writes that he is now a welding and materials engineer with Kenworth Truck Company in Seattle. He is responsible for evaluating welding methods and practices at all five Kenworth plants in the U.S. and Canada. Ron had previously spent 10 years working for the federal government at Mare Island Shipyard and the EPA in both Chicago and Seattle. He wants classmate Les Kramer especially to know that he recently earned his Professional Engineers License. In addition to his company responsibilities and helping wife, Patricia, raise their two children, Ron is also active in ASM, AWS, SAE, and SME.

*

Howard Aaron, Ph.D. '67, formerly head of central materials testing lab for D.A.B. Industries, Inc., has been appointed as vice-president of engineering and research, and is responsible for product development, engineering, corporate materials and testing, quality assurance, and research and evaluation programs.

*

Larry Happ, '68, has been for the last four years welding and materials engineer for the Paul Mueller Co. in Springfield, Missouri. He is involved with everything from customer inquiries on materials selection and design to in-house fabrication processing and field failure analysis. Larry is now a licensed professional engineer, and enjoying the good life in the Ozarks with his wife and four children.

Grant Rowe, M.S. '68, Ph.D. '75, is now manager of the Properties Branch at GE's Research and Development Center. Grant supervises 10 engineers and scientists working in the areas of soft and permanent magnetic materials, amorphous metals, grain boundary segregation, liquid droplet thermomigration, and novel metal processing methods. Grant has been at GE's Schenectady labs since 1976 after spending a year with Westinghouse-Hanford in Richland, Washington, following his graduation.

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Bijoy K. Das, Ph.D. '71, is a project leader in the Materials Science Division of the National Physical Laboratory in New Delhi, India. Bijoy supervises a group working on electron materials at NPL where he has been working for the past five years.

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Rick Capp, '73, is now chief metallurgist at Technical Materials, Inc., in Lincoln, Rhode Island, and the Capp family (two children) lives at 585 Walnut Hill, Woonsocket, R.I. Rick's brother, Mike, is now a junior in metallurgy at Urbana-Champaign after transferring from LeTourneau College in Longview, Texas.

*

Sudhansu Chakravorty, Ph.D. '75, wrote last summer that he had accepted a position as assistant professor in the engineering school at Pahlavi University in Shiraz, Iran. Chuck is initiating research and teaching courses in metals casting and powder metallurgy. We haven't heard from Chuck since the unsettled conditions in Iran, and anxiously hope he is well and for a return to normalcy in the near future.

*

John Kujawa, '75, is Technical Manager of Keokuk Steel Casting Division of Kast Metals Corporation, with duties covering casting engineering, gating and risering, heat treating, welding and technical control of steel-making processes. Johnny has been on the campus trying to recruit some of our graduates to his company.

*

Philip Roth, '76, has been promoted to product manager at Lindberg, manufacturer of electric industrial heating equipment, in Chicago. Phil has been with Lindberg about a year and a half, and is working on an MBA at DePaul. Phil and his wife, Gloria, live at 852 Sumac, Highland Park, Illinois.