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Metro Tech Campus Welcomes First Residents

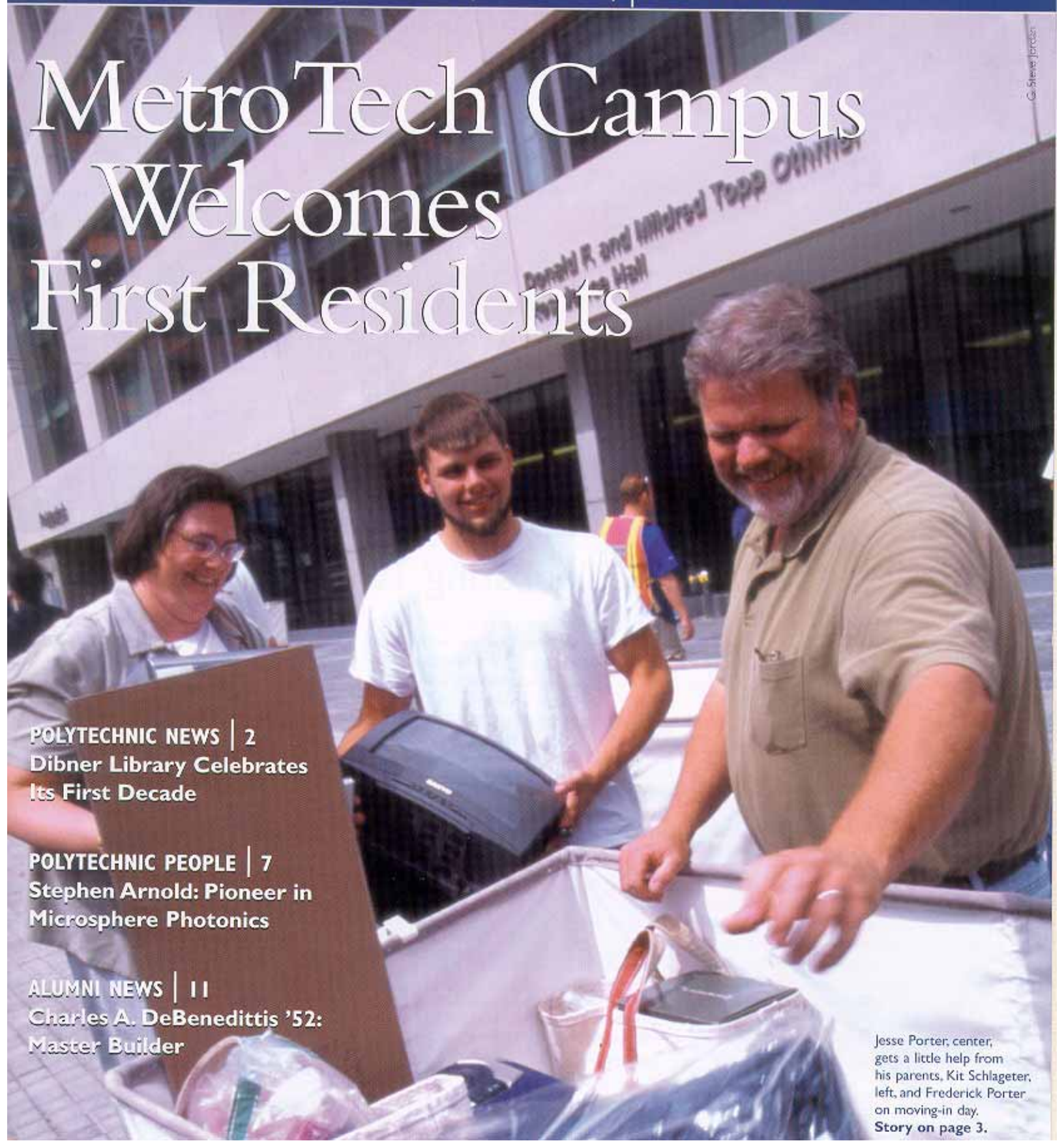
G. Steiner/Jordan

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Master Builder

Jesse Porter, center,
gets a little help from
his parents, Kit Schlageter,
left, and Frederick Porter,
on moving-in day.
Story on page 3.



The staff of Polytechnic's Bern Dibner Library of Science and Technology is celebrating its 10th anniversary in 2002. Front row, from left: Heather Walters, Jana Richman and Ana Torres. Second row: Gavin Paul, Christine Worden, Yencia Clark and Michal Kiezik. Third row: Nancy Byrne, Beh Sue Yuen, Rachel Dwight and Roupchan Hardowar. Back row: Jim Jarman.



DIBNER LIBRARY: Celebrating 10 Years of Service

The dedication of the Bern Dibner Library of Science and Technology in 1992 at MetroTech Center marked the opening of Poly's first new building since the University moved in the late 1950s from its former site on Livingston Street. Bern Dibner '21 H'59, a Poly alumnus and the library's principal benefactor, knew that Poly could not be a first-rate technological institution without a modern research library. He realized that technology and the information age placed new demands on the University and that the very nature and role of a campus library have been transformed.

Dibner was right. Since 1992, the library's role has greatly expanded. The library has migrated from paper-only journal subscriptions to the point where now about 90 percent of journals are in electronic format; the library subscribes to over 6,000 journals—several times the number of subscriptions when the Dibner library opened. There is also a small but growing

collection of e-books that are heavily used.

The online catalog has been transformed. In 1992, the catalog was a stand-alone system that merely indexed and described books and journals; it now provides links to numerous offsite full-text databases as well as complete courses enhanced with images, video and audio and exam papers and class notes. The Web, in its infancy in 1992, has become ubiquitous. To date, there have been four versions of the library's Web page, each incorporating the latest technology, permitting a greater variety of services. The Bern Dibner Library of Science and Technology was awarded the 2002-2003 Golden Web Award for its new Web site <http://library.poly.edu>. This Web site was released in June in celebration of the library's 10th anniversary.

