

## Robertson named Interim Head

Ian Robertson has been named Interim Head of MatSE, taking over after John Weaver stepped down on March 20 to spend more time on his research, working with his students, and in instruction.

Weaver's accomplishments as Head include hiring outstanding new faculty (John Rogers, Moonsub Shim, Jim Zuo, and Erik Luijten), raising \$4 million for building renovations, changing the department by-laws and many of its procedures, managing the generous gifts of Don Hamer and Ron and Peg Morris (including the naming of the first Hamer and Morris professors), involving freshmen in Engineering Open House projects, significantly increasing faculty recognition, making improvements to student recruitment, and promoting MatSE's biomaterials initiative. During his tenure, the undergraduate program moved to #1 in the nation and the graduate program moved up to #2. These and other management demands notwithstanding, Weaver taught every semester and currently teaches the freshman introduction to materials course, MatSE 100-182. He continued to pursue an active research agenda while Head and rebuilt his lab after its move from Minnesota. His group of 12 focuses on the physics and chemistry of surfaces, interfaces, and nanostructures. He will continue to serve as a full-time faculty member, he has agreed to chair the graduate recruitment committee, and he is thinking about major initiatives like materials research center proposals.



Ian Robertson

Ian Robertson is no stranger to MatSE, having joined the faculty in 1983. He was the chair of the Metals Division from 1992 to 1995. Robertson served as Associate Head under James Economy from 1995 to 1999. In 2001, he accepted the position of Assistant Dean for Continuing Engineering Education in the College where he was responsible for revitalizing the engineering online program and for expanding the office to include educational outreach programs. He remained involved in the MatSE Department and maintained an active research group. His research encompasses radiation effects in metals and semiconductors, structure and chemistry of vapor-deposited films, mechanisms of strain transfer across interfaces, and dynamics of deformation and fracture under extreme conditions. A favorite among undergraduates, Robertson has been recognized for his instruction (Burnett Teacher of the Year, 1992) and advising (Engineering Council Award for Excellence in Advising, 1996, 1997, 1999). He was instrumental in bringing job placement services to MatSE students.



Robert Averback

## MatSE celebrates the investiture of the first Hamer Professor

On April 2, 2003, MatSE celebrated the investiture of Robert Averback as the first Donald W. Hamer Professor. At the ceremony, faculty, family members and friends gathered to congratulate Averback—and to recognize alumnus Don Hamer (BS Cer '45) for his continued generosity to the University of Illinois.

Robert Averback received his Ph.D. for work in low-temperature, solid-state physics at Michigan State University in 1972. He became interested in materials science and ion-solid interactions while a postdoctoral fellow at Cornell University. Before joining the faculty at the University of Illinois in 1987, he was a staff physicist at Argonne National Laboratory. He was a co-recipient of the Department of Energy award for sustained outstanding research

# Greene elected to the National Academy of Engineering

Joe Greene has received one of academia's highest honors, election into the prestigious National Academy of Engineering (NAE). Founded in 1964, the NAE is a private, independent, nonprofit institution. Its members provide engineering leadership in service to the nation. In addition to its role as advisor to the federal government, the NAE also conducts independent studies to examine important topics in engineering and technology.

The NAE has more than 2,000 peer-elected members and foreign associates, senior professionals in business, academia, and government who are among the world's most accomplished engineers. They provide the leadership and expertise for numerous projects focused on the relationships between engineering, technology, and the quality of life.

Joe Greene was elected "For pioneering studies in the synthesis and characterization of epitaxial and highly ordered polycrystalline materials."

"All professional awards are special of course, since they provide peer recognition of one's achievements," Greene said, "and I deeply appreciate the many honors that have been bestowed upon our research group over the years. However, while most professional awards are designed to honor specific accomplishments within a well-defined field of specialization, being elected to the National Academy is particularly special since it recognizes outstanding contributions spanning the entire breadth of the field of engineering."

"I have been extremely fortunate to have had, and continue to have, more than my share of truly outstanding students, post-docs, and visiting scientists. These are the people that really do the work. No university professor succeeds by himself and this honor belongs to them as well. In addition, it has been my good fortune to have been a member of the top Materials Science Department in the country (indeed, in the world) throughout my entire career. The Department, and the University of Illinois itself, is a place of unusual intellectual vitality, vigor, and excitement. Even after more than 25 years here, I still wake up each morning feeling that excitement, wanting to get to the laboratory. It is amazing to be in a position to be paid to do what you enjoy doing anyway."



Joe Greene

## Find your classmates using the UIAA directory

Use the online directory to search for former classmates; contact a professor; or—if you're a member of the University of Illinois Alumni Association—tap into a network of more than 40,000 alumni who have already indicated that they're willing to correspond with alumni and undergraduate seniors about their profession, place of business, city of residence, interest in being a mentor and internship opportunities. Remember to keep your information current with the University of Illinois, so that your

directory listing is correct and also so that you will continue to receive the *MatSE Alumni News*.

