

# NEWSLETTER

## Department of Metallurgy and Mining Engineering

University of Illinois at Urbana-Champaign

March, 1985

### FALL MEETING

The September Fall meeting of the AIME-ASM was especially notable for the department and its alumni. Foremost was the large gathering of over 80 alumni who had a great time visiting old friends and meeting new ones, getting current news from the campus, and honoring fellow alumni and faculty.

Named Fellows of ASM were Howard Aaron, PhD '67, (V-P, DAB Industries, Troy, MI), for integrating materials science into design, manufacturing, and quality control; Prof Carl Altstetter for teaching and research in gas thermodynamics, solutes in refractory alloys and environmental effects on stainless steel; E. Neville Pugh (former faculty member now at NBS) for his contributions to understanding of corrosion of metals; Don Sandstrom, '58, (Assoc Div Leader, Materials Science and Technology, Los Alamos) for work in fabrication and joining of aluminum, on deformation of uranium alloys, and ion beam welding; Ed van Reuth, PhD '64, (Pres, Technology Strategies, Burke, VA) for researches in superconductivity, rapid solidification, and ceramics for turbine engines; and Glen Wensch, '46, PhD '49, (G. W. Wensch Professional Corp) for pioneering fast reactor and nuclear materials technology.

Bob Luetje '59, was elected to a term as ASM Trustee, following his chairmanship of the Council for Professional Development. Bob Bohl received the A.E. White Distinguished Teacher Award on the basis of his assiduous adherence to the example of his mentor, Earl Eckel, former great teacher in the department who was similarly honored in 1973. Bob also received the College's Stanley Pierce Award for promoting student-faculty relations.

The U of I Loyalty Award was bestowed on Marion "Bud" Fox '57, Michael Monaco '55, and Jonathan Smith '47, for their outstanding efforts to promote the welfare of the department. The department's Distinguished Merit Award was conferred on Howard Aaron, Robert Anderson '50, and Joseph Waisman '40 for the distinction brought to the department by their accomplishments.

### M<sup>2</sup>A<sup>2</sup> ACTIVE

The M & M Alumni Association has had a busy year under the leadership of Glen Wensch. Four alumni were elected to begin three-year terms as Directors in 1984: Russell Duttweiler '60, GE Aircraft Engine Plant, Evendale, Ohio; Larry Hayes '59, McDonnell-Douglas Electronics, St. Charles, MO; Marty Kopchak '73, Caterpillar, Joliet; and John Koucky '57, Wagner Castings, Decatur.

The Board of Directors met three times in 1984, and made progress on a number of fronts. Departmental concerns were expressed in meeting with Acting Dean Van Valkenburg, especially about declining enrollments and we think this influenced the preferential admission policy for metallurgy applicants. The Board has spearheaded programs of support for the department from individuals and industry. Your response to their appeals has been terrific! About \$2000 was received as a memorial to Harold Walker's memory when his former students received a special notice at the time of his death. The number of gifts received last December alone, in response to the letter of appeal sent in November was 55 for over \$3000 (our latest data from the Foundation). Among the donors were members of the Dean's Club (\$500) and our first (to our knowledge) member of the President's Council (\$10,000 pledged over 10 years)—Richard Berry '64.

### DIRECTORY

The 1984 edition of our Alumni Directory has been mailed, and thanks are due the office staff for their efforts, and especially to the many of you who responded to our "Lost Alumni" list and helped us update a great number of addresses. Such directories are almost impossible to maintain accurately; not only do you people keep moving around, but there are often errors made in our office, the Alumni Association (who maintain the mailing list) and the campus mailing center who do the actual mailing. All addresses are now stored on disc, and we should be able to do a better job in the future. Please help us by letting us know of your address changes.

### ALUMNUS LEAVES ESTATE TO U. OF I.

Ivan Racheff, a Balkan immigrant, who graduated from the University in 1917, set himself up as a metallurgical consultant and later as owner/operator of the Knoxville Iron Works, died in 1982 at the age of 90. He left some \$5.5 million to the University according to his will which has been delayed in the courts until recently. Use of the funds will be decided by a University committee, but Racheff's wishes were that they be used to support students and research in materials and in study of environmental impacts of technology.

Mr. Racheff was well-known to many of our faculty through visits with him and review of the 70-volumes of reports generated during his consulting days. He had an intensely interesting life, from doing odd-jobs to put himself through school, learning the steel industry in Gary, his later consulting business involving many innovative approaches and use of metallography, through his later ownership and operation of a steel melting and rolling facility in Tennessee.

