UNDERGRAD ENROLLMENTS DECLINE

The College and the Department are quite concerned over declining enrollment trends in engineering across the country as well as on the campus here. Out enrollment figures are difficult to interpret in view of the artificial restraints of a quota system for admissions, and the fact that in previous years, students who were denied admission to Liberal Arts could apply to engineering, and then transfer out as early as possible.

This year, the "back door" route has been closed by requiring students to remain in their original college for a full year, and to follow the program of that college. After that time, they will be eligible for transfer only if they were originally eligible to the other college, or have a B average. Few prospective social scientists are likely to achieve this in a year of math, chemistry, and physics.

Another alarming feature of the enrollment picture is the number of continuing students who fail to reappear. This year, over 400 fewer students than predicted failed to continue in the college. We are clearly challenged to make our program suited to the needs and interests of our students.

In the face of a 15% decrease in college undergraduate enrollment in the past three years, our metallurgy enrollment has remained steady at about 60. We have been aided tremendously in our efforts by the financial aids program supported by concerned industries. As always, your help in promoting metallurgy careers among young people within your sphere of contact is important.

DEPARTMENTAL STAFF CHANGES

John Morral left the department this year to take a position in the metallurgy department at the University of Connecticut, Storrs. John was a popular and very effective teacher, and students and faculty alike were sorry to see him leave. John had been here only two years, but in that time had impressed us all with his depth of understanding and his conscientious approach to teaching. We wish him success in his new position.

Bruce Bardes, who joined the college at the same time as John has also left the University. Bruce's appointment was in mechanical engineering, but his interest in metallurgy brought him in contact with our staff, and many of our students. Bruce has taken an industrial position as a metallurgist.

Bruce's position in mechanical engineering has been filled by Dr. Joseph Greene who recently received his Ph.D. from USC. His work there involved thin films, particularly in the analysis of sputtered films. He plans to continue his research in this general area of surfaces. Joe is teaching the heat treatment course given by mechanical engineering for their students, and it is planned that we might help staff that course so that Joe will have time to become more involved in the work of the metallurgy department.

SEMINAR SERIES GIVEN

The third series of seminars in materials technology was presented in the department this Fall. These lectures are designed to acquaint our students with the kinds of problems currently faced in industry, and how the fundamental principles studied in the classroom are applied to the solution of these real problems.

A number of our alumni participated in the series:

Jim Bechtold, Westinghouse: "Materials Research in the Power

PROGRAM IN FRACTURE CONTROL STARTED

A new interdisciplinary program in Fracture Control is getting under way this year, and involves the staff of our department, TAM, and Civil Engineering. It is a cooperative program with industries who are concerned with solutions to metal failure problems.

Prof. Bohl is serving on the steering committee, and Prof. Lawrence and Pugh are primary investigators. The program will be funded by the participating companies, and will involve the efforts of staff and graduate students from the several departments.

Effort will be directed toward better understanding of failure mechanisms rather than the answer to specific problems.

In the initial stages, the program will involve research on fracture control of commercial steels and cast irons used in the automotive, earthmoving, and agricultural implement fields.

Early emphasis will be centered in four areas: welded components of high strength, low alloy steels; fatigue and cumulative damage; cast metals; and corrosion and stress corrosion. Research programs will be planned by committees of industrial and college representatives.

Information will be exchanged by means of joint meetings with sponsors, state-of-art reports, progress reports, student thesis, as well as submission of final results to the professional journals.

Generation Industry."

Howard Friedman, Fotofab Co: "Photochemical Machining."

Stan Paprocki, Battelle-Columbus: "Management Trends."

Bill Heitmann, Inland Steel: "Development of a New Steel."

Dale Trott, Battelle-Columbus: "Explosive Welding."

Roland Carreker, General Electric: "The Metallurgist as a 'Generalist.'"
Charles Squary, '36, has served on the Governor's Committee of the Great Lakes Commission 10th Anniversary of the St. Lawrence Seaway, and was also awarded the "Silver Knight of Management" by the National Management Association. Chuck is Asst. to the Vice President, Steel Manufacturing, Inland Steel Co.

L. H. McCreevy, '37, after a year in Texas with the Kinetics Div. of LTV, has been transferred back to the Missiles and Space Div., where he is materials engineer in the Adv. Systems Group. His current address is: Missiles and Space Div-Michigan, LTV Aerospace Corp., P.O. Box 909, Warren, Mich. 48090.