The Information Literacy Center, established in 1997 with support from the Dibner Fund, regularly offers workshops to train students, faculty and staff to increase

their productivity through the use of software. A multimedia lab was created in 2000 to support faculty in moving course content onto the Web.

While the library has embraced new technology—it would now be hard to imagine offering service without it—it retains its traditional ambience and remains a comfortable place to study and relax. The growth has been remarkable. In its first six months of 1992, the library had about 51,000 visitors. During that same period in 2002, over 115,000 used the library. Group study rooms remain extremely popular, reflecting the impact of a "teamwork" approach to the curriculum.

Many things changed during the library's first 10 years in MetroTech except one—the focus on Poly students. They continue to work hard and they deserve the best.

— Jana Richman
Director of Library Services

Long Island Graduate Center Opens; New Campus, Expanded Programs

Joined by legislative and industry leaders, Polytechnic dedicated its new Long Island Graduate Center with a breakfast and ribbon-cutting ceremony September 20. With an expanded curriculum and a state-of-the-art, fully wired campus in The Melville Corporate Center, the new center will serve as an important resource for Long Island's engineering community.

"Polytechnic, in the past three years, has undergone the most dramatic transformation in its 148-year-history," declared President David C. Chang at the opening ceremony. "Our new Long Island Graduate Center is emblematic of the changes occurring at Poly—advanced technology, strong academic programs and a commitment to educating the next generation of leaders in science, technology and management."

Noting the importance of technology in the nation's defense, Congressman Steve Israel of Long Island commended Polytechnic for producing the tech-savvy personnel who will protect the country's national security, adding, "I urge our defense companies on Long Island to hire Poly graduates."

Echoing the theme for a technology-trained workforce, State Senator Carl L. Marcellino said: "This is a day of celebration. Long Island needs the skilled graduates Polytechnic produces."

James M. Smith '71, president and CEO of the Long Island-based EDO Corporation and chairman of the graduate center's

Corporate Advisory Council, advised professional managers to stay current with new technologies. "If Long Island is to stay in the forefront of technological innovation," Smith said, "professionals need to continually upgrade their skills and knowledge, especially in a fast-moving technology-driven world."

Dr. Frank A. Cassara, director of the center and professor of electrical engineering, noted that Polytechnic is now in its sixth decade of service to Long Island and has educated generations of engineers and scientists who have solved some of the world's most difficult problems ranging from microwave radar to polymers and bar codes. "The roster of Polytechnic graduates," Cassara said, "comprises a veritable 'who's who' among leaders of Long Island's high-tech industry."

Students at the center can choose to pursue a master's program, take a 15-credit graduate certificate program or enroll in selected courses. The programs include management, computer science, wireless innovation, systems engineering, electrical engineering and telecommunications networks. All courses are taught by full-time faculty and accomplished business leaders. Classes are offered in the evenings Monday through Thursday and during the day on Saturday.

For more information contact Frank A. Cassara at cassara@rama.poly.edu, at (631) 755-4300 or go to www.poly.edu/li.

OTHMER RESIDENCE HALL WELCOMES FIRST STUDENTS

The transformation of Polytechnic took a major step forward in August with the opening of the University's first residence hall on the MetroTech campus. The \$44-million, 400-bed building, named in honor of the University's greatest benefactors, Donald F. and Mildred Topp Othmer, rises 20-stories over the downtown Brooklyn campus. Professor Othmer, a famed chemical engineer, taught at the University for more than five decades and served as head of the Department of Chemical Engineering.

"The residence hall and other new University amenities have created a 24/7 campus environment for both residential and commuter students," says Ellen F. Hartigan, Polytechnic's vice president for student affairs. "In addition,

"The residence hall allows us to recruit outstanding students nationwide.

This facility will provide a richer and more diverse education experience for all our students."

—Ellen F. Hartigan

the residence hall allows us to recruit outstanding students nationwide. This facility will provide a richer and more diverse education experience for all our students."

In September, Polytechnic opened the new 300-seat Jasper H. Kane Dining Hall. Kane '28 H'95, a retired vice president and director of Pfizer Inc. and a staunch supporter of the University, donated over \$3 million to the Campaign for Polytechnic—*Fulfilling the American Dream*.

Early next year, the University will open a new student lounge in Rogers Hall named for the late Dr. Peter P. Regna '32 '37 '42 H'94, and his wife, Barbara. Regna, one of Polytechnic's most distinguished alumni, played a key role along with Kane in discovering, developing and manufacturing several drugs that revolutionized modern medicine, including Terramycin.



Cutting the ribbon for the opening of the new Long Island Graduate Center are, from left, Ted Weiss, president of T. Weiss Realty Corporation and the owner of The Melville Corporate Center; Dr. Ivan T. Frisch, Polytechnic's executive vice president and provost; Joseph Katz, senior vice president for research and development at Symbol Technologies Inc.; Senator Marcellino; Congressman Israel; James M. Smith; President David C. Chang; and Professor Cassara.



SUMMER RESEARCH 2002

Building and programming a line-following robot was a challenge for high-school students participating in Polytechnic's 2002 Summer Research Institute. From left are Shuchie Jaggi, 15, Francis Lewis High School, Queens; Dr. Vikram Kapila, associate professor of mechanical engineering, Polytechnic; Andrew Eichel, 15, James Madison High School, Brooklyn; Juliya Golubovich, 16, Brooklyn Technical High School; and Ian McClarin-Sewer, 17, Dalton School, Manhattan. The students, who also worked on a walking robot and a robotic vacuum cleaner, studied in Kapila's Mechatronics/Process-Control Remote Laboratory.