He returned to the campus only once, late in life as host to a team of visiting Bulgarian scientists. We had set up some of his lab equipment from his former consulting days; tears came to his eyes when he saw his old familiar equipment and tools.

We hope that the department may receive substantial use of the funds, as he expressed were his wishes, but however the money is used, all of us who met him were enriched through his forceful personality, vitality, broad perspectives of life, and the example of his active and productive lifetime.

### MRL APPOINTMENTS

Howard Birnbaum has accepted a ¼-time administrative position with the Materials Research Lab as director of metals and ceramics programs, DOE. Hamish Fraser also devotes administrative time to the MRL as chairman of the operating committee for the Center for Microstructural Analysis.

# DEPARTMENT NOTES

## NEW STAFF

John Thornton joined us as Professor last Fall. John was vice-president R & D for Telic Corp, and before that was with Litton Systems. John brings great distinction to our department; he has been president of the Am Vacuum Soc, currently is on the Board of the Am Inst Physics, and holds 13 patents and is author of over 100 publications. John has two degrees from U of Wash, and his PhD in plasma physics from Northwestern. John has an active research and teaching program in electronic properties of materials underway. We are delighted and fortunate to have a person of John's calibre to help us develop in this vital area of materials science and engineering.

T. A. Parthasarthy joined us this Fall as an assistant professor. "TAP" did his undergraduate work at IIT (Madras) and his graduate work at Ohio State where his doctoral adviser was Paul Shewmon. His thesis concerned hydrogen attack on 2 1/4 Cr-1 Mo steels. TAP spent three years in industry in India as a development engineer in welding research. Currently he is establishing research programs in microstructure-mechanical property correlations, and the kinetics of phase transformations; his teaching interests lie in the area of dislocation theory. TAP is a very personable young man and a strong addition to our staff.

## NUMERO UNO

Some of you noticed the Gourman Report, ranking graduate and undergraduate programs in metallurgical engineering in the country, and published in last June's *Jnl of Metals*. The rankings were based on a complex system involving many criteria, and U of I-Urbana was rated first in both categories. Jim Burke, PhD '78 and now at Shell Oil research in Houston, was the first to call us after seeing these rankings to help share our pride in this recognition.

## ENROLLMENT

Undergraduate enrollment took a steep nosedive this year. We graduated a large group of seniors, but admitted a small number of freshmen and junior college transfers. As a result, we fell from 82 students to 58 last Fall, as most of the College's new freshmen seem intent on studying electronics and computers. We are increasing our efforts to attract students, and our "recruiting office"

is in touch with over 40 prospective students who have expressed interest in our program. A new preferential admission policy permits us to admit qualified students who could not meet the college's normal very high admission criteria.

Graduate enrollment continues at levels of over 100, which is about the capacity of our research programs to support. We are finding increasing numbers of top students from all over the country are applying to Illinois. The result is not only a larger, but a more capable class.

## DRUCKER RESIGNS

Daniel Drucker resigned as College Dean last June, and his duties have been assumed by Acting Dean Mac Van Valkenburg while the search for a new dean takes place. Mac has taken firm control of college affairs and set up a very effective administrative team. In particular, Tony Graziano has returned to Illinois from the U of Delaware (where he was assistant to the president) to be in charge of long-range planning. Tony was once our department business manager, before he was "stolen" by college and campus administrators who recognized his superb talents. We are delighted to have Tony with us again. Another member of the team is Jerry Fisk, also once our department business manager, with responsibilities in space utilization. Jim Stukel and Lynn Barry complete a very forceful and effective administrative team in the college office, and significant positive actions are already the result of their efforts.

## HEAD SEARCH

The search committee charged with recommending candidates for a new department head has been active after some months' delay occasioned by the resignation of Dean Dan Drucker. It seemed unreasonable to recruit department leadership with uncertainties in the College administration. Charlie Wert agreed to continue his duties until the new head is named, which we hope will be by summer.

## CAREER NIGHT

Last Spring, our student technical society (UIMS) held its Career Night, a popular activity which has become an annual tradition. The program features talks by recent graduates on how to prepare for the world after graduation. Last year's speakers

were Alan Stone, '78, president of Aston Metallurgical Services in Chicago; Zvi Flanders, '79, Packer Engineering in Naperville; Kevin Bruch, '82, from Caterpillar in Peoria; and Jeff Logas, '82, now a graduate student in the department. Each gave interesting presentations on their perspectives of how to survive and prosper in the profession.