Visit [www.uiaa.org](http://www.uiaa.org) to update your contact information online

**MatSE**  
Illinois

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# Birnbaum receives Von Hippel Award

Howard Birnbaum has received the 2002 Von Hippel Award from the Materials Research Society. The highest award of MRS, the Von Hippel Award recognizes “brilliance and originality of intellect, combined with vision extending beyond the boundaries of conventional scientific disciplines.” The award consists of \$10,000 and a ruby laser crystal symbolizing the many-faceted nature of materials research.



Howard Birnbaum

“Through innovative use of a wide range of novel experimental tools, Howard K. Birnbaum has made seminal contributions to our understanding of intrinsic point defects, hydrogen in metals, and grain boundary segregation, especially as these effects relate to mechanical properties,” the award citation reads. “He has also stimulated, directed, and influenced interdisciplinary research throughout the materials community.”

In his award presentation at the MRS fall meeting, Birnbaum summarized the different mechanisms of hydrogen embrittlement, which his research over 25 years has done much to reveal. He also used the occasion to question various funding agencies’ apparent “decision that the subject of fracture is passé.” He asserted that understanding fundamental mechanical properties is still important for materials in aggressive environments and in critical applications. “It is to the detriment of our society that this is happening,” he said.

## Call for nominees for alumni awards

### *Distinguished Merit Award*

Presented to an alumnus whose accomplishments reflect admirably or bring honor to MatSE.

### *Loyalty Award*

Given in appreciation for time, talents, and services so freely given to the MatSE Department by an alumnus.

### *Young Alumnus Award*

Presented to an alumnus under the age 40 who has demonstrated unusual accomplishments in the early stages of his/her career.

The deadline for nominations for 2004 MatSE Alumni Awards is September 1, 2003. Nominations may be mailed or emailed to the MatSE Alumni Board, c/o Cindy Brya, 1304 W. Green St., Urbana, IL 61801, brya@uiuc.edu. The Board will vote on recipients at the fall meeting.

### Nomination Form

Name of nominee \_\_\_\_\_ Phone/E-mail \_\_\_\_\_

Nominee's address \_\_\_\_\_

Award nominated for \_\_\_\_\_

Please write a brief paragraph stating why you think this person should be recognized. (Additional paper may be attached.)

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Your name \_\_\_\_\_ Phone/E-mail \_\_\_\_\_

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## Hamer Investiture continued

in 1985 for his work on radiation-induced segregation. In 1993 he received an Alexander von Humboldt Award for U.S. Senior Scientists.

Averback and his students investigate fundamental aspects of non-equilibrium processing of materials by ion beams, consolidation of nanoscale powders, and low-temperature diffusion. Ion implantation has long been employed in the semiconductor industry as a highly controlled method of doping semiconductors. However, a host of new technologies using ion beams for processing has been developed in recent years, including ion beam mixing, beam-assisted deposition, and ionized cluster beam deposition. Averback's group studies these various methods through both laboratory experiments and computer simulation.

"I am very honored to be named the first Donald W. Hamer Professor of Materials Science and Engineering," Averback said. "The funds made available by Mr. Hamer's kind gift provide an exciting freedom to pursue new ideas for scientific research. My research group and I eagerly look forward to it over the next several years."

Donald W. Hamer has been one of MatSE's most generous alumni. After graduation from the University of Illinois, he served in the Navy and then worked as a ceramics engineer in Chicago. He earned his M.B.A. at the University of Chicago and relocated to Pennsylvania, where he was chief engineer at the Erie Technological Products Plant, now Murata Electronics. He formed State of the Art, Inc., in State College, PA, to produce educational seminars and provide consulting services on thick film technologies. With an eye to the future integration of thick films and micro-electronics, Hamer expanded the company into manufacturing, and they began producing and selling thick films to be used as resistors. One the side, he earned another degree, a B.S. in electrical engineering at Penn State University. A Fellow of the American Ceramic Society, he received the U of I College of Engineering Alumni Award for Distinguished Service. Hamer is an active member of MatSE's Senior Advisory Committee.

At the investiture ceremony, Hamer remarked, "There is great satisfaction in being able to spend some money for a very, very good cause. Someone once said, you know the old saying 'Give till it hurts.' That's all wrong. Give till it feels good."



College of Engineering Dean David Daniel presents Don Hamer with a medallion in a shadow box display.



Averback's research group: Samson Odunuga, See Wee Chee, Pavel Krasnochtchekov, Kim Garnier, Kai Zhao, Bob Averback, and Bryan Gundrum.



Ron Morris (center) and Carl Alstetter admire Averback's medallion, which is given as part of his investiture as the Hamer Professor.



Don Hamer with his colleagues from State of the Art, Inc. Amit Das (left) is Director of Product Development and Bob Hufnagel (right) is President and CEO.

