

# NEWSLETTER

## Department of Metallurgy and Mining Engineering

University of Illinois at Urbana-Champaign

March 1987

### COLLEGE FINALLY APPROVES CERAMICS-METALLURGY MERGER

Last year's *Newsletter* comments regarding the consolidation of the metallurgy and ceramics departments turned out to be premature. Difficulties related to the organization of the new unit, the status of divisions within the new department, and objections on various grounds from turf-guarders in other parts of the college who work with materials conspired with the inherent inertia of the University bureaucracy to delay the process. We can now say, however, that on March 3 the College faculty approved the formation of a new Department of Materials Science and Engineering

which combines our department with ceramic engineering. The strengths that the two departments bring to the new program should result in the finest materials program in the country. The departments have about the same size faculty (about 20 each), metallurgy has the larger graduate and research programs while ceramics has about twice the undergraduate enrollment as metallurgy. Both departments have grown in size and resources in recent years, and have strong support from research sponsors as well as from loyal and dedicated alumni.

### ALUMNI HONORED AT ANNUAL MEETING

The annual alumni meeting was held this year in Orlando in conjunction with the ASM-AIME annual meetings, and again was a highly successful event with 75 alumni, faculty, and guests attending. The beer and wine, subsidized by the department alumni fund, helped the flow of conversation and reminiscences. During the meeting, Alumni Loyalty Awards were presented to Larry Hayes '59, Marty Lopchak '73, and John Koucky '57. All are members of our alumni constituency Board of Directors and active in their support of the department. In addition, the Department's Distinguished Merit Award was presented to Robert L. Ray '44, a Fellow and former Trustee of ASM and now a consultant in Oakland, California; and Paul G. Shewmon '52, an internationally known authority on thermodynamics and transformations in solids and now a professor at Ohio State. Next year's meeting will be in September in Cincinnati.

### NEW COLLEGE ALUMNI EVENTS PLANNED

The College is planning special events to be held in conjunction with the all-campus Alumni Association reunion of the classes of 1912, '17, '22, '27, '32, '37, '44-'47, and '62 on April 30-May 2. This will include a Dean's Luncheon on Friday, May 1, followed by departmental open houses and tours. We will plan a program of visits, program updates, and conversation tailored to the interests of our alumni who attend. Announcements will be mailed to the above classes by the Alumni Association about March 1. The College's participation is a new concept, and is not intended to conflict with University-wide reunion activities, but rather offer an opportunity for emphasis on the more personal associations alumni may have with their own department. Watch for the announcement, and plan to attend and make this event successful.

Another alumni event planned is an Engineering College Tent Party in conjunction with the Wisconsin football game on October 17. Alumni planning to attend should make reservations for this luncheon (\$7.00) with Elaine Battles, 103 Engineering Hall, 1308 W. Green, Urbana 61801. A group of football tickets has been reserved and should be ordered (\$14.00) directly from the Athletic Assoc. Ticket Office, 100 Assembly Hall by July 15. The tent will be set up west of the

stadium, and will feature lunch, prizes, and entertainment as well as fellowship. Also scheduled that day will be the rededication of the EE Building, to be named the Everitt Building in honor of the memory of former Dean W. L. Everitt. The permanence of these social events planned for the enjoyment of alumni will depend on the level of response.

### ALUMNI GIFTS BUY SEM

The department recently purchased a new electron microscope to be dedicated to undergraduate teaching. This \$30,000 acquisition was made possible through your alumni gifts to the department, with some matching from departmental and college funds. It has been ironic that while the college has one of the best electron microscope facilities in the world, the availability of this resource to undergraduates has been minimal. This instrument will become part of a series of laboratory studies. This is the first major piece of equipment purchased from alumni grants. These funds have been growing considerably in recent years and have an important impact of projects which cannot be funded from limited departmental sources.

### HOWARD BIRNBAUM IS NEW MRL DIRECTOR

Prof Howard Birnbaum has been appointed Director of the Materials Research Laboratory. He will retain a 50% appointment in our department and continue his research program here and in MRL on hydrogen effects on the deformation and fracture of metals and on the properties of interfaces. The MRL is an interdisciplinary laboratory supporting research of faculty in several departments. It also maintains central facilities which are at the cutting edge of scientific capabilities with excellent support staff. Howard's goals for the MRL are to improve the quality of research, maintain and improve the central facilities and the services they provide to the research programs, and to broaden the range of materials science and engineering served by the laboratory.