## POLYMERS

The polymers group in the department has continued to flourish in both research and teaching, as well as in interaction with other engineering faculty interested in polymers. There is likely to be an amalgamation of the polymers effort in the college and centered in our department, with participating faculty having split appointments in their "home" departments. This centralization will give polymers a greater profile and help their growth and recognition.

## SENIORS HONORED

This year a unprecedented four U of I students were recognized as ASM Scholars in national competition, and were awarded placques and checks. Honored were seniors Larry Rakers, John Givens, Marilyn Johnson, and Jane Nealis. Local awards made by the ASM Sangamon Valley Chapter to outstanding seniors were received last Spring by Brian Booth and Thomas Little.

## SABBATICALS

If the halls of MMB have been a little quieter lately, it is because three of our faculty have taken semester sabbaticals this year. Carl Altstetter has gone to South Africa, Haydn Chen to Taiwan, and Gert Ehrlich to Harvard. While the rest of us work a little harder to fill the void left by their absence, we look forward to their return—refreshed and revitalized to help move the department forward.

## OFF-CAMPUS DEGREES

Five students from Sunstrand completed the requirements for our MS degree, and were put on the January list. The challenges of off-campus study are great for students as well as staff, and we congratulate these five hard-working students: Dallas Augustine, Owen Briles, Frank Carriglitto, Bill Connors, and Walter Humy.

# ALUMNI NOTES

Charles Dodson, '42, is Vice-President and Gen. Manager, Capital Wire & Fence Co, Inc, 3334 Kenilworth Ave, Hyattsville, MD 20781. Charles has the same home address which was incorrectly printed in the directory: it should be P.O. Box 1076, Warrenton, VA 22186.

Harry Czyewski, '41, MS '50, sends us the following information on alumni: Larry Nelson, PhD '76, formerly at INCO's Sterling Forest Lab, is now with EPRI, P.O. Box 10412, Palo Alto, CA 94303. Walter Kilimnik '40 is still with American Alloy Metals, but now at P.O. Box 1467, Vancouver, WA 98668, and living at 6604 NW Dogwood Dr., Vancouver, WA 98663. Burton Person, '47, is Chairman, Pawnee Plastics Inc., P.O. Box 12890, Wichita, KN 67277. Gehardus Koch, PhD '76, is working at Battelle's Columbus Laboratories, and living at 2160 Shoreham Rd, Columbus, OH 43220. Bo-Ching Cheng, PhD '76, is living at 224 Prairie Dog St, Fremont, CA 94538, and working at GE Research in San Jose. Our information on Harry himself needs correcting. We should have known better than to have reported him "retired". He'll never retire, and he is now operating as an independent consultant. His home address should be: 1966 NW Ramsey Crest, Portland, OR 97229, and his business address is Oregon Technical Services Center, Inc., 2245 Canyon Rd, Portland, OR 97201.

Richard Van Pelt, '43, has retired as Director of Metallurgy Research at Caterpillar, following a life-long and productive career at Cat. Following a gala retirement party in January, the Van Pelts did the sensible thing and headed Southwest for an extended getaway from the Illinois winter weather.

Bill Apblett, '48, has been elected Executive Vice-President of Foster Wheeler Development Corp. Bill joined Foster Wheeler in 1954, and has held various positions in the company, with most of them involving R & D in welding technology.

Warren Davis, '50, presented an excellent review of modern technology in the forging industry to the local ASM chapter in February. It was great to see Warren for the first time in the 35 years since he graduated; between us we could recount contacts with most of the members of that class. Warren is now manager of metallurgical engineering at Laidish.

Ed Gale, '50, is now with Lindberg Heat Treating Company in Worcester, MA. Daughter Elizabeth, who was "nearly" in metallurgy when she was a student here and spent much time in our halls, is now in charge of QC of naval reactors for Babcock & Wilcox in Akron.

Jim Skarda, '51, has been promoted to Director of Marketing at Rolled Alloys, and has moved from Ohio to Temperance, Michigan.

Keith Hugel, '52, has been named to the newly-created position of Director of Marketing for the Handy & Harmon Heat Transfer Group. He will be responsible for the marketing operation of Daniel Radiator, Jackson Industries, US Auto Radiator, and O&M Manufacturing. Keith joined Daniel in 1981 as corporate manager of manufacturing after 10 years as district sales manager with Anaconda-American Brass in Houston.