## Alumnus Ismat Shah leads Afghan relief effort

Ismat Shah (PhD Met '86) had no idea his life was about to change on September 11, 2001. As faculty adviser for the Muslim Students' Association at the University of Delaware, he was suddenly thrust into the limelight on campus and beyond as people questioned the Muslim religion in light of the terrorist attacks that day. Almost overnight there were opportunities to discuss his faith at every turn.

While unplanned and a little unnerving at first, Shah embraced the opportunities and organized the community's interest and support of the Afghan people into a relief organization that built an elementary school for Muslim girls in a refugee camp on the Pakistan-Afghanistan border.

"My life did change after 9/11," he says. "I now consider myself a representative of the Muslim faith. In public, I am very conscious of the fact that I am a Muslim and I need to be a certain way. I feel more responsibility now than before."

Independently, Shah has always done what he could to alleviate the immense poverty of his native Pakistan when he returns each summer to teach at a special summer college on "Physics for Contemporary Needs."

"In Pakistan, as in Afghanistan," he says, "the poverty is so great there is a need for everything. Anything we can do is just a drop in the bucket, but we try to do what we can. These are people who live off of the random acts of mercy others can provide."

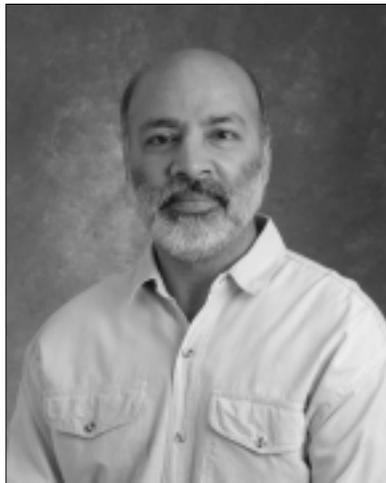
In the past he has assisted numerous families in raising doweries for young women, and he has contributed money to educational efforts. Additionally, he has helped approximately 14 young Pakistanees enroll at the University of Delaware to study in various departments in engineering, physics and math. Most of those students found their first U.S. home with Shah and his family. Two young women lived with the family as exchange students for a year and still correspond with Shah, whom they call "Babba," the Urdu word for father.

Shah's efforts to start a school in the refugee camp began post 9/11 after he gave a

talk in Wilmington. Members of Creative Grandparenting Inc. approached him to discuss ways to help the Afghan people.

"While they were hoping to go into Kabul to help, we also discussed the idea of doing something for people in the refugee camps in Pakistan," Shah says. "From a practical standpoint, it was nearly impossible to get into Kabul."

While that group eventually did end up financially supporting an existing school in Kabul, others wanted to do more, and soon the organization, Afghanistan/Delaware Communities Together (AFDECT), was formed.



Ismat Shah

Working with friends who were educated in the U.S. and who have returned to live in Pakistan, Shah toured the Jalozaai Camp near Peshawar and observed its terrible poverty firsthand. The camp is home to some 150,000 people, many of whom have lived there for the past 16 years since an earlier war forced them to flee Afghanistan. The children who have been born there have never known any other home. Ironically, neither the government of Afghanistan nor Pakistan officially recognizes the camp and it does not get any government aid. It is as if the four-square-mile camp of mud houses—traversed by an open drainage ditch that is the only source of water, sewer and recreation for the children—does not exist.

"As we were looking at the camp and all the misery that goes with it, we were able to determine that one of the biggest needs is education for young girls," Shah says. The newly founded Girls School in the Afghan Refugee Camp in Pakistan caters to girls in grades one through five. The building itself has brick floors, mud walls and a thatched roof. The structure has five rooms, and fans help to cool the temperatures that can reach 117 degrees. The 150 girls who attend are provided with clothing and one meal a day. Three refugees have been hired to teach, prepare the meals and make the clothes. Shah hopes to double the student population this year and hire two more teachers. He will travel to the region this summer to find a refugee camp inside Afghanistan to start a new school there.

"There is so much to do," he says. "It is hard to even celebrate these small successes. And, actually, living conditions in Pakistan are not that much better. It is a very touching reality. We all need to do what we can."

After serving as a postdoctoral fellow at the University of Illinois, Shah went to work as a senior research scientist for the DuPont Co. During that time he also served as an adjunct professor at the University of Delaware in physics and astronomy. In 1999, he became an associate professor and a member of the Center for Analytical Science and Technology. During summers, he works as the manager of nanostructured materials for Fraunhofer Inc. in the Delaware Technology Park.

His research specialities include nanostructured material synthesis, characterization and applications, energetic condensation for the deposition of polycrystalline silicon films on low-temperature substrates and the development of sputtering sources for unique applications. He also works in electron field emission, hard and protective coatings, organic-inorganic interfaces and dielectric materials.