# DEPARTMENT NEWS

## Students Win Awards

Our UIMS was selected as the college's best professional student society last year on the basis of their strong program of educational and social activities and involvement in campus life and was also named outstanding student chapter by TMS. The Society's Open House exhibit on polymers won first place in the annual competition. The credit for this recognition can be shared by the students themselves who participated fully in planned events, the two young women who served as presidents during the period (Joan Tak and Kelli Nimmo), and the alumni who left not only a heritage of involvement but also have donated funds that have helped sponsor many activities.

Tom Warne, an undergraduate student from Ohio who is now in the co-op program and alternating work and study sessions with GE in Cleveland, was awarded a \$750 AFS-Foundry Education Foundation scholarship last Fall. Another undergrad, Kelli Nimmo, was named an ASM Scholar, and received a \$500 award. Kelli is also a co-op student, whose work assignments have been with Olin in East Alton. Kelli is also the president of the student technical society, UIMS.

## Racheff Bequest Benefits Department

The status of the bequest of Ivan Racheff to the University is becoming much clearer. Half of the approximately six million dollar estate will be retained by the University to fund campus proposals thought to be consistent with Mr. Racheff's interests. We could conceivably access this support. The other half is to be divided on a 60:40 basis between metallurgy programs and environmental engineering. Of the income generated from our share of this endowment, about \$30,000 will be used to establish a Racheff Professorship. Exactly how this sum will be used to enhance the Professorship is not yet determined. The balance of the income will be used to support undergraduate financial aid grants and to support capital equipment for research and teaching. Our original expectations from Mr. Racheff's will were much higher, but at least the matter is finally resolved and we can now utilize these funds for the benefit of our program.

Gifts from alumni are also being received in increasing amounts in response to requests from the department, college, and University to support important programs. It should be made clear that contributions made to the College or U of I Foundation can be directed to the use of the department and these instructions will be followed. In addition to the generosity and thoughtfulness of the general response, we particularly recognize the large gift of Olin stock from Richard Berry, an amount that is matched by the company.

## Robert Averbach Joins Staff

Dr Robert Averbach joined our staff this Spring as Professor of Materials Science. Bob has a BS from Dickinson College and his PhD from Michigan State in physics. After a two-year post-doc position at Cornell, he taught a year at Dickinson before joining Argonne National Lab in 1974, where he has been until coming to us. He has an outstanding reputation in the areas of radiation damage and ion beam modification of materials, and has done pioneer research in these areas. He was a recipient of the 1984 DOE Basic Energy Science Award for sustained outstanding research in materials science. Bob will have an affiliation with our MRL where his research will involve nonequilibrium processing of materials. Under this umbrella, he will continue his ion beam studies as well as "nanophase materials", a term created to describe compacted particles in the 50 Angstrom size. Bob is off to a fast start, with a post-doc and two graduate students. His teaching responsibilities will begin in the Fall with our undergraduate thermodynamics course. Dr Averbach's addition to the staff certainly adds distinction to our program.

## TONY'S BACK

Tony Graziano, who many remember as our first of a series of very capable business managers, has returned to the campus and is now Associate Dean of the College and Director of the Engineering Experiment Station. When Tony left this department, he held a series of positions in college and campus administration before leaving us for the position of assistant to the president at the Univ of Delaware.

## Adriaan DeWitte Has Retired

The era of mining engineering in the department ended last Spring with the early retirement of Prof. Adriaan deWitte, our last faculty member in the mining and petroleum field. Adriaan joined the department in 1960 as Professor of Petroleum Engineering, with specific interests in geophysics and propagation of electromagnetic waves in porous media. In more recent years, Adriaan's interests focussed on the interaction of technology, economics, and the environment. He has taught a popular undergraduate course dealing with these topics in recent years. The deWittes, who are natives of Netherlands, are enjoying their retirement here in the community.

## Gaylord Sabbatical

Prof Richard Gaylord spent a 5-months sabbatical as a Visiting Fellow at the Cavendish Laboratory at Cambridge University in England. He enjoyed the opportunity to carry out work on the theory of rubber elasticity, while getting a glimpse of English life, developing a taste for good beer, and attending a multitude of foreign films. He has been elected to Life Membership in Clare Hall at Cambridge, and hopes to return there annually.

