NEWS-LETTER

UNIVERSITY OF ILLINOIS

Department of Mining, Metallurgy and Petroleum Engineering

JANUARY, 1966

Display Materials Needed for Halls

The final stages of our move to the present Metallurgy and Mining Building are now being accomplished. Most recently, the painting of corridors has been completed, and now we have well-lit, attractive, spacious halls. We are particularly interested in utilizing these halls as display areas, not only to make the building more attractive, but also to promote interest in the field of metallurgy. Many students, especially freshmen, pass through our building on their way across the campus, and good displays would surely be an effective recruiting device for more students.

This shortage of students is a serious problem, as any of you know if you've been involved in any recruiting attempts. Our undergraduate enrollment has continued to drop, as it has elsewhere across the country. We had 88 students in 1962, and this has dropped to 78, 67, and 59 in successive years since.

Our best source of students is believed to be among those beginning engineering students who are not firmly committed to any specific field, and might consider careers in metallurgy if their interest could be stimulated. Certainly exposure to the field by means of attractive displays and models is one excellent technique.

With this in mind, we particularly ask that each of you consider possible materials which your company might offer us on a loan or permanent basis that might satisfy this purpose. I am sure many companies have such material which would not only promote company of industry interests directly, but also help the common problem of p r o v i d i n g more metallurgists. Please give this matter serious thought, and contact Prof. Read if you have any suggestions or contributions.

NEWS ABOUT THE FACULTY

The end of an era came about with the retirement of Harold "Abe" Kruse last August. Abe goes back a long way, to the days when the machine shop was a small room with a lathe off the Mining Lab, and he was the entire staff. Abe was always more than a machinist; he was a friend and teacher to the students who brought their work to him. We all miss Abe, his cigars, and his freely offered philosophies. We take consolation in the fact that he and his wife are remaining in the community so that we are able to see them from time to time.

Prof. Paul Beck was named by AIME as a Fellow of the Metallurgical Society. This is a high honor, as the maximum number of Fellows is limited at 100, and no more than five are appointed in any year. Paul's recognition was based on his particularly outstanding work in substructure, recovery, recrystallization, grain growth, alloying behavior, and electronic structure.

Prof. Robb Thomson is on leave this year to ARPA, where he is involved in the planning of materials engineering laboratories to complement the materials science laboratories which have been established in recent years. The Thomsons are living in Washington, D. C. while Robb is on this assignment.

Prof. David Lieberman gave the introductory lectures of a two week seminar held at Rensselaer this past summer on "Dislocations and Point Defects in Materials". Also on the program was Dr. R. Bullough from Harwell, who was Visiting Professor here this past year.

The text "Physics of Solids" by Profs. Wert and Thomson has enjoyed wide popularity in its two-year career, and rights have re-

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Dept. Saddened by Loss

Prof. Arthur C. Forsyth died at home Dec. 11, 1965. We know you join in our sorrow at this loss of our good friend and colleague. Art was 67, and was to have begun his retirement at the end of this year. He had been in the department for twenty-five years, so was a teacher to nearly all of our metallurgy alumni, who knew him as the sincere friend and dedicated teacher that he was.

Art came to the University from the Univ. of Minnesota where he obtained his Ph.D. Art is survived by his wife, Florence, and four children: John, who graduates from ths University this February in M.E.; Arthur, a student at SIU; and two married daughters, Nancy and Linda. Our deepest sympathy is extended to the family.

Erwin Kurt Weise died last January 3, at the age of 62. Prof. Weise came to this country from his native Germany in 1948, and soon after joined the staff of the E.E. Department. Later, he came to our department to continue his research in the field of electrical and magnetic properties of solids.

Because of his concentration in research, not many of our students knew him well, but it was their loss, as this was a man of great charm and culture and of indominable courage, above and beyond his professional stature. Erwin is survived by three daughters and his wife, Ursula, who is an editor for the Engineering Publications Office.

Resolutions calling for the discontinuence of undergraduate program in mining engineering have been adopted by the College and University Senates. The background on this action was given in last year's **Newsletter;** succinctly, it was a question of not enough students. There are five faculty members on the staff in mining, who will now be able to devote their full energy to the development of a vigorous graduate program.