Polytechnic Awarded NSF Grant To Enhance Teacher Technical Training

Polytechnic has been awarded a \$450,000, three-year National Science Foundation (NSF) grant to enhance the technical and laboratory skills of high school teachers in the New York metro-area. An array of training and research activities will bolster the science, mathematics and technology skills of teachers and help them integrate project-based learning in their science and mathematics curriculum.

According to Dr. Vikram Kapila, the principal investigator for the project and associate professor of mechanical engineering at Polytechnic, the field of mechatronics—the integration of electronics, control theory, computer science and mechanical engineering—will be used to engage and stimulate the interest of teachers in hands-on learning activities. For example, teachers will undertake the synergistic integration of sensors, actuators, instrumentation and computer-control hardware and software to perform such tasks

as industrial and home automation, the validation of global warming phenomenon and the design of Web-enabled remote laboratory experiments.

"The technological applications of mechatronics are part of our everyday life," says Kapila, "from such mundane consumer products as the microwave oven and the washer-dryer to sophisticated jet engines and intelligent highway systems."

Polytechnic operates a Web-enabled Mechatronics/Process-Control Remote Laboratory, developed by Kapila with an earlier grant from the NSF. The lab will serve as a training and research laboratory for the teachers when the program is launched next summer.

"Teachers admitted to the program will acquire research, communication and presentation skills that will enrich their school's curriculum," says Kapila. "And they will inspire their students to pursue careers in science and technology."

OTHMER INSTITUTE AWARDS GRANTS TO 19 PROFESSORS

Polytechnic's Othmer Institute for Interdisciplinary Studies awarded grants to 19 Poly professors as part of a new initiative titled Short-Term Faculty Seed Grants for Interdisciplinary Research and Innovative Curriculum Development.

The institute created the seed grants as a catalyst for faculty to explore research and education endeavors that cross disciplinary boundaries. More than \$120,000 was awarded in this first round of awards, with more than two-dozen faculty members submitting grant proposals. Dr. Mel Horwitch, director of the institute, said, "These initial seed grants are a first step by the institute in helping the University emerge as a strong magnet attracting diverse talent and as a unique intellectual home for high-impact ideas, innovations and learning."

The 19 professors and their selected proposals are Dr. Stephen Arnold, *Developing an Interdisciplinary Photonics Educational Laboratory*; Dr. Yair Berson, *The Role of Leadership and Job Crafting in Maximizing Innovation and Team Performance*; Dr. H. Jonathan Chao and Dr. Nasir Memon, *A Security-Enabled Router*; Dr. Francine Dolins, *Changing Behavior Using Spatial Tasks: Monkeying Around to Learn in a Virtual Environment*; Dr. Christos Georgaklis, *Systems Research Institute for Chemical and Biological Processes*; Dr. Mel Horwitch, *Formation of a "Homeland Security Industry" and the Shaping of U.S. Innovation*; Dr. Zhong-Ping Jiang, *Nonlinear Ship Control*; Dr. Vikram Kapila and Dr. Farshad Khorami, *Development of Unmanned Air Vehicle Testbeds to Validate Control Algorithms*; Dr. Sunil Kumar, *The Micro-Mechanical-Optical-Electrical Systems Initiative at Poly*; Kumar and Dr. Bruce Garetz, *Pulsed Laser Interactions with Materials: Interdisciplinary Group and Laboratory*; Dr. Ramesh Karri and Memon, *Hardware Sensor for Host-Based Intrusion Detection*; Dr. Mihir Parikh, *Technology Integration, Outsourcing and Alliances in the Wireless Area*; Dr. Bharat Rao and Horwitch, *Global Innovation Strategy*; Dr. Ivan Selesnick, *Signal Processing for Electro-Physiological and MRI Data Analysis*; Dr. Meihua Tai, *Design and Prototype of Reconfigurable Unmanned Ground Vehicle (RUGV)*; Dr. Iwao Teraoka, *Development of HTML Course Modules and Database for Submission of a Proposal for NSF's International Materials Institutes Program*; Teraoka and Dr. Abraham Ulman, *Chiral Surfaces for Advanced Separation*; Dr. Yao Wang, *An Active Sensor Network for Search and Rescue Using "Remotely Guided Rats"*; and Dr. Nina Ziv, *The Evolving Convergence of Literature and Information Technology: An Exploration with Implications for Managerial Practice*.

SPOTLIGHT ON:

CHEMICAL ENGINEERING, CHEMISTRY & MATERIALS SCIENCE

For Department Head Dr. Christos Georgakis, his department has one of the University's richest scientific and engineering traditions: It has produced two of the most generous University benefactors, Dr. Donald F. Othmer, a chemical engineering professor, and Dr. Joseph J. Jacobs '37 '39 '42 H'86, a PhD in chemical engineering and a student of Othmer's. Georgakis says that chemical engineering is the ultimate engineering discipline and offers unique challenges and

"Exceptional faculty attracts the research grants that improve educational programs and further scientific discoveries."

—Dr. Christos Georgakis

rewards. It is a discipline, he says, that demands not only the mastery of physics and mathematics, as do all other engineering disciplines, but also of chemistry.

In the past five years, chemical engineering has expanded to involve biology into its sphere of study. "Those who select it as their field of study," he says, "are rewarded with challenging and exciting studies that could also involve innovative research." He adds that "graduates from any of the bachelor programs of our department have the skills to transcend various careers—in oils, chemicals, computers or pharmaceuticals—with the highest starting engineering salaries."

Georgakis joined Poly in January 2001 from Lehigh University, where he was the Iacocca Professor of Engineering and director of the Chemical Process Modeling and Control Research Center. At Poly, he holds the Othmer Distinguished Professorship in Chemical Engineering. Georgakis arrived at the University at a time when the department boasted the largest research revenues at Poly, new and renovated laboratories, partnerships with outside institutions and new degree programs.