Richard A. Wilde, '40, has a new address; He is Chief Metallurgist, Eaton Corp. Research Center, 26201 Northwestern Highway, Southfield, Mich. 48037.

Reidar Ericksen, '41, has accepted Met Thermodynamics 3
Elective 3

Sixth Semester
Phys. Met. II 3
Phys. Met. Lab. II 3
Mechanical Metallurgy 3
Electives 7

Seventh Semester
Electrical Engr. 3
Seminar 2
Electives 12

Eighth Semester
Electives 16

SUMMARY
Total hours required for graduation 128
Social Science and Humanities Electives 18
Free Electives 6
Technical Electives 24


Harry Czyzewski, '41, attended the Alumni Dinner in Detroit this Fall with his wife, Wilma, and won the award for coming the greatest distance. Harry's firm, Metallurgical Engineers, Inc. in Portland recently celebrated its 25th anniversary. The firm's logo, MEI, is now relevantly interpreted as Materials, Ecology, and Industrial products and processes, and reflects the wide scope of its efforts.

Our apologies go to Olaf Paasche, '42, for placing Oregon State Univ. in Eugene instead of Corvallis in our last Directory. Olaf is Professor of Metallurgical Engineering at OSU.

Gustavas Simpson, '43, is now living at 258 W. New England Ave., Worthington, Ohio 43085.

Jonathan Smith, '47, has been named Outstanding Citizen of his community of Meadville, Penn. Smitty is President of Sunbeam Equipment Corp.

George Eadic, '49, who was on the mining faculty for a number of years, and is now an administrator in the state Geological Survey in Urbana, is President-elect of the Chicago Section of AIME, and will take over the reins in January.

Bob Draznik, '53, is now working for Carpenter Technology Corp. in Melrose Park, and living at 5950 Four Lakes Ave., Apt. C, Lisle, Ill. 60532.

Art Lutts, MS '55, is now living in Liege: 178 Tildonksesteenweg, 3020 Herent, Belgium. Art gets visited occasionally by old friends on the tour, and now that you have his address, you may look Art up, also.

Chuck Robertson, '56, who is with Sun Oil and helps with Alumni Dinner arrangements when the societies meet in Philadelphia, had a rare spectacle view of Yellowstone Park last summer when he broke his ankle while hiking, and had to be brought out by helicopter.

Joe Enrietto, '56, has left Jones & Laughlin's Graham Research Lab, and is now with Westinghouse in the PWR Reactor Division, as manager of materials.

A. John Birkle, '57, whose R & D Department with Colorado Fuel & Iron was eliminated when the Crane Co. took over CF&I, is now Staff Engineer with Consumer Power Co. in Jackson, Michigan. John's responsibilities concern metallurgical problems, quality assurance, in-service inspection, and similar problems in the many new plants of the Consumer system.

Jim Hanafee, '58, has left Franklin Institute in Philadelphia, and is now waiting for his AEC clearance to begin work at the Lawrence Radiation Lab in Livermore, Calif. His home address now is 1161 Butte Ct., Livermore 94550.

Ray Anderson, '61, was among those present at the Alumni Dinner in Detroit this Fall, and was thoughtful enough to bring his wife. Ray is now in Detroit as District Representative for International Nickel. Ray's home address: 7365 Brookridge, Birmingham, Michigan 48010.

Joe Phebus, '62, is in practice as an attorney in Urbana. Joe attended law school here after completing his service duty, and graduated with high honors. He is very active in community service organizations and politics. He serves as alderman in the Urbana city council.

Denes Bardos, '62, who left Argonne Lab two years ago to become chief metallurgist for Fort Wayne Metals Research Corp., is now Research Director. The com-
pany has been absorbed by Essex Int., and Denes' assignment is the development of a division for new alloy products. It sounds like a responsibility that will require the same organizational skills needed on last summer's vacation when the Bardos' family of eight children toured Washington D. C. and the East.

Bob Wittman, '62, who was at Battelle-Columbus for a number of years, has moved to Denver and is now working at Denver Research Institute.

Mahmood Mirza, MS '62, is now on the staff at the Unv. of Kentucky, and engaged in mining research with Fred Wright. Fred, who left our staff to go to Kentucky in 1967, is directing a very large research program in mine roof control.