## NAS Honors Gert

Prof Gert Ehrlich has been elected to the National Academy of Sciences, one of the highest honors an American scientist or engineer can achieve. Membership in the Academy recognizes distinguished and continuing achievements in original research. There are 27 members of the U of I faculty who are members of the academy.

## New Research Area

Prof Richard Wool, in addition to his considerable research effort in polymer interfaces as applied to composites, blends, and electronic materials is Research Director of an interdisciplinary campus group responsible for making biodegradable plastics from corn starch.

(continued on page 5)

# ALUMNI NOTES

## 1928-1940

We were pleased to receive a note from William Lindsay, '28, who has reviewed the latest Directory for accuracy. Unfortunately, changes from Mr. Lindsay's era generally report the passing on of members of the earlier classes. Included in this report are: Rudolph E. Pagerburg '23, Fred A. Miller '27, Paul L. Richards '33, Charles J. Stephens '26, and George C. Young '28.

Tom Simms, '40, has built a home outside Cincinnati: 5430 Mt Zion Rd, Batavia, OH 45103. Tom has been in the consulting business (Simms Engineering) and doing Motivational Speaking.

## 1941-1945

George Doremus, '41, is rounding out five years of retirement from the American Brass division of Anaconda. As soon as he finishes off the chores lined up for him, he may do some consulting work.

Jun Hino, '41, PhD '56, has retired after a long career with Westinghouse-Bettis and now is enjoying golf and travel with his wife, Yo. Jun's address was incorrectly listed in the recent Directory: it should be 106 N. Heide Lane, McMurray, PA 15317.

Olaf Paasche, '42, who retired as professor of metallurgy at Oregon State, was named a Fellow of ASM last Fall. Olaf was recognized for his work on phase equilibria in Ti, Zr, and Hf, creep in Al, as well as his excellence as a teacher.

## 1946-1950

Glen Wensch, '46, PhD '49, received the College's Alumni Award for Distinguished Service in Engineering at last Spring's honors day convocation. Glen was cited for pioneer work in the development of nuclear energy, particularly fast reactor technology. Glen spent most of his career in the nuclear energy field, and was assistant administrator for nuclear energy in the DOE at the time of his retirement in 1977. As is well-known, Glen retired to Champaign, and has since been active in civic affairs, and in the department alumni activities developing and leading a strong departmental constituency group during the past eight years.

Richard deWitte, '49, took early

retirement after 30 years with International Nickel. Dick has been president of Inco since 1982, having started in 1949 as a research metallurgist at the Bayonne laboratory. Dick and Rosemary's five children have given them seven grandchildren, which they enjoy along with tennis, golf, and sailing.

Bill Hensley, '49, is in the metallurgy/refractories operations of Fluor Engineers, Inc at 3333 Michelson Dr, Irvine, CA 92730.

Bob Anderson, '50, was honored by the Houston Chapter of ASM in the dedication of their Directory and Buyers Guide; it is obvious that Bob is Mr. Metallurgy in Texas. Bob has retired from the consulting firm he founded, leaving the operation to his son, Steven (once a student here), in order to devote himself to writing, golfing, and fishing.

Don Dyke, '50, has been elected president of the Metals Powder Technology Assoc. Don is V-P of Sintered specialties Div of SSI Technologies, Janesville, WI.

## 1951-1955

Richard Gaydes, '53, retired as corporate chief metallurgist for Republic Steel (LTV) last year, but is not ready for the pasture yet. Dick has just been appointed Director of Materials Laboratory and Procurement Quality for Lear-Siegel in Cleveland. His primary responsibilities are failure analysis and product and vendor quality.

Richard Berry, '54, spoke this Spring at the College's Executive Seminar Program, a course for seniors to hear outstanding executives on topics dealing with a wide range of professional topics. Lowell Hoffman, '63, was a speaker during last Spring's series. Richard is Executive Vice-President of Olin, and is located in Stamford, CT.

Edwin Jackson, '55, was inadvertently left off the alpha listing in the Directory. Ed is Chairman, Jackson Capital Corp, One Allen Center, 500 Dallas, Suite 970, Houston, TX 77002. We noticed several J's are missing.

Gerald Robinson, '55, is a lawyer and entrepreneur in Cincinnati. He was in Urbana recently on the way to Bloomington, where he has purchased the local TV station. Robbie is phasing out of the real estate bus-

iness, and concentrating on entertainment. Robbie's metallurgical career lasted only six weeks after graduation, but he states "I use my education every day."