Richard L. Sloan, '54, is vice-president of Tenneco's Tennessee Gas Transmission Co. He has been with Tenneco since 1965, starting as a petroleum engineer in Oklahoma City.

Joe Darby, PhD '58, has returned to Washington, DC from Argonne National Lab for a two-year assignment with a program evaluating high-risk, high-payoff research programs.

Don Neruda, '59, was named an ASTM Fellow last year, and also received the Society's 1984 Award of Merit. Don is senior staff engineer at AT&T Technologies (formerly Western Electric).

Lowell Hoffman, '63, is now Vice President and Director of Marketing for Kraft, Inc, with his office in Glenview, IL. Lowell was formerly V-P, Materials for National Can. We congratulate Lowell on this new position, and are especially pleased that his proximity will allow him to continue his contributions as a Director of the M&M Alumni Association and a loyal friend of the Department.

Larry Adler, 'PhD '64, was elected a distinguished member of AIME, and is now Professor of Mining Engineering at W. Virginia University.

Chuck Anderson, '64, presented a talk on Robotics at a recent local ASM chapter meeting. At Caterpil-

lar, Chuck is in charge of development and utilization of robotics in welding applications.

Bob Setlak, '64, visited us in connection with the annual Illinois Academy of Science Fair held on the campus each Spring. Bob has been involved with this important program for young prospective scientists and engineers for a number of years as an activity of the Chicago-Western ASM chapter. Bob also helped us locate several "lost alumni" with whom he has maintained contact.

Art Ytterhus, PhD '64, has brought us up-to-date on his activities and those of some of his classmates. Art is now with AVCO in Wilmington, MA, serving mainly as an adviser ("guru") to non-metallurgical types on problems involving metals, corrosion and related topics.

Gary Rauch, MS '65, has completed a term as chairman of the Pittsburgh ASM chapter and is a senior research scientist in the magnetism dept at Westinghouse's R&D Center. They are doing interesting things with magnetic properties of a variety of materials, including scribing grain-oriented steels with a continuous wave laser which earned Gary a Westinghouse Achievement Award.

Ron Gibala, PhD '65, has left Case-Western to become head of the metallurgical engineering dept at the U of Michigan in Ann Arbor.

Charles White, '65, has been promoted to full professor rank at General Motors Institute in Flint. GMI is no longer affiliated with General Motors, and is an independent institution, which involves a new way of life for the school's faculty and administration.

Greg Paskiet, '66 MS '68, has joined Atlanta Steel Co in Atlanta, GA as a customer service metallurgist. Atlanta is a producer of wire and rod products. Greg's new address is 843 Lake Hollow Blvd, Marietta, GA 30064.

Glen Schmid, '66, is now senior staff welding engineer at Armco's Research and Technology Welding research laboratory.

Mike Valentine, '70 MS '72, has moved from his position with the Naval Air System Command in

Washington to the Dept of Energy in Las Vegas, NV, where he is serving as a materials engineer in the DoE's Nuclear Waste Disposal Program.

Bidyut (Ben) Ganguly, PhD'71, visited us last Fall. He is with EFP Corp in Elkhart, Indiana; they make polystyrene foam for foundries.

Reinhard Dirscherl, MS'71, was in Detroit last Fall for the Metals Congress. Reinhard received his PhD at the Max Planck Institut fur Extraterrestische Physik in Munich, and now is with Messerschmitt-Boelkow-Blohm, dept Lasertechnik as an R&D scientist.

Mike Muntner, '71, was nearby on business and dropped by for a nostalgic visit and to let us know (contrary to his tradition) he's no longer changing jobs, but still with AVCO in Stratford, CT, making exotic castings, and has a new address: 17 Maltby Ave, West Haven, CT 06516. Mike recently finished his Masters degree at UConn.

Chuck Rosenberg, '71 MS'72, is now a technical law clerk at the US Court of Appeals in Washington, DC. This court hears cases dealing with patent law. This is a coveted one-year appointment; at its conclusion Chuck plans to continue his career in the area of patent law in either Washington or Los Angeles.

Tim Rozycki, '71, was promoted to division metallurgist at Interlake's Steel Division; Tim was formerly in product development. Tim has earned an MS from Illinois Tech, and is active in ASQC, serving now as the local chapter's treasurer.