For the past two years, our graduates have participated in the Chicago Section AIME Young Engineers Night. Last year, Ken Ehrlich, '67, of Republic Steel, was a participant, and this year, Eugene Smith, '62, with National Gas Pipeline of America, made a presentation.

Congratulations to Kalinath Mukherjee, Ph D '63, for receiving the Distinguished Teaching Award at the Polytechnic Institute of Brooklyn. The Award is based on student and faculty evaluation of contributions to the Institute and the profession. His citation pays tribute to his enthusiasm, skill, integrity, example, professional statute, and commitment to quality education. Kali was at SUNY-Stoney Brook until coming to PIB in 1967. He is now living at 272 Taylor St, Huntington Beach, Long Island.

Ken Boris, '63, has been moved from the Kenosha plant of American Brass to the Research and Technical Center in Waterbury, Conn. Ken's new home address is 49 Stonehenge Pl, Watertown 06795.

Lowell Hoffman, '63, after two years as Production Manager for Lapeer Fabricators in Michigan, moved to Wheaton and he is now Manager of Materials Systems and Production Materials for National Can. The Hoffmans have a two-year-old son, and are living at 2S-316 Burning Tr, Wheaton, Ill. 60187. Lowell has been active in Jaycees, and was named Michigan's "Outstanding Sparkplug" of 1971.

Jim Watters, '66, is now a graduate student in Business Administration at Harvard, and is living at 15 Peabody Terrace, Apt. 22, Cambridge, Mass. 02138. Jim was previously with Bethlehem Steel.

Clint Heiple, Ph D '67, had an incorrect address reported in the last Alumni Directory. His correct address is: 1784 Table Mesa Dr., Boulder, Colorado 80303.

Martin Essien, '68, after a year and a half in the Utah Copper Division of Kennecott, worked in the process metallurgy field in Sierra Leone to complete his external residency requirements. He is now back in this country as a permanent resident, and looking for a position, Martin can be reached at 2420 Illinois Ave., East St. Louis, Ill. 62205.

Tony Flores, '68, who is with Timken, has applied to the Univ. of Cincinnati MBA program, and will work on his advanced degree in evening courses.

Larry Happ, '68, married Susan Beste of Wausau, Wis. last Spring. Larry is a welding engineer with the Trane Co., and the couple is living at 1221½ Denton in LaCross. Larry is serving on the executive committee of the local AWS Section.

Wally Schnell, '68, has recently finished the MBA program at Indiana with a fine academic record and is now with Arthur Anderson & Co. in Chicago. In addition to supporting the Hoosier bars, Wally met Mary Lauber and they were married last June. Wally visited the lab during the football season looking for news of his old classmates.

Sam D'Agostino, '70, is working at the Naval Ammunition Depot in Crane, Indiana, where he is exposed to a wide variety of research, development, and failure analysis problems. He is taking on a master's program in solid state physics at the Depot through Indiana U. Sam's home address is P.O. Box 194, Oolitic, Ind. 47451. and he says the scenery, camping, and fishing is great.

Sam Miller, '70, visited us earlier this year on a weekend away from his job at Allan Bradley in Milwaukee, where he was setting up and supervising a thin film production facility.

B. Keith Moore, Ph D '71, is doing research and teaching materials engineering to the dental students at Northwestern Medical School in Chicago, where he is a staff member.

Gilles Garrigues, MS '71, returned to France after completing his degree, and is now serving his military obligation in the French Army. His assignment is at the Ecole Nationale Superieure des Mines, 60, Bd Saint-Michel, Paris 6. He is doing x-ray diffraction research at the school.

STAFF MEMBERS ARE NAMED FELLOWS

Professors Beck, Birnbaum, and Wert have all been honored this past year by election as Fellows of the American Physical Society. The honor of this distinction is somewhat tempered by the fact that it is accompanied by an augmentation of the annual dues by ten dollars. Paul Beck received another honor when he was invited to present the 1971 IMD Annual Lecture at the Atlanta meeting of the Society. Paul's lecture was entitled: "Some Recent Results on Magnetism in Alloys."
ALUMNI NEWS

pany has been absorbed by Essex Int., and Denes assignment is the development of a division for new alloy products. It sounds like a responsibility that will require the same organizational skills needed on last summer's vacation when the Bardos' family of eight children toured Washington D. C. and the East.

Bob Wittman, '62, who was at Battelle-Columbus for a number of years, has moved to Denver and is now working at Denver Research Institute.