For more information on the relief organization, contact Shah at [ismat@udel.edu](mailto:ismat@udel.edu).

*Article courtesy of the University of Delaware Office of Public Relations.*

## Faculty Notes

**John Rogers** joined the MatSE faculty in January as a Founder Professor of Engineering. He will be featured in an upcoming newsletter.

**David Payne** received the Outstanding Educator Award presented by the Ceramic Educational Council on behalf of the American Ceramic Society. The award was presented at the ACerS annual meeting.

**Erik Luijten** received the 2003 Helmholtz Award in recognition of "Fundamental and innovative contributions enhancing the state of the art of computer simulations of theoretical models that are directly relevant to the critical and phase behaviour of aqueous systems." The award recognizes promising young researchers who are making significant contributions in areas of interest to the International Association for the Properties of Water and Steam.

**Gerard Wong** was named the 2003 Donald Burnett Teacher of the Year. In selecting him for the award, the committee cited his "excellent undergraduate teaching record and his critical role in the development of the undergraduate biomaterials program."

**John Abelson** was in residence at the Ecole Polytechnique in Paris, France, last fall.

**Steve Granick** was named a Guest Professor by the Polymer Department at Peking University, China.

**Trudy Kriven** was granted her 3<sup>rd</sup> U.S. patent on November 19, 2002. The patent is entitled "Processes for Preparing Mixed Ox-

ide Powders," and the authors are M.A. Gulgun, W.M. Kriven and M.H. Nguyen.

**Jennifer Lewis** and **Glen H. Kirby**, Ph.D. student, won the 2003 Brunauer Award from the American Ceramic Society for their paper entitled "Rheological Property Evolution in Concentrated Cement-Polyelectrolyte Suspensions" published in the December 2002 issue of the Journal of the American Ceramic Society.

**Paul Braun** and **Angus Rockett** were recipients of the Engineering Council Award for Excellence in Advising.

**Joe Greene** stepped down as director of the Materials Research Laboratory on December 31, 2002.

**John Weaver** presented the Kodak Distinguished Lecture at Rensselaer Polytechnic Institute in February.

**Paul Braun** and co-investigators **Jennifer Lewis**, **Pierre Wiltzius**, Yi Lu (UIUC-Chemistry), Jeff Brinker (UNM) and Shanhui Fan (Stanford) were awarded a DOD Multidisciplinary University Research Initiative (MURI) grant for their proposal on "Self-Assembling Multifunctional Ceramic Composites." The grant is worth \$1 million per year for 3-5 years. Only 17 grants were awarded nationwide.

## Student Notes

**Christopher Michael** was one of 42 students chosen from across the U.S. to receive a merit-based scholarship funded by the Bill and Melinda Gates Foundation. The award covers the full cost of studies at Cambridge University in England. Christopher also received the Harvy H. Jordan Award, which is presented to an outstanding senior in the College of Engineering and is based on high scholastic standing and character. The award includes a certificate, a plaque, and a check for \$2,000.

**Shawn Mack** received the Hoffman Scholarship from the Electronics Division of ACerS for 2003. The scholarship is for a junior who has demonstrated a high level of achievement in academics, professional involvement and extracurricular activities. The award consists of \$2,000 and a plaque.

**Yau-Ru Chen** was selected for the Senior 100 Honorary. The Senior 100 Honorary recognizes 100 May graduates at the U of I for academic success and involvement/service on campus or in the community. She and **Nick Orf** were named Bronze Tablet Scholars by the University.

**Liping Huang**, Ph.D. student in John Kieffer's group, received the 2003 Norbert J. Kreidl Award. The award recognizes excellence in research. It is the highest award given by the Glass and Optical Materials Division of ACerS.

**Huilin Tu**, Ph.D. student in Paul Braun's group, received a Mavis Memorial Fund Scholarship from the College of Engineer-

ing. The scholarships, worth \$5,000, are for students interested in careers in engineering education.

**Chong Wee Lim**, Ph.D. student in Joe Greene's group, won the highly competitive Ludo Frevel Crystallography Scholarship for 2003. The International Centre for Diffraction Data (ICDD) selected Lim to receive the award worth \$2,250.

**Glen Kirby**, Ph.D. student in Jennifer Lewis' group, and **Ryan Ong**, Ph.D. student in David Payne's group, received travel fellowships to present their work at the European Ceramics Society meeting in Istanbul, Turkey, this summer.

**Ken Bratland**, Ph.D. student in Joe Greene's group, received the "Thin Film Division Student Award" for outstanding graduate research based upon the paper he presented at the AVS 49<sup>th</sup> International Symposium in Denver, CO.

**Suneel Kodambaka**, Ph.D. student in Joe Greene's group, received the Ross J. Martin Award for outstanding research achievement by a graduate student in the College of Engineering. The award includes a check for \$2,000.