His charge is to increase the number of faculty in chemical engineering and the number of undergraduate students.

Georgakis is also committed to enhancing and augmenting the teaching and research initiatives established by his predecessor, Dr. Kalle M. Levon, including the premedical undergraduate program, which is expected to attract an increasing number of high-quality students. "My goal is to build up chemical engineering and enhance the activities in applied sciences at Poly."

says Georgakis, "and achieve a level of excellence to compete with the top 25 chemical engineering and chemistry departments in the country."

Research is the cornerstone of the department. For fiscal year 2000-2001, the department's 18 faculty members received 31 grants, totaling \$3.5 million. Fourteen faculty members received 33 grants in fiscal year 2001-2002 totaling approximately the same amount. Much of this research is being done in established and new centers and laboratories.

The department is also home to the 60-year-old Polymer Research Institute, created by the late Professor Herman F. Mark, considered the father of polymer science. The department houses the Center on Biocatalysis and Bioprocessing of Macromolecules and the Materials Research Science and Engineering Center (MRSEC).

In 2000, the department partnered with SUNY Downstate Medical Center to foster research and education in biomedicine and bioengineering. Together, they currently offer an MS degree in Biomedical Engineering. The department also offers an MS degree in Informatics in Chemistry and Biology, a relatively new science, which organizes and interprets information on DNA, RNA and protein sequences.

Future ambitions for Georgakis include raising money to endow junior professorships and funding start-up research projects to draw more outstanding faculty and to stay competitive with other science and engineering schools. "Exceptional faculty attracts the research grants that improve educational programs and further scientific discoveries," he says. "This trickle-down effect greatly benefits undergraduate students with up-to-date ideas and, in a larger sense, society."



Dr. Christos Georgakis

FACULTY/STAFF NEWS

Dr. Barry S. Blecherman, industry associate professor of management and program director of the MS in Management Program, has been named associate dean for undergraduate education and innovation.

Blecherman joined Poly's Department of Management in 1994 and recently oversaw the creation of its BS in Technology and Information Management Program, which he also directs. In his new position, he will work with academic departments to develop and implement undergraduate programs and negotiate partnerships with industrial and education institutions on undergraduate programs. He will also work with the Office of Assessment and the Department of Academic Success to monitor and analyze student retention, summer programs and transfer-student process. Before coming to Poly, he worked as an engineer for RCA and as a consultant in computer systems; he was involved in classified work for the U.S. Navy in computer operating systems on AEGIS class cruisers, in financial processing systems for a large bank, in the design and implementation of an optical character reader and as a lecturer at the Wharton School of Business.

Dr. Nancy M. Tooney, associate professor and associate dean of engineering and applied sciences, was named a fellow of the New York Academy of Sciences for her work as chair of the academy's Women in Science Forum and for developing cross-disciplinary programming.

Ellen F. Hartigan, vice president of student affairs, has been named to the Board of Trustees at St. Joseph's High School in Brooklyn.

POLYTECHNIC STUDENTS TAKE CLASSES ON THE ROAD

Twenty-four Students Embark on a Unique Semester-long Study Program

The Great Wall of China. The ancient temple of Angkor Wat in Cambodia. Usually, students in the United States can only read about these places. But these and many other important cultural sites will become a classroom for 24 Polytechnic undergraduates who are embarking on a semester-long study program.

This is the first time that the Department of Humanities and Social Sciences is offering a 14-week study program abroad. Five Polytechnic faculty are accompanying the students through nine East Asian countries: Cambodia, China, Hong Kong, Japan, Korea, Philippines, Taiwan, Thailand and Vietnam. The students will complete four interdisciplinary courses, the equivalent of a semester's work. These courses will help the students understand the region from contemporary and historical perspectives.

"This will not be the typical study abroad trip," says Department Head Dr. Harold P. Sjursen. "Students will use on-site locations as an integral part of the learning process."

During the first half of the course, Instructor Lauren Kozol will lecture on comparative arts and literature, and Instructor Donald Phillips will teach an environmental humanities course. In the second half, Assistant Professor Jonathan Soffer will lecture on East Asian history, and Professor David Mermelstein will teach a course in East Asian economics.

Poly students will also meet students at other universities throughout Asia.

"When our students interact with local students," says Sjursen, "it's easier for them to participate in local cultures."

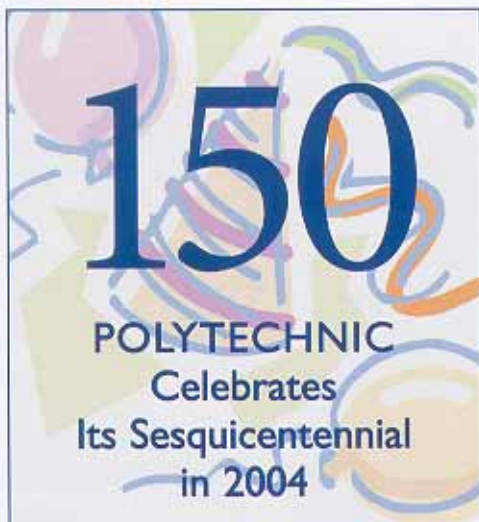
To prepare for their trip, students read their course material while still in New York and attended meetings with faculty to discuss issues unique to study abroad, home sickness and cultural decorum, for example.

Harry Chen '04, is excited about the trip. "College is about meeting new people and experiencing new things," Chen says. "This trip will allow me to witness Eastern cultures first hand."