Tom Odom, '75 MS'76, has moved from Exxon in Baytown, TX to Texas Gas Transmission in Owensboro, KY, where he will see that the pipeline keeps piping, and look for decent soil and enough space to resume his gardening and beekeeping on a proper scale. This move puts Tom back in the part of the country where he began just after graduation in Paducah.

Tom Bond, '77 MS'78, has moved to Caterpillar's Joliet plant, and began taking night courses in the U of Chicago's MBA program. What with working on the new home in Shorewood, smashing up the car, adding son Alan to the family last October, and getting involved in community activities, the Bonds are keeping out of serious trouble.

Prabir Bhowal, PhD'77, joined Cameron Iron Works in Houston,

TX in 1982 as senior product metallurgist. He has plenty of challenges in his work that involves jet engine components, physical metallurgy processing, materials for sour gas fields, and responsibility for fatigue and fracture labs. The Bhowals are well settled now in Houston: wife Lujata has a job as a teacher, son Samit is almost 4, and they recently brought both of their mothers from India to live with them.

Stan Czuba, '79, is now at Elgiloy, in Elgin, Illinois. Stan has held positions since his graduation at Lindberg and Kropp Forge.

Zvi Flanders, '79, has assumed new duties at Packer Engineering in Naperville, IL; he is now manager of metallurgical services.

Pat Murzyn, '79 MS'81, has transferred from Texas to New York, with new responsibilities for Linde: finding new and better ways for industry to use Linde gases. Pat was at Metals Park last November taking an ASM short course in brazing, and surprised Bob Bohl by sneaking into an evening work session Bob was conducting for a different ASM class. While Pat still had him off-balance, he took two of three racketball games. Pat is looking for a place to live in the area and now gets his mail at P.O. Box 433, Elmsford, NY 10523.

Nestor Zaluzec, PhD'79, was selected by *Science Digest* as one of the one hundred brightest scientists under age 40 in the country. Congratulations on this well-deserved recognition! Nestor is in the Materials Science Division at Argonne.

Doug Stewart, '80, is now working for Ladish in Cudahy, WI; his new address is 3831 E. Dannorman, Cudahy, WI.

Ken Cadien, PhD'81, has continued his award-winning tradition by receiving an annual \$30,000 faculty development award from IBM to support his efforts in studying optical properties of insulator and semiconductors and other exotic electronic materials. Ken is now an assistant professor at RPI, and was formerly with Eastman Kodak and Duke University before joining Rensselaer.

Rick Jereb, '82, is now a process engineer for IBM in Owego, NY. Rick's new home address is Jane Lacey Dr, 33AA, Endicott, NY 13760.

Mark Walter, '83, has taken a position with TC Industries, a commer-

cial heat treating firm, in Crystal Lake. Mark was married last May, and has kept busy between enjoying his work and married life, and moving into a home he and his wife have newly built.

D.Y. "Young" Jung, PhD'84, who has been a staff engineer with IBM in Endicott, NY since 1982 has been promoted to project engineer and is busy adjusting to his new managerial responsibility dealing with metals and ceramics in electronics packaging.

John Lancaster, '84, is with GM's Central Foundry Division in Saginaw, MI, and has begun an MBA program at Saginaw Valley State College. He recently was in town on business with CFD's plant in Danville. We are now working on his young brother, Joel, to become a U of I metallurgist.

Ann Zimmerman, '84, is enjoying the challenge of her work at TRW, where her boss is Roy Batista '56. Ann has received a TRW Fellowship for work on her MS at UCLA, and is considering continuing her graduate studies full time.

Karen Ducky Sherwood, '84, took a position with Intel in Aloha, OR, and is succumbing to the charms of the Pacific Northwest. Ducky has survived a staff cut at Intel, as that industry is seeing tougher days. She loves her work, and has written a long letter of advice to interviewing seniors; many senior classes to come will find her sharp observations and comments extremely useful.

## DECEASED

Brian Burt, Min'22 passed away in 1975.

Reidar Ericksen, Met'41.  
Larry Huebner, Met'51. Larry suffered a fatal heart attack while on vacation in Hawaii last June. Daughter Mary Joe is a graduate student in the department now; daughter Laurie graduated last May.

Cecil Smith, Min'13, died at the age of 94 after a 47-year career with Montana-Dakota Utilities.

Harold L. Walker died last February after prolonged illness at the age of 78. He was head of the department from 1942 until 1954; alumni from those years learned of his passing by special letter. Known as "Johnny" to most, he was a foremost educator and an expert in the brass industry.