ALUMNI ADVICE ON CURRICULUM PLANNING ASKED

The department is currently involved in a critical review of our undergraduate curriculum in metallurgy. The motivation behind this study is two-fold: firstly, a continuous examination of the curriculum in such a dynamic field as ours is a necessity; secondly, there is the distinct possibility that the University may change from the semester to the quarter system, which would require a complete revision of all our courses.

It is felt that increased enrollments will pressure the University into some kind of year-round operation, and that the quarter system may well be chosen as the best method of accomplishing this goal. The fact that the Chicago Circle campus is already on the quarter system is seen by some as the handwriting on the wall. The final decision will be made by the Board of Trustees on the advice of the faculty and administration, but we want to be ready with a carefully thought-out plan in any event.

Since the alumni, as products of the curriculum, are in a unique position to judge its effectiveness, we are seeking your help in evaluating some contemplated changes. Will you take the time to complete the questions below in the light of your own experience, and return them to us? It will help us evaluate the responses if we know the type of work you are doing, so please provide that information as well. If you feel you can be more candid in your remarks if you don't sign your name, this is not at all necessary.

Naturally, the usefulness of this survey will be greatly enhanced by a large number of responses representing a wide variety of positions. Your cooperation in this effort to make our program as effective as possible is earnestly requested.

----------Detach and return to R. W. Bohl, 206 Metallurgy & Min Bldg----------

Year Received B.S._____ M.S._____ Ph.D._____

General description of duties:

1. Do you feel an introductory survey course in metallurgy is necessary or desirable?

2. Should any extractive metallurgy be required?

3. Is more physics of metals desirable (e.g., a course in atomic physics in addition to one in metal physics)?

4. Should "engineering metallurgy" be taught on the basis of phenomena (age hardening, martensite, recrystallization, etc.) rather than on the basis of materials (steel, brass, aluminum, etc.) as it has been in the past?

5. Is there too much lab work in metallography?

6. What areas do you feel have been omitted or under emphasized?

7. What courses have you found least useful?

8. Any other comments?

ALUMNI NOTES

Cecil W. Smith (1913), as president of Knife River Coal Mining Company and chairman of the board of Montana-Dakota Utilities Co. has called our attention to an interesting lignite strip mining operation his company is developing in North Dakota. The lignite is being produced for central station power generation.

P. N. Ferguson (1923) retired in 1964 after a 35-year career with St. Joseph Lead Co. Mr. and Mrs. Ferguson inaugurated his retirement with a trip to Europe and the Near East.

Don Buchanan (1927) has written to tell us that Bill Campbell (1947) died last winter in Pittsburgh, where he was vice president of National Mine Service Co.

We have also learned that Raymond Lager (1927) died of a heart attack in July, 1964. Mr. Lager had been with Surface Combustion and Owens-Illinois Glass Co.

Adler E. Spotte (1940) has taken a position as vice president of Clinchfield Coal Co., and now resides at 216 Wiseman Street, Bridgeport, West Virginia 26330.

Jack Hanson (1940), his wife and son commuted from California to Urbana in September to see his favorite football team in action. Jack's pilot's training while getting his degree in metallurgy awakened a love for flying that made his metallurgical career very short and led to his present position of captain for United Air Lines. Though this position alone puts him in the higher brackets of finance, he still has time to handle a thriving real estate business, and also time to take advantage of the unlimited travel pass privilege which is a fringe benefit of the flying business. If you are interested in real estate near Palos Verdes Estate, California, we recommend that you contact "Honest Jack" Hanson.

Ray Carlen (1942), who is executive vice president of Ryerson, has moved to 321 No. Adams in Hinsdale, Illinois.

Bill Rudin (1942) has informed us that his classmate Marcilo (Mike) Guimaraes died last March 21 of cancer after a short illness.

R. C. Matter (1943) completed his M.A. in business administration from Ball State after an arduous five-year stint of night courses. Bob is managing supervisor of process engineering, lead-acid Delco battery operations. His address is 1308 No. Nursery Rd., Anderson, Indiana.