Mahmood Mirza, MS '62, is now on the staff at the Univ. of Kentucky, and engaged in mining research with Fred Wright. Fred, who left our staff to go to Kentucky in 1967, is directing a very large research program in mine roof control.

For the past two years, our graduates have participated in the Chicago Section AIME Young Engineers Night. Last year, Ken Ehrlich, '67, of Republic Steel, was a participant, and this year, Eugene Smith, '62, with National Gas Pipeline of America, made a presentation.

Congratulations to Kalinath Mukherjee, Ph D '63, for receiving the Distinguished Teaching Award at the Polytechnic Institute of Brooklyn. The Award is based on student and faculty evaluation of contributions to the Institute and the profession. His citation pays tribute to his enthusiasm, skill, integrity, example, professional statute, and commitment to quality education. Kali was at SUNY-Stoney Brook until coming to PIB in 1967. He is now living at 272 Taylor St., Huntington Beach, Long Island.

Ken Boris, '63, has been moved from the Kenosha plant of American Brass to the Research and Technical Center in Waterbury, Conn. Ken's new home address is 49 Stonehenge Pl, Watertown 06795.

Lowell Hoffman, '63, after two years as Production Manager for Lapeer Fabricators in Michigan, moved to Wheaton and he is now Manager of Materials Systems and Production Materials for National Can. The Hoffmans have a two-year-old son, and are living at 28-316 Burning Tr, Wheaton, Ill. 60187. Lowell has been active in Jaycuses, and was named Michigan's "Outstanding Sparkplug" of 1971.

Jim Watters, '66, is now a graduate student in Business Administration at Harvard, and is living at 15 Peabody Terrace, Apt. 22, Cambridge, Mass. 02138. Jim was previously with Bethlehem Steel.

Clint Heiple, Ph D '67, had an incorrect address reported in the last Alumni Directory. His correct address is: 1784 Table Mesa Dr., Boulder, Colorado 80303.

Martin Essien, '68, after a year and a half in the Utah Copper Division of Kennecott, worked in the process metallurgy field in Sierre Leon to complete his external residency requirements. He is now back in this country as a permanent resident, and looking for a position, Martin can be reached at 2420 Illinois Ave., East St. Louis, Ill. 62205.

Tony Flores, '68, who is with Timken, has applied to the Univ. of Cincinnati MBA program, and will work on his advanced degree in evening courses.

Larry Happ, '68, married Susan Beste of Wausau, Wis. last Spring. Larry is a welding engineer with the Trane Co., and the couple is living at 1221½ Denton in LaCross. Larry is serving on the executive committee of the local AWS Section.

Wally Schnell, '68, has recently finished the MBA program at Indiana with a fine academic record and is now with Arthur Anderson & Co. in Chicago. In addition to supporting the Hoosier bars, Wally met Mary Lauber and they were married last June. Wally visited the lab during the football season looking for news of his old classmates.

Sam D'Agostino, '70, is working at the Naval Ammunition Depot in Crane, Indiana, where he is exposed to a wide variety of research, development, and failure analysis problems. He is taking on a master's program in solid state physics at the Depot through Indiana U. Sam's home address is P.O. Box 194, Oolitic, Ind. 47451. and he says the scenery, camping, and fishing is great.

Sam Miller, '70, visited us earlier this year on a weekend away from his job at Allan Bradley in Milwaukee, where he was setting up and supervising a thin film production facility.

B. Keith Moore, Ph D '71, is doing research and teaching materials engineering to the dental students at Northwestern Medical School in Chicago, where he is a staff member.

Gilles Garrigues, MS '71, returned to France after completing his degree, and is now serving his military obligation in the French Army. His assignment is at the Ecole Nationale Superieure des Mines, 60, Bd Saint-Michel, Paris 6. He is doing x-ray diffraction research at the school.

STAFF MEMBERS ARE NAMED FELLOWS

Professors Beck, Birnbaum, and Wert have all been honored this past year by election as Fellows of the American Physical Society. The luster of this distinction is somewhat tempered by the fact that it is accomplished by an augmentation of the annual dues by ten dollars.

Paul Beck received another honor when he was invited to present the 1971 IMD Annual Lecture at the Atlanta meeting of the Society. Paul's lecture was entitled: "Some Recent Results on Magnetism in Alloys."