**Yun-Ju (Alex) Lee**, Ph.D. student in Paul Braun's group, and **Joshua Robach**, Ph.D. student in Ian Robertson's group, received Racheff Awards for outstanding graduate research. The award consists of a plaque and up to \$1,000 financial support to attend a conference, at which relevant research will be presented by the student recipient.

## Department of Materials Science & Engineering Fund

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## Economy elected to the American Academy of Arts and Sciences

James Economy has been elected a fellow of the American Academy of Arts and Sciences. Election to the American Academy is an honor that acknowledges the best of all scholarly fields and professions. The academy has more than 3,950 fellows and 575 foreign honorary members, which includes more than 150 Nobel laureates and 50 Pulitzer Prize winners. The academy focuses its research on international security, social policy, education and the humanities. New fellows will be inducted in early October at ceremonies at the academy's headquarters in Cambridge, MA.

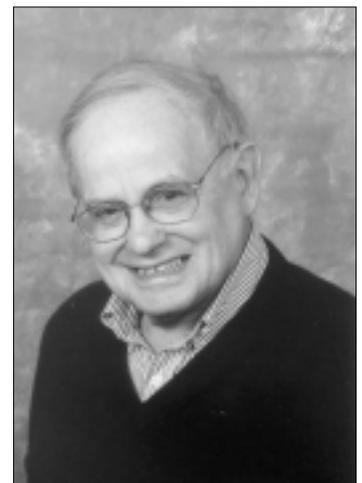
"Jim is a highly respected leader in materials research and engineering on our campus," said Nancy Cantor, the chancellor of the Urbana campus and also a member of the academy. "It is absolutely appropriate that the academy recognizes his contributions in both scholarship and leadership."

Economy has played a major role during

the past 40 years in the design and development of a number of polymer systems, including liquid crystalline materials for structural uses, novel thermosetting resins that can be recycled, and activated fibers for filtering environmental contaminants. He led the effort to create the National Science Foundation Center on Advanced Materials for Water Purification at the Urbana campus.

Most recently he and his group have developed a new composite based on carbon fibers in a boron nitride matrix, which shows a 10x improvement in wear for aircraft brakes as compared to the currently used carbon/carbon composites. This work has led to a Phase 2 SBIR awarded to EKOS Material Inc., a company with which Economy has close ties. It is very significant that although trained as a chemist he has achieved the highest recognition offered to engineers, namely election into the National Academy of

Engineering. He has made contributions to the basic understanding of materials (over 250 publications) and has discovered (over 65 patents) and subsequently commercialized a number of significant products.



James Economy

**George Bachman (PhD Cer '47)** of Edison, NJ, died January 29, 2003. He worked several years as a research scientist in the Glass Division/Research Laboratories of Pittsburgh Plate Glass Company before his appointment as director of the Research Fiber Glass Division of PPG in Shelbyville, IN. The remainder of his career was spent in research, as well as related administration and patents. He was a longtime director and former chairman of the Board of Northeast Electronics Corp. in Milford, CN. He was an elder/trustee of the First Presbyterian Church of Metuchen, NJ. He is survived by his wife of 52 years, Lorraine.

**Gerald Duray (BS Met '61)** of Palatine, IL, died May 17, 2002. He worked as a consultant in Palatine.

**Shuin-Kai Juang (PhD Met '89)** of Tau Yuan, Taiwan, died on October 18, 2002. He was a research fellow and manager of

the electric energy division of Chung-Shan Institute of Science in Longtang, Taiwan. He spent most of his career in developing high energy density batteries. Survivors include his wife, Su-Ling, and one son, Yu-Chih.

**Alvin L. Rogatz (BS Cer '50)** of Williamsburg, VA, died on October 30, 2002. He was last employed as the manufacturing vice president for Maida Development Co. His wife, Ethel, survives him.

**Richard Van Pelt (BS Met '43)** of Washington, IL, died February 13, 2003. A World War II Navy veteran, he served as a lieutenant junior grade aboard the USS Wasp in the Pacific Theater. He was employed with Caterpillar for 39 years. He worked at the company's Mossville and East Peoria plants and retired in 1985 as the manager of metallurgical research. He was a member of the American Society of Metals and served as its national chairman from 1988

to 1990 and as a trustee. He was a 50-year member and historian of the local chapter. The society annually awards two scholarships in his name to University of Illinois students. In 1982 he received the Distinguished Merit Award from the Department of Metallurgical Engineering at the University of Illinois. He was a former president of the Metallurgy Alumni Board at the U of I. He taught metallurgy at Illinois Central College and Bradley University. He was commissioner for the Washington Police Department for 12 years. He was a member of the First United Methodist Church in Washington. Surviving are his wife of 57 years, Dorothy; one son, Richard, of Satellite Beach, FL; one daughter, Diane Van Pelt of Mission Viejo, CA; and two step grandsons.