## 1956-1960

Earl Carlson, '56, was director of research for Amsted Industries when Amsted decided to close their research laboratories. Earl is now with National Forge in Colorado Springs, where he is mainly concerned with powder metallurgy.

Mike Myles, '56, PhD '63, is now Deputy Director of Fossil Energy Programs at Argonne Lab outside of Chicago. Mike has been at Argonne since working at the Lab while completing his doctoral research. Metallurgy may reach into the next generation as his daughter Jennifer prepares for college next Fall with plans to follow her father's footsteps.

Don Boone, '57, PhD '62, is now doing full-time business as Boone & Associates in Walnut Creek, CA, as he has completed his part-time association with the Naval Postgraduate School in Monterey, CA. Don's work has taken him to Europe and China among other places this year, and he expects his teaching and consulting work to expand.

Don Woodward, '57, has retired from Kaiser Aluminum after the corporate decision to close their Dalton extrusion plant which Don managed. After some thought about buying the plant from the company together with other management people, he decided against the venture, and is now selling real estate in the area to keep busy.

Jim Galligan, MS '57, received the prestigious Humboldt Award in recognition of his research and teaching accomplishments. The award of \$18,000 includes six months of research at the Univ of Gottingen. Jim is now at the Univ of Connecticut, and has been a Max Planck Fellow in Stuttgart, and Visiting Professor at the Israel Institute of Technology in Haifa, and David Ben Gurion Univ in Israel. Jim's research has involved photoplasticity and electron properties in II-VI compounds as well as plastic flow and fracture and radiation damage. After leaving Illinois, Jim received his PhD at Berkeley.

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# ALUMNI NOTES

Sal Grisaffe, '57, was named a Fellow of ASM last Fall at the annual meeting. Sal is Chief, Materials Division, NASA-Lewis, Cleveland. Last year, Sal was named to the Department's Distinguished Merit Award. He received NASA's highest medal of excellence in ceremonies last November in Cleveland. Sal was recognized for significant contributions and leadership in advancement of materials technologies for aeropropulsion, space propulsion and power, microgravity science, and research productivity.

Joe Darby, PhD '58, after several years of alternating appointments in Washington and Argonne Lab, has moved permanently to DC to be in the DOE Headquarters.

Glen Canfield, '59, is due a sincere apology for having been left off the Alumni Directory distributed last year. Glen started his own business last year, Canfield & Associates, Box 9955, Longview, TX 75608. He manufactures deoxidation and desulfurization agglomerates, continuous casting powder, and casting copper-base alloys as well as doing heat treat consulting. Glen had been with Lone Star Technologies for some time, and prior to that held several positions in the steel industry.

Bob Luetje, '59, has left Armco after a long career there, and is now general manager Technology/R & D for Kolene Corporation in Detroit. Bob continues his service to ASM as National Trustee.

Kalinath Mukherjee, PhD '59, is chairman of the Dept of Metallurgy, Mechanics, and Materials Science at Michigan State. Kali was named last year to the MSU Distinguished Faculty Award. His current research deals with laser surface treatments of metals.

## 1961-1965

Gerald Duray, '61, is manager of business development in the mid-west regional office of Gilbane Building Co in Chicago.

Denes Bardos, '62, PhD '66, is now with Richards Medical in Memphis, after many years with Zimmer, but still in the area of biomaterials. At Richards, Denes is V-P, Research & Development. The family enjoys living in Memphis; No. 7 in the family is graduating from high school this year.

Mike Callen, '63, is president, Applied Strategies International, 150 N. Wacker Drive, Chicago 60606, which manages the Midwest Trade Adjustment Assistance Center for the Dept of Commerce.

Lowell Hoffman, '63, has been promoted by Kraft to Vice President and Director of Materials Management for Operations & Technology. Lowell joined Kraft two years ago, and his outstanding work for them is reflected in this promotion. Although his new duties have forced him to resign his position as Director of the department's alumni association board, we expect to see Lowell periodically as Kraft has plants in the local area.

Patricia Shamamy, MS '63, was recently named national Vice President of the Society of Women Engineers. Pat is an Asst Prof at Lawrence Tech in Southfield, Michigan, and has also been active in many technical, education, and community activities.