Robert Ray (1944) reports a growing clientele for his consulting business in California, and he has also signed up to teach a course in metallurgy at the local Junior College. Bob's address is 1040 Park Lane, Oakland, Calif. 94610. He and Bob Bertossa (1949) were active in promoting legislation regulating state registration of metallurgical engineers. Bob also tells us that Keith Lampson (1949) has recently been named manager of Materials and Processes for Marquardt Aircraft in Van Nuys.

Jonathan Smith (1947) has been promoted to executive vice president of Sunbeam Equipment Corp., Meadville, Pa. The Smiths are now living at 1180 Lakemond Dr. in Meadville.

Burton Person (1948) is director of technical services in the consumer products division of Singer Co., with his office in New York City.

T. E. Perry (1949) has been promoted to assistant chief metallurgist for Republic Steel, and has moved to the Cleveland general offices. Tom enjoyed a trip last Spring to Europe to inspect new steelmaking technology. The visit was culminated by a seminar at the University of Birmingham on continuous casting.

We had lost track of Norm Block (1949) for some time, but are now able to report, courtesy of A. Lee Barrett (1930) that Norm is vice president and general manager of Western Precipitation Division of Joy Mfg. Co. in Los Angeles. Lee is Corporate Technical Consultant for Joy in Michigan City, Indiana.

P. H. Frederick (1950) is now Product Manager, Stainless Bar and Billet Sales, Allegheny-Ludlum Steel Corp. In this capacity, Phil is located in the Company's general office in Pittsburgh.

Don Dyke (1950) has taken a position as Process Development Engineer for Parker Pen Co., after 13½ years with General Electric. Don's address is now: 514 Apache Dr., Janesville, Wisconsin 53545.

Bruce Capek (1951) is now Asst. Corporate Controller for Union Tank Car Co., and responsible for long range planning and major investment spending. Bruce was with Standard Oil until 1962, and has obtained his MBA from Northwestern.

Roy Anderson (1952) has left Humble Oil to take a position as Operations Manager for Esso Exploration. Roy is now in New Orleans for a six-month training period, then will spend 18 months in New York before being given an overseas assignment.

Bill Bond (1953) is chief metallurgist for Bell Helicopter Co. in Ft. Worth, and has been doing some successful recruiting to bring some Illini metallurgists to his staff.

D. C. Simpson (1953) has been promoted to division engineer for Shell Pipe Line Corp., Compton, Calif. Before this assignment, Don spent two years with BIPM in The Hague.

Quite a nucleus of Illini has formed at NASA-Lewis Research Center in Cleveland. Mike Gedwill (1956), Sal Grisaffe (1957), and Bob Dreshfield (1954) are doing research in the Materials and Structures Division, while John Merutka (1949) is monitoring research contracts.

Jim Dvorak (1953) is co-author with Wm. Rostoker of a fine text "Interpretation of Metallographic Structures", published by Academic Press. The book emphasizes the importance of metallography as a basic tool of metallurgy and is beautifully illustrated with a great variety of microstructures that show many fundamental principles.

Gerry "Robby, Go Home" Robinson (1955), in a moment of nostal-

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MORE ALUMNI NEWS

gia on the tenth anniversary of his graduation, called from Cincinnati to reminisce about former days. Robby is in the real estate business, and has built over 600 apartments. He would very much like to hear from his old buddies.

Lyle Jacobs (1957) is in the metallurgical consulting business. He is manager of metallurgical services for Taussig Associates, Inc., 2100 W. 35th, Chicago.

Dan Weinstein (1957) has left Illinois Institute of Technology and is now with the Metallurgy Division, Vallecitos Atomic Lab., P. O. Box 846, Pleasanton, Calif. Dan's work on zirconium while at IIT lead to an interest in reactor materials, and now he will be able to concentrate in that field.

Ralph Getz (1957) has resigned his position at Battelle, where he had been employed since his graduation, and is now working at Owens-Corning Fiberglas Co., Granville, Ohio.

Don Beaman (1958 PhD 1964) has left the International Nickel Company, and is now with Dow Magnesium at Midland, Michigan. The Beamans live at 2413 E. Sugnet Rd., Midland.

Jim Hanafee (1958) is now in the last stages of his Ph D work at Case. Jim is studying the effect of high pressure on dislocation motion.