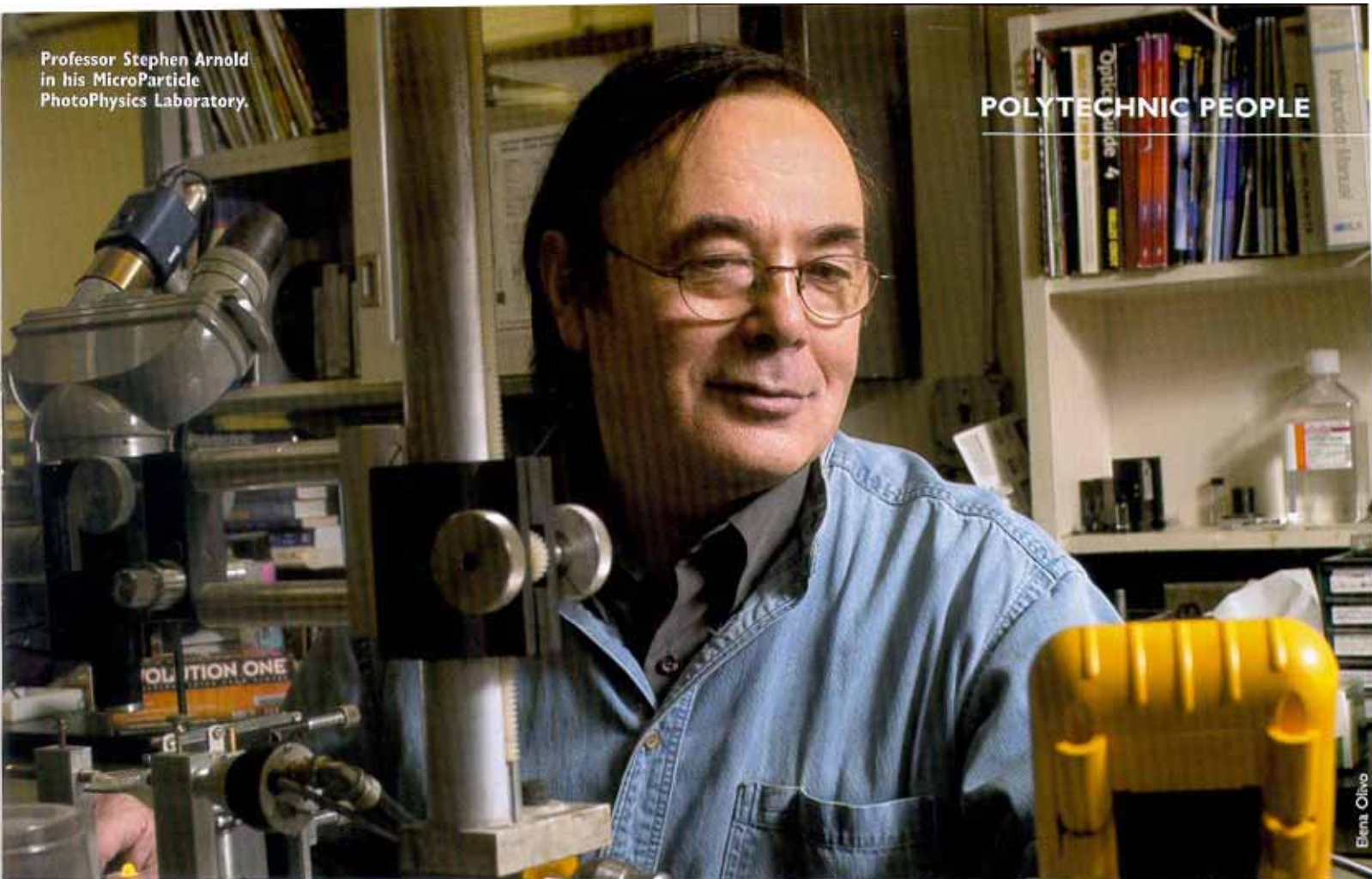
Kozol will require her students to contribute to a weekly Web newsletter, *Poly Rhythms*, so that friends and family at home can follow the group's travels. An update on the trip can be viewed at www.poly.edu/asia.

Sjursen envisions this trip as the first of many that Poly will offer each fall. Other possible regions for the program are Europe and South America. He also notes that the support of Polytechnic President David C. Chang, who has encouraged international study, was critical to the existence of the program.

"These trips are important," Sjursen says, "because they open up a student's world. The experiences they gain abroad can affect their career and life choices."



Poly students and faculty members are spending the fall semester studying in nine East Asian countries.



STEPHEN ARNOLD: Seeing Great Promise in Tiny Spheres

In May 2002, the journal *Applied Physics Letters* published a short paper co-authored by scientists at Polytechnic University and Rockefeller University. Shortly afterwards, the paper was selected by *Nature* magazine as one of the four most interesting physics papers of the month. The lead researcher behind this effort at Polytechnic is University Professor Stephen Arnold.

The paper's abstract makes a rather remarkable claim: "We present a novel optical biosensor with unprecedented sensitivity for detection of unlabeled molecules." In short, Arnold and his team at Polytechnic—which includes Dr. Iwao Teraoka, a chemistry professor, and Maziar Khoshsim, a graduate student—believe they have discovered a new way to detect the presence of specific biomolecules—e.g., protein molecules and strands of DNA.

The recent paper culminates work that Arnold began at Polytechnic in the 1980s. Together with Dr. Lorcan M. Folan '83 '87 then a graduate student and now a Polytechnic professor, Arnold designed and built an apparatus to levitate electrically charged particles by using electrostatic force

to counteract gravity. Such particles are tiny "microspheres" perhaps ten millionths of a meter in diameter. When light is directed at a levitated microsphere, it can become a tiny laboratory for controlled investigation of certain types of energy transfer.

Some of Arnold's early microsphere experiments, he readily concedes, were guided more by the free-ranging curiosity of an experimenter than by the desire to test a specific theory: "The absence of a theory shouldn't prevent one from doing the measurements," he says. "Until one has the data, one really doesn't know."