Doug Ruhmann, '64, is doing first-class work in composites for McDonnell-Douglas in St. Louis. Doug finished his PhD at Washington U in St. Louis. He was almost a colleague, as the Aero Department here was interested in his expertise in composites for aircraft structure, but Doug decided to stay with McDonnell-Douglas.

John Bilello, PhD '65, is the first dean of Cal-Fullerton's School of Engineering and Computer Science. John previously was at Brookhaven Nat'l Lab.

## 1966-1970

Larry Zagorski, '68, MS '70, has been appointed V-P of technology for Teledyne Allvac, Monroe, NC.

Don Potter, PhD '70, now professor of metallurgy at UConn, has received a \$387,000 3-year grant to study surface modification of metals by ion implantation.

## 1971-1975

Mel Bluem, PhD '72, has been transferred from Exxon's Texas location to their Eastern Division in New Orleans: Exxon Company USA, ISSS Poydras, PO Box 61707, New Orleans 70161. Incidentally, Mel's name was misspelled in the recent Directory.

Don Warren, '72, has a new home address: 121 Carter, Ottumwa, IA 52501. Don is still with Deere, and is manager, Materials Engineering Dept at Ottumwa.

## 1976-1980

Tom Bond, '77, MS '78, reports the arrival of Kristina Lynn last June. Tom is enjoying the family firm but misses the people he worked with at Caterpillar. He expects to finish his MBA from Chicago this June. Wife Lynn is teaching part-time at Joliet Junior College.

David Van Aken, '78, PhD '86, has been named a Presidential Young Investigator by the National Science Foundation; one of 200 named from over 1100 nominations. The award is an NSF annual grant of \$25,000 plus matching industrial support up to \$37,500. Dave will not investigate the president, but continue his electron microscopy of rapidly solidified metals at the Univ of Michigan, where he is completing his first year on the staff.

Mike Kaufman, '79, PhD '84, has left the National Bureau of Standards and has taken a position in the academic world at the University of Washington, Seattle.

Andrew Kohler, '79, visited while passing through on business. Andy has drifted out of metallurgy and is currently a partner in a computer software venture, Sanddollar Software, in Indianapolis. His address is 3041 Brentwood Circle Dr, N, Apt 2C, Indianapolis 46268.

Dawn White, '79, PhD '86, is now with MTS Systems in Minneapolis in their Adv Technology Development Division. Dawn's home address is 3195 220th St, Prior Lake, MN 55372.

Phil Zapp, PhD '79, reports an update: new home address is 5600 Partridge Ln, Raleigh, NC 27609 and new position: DuPont Laboratory, 14 Alexander Dr, Research Triangle Park, NC 27709. The lab is devoted to microelectronics packaging, but Phil still claims he is a "metallurgist beleaguered by chemists." Phil was at Savannah River Lab prior to the move to Raleigh. The entire family approve the move; the kids, Sarah and Laura, are happy and growing, and Marlene is working to establish a private practice in pre-school speech therapy.

(continued on next page)

## ALUMNI NOTES

Alan Stone, '80, is adding equipment and clients to his Aston Metallurgical Services, 4201 N. Ravenswood, Chicago 60613.

### 1981-1985

Toni Grobstein, '81, has finished her graduate studies at Case-Western and is now in the Advanced Metallurgy Branch, NASA-Lewis, Cleveland. Toni's sister, Beth, will finish her BS here this May.

Paul Zahray, '81, has left Howmet and is now in his second year of graduate study in Carnegie-Mellon's Engineering and Public Policy program.

David Kline, '82, MS '84, is a packaging engineer with Gould Electronics in Pocatello, ID. He was on the campus recently doing some business and looking for materials engineers for his industry.

Sue Broadbent Meyer, '83, and husband Duane, '81, now live at 1165 Dogwood Lane, Aurora, IL 60505. Duane was promoted to GM's BOC plant in Chicago as plant metallurgist; he was previously at GM's Danville foundry. Sue has taken a position involving design with Northern Illinois Gas in Naperville.

Art McClellan, MS '83, has returned to his native North Carolina where he has joined the staff of DuPont.

Jim Heckman, '84, has left Motorola in Phoenix, and is now with Liquid Air in Oxnard, California.

Mike VanMaldegiam, '84, Ed Brown, '83, and Peter Ziolkowski, '83, all finished their MS degree programs at Michigan Tech this past year.