## Louann Mattix retires

*Louann Mattix, staff clerk in the MatSE Business Office, retired on December 31, 2002, after 33 years at the University. Below is a message from Louann to alumni and friends.*

"I did it! I finally did it! After a very agonizing decision I decided on December 30 to retire the next day, December 31, 2002. I began my career at the University in October 1969. In January 1970, Jerry Fisk, then the business manager, asked me to come work in the former Metallurgy and Mining Engineering Department. That's where I spent my entire career!

When I started in the department, the students and I were almost the same age. So we hung out together. The older folks won't believe this but one 4<sup>th</sup> of July, some students and I got on top of the Metallurgy and Mining building to watch the

fireworks. We couldn't see the fireworks because the Illini Union was in the way but we had a great time getting up there!



Jay Menacher presents Louann with a gold watch at her retirement reception on January 31.

My mind is filled with so many memories of all the faculty, staff, grads, undergrads and student workers I've had the privilege to work with over the years. I went from mimeograph machines to digital imaging to computers. My brain is filled with learning all the new equipment year after year.

I enjoyed going to work each day, because each day brought a new adventure. I cannot begin to count the number of people that passed through my office over the years. Many became my personal friends and I'm still in contact with them.

Since I had worked all my life, I was afraid of being bored after retirement, but I must say I have adapted quite well – going to bed late and getting up at noon works for me!

I'd love to hear from you. My e-mail address is l-mattix@uiuc.edu."

# MatSE presents named lectures

The MatSE Department was pleased to present two named lectures last semester. On February 10, David A. Weitz gave the Thomas A. Read Lecture, "Spheres on Spheres: Self Assembly and Structure of Colloidal Particles on Spherical Surfaces." Weitz is the Gordon McKay Professor of Applied Physics and Professor of Physics at Harvard University. The lecture is in memory of Thomas Read, Head of the Metallurgy Department at the University of Illinois from 1954 to 1966. The lecture series was provided by funds contributed by Read's students, research associates, and colleagues.

On April 7, C. Jeffrey Brinker gave the Lane Lecture, "Self-Assembly of Bio-Inspired Nanostructures." Brinker is a Senior Scientist at Sandia National Laboratories and a Distinguished National Laboratory Professor in Chemistry and Chemical and Nuclear Engineering at the University of New Mexico. The Lane Lecture was established by Joseph (BS Met Eng '43) and Wyvona A. Lane (PhD Chem '46) to foster increased collaboration between the MatSE and Chemistry Departments.



Students and faculty enjoyed the receptions following the lectures.



Howard Birnbaum and David Weitz at the close of the Read Lecture. Thomas Read was Birnbaum's Ph.D. advisor.

**Welcome to the University of Illinois Alumni Association.**

Your membership is helping build an even greater University alumni network. We hope you will become involved in the Association's many activities and take advantage of the growing number of exclusive member benefits.



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<p><b>Annual Membership</b></p> <p><input type="checkbox"/> Single \$45</p> <p><input type="checkbox"/> Single, Recent Grad** \$30</p> <p><input type="checkbox"/> Single, Senior Alumni*** \$30</p> <p><b>Life Membership</b></p> <p><input type="checkbox"/> Single \$750</p> <p><input type="checkbox"/> Single, Senior Alumni*** \$375</p> <p><input type="checkbox"/> Check here if you would like information on other payment plans.</p>	<p><input type="checkbox"/> Joint* \$60</p> <p><input type="checkbox"/> Joint, Recent Grad** \$40</p> <p><input type="checkbox"/> Joint, Senior Alumni*** \$40</p> <p><input type="checkbox"/> Joint* \$1,000</p> <p><input type="checkbox"/> Joint, Senior Alumni*** \$500</p>	<p><b>Method of Payment</b></p> <p><input type="checkbox"/> Check: Please make your check payable to the University of Illinois Alumni Association.</p> <p><input type="checkbox"/> Credit Card: Please charge my:</p> <p style="margin-left: 20px;"><input type="checkbox"/> MasterCard <input type="checkbox"/> VISA <input type="checkbox"/> American Express <input type="checkbox"/> Discover</p> <p>Card Number _____</p> <p>Expiration Date _____</p> <p>Signature _____</p>
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Membership dues include \$12 per year for a subscription to Illinois Alumni magazine.

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**JOINT MEMBER INFORMATION**

If you have selected a joint membership, please provide the following for the joint member:

Joint Member Name \_\_\_\_\_

Social Security Number \_\_\_\_\_ University of Illinois graduate?  No  Yes

Relationship to Member (optional) \_\_\_\_\_

Name on Diploma (if different from above) \_\_\_\_\_

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\* Joint members are two persons living at the same address who receive one copy of each issue of the alumni magazine and Alumni Association, college and department mailings.

\*\* Currently enrolled as a University of Illinois student or earned a University of Illinois degree within the past three years.

\*\*\* Must be age 65 or older or have graduated from the University of Illinois 40 or more years ago. In the case of joint memberships, one of the joint members must meet this criteria.