Arnold's early work helped create the interdisciplinary field now known as "Microsphere Photonics." He continues his work at Polytechnic's highly-reputed MicroParticle PhotoPhysics Laboratory (MP³L), and serves as senior faculty fellow at the University's new Othmer Institute for Interdisciplinary Studies.

The promising new optical biosensor described in the recent paper exploits fundamental principles of Microsphere Photonics: A microsphere of a given size has certain characteristic electromagnetic

"modes," each of which can be thought of as a wave that circumnavigates the inside of the microsphere. Light spectra associated with the microsphere thus show distinct spikes

at certain wavelengths corresponding to resonances of these modes. If the diameter of the microsphere is altered by even a nanometer-sized increment—such as that induced by the bonding of a single layer of molecules to its surface—the change is neatly signaled by a shift in the corresponding spectra. Hence the potential for an exquisitely sensitive biosensor.

For more details of Arnold's work, visit the Othmer Institute Web site at www.poly.edu/microparticle.



A levitated microsphere

— George Smith
Director of Corporate and Foundation Relations

Nakahara Receives IEEE Alexander Graham Bell Medal



Dr. Tsuneo Nakahara, executive adviser to the CEO of Sumitomo Electric Industries Ltd. and a Polytechnic trustee, has been awarded the 2002 IEEE

Alexander Graham Bell Medal for his pioneering work in designing and developing manufacturing systems for optical fibers. Sponsored by Lucent Technologies, the medal is presented for exceptional contributions to the advancement of communication sciences and engineering.

Nakahara joined Sumitomo Electric Industries Ltd. in 1953 and served as the company's vice chairman and deputy CEO. During his tenure, Sumitomo developed the technology to manufacture vapor phase axial deposition optical fiber, which is standard in Japan and one of the top three manufacturing processes worldwide. His team also developed low-loss optical fiber with a pure silica core and fluorine in the clad, which is widely used for underwater long-distance cables. He performed millimeter wave research as a staff member of Polytechnic's Microwave Research Institute during the early 1960s.

PROFESSOR EMERITUS BENJAMIN SENITZKY:

Dedicated Educator and Leader In Establishing Polytechnic's Presence on Long Island

Dr. Benjamin Senitzky might have been a famous violinist, if it weren't for a solo performance he gave in New York at the age of 13.

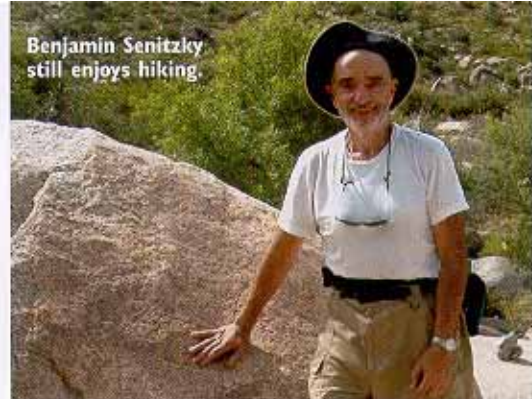
"It was the Tchaikovsky Violin Concerto," he explains. "It was long and too demanding."

The music world's loss turned out to be Polytechnic's gain. During a 25-year career, Senitzky was a dedicated educator, a leader and a visionary who played a key role in setting up the University's undergraduate program on Long Island in 1974.

His music career, however, continued long enough to include playing in a band that backed Frank Sinatra at the Waldorf-Astoria in New York, but Senitzky found his true calling, physics, at Columbia University. Several years of Army service during WWII interrupted his studies, but Senitzky eventually earned a BS in Electrical Engineering in 1948 and a PhD in Physics in 1956. As a graduate student, Senitzky worked under Dr. I. I. Rabi, a Nobel Laureate, researching the hyperfine structure of the excited state of alkali atoms, using the atomic beam resonance technique.

After graduating, Senitzky worked at Bell Telephone Laboratories in Murray Hill, N.J., where he stayed until 1959, when Gordon Gould, who later taught at Polytechnic, asked him to join his laser-research team at Technical Research Group on Long Island.

This wasn't his first encounter with Gould. When Senitzky was a graduate student, Gould, then a student at Columbia, had shown a book of notes to him and Dr. Martin L. Perl '48 H'96, his research partner and future Nobel Laureate. The notes would later be



Benjamin Senitzky still enjoys hiking.

the basis of a long and ultimately successful patent struggle Gould conducted over his laser research.

"We had no idea that that lab notebook would create such a fuss," Senitzky says, "Gould had had it notarized by some guy who ran a candy shop."

In 1966, while still at Technical Research Group, Senitzky traveled "down the road" to chat with faculty at Polytechnic's campus in Farmingdale, Long Island. "I guess they liked what I had to say," he says. "They hired me the next day."

Senitzky was hired as associate professor of electrophysics and continued his research in millimeter wave techniques. He became assistant department head in 1974 and a professor in 1975. In 1974, he and a colleague, Dr. Frank A. Cassara, now director of Polytechnic's Long Island Graduate Center, wrote the curriculum for a freshman-engineering lab to expose students early in their careers to the various fields of engineering. Many of the Farmingdale faculty volunteered their time to create the various experiments.

"We were the first engineering school to suggest such a lab," Cassara says. "It was a busy and exciting time."

Senitzky became director of the Long Island campus in 1978 and aimed to give his student's the best education possible. "Job interviewers were highly impressed with our grads, and they were hired by prestigious companies like IBM or Bell Labs."

Senitzky was involved in more than just academics. He often took small groups of graduates and undergraduates hiking and camping. An accomplished swimmer, he once beat a four-student relay team in a mile-long race in a pool nearby.

Senitzky taught at Poly until 1989, when he and his wife, Jeanne, began to divide their year between New Hampshire, where their daughter, Susan, lives, and the University of Arizona at Tucson, where he was an adjunct professor until 1999. Since 2000, Tucson has been his home. He still enjoys hiking several times a week, practices the violin daily and plays with an amateur quartet, which is presently working through Shostakovich's 15 quartets.