Matt Zaluzec, '84, has left the oil industry in Texas, and has returned to Urbana for graduate study.

Soo-ho Kim, PhD '85, is a senior research scientist at GM's Research Lab in Warren, Michigan, and visited us recently while utilizing some of MRL's facilities.

Jane Nealis, '85, has her career with GE's Nuclear Energy Operations in San Jose, CA well under way. She has been selected for a program of advanced study at Berkeley; full time beginning next Fall, then half time until completion of the masters degree. Jane loves California, is involved (predictable) in many outside activities, enjoys her work, and looking forward to getting back in the classroom.

## DEPARTMENT NOTES

### Composites Research and Teaching

Prof Avi Zangvil has developed a strong research program in ceramic and metal matrix composites, and structural and property investigation of the effect of alloy additions to silicon carbide materials. Techniques used include sophisticated electron beam instruments and are aimed at the development of high temperature structural ceramics. The composite studies are focussed on the interfaces of SiC-containing composites. This work is supported by federal and industrial funds, with Dow Corning and Sohio participating. Avi and Prof Mike Rigsbee are jointly teaching a composites course this semester which has an enrollment of about 30 students. This program is an example of the broad materials interests in the department. The appeal of this broad teaching and research emphasis is having a positive impact on enrollment and interest in our program.

### Werts Visit China

Charlie and Lucy Wert spent a month in China last Fall. They attended a conference in Zhengzhou devoted to the study of Chinese metallurgy of the Han era. They also visited the old cities of Xian, Beijing, Nanking, Shanghai, and Hefei. A most interesting part of their tour was the famous city of Dunhuang, the final stop on the old silk road on the long dangerous trek across the northwest desert toward Europe.

### 1986-

Mary Jo Huebner, MS '86, will be the metallurgy division in the position she has taken with Shaw Aero Devices, Long Island, NY. Her address is 519 Accabonac, East Hampton, NY 11937. Her sister, Laurie, '84, is engaged to be married this May.

Andre Lee, who finished his PhD this January, was named to the award for best graduate student paper by the Material Research Society at its annual meeting in Boston last December. He received a trophy and \$250. His paper was "Matrix Effect on the Relaxation of Uniaxially Strained Polymer Melts", co-authored with Richard Wool. Andre is now with the National Bureau of Standards in Gaithersburg.

### Altstetter and Chen Visit Taiwan

Profs Haydn Chen and Carl Altstetter were in Taiwan during last semester's winter break, and enjoyed an alumni dinner with several alums, including Chin-Huan Chen, PhD '59, Han Shih, MS '67, Tsong Perng, PhD '85, Chien-Min Wang, PhD '85, as well as graduates from Ceramics and Physics. Chin-Huan Chen, who retired from Dow Chemical recently, was visiting with his wife, Jean, and consulting with the MRL of the Industrial Technology Research Institute in Hsinchu. The Chens still live in Midland, Michigan. Han Shih is Chairman of Materials Science and Engineering at National Tsing Hua University. Tsong Perng is on the faculty of this department. Chien-Min Wang is now in charge of the ceramics effort of the Materials Research Laboratory. Carl was accompanied by his wife, Nadja, and presented an intensive three-week semester course on Environmental Effects on Mechanical Behavior at the National Tsing Hua University. The visit was sponsored by the Republic of China Ministry of Education and the MSE Department. The dedicated students in this course included students and faculty of Tsing Hua as well as about 20 graduate engineers and scientists from all over Taiwan. In spite of the pace of the course, time for socializing and sightseeing was hosted by the students and faculty as organized by Tsong Perng and his wife.

### Chipping Away

IBM has funded a \$2M grant for research on state-of-the-art computer chips. John Thornton is the project director of this multidisciplinary effort; other departmental faculty participating are Joe Greene, Mike Rigsbee, Richard Wool, and Steve Granick.

### Rigsbee's Research Recognized

Prof Mike Rigsbee, who has been associated with the Corps of Engineers Construction Research Lab in Champaign in joint research programs, has received a letter of commendation from the commanding general of the USA Corps of Engineers. Mike was congratulated on his efforts in the development of the Ion

(continued on page 6)

# DEPARTMENT NOTES

Plating Facility and co-invention of the ion plated composite ceramic anode, recognized as a major breakthrough in surface treatment science. This work has led to a fundamental understanding of the relationship between ion plating parameters and the coating microstructure for enhanced corrosion and wear resistance.

## Sam Stupp Visits India

Sam Stupp, professor of ceramic engineering and materials and a member of the polymer group, was invited by the Indian Ministry of Science and Technology to present a lecture on liquid crystal polymers at a United Nations-sponsored conference on polymers and composites. The conference was held in New Delhi last December. While in New Delhi, Sam also gave a lecture at the Indian Institute of Technology's Center for Materials Science.

## Angus Rockett Joins Staff

Angus Rockett accepted a position as Visiting Asst Prof with us last Fall. Angus did his undergraduate work at Brown and received his PhD here last year under Joe Greene. In the course of his academic career, Angus received many awards, including an NSF Research Fellowship, Sohio Fellowship, and the AmVac Society's Student Prize and Varian Fellowship Award Finalist. His research includes Monte Carlo simulation of crystal growth, and utilization of CSL's Molecular Beam Epitaxy facility to grow semiconductor crystals. He is a participant in the NASA-sponsored Center for Commercial Development of Space at the U of Houston (Joe Greene is Asst Director) to explore crystal growth in space vacuum. They expect to have experiments on the space shuttle in the next two years. Angus will teach our advanced physical metallurgy course next Fall.

## Alumni Available Service

This is a reminder that the College Placement Office maintains a list of "Alumni Available." This listing can be used by alumni considering job changes as well as by companies looking for graduates—often those with some work experience. The department sometimes gets requests for help in locating candidates for positions as well as from those looking for new jobs. These requests seldom are coordinated, and the use of the Placement Office service could serve both needs more efficiently. If you wish to be listed in the Alumni Available bulletin, or review it for prospects for openings, contact the Placement Office, 109 Engineering Hall, 1308 W. Green, Urbana 61801.



### 1987 Annual Fund

### College of Engineering

In support of the UIUC Engineering Annual Fund, enclosed is

- \$50     \$100     \$250
- \$500     \$1000     Other \_\_\_\_\_

Please direct my gift to:

Department of \_\_\_\_\_

College of Engineering Unrestricted

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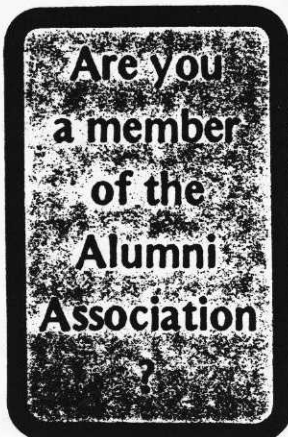
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**Sponsoring Associates** are recognized by each department for their contribution of \$100 or more.

The **Dean's Club** honors those who contribute \$500 or more to a department or to the college.

Make your tax deductible check payable to **UIUC Engineering Annual Fund** and return it in the enclosed business reply envelope.

Please do not remove the address label on the reverse side.



More than 103,000 alumni are—including approximately 60,000 who are life members. As a member you'll receive the Illinois Alumni News or U of I Chicagoean, as well as publications of your college or departmental constituent association. You'll qualify for our tour program, our insurance program and the annual family camp. And you'll continue your loyal involvement with something great—your University of Illinois.

To join, either as an annual member or as a life member, return this form with your check to: Alumni Association, 227 Illini Union, 1401 West Green Street, Urbana, Illinois, 61801. (Make your check payable to the University of Illinois Alumni Association.)

- One year single membership—\$15     One year husband-wife—\$20
- SINGLE LIFE MEMBERSHIP—\$200. (INSTALLMENT PLAN: \$220—\$10 DOWN, FOUR YEARLY PAYMENTS OF \$52.50.)
- HUSBAND-WIFE LIFE MEMBERSHIP—\$225. (INSTALLMENT PLAN: \$245—\$10 DOWN, FOUR YEARLY PAYMENTS OF \$58.75.)

Name \_\_\_\_\_ S.S.# \_\_\_\_\_

Spouse's name (if an alumnus) \_\_\_\_\_

If female, list maiden name. Does spouse have a U. of I. degree? \_\_\_\_\_

Address \_\_\_\_\_

College & dept. \_\_\_\_\_ College yr. \_\_\_\_\_

If you're already a member, thanks for your support. If you graduated within the last two years, write for special life membership rates. Please check:  Urbana-Champaign Campus  Chicago Campus. If you did not attend the University of Illinois, please check this box.