UD21

## 1940s

**H. P. Leighly (BS Met '48, MS Met '50, PhD Met '52)** wrote to the Editor of his sadness in reading of former classmate Glen Wensch's death. He wrote that Glen earned the first Ph.D. in metallurgical engineering from the U of I. Stanley Channon earned the second one, and Leighly earned the third. He is a professor emeritus of the Department of Metallurgical Engineering at the University of Missouri, Rolla.

## 1960s

**Walter Class (BS Met '61)** has been named an Axcelis Fellow. This is the highest techni-

cal award and accolade in his company. Class is the second technologist to be named a Fellow. A 16 year veteran of the company, he is the strategic marketing director. Axcelis Technologies, headquartered in Beverly, MA, provides innovative, high-productivity solutions for the semiconductor industry.

**Doug Ruhmann (BS Met '64)** was elected President of the MatSE Alumni Board. He manages Harpoon/Slam Proprietary Programs for Boeing in St. Louis, MO.

**Krish Chawla (MS Met '67, PhD Met '71)** is a professor of materials science and engineering at the University of Alabama, Birmingham. His book

Ceramic Matrix Composites is now in its second edition.

## 1970s

**Dino Gavanes (BS Met '73)** is the co-founder and president of Premier Risk Services, Inc., in Itasca, IL. He has over 25 years of experience in the insurance industry.

**Sanak Mishra (MS Met '70, PhD Met '73)** moved from New Delhi to Rourkela as the managing director of the Rourkela Steel Plant. He is a member of the Board of Directors of the Steel Authority of India Limited, the 14th largest steel company in the world. He and his wife Veena (MS Library '68, MS Journalism '70) took

Charlie Wert on a tour of the Taj Mahal during Wert's visit to India last year.

**William Ellis (BS Met '74)** returned recently from a 3-month assignment for the US Army in Kuwait and Qatar. As a civilian project engineer, he manages the design, construction and equipping of military vehicle maintenance facilities worldwide. Ellis was an adjunct instructor at a local junior college prior to working for the Army. Though semi-retired from farming, he restores and exhibits antique farm tractors from his extensive collection.

**Alan Stone (BS Met '78)** moved his company Aston Metallurgical Laboratories to a new facility in Wheeling, IL.

## *We want to hear from you ...*

and find out what has been happening in your life. Your fellow alumni, as well as the MatSE Department, want to hear about your activities. The Alumni News is mailed twice a year and is also available on-line at [www.mse.uiuc.edu/alumni.html](http://www.mse.uiuc.edu/alumni.html).

Name \_\_\_\_\_ UIUC degree(s) and year(s) \_\_\_\_\_

Business address \_\_\_\_\_

\_\_\_\_\_ Phone \_\_\_\_\_

Home address \_\_\_\_\_

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

News about you (continue on separate sheet if necessary) \_\_\_\_\_

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**Return to:**

**The Editor, MatSE Alumni News, 201B MSEB, 1304 W. Green St., Urbana, IL 61801 or e-mail [brya@uiuc.edu](mailto:brya@uiuc.edu)**

Aston is an independent laboratory and consulting firm that provides metallurgical testing, consulting, failure analysis, problem solving, and expert witnessing.

## 1980s

**Sheryl Tipton (BS Met '80)** was named Vice President-Elect of the MatSE Alumni Board.

**David M. Wilson (BS Cer '82, MS Cer '84)** is a senior materials science specialist for 3M in St. Paul, MN.

**Dale E. Baker (BS Met '86)** has been named metallurgical and quality systems manager at Alcoa Warrick Operations. He recently was a technical coordinator for the company's rolling division.

**Sherry Brown (BS Met '89)** is employed as a metallurgical engineer in the Technical Services Division of Caterpillar. She and her husband, Shannon, reside in Morton, IL.

## 1990s

**Hilde Schneider (BS Cer '90, MS Met '92, PhD MatSE '95)** gave birth to her first child, Emily Rose Spielbauer on October 26, 2002. Hilde is a senior research scientist at 3M in St. Paul, MN.

**Steve Kilgore (BS Met '93, MS MatSE '96)** works in Motorola's Intrinsic Reliability Engineering Lab in Arizona.

**Kevin Ledvina (BS Cer '95)** earned an M.B.A. from Northwestern University's Kellogg School of Management. He is

a product manager at Hytel Group located outside Chicago.

**Tim Holmstrom (MS MatSE '97)** recently completed his Ph.D. in physics from the University of Virginia. He will be starting a research associate's position with the College of William and Mary in June.

**Curtis C. Martin (BS Cer '99)** works in customer service for Capstone Turbine Corporation in Tarzana, CA. He lives in Reno, NV, and was previously a mortgage broker.

**Sherry Morissette (PhD MatSE '99)** is the group leader/senior scientist for TransForm Pharmaceuticals, Inc., in Lexington, MA.