Darryl Albright (1959) completed his Ph. D. at Lehigh and is now with the engineering research group of International Harvester at Hinsdale, Ill. Prior to attending Lehigh, Darryl obtained his M.S. from Rensselaer while working at United Aircraft in Hartford, Conn. The Albright's address is 5440 Park Ave., Downers Grove, Ill. 60515.

George A. Morris (1959) visited the lab this Fall while on vacation. George has returned to civilian life and has taken a research position in nuclear materials at the Livermore laboratories (George took his M.S. in Nuclear Engineering here). The Morris family lives at 629 Mojave Ave., Livermore, Calif.

Carl Weise (1960) and Dick Van Pelt (1943) were here to describe Caterpillar's new Inertia Welding operation to our student technical society. Ed Sluetz (1947) has been called back to Peoria by Caterpillar to be in charge of the division formed to exploit this new fabrication technique.

Ken Janowski (1959) has been with Aerospace in Los Angeles since 1962, and is now completing requirements for his M.S. in Engineering from UCLA. He reports recently visiting with Bob Willard (1959), who is with Atomic International Div. of North American Aviation, and with Dick Weinberg (1959) who is in the army and stationed at San Pedro. Dick is doing graduate work at USC.

For the first time, our grads might have to begin worrying about competition from Purdue alumni, as Jim Cost (Ph D 1962) is now on their staff in metallurgy as Associate Professor. Jim resigned his position at Ford Scientific Lab. to return to the academic world.

Mike Garza (1961) in a visit to the department this fall told us that the Mexican steel foundry for which he works is sending him to the Univ. of Pennsylvania at Philadelphia for a degree in business administration.

Lowell Hoffman (1963) has completed his MBA program at Indiana, and has taken a position with Cummins Engine Company in Columbus, Indiana. Lowell will be working in the area of manufacturing operations. Lowell was married last Sept. 4 to the former Ruth Weber, a music school graduate of IU.

Mrs. Shammamy (nee Patty Bunn, M.S. 1963) has moved with her husband (Ph. D. TAM, 1965) to Detroit, where he is employed at the General Motors Research Lab. She has a daughter born last November.

Ron Bailey (1964) has finished his first year at Carnegie Tech on schedule toward his goal of a Ph. D., although he finds that Paul Shewmon's (1952) assignments tend to interfere with his newly developed social life.

Charles Anderson (1964) who had been with Duriron in Dayton, Ohio, is now with Caterpillar in Peoria in the quality control department.

Dick Forbes (1964) is a research metallurgist for United Nuclear in Pawling, New York. Dick is hoping to get his master's in nuclear engineering through evening courses from NYU. The Forbes' address is 170 Smadbeck Ave., Lake Carmel, N. Y.

Robert C. McAllister (M.S. 1964) is now with Titanium Metals Corp. at their Applications Development Center in New Jersey.

FACULTY NEWS (cont'd)

cently been arranged for its translation into Polish and Spanish. Next year, the authors expect to begin a revision and second edition.

Prof. Marvin Wayman presented a paper on ferrous martensites at the BISRI-ISI conference of Physical Metallurgy of Bainite and Martensite at Scarbarough, England last spring. Marv spent about three weeks visiting laboratories and Universities in England. He presented colloquium talks on phase transformations and AERE (Harwell), Cambridge, Birmingham, Leeds, Liverpool, and Sheffield.

Prof. Walter Bruckner last summer served as a consultant to the U.S. Naval Applied Science Laboratory on the corrosion of high strength marine alloys. He has begun a new program of corrosion control of anodic inhibitors and anode polarization for structural steels and oxidation studies with electric fields at high temperatures.

This past August, Prof. Carl Altstetter gave a series of lectures at the University of Denver as part of the annual "Energetics in Physical Metallurgy" seminar sponsored by the NSF. The lectures, entitled "Thermal and Athermal Deformation Processes" were presented as an intensive two-week graduate course on the state of present knowledge and theory of the fundamental processes of plastic deformation.

Prof. J. J. Gilman spent two weeks in Japan to attend the International Conference on Fracture at Sendai. Jack lectured at the Conference as well as at Tokyo and Kyoto Univ. and at the Fuji Iron & Steel Co Research Lab.