APO'S SPECIAL ACHIEVEMENT

Brooklyn/Staten Island Blood Services has given a Special Achievement Award to Polytechnic's Alpha Phi Omega (APO)-Kappa Beta Chapter for coordinating the University's blood drive in 2001 and collecting more pints of blood than the previous year. Receiving the award are, from left, Debbie Cassetta, director of assessment and community adviser to Kappa Beta; Eric Shiu '03; Abigail Dy '03, president, APO; President David C. Chang, president, Polytechnic University; and Sirichai Vitayavanich '03. APO is student-run service organization.

Devotion to Improving Math Scores Wins Awards for Department Faculty

Last year, an undergraduate computer-engineering student became so convinced that zero divided by zero equals one that he spent six hours arguing his theory to three Polytechnic math faculty. "That particular student still doesn't believe that zero divided by zero is not one," says Carolyn King, a mathematics instructor, "but in what other school could a student get six hours of time with instructors to discuss this?"

Polytechnic students have recognized the dedication of Department Head Dr. Erwin Lutwak and his colleagues Professor Deane Yang, Instructor Carolyn King and Lecturer Chandni Shah, by honoring them with the 2001 and 2002 Dedicated Faculty Awards, respectively. The award, decided by a student committee, was given for their commitment to students in helping them to master the mathematics they need to succeed at Polytechnic. Faculty in the Department of Mathematics may be the first in the history of the award to have received it in two consecutive years. The department itself has garnered attention recently for its expanded efforts to strengthen the math skills of students. Since fall 2000, all academic departments have increased the amount of math required

in their programs, in most cases from 14 to 20 credits over the first two years of study. Students are also taking more math courses as electives. "If students have difficulty in engineering courses," says Lutwak, "more often than not it's a math issue."

To help students with the math curriculum, the department has introduced several initiatives. A diagnostic test initially identifies freshmen who need remedial work, which is offered in accelerated review courses. Weekly math workshops encourage students to solve problems cooperatively with professors. Lutwak is also proud of his faculty's long office hours, which allow students to get help at almost any hour of the day.

"I'm most impressed with how often the math faculty are here on weekends or stay late at night to work with students," Lutwak says.

Amy Mann '04, agrees: "Students can get help at almost any hour in the math department—even on weekends."

What qualities do Shah and King think make a good teacher? "There are no tricks to teaching," Shah replies. "Patience is important, and I try to make it easy for students to ask questions and seek help."

King adds: "You have to love math and

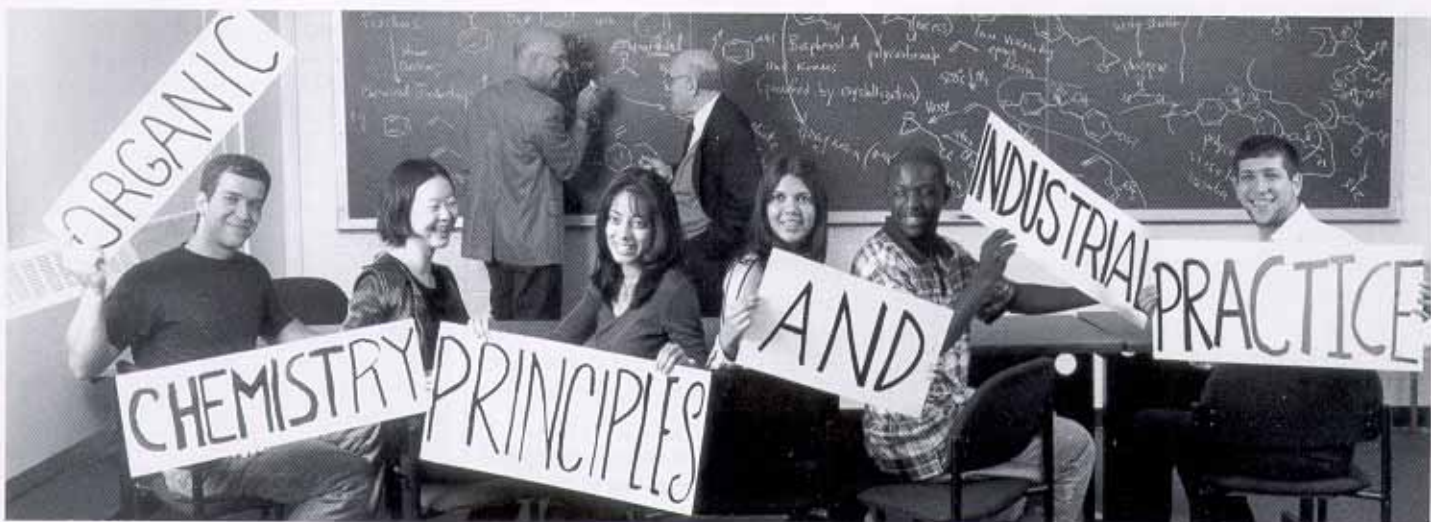


Dr. Chandni Shah and Carolyn King

enjoy sharing what you do. You also have to enjoy working with this age group."

Both are modest when it comes to discussing their awards, and King quickly shifts the conversation to her students. "The students we're recruiting have great attitudes," she says. "They do the work necessary to succeed without complaining. In about two years time, we are going to see an even higher level of engineer coming out of Poly."

Lutwak agrees: "A Polytechnic diploma should certify that a student has mastered the mathematics needed to become a leader in engineering, science or any other field that demands quantitative and analytic skills. Chandni Shah, Carolyn King and Deane Yang exemplify the dedication to our students that is needed to achieve this goal."



COVER SHOT

Spelling out the title of a new book, *Organic Chemistry Principles and Industrial Practice*, are six Polytechnic students in a classroom with the authors, Professor Mark M. Green, left, and Dr. Harold A. Wittcoff, scientific adviser at Nextant Inc. The book will be published by

Wiley VCH, Weinheim, Germany. From left, the students are Eugene Dimarksky, Jennifer Yim, Melodie Torres, Recia Roopnarine, Senmgthane Dieng and Steven Bucholz, all Class of '04 and chemical engineering students. A similar picture will be used on the cover of the book.

ALUMNI PRESIDENT'S CORNER

How many of you remember the great Paint-A-Thon of 1996? At the time, President Chang felt the University needed to improve the students' learning environment. He asked for help from the Polytechnic community, and the response he received was better than anyone could have imagined. Alumni, students, faculty and staff joined forces one weekend and painted every inch of Rogers Hall. A symbolic gesture, to be sure, but it showed we work best when we work together.

Fast forward to today: Polytechnic has undergone an amazing transformation. After a successful capital campaign, the University built a new state-of-the-art academic and athletic facility, the Joseph J. and Violet J. Jacobs Building, and welcomed the first on-campus residents to the new Donald E. and Mildred Topp Othmer Residence Hall in September.

These two developments herald a change in the role of Polytechnic and of its alumni. The high-tech, fully wired, "smart" classrooms and renovated laboratories will give our students an unparalleled educational experience and will help position Polytechnic among the ranks of the great technological and engineering institutions.

Poly can now reach out to a previously untapped student pool through its alumni chapters—around the country and around the world. These chapters will play a more vital role in the University's recruiting efforts by hosting gatherings where prospective students

can meet alumni. We also plan to increase alumni participation in sponsoring communications and technical writing workshops, lectures and mentoring programs as well as spearheading efforts to help the University to forge greater alliances with professional and technical societies such as FIRST (For Inspiration and Recognition of Science and Technology).

With the first anniversary of 9/11 still fresh in our minds, it is fitting that we honor those who made the ultimate sacrifice on that day and throughout the history of this nation with the unveiling of the Polytechnic Alumni War Memorial on October 29. For more information call Donald N. Ivanoff Jr., director of alumni relations at 718/260-3885, or e-mail him at divanoff@poly.edu.

I look forward to my first year as president of the POLYTECHNIC ALUMNI. I'm eager to hear your suggestions on how to improve our alumni outreach and support the University. Meantime, to find out how you can be more involved in the alumni association, log on to www.poly.edu/alumni, where you'll find good suggestions.



James Oussani Jr.

VOLUNTEERS NEEDED

The POLYTECHNIC ALUMNI is looking for members who would like to volunteer their time and talents to help increase the vitality of the University and the Alumni Association. Here are a few suggestions on how you might be able to lend your support.

Recruiting: Help spark the interest of high school students about coming to Poly by attending college fairs sponsored by the University or hosting receptions in your area for prospective students.

Reunions: Help organize an on-campus visit for your class, team or student organization. We are especially interested in hearing from members of the classes of 1953, 1963, 1978 and 1993 as well as members of the Peer Counselors and varsity athletes.

Sections: The Office of Alumni Relations wants to revitalize alumni sections in central New Jersey, Philadelphia and on Long Island and establish new ones in southern Connecticut and the Hudson Valley.

For more information, e-mail Donald N. Ivanoff Jr. at divanoff@poly.edu or call him at 718/260-3885.



The POLYTECHNIC ALUMNI
Long Island Chapter
Invites You
to

The Annual Pre-holiday Dinner

*Ring in the holiday season!
Enjoy an elegant dinner
and good conversation with friends.*

**Tuesday, December 10, 2002
at 6 p.m.**

Milleridge Inn, Jericho, N.Y.

**Cost: \$50 per person
Reception: 6 p.m.
Dinner: 7 p.m.**

Directions: The Milleridge Inn is at the intersection of Hicksville Road and Jericho Turnpike. The inn is 1/2 mile from either Exit 41 North on the Long Island Expressway or Exit 35 North on the Northern State Parkway on the right side of the street.

For more information, please call Lisbia Horton in the Office of Alumni Relations at 718/260-3844, or e-mail her at lhorton@poly.edu.

YOU CAN HELP

Alumni are keenly interested in Polytechnic's ranking in various national surveys. What most alumni don't know is that they can help impact our ranking. When ranking universities, all the major surveys examine a number of factors, including the percentage of alumni who contribute to their *alma mater* on an annual basis.

Currently, a modest 16 percent of Polytechnic alumni contribute to either the Polytechnic Fund or various special campaigns. We are grateful if you are among our loyal donors. However, to increase our standing in national surveys, we must have more participation in our annual fundraising efforts.

So, when you get a call from a phonathon student or receive an appeal letter in the mail, please remember that your gift is a vote of confidence in your University and a way to express your desire to see your Polytechnic degree increase in value.

— George Likourezos '92 '92
Polytechnic Fund Chair

PROFILE

CHARLES A. DEBENEDITTIS '52: Master Builder Brings Construction Management to Poly

For Charles A. DeBenedittis '52, the road to a celebrated career managing the design and building of some of the world's mega skyscrapers began with his father.

"As a youngster, I never had much interest in construction," recalls DeBenedittis. "However, my father, who immigrated to this country from Italy, prided himself in learning carpentry and becoming a renovation contractor. He convinced me to attend Brooklyn Technical High School, where I studied architecture and building construction, and then it was on to Polytechnic for my bachelor's in civil engineering."

DeBenedittis, senior managing director for Tishman Speyer Properties, oversees the firm's design and construction activities worldwide. In a career spanning a half-century, he has been involved with such "signature" projects as the 100-story John Hancock Center in Chicago, the 4-million-square-foot Renaissance Center in Detroit, the