## 2000s

**Casey Motter (BS MatSE '00)** and **Joe Harmon (BS MatSE '00)** were married March 7, 2003, in New Orleans. Motter is a production engineer in charge of the porous coating department at Centerpulse Orthopedics. She is taking pre-med classes and plans to go to school to become a surgical physician assistant. Harmon is a manufacturing engineer at AMD and supports the thin film processing of wafers. They reside in Pflugerville, TX.

**Justin Titus (BS MatSE '01)** married Jamie Fearday on August 17, 2002, in Sigel, IL. Justin is employed at Mid-State Industries in Arcola. His wife is employed at First Mid-Illi-

nois Bank and Trust in Mattoon. The couple resides in Neoga.

**Matthew Yaklich (BS MatSE '01)** and Megan Kohr were married on July 6, 2002, in Peru, IL. He is a metallurgical engineer with Caterpillar Inc. in Morton. His wife teaches Spanish for the Unit 5 Schools. The couple resides in Normal.

**James Smay (PhD MatSE '02)** was recognized for his work on 3-D colloidal inks in C&E News' "Chemistry Highlights 2002."

**Mike Tabo (BS MatSE '02)** is engaged to Cindy Borrero (AB Political Science '02). Tabo is a metallurgist at Alcoa's Warrick Operations. He and his fiancé recently moved to a new home in Evansville, IN.

## MatSE alumnus honored by College

G. Ronald Morris (BS Met '59) is the recipient of the College of Engineering Alumni Award for Distinguished Service. The Alumni Award for Distinguished Service consists of a medal and a certificate for superior accomplishments. It is given to alumni and former faculty members who have distinguished themselves by outstanding leadership in planning and direction of engineering and scientific work, by fostering professional development of young engineers and scientists, or by their contributions to knowledge in the fields of engineering and science.

The award citation reads "To Ron Morris for his leadership and vision in materials manufacturing industries." Morris' career focused on industrial production. In the last 40 years, he held virtually every corporate manufacturing and executive position, and his leadership turned foundering enterprises into profitable companies. Morris has had responsibility for personnel units ranging from a few to more than 15,000 people. He retired in 1999 as President and CEO of Western Industries Inc., a privately held contract manufacturer of fabricated steel and molded plastics products headquartered in Milwaukee.

Ron Morris has given of himself freely and generously in educational, philanthropic, and civic organizations. He serves on the MatSE Department's Senior Advisory Committee and will soon assume responsibilities as a recent nominee to the University of Illinois Alumni Association Board of Directors. In 2000, he and his wife established the G. Ronald and Margaret H. Morris Professorship in Materials Science and Engineering, now held by Ken Schweizer.

## From the interim head

Since the last alumni newsletter there have been several changes in the department. John Weaver stepped down as Head to focus more attention on research and teaching, and I have accepted the responsibilities of the Interim Head. A search is in progress, and we hope to appoint our new Head early in 2004. Several other notable changes have occurred in the last six months. Gert Ehrlich has retired after 34 years in the department, although he will teach statistical thermodynamics one final time this fall. After a very successful term, Joe Greene has stepped down as the Director of the Frederick Seitz Materials Research Laboratory and returned to the department.

The department is in excellent condition. Our graduate program moved from third to second in national ranking, our undergraduate program is ranked first, we are in the final phase of a \$4 million renovation of the east wing of the Materials Science and Engineering Building, we have a new biomaterials option for our undergraduates, and our undergraduate and graduate student enrollment numbers are increasing. Our students and faculty are being recognized for their work. Bob Averback is the first recipient of the Hamer Professorship. Joe Greene was elected to the National Academy of Engineering. Jim Economy was elected to the National Academy of Arts and Science. Howard Birnbaum was awarded the von Hippel award from the Materials Research Society. Jennifer Lewis was promoted to Professor and, along with her Ph.D. student Glen Kirby, won the best paper award at the ACerS meeting. David Payne was awarded the Outstanding Educator Award from the ACerS Educational Council. Our undergraduates, including our freshmen, won 9 of the 21 awards at this year's

Engineering Open House. Considering the size of our program compared to others in the College, the number and significance of these awards shows the quality of our program.

You will have heard of the budget difficulties facing the University of Illinois, the College of Engineering, and the MatSE Department. The budget reduction will affect our program and the services we provide, but due to some prudent decisions earlier in the year, we should be able to keep these to a minimum. You, as alumni, can help us continue to be successful. Our students and even our alumni need jobs, so please let me know of internship, coop, and job opportunities in your company.

If you are in the Champaign-Urbana area, I encourage you to visit me and to spend time in the department. If you have questions, please call (217-333-1440) or email ([ianr@uiuc.edu](mailto:ianr@uiuc.edu)) me. I look forward to hearing from you.



Ian M. Robertson  
Professor and Interim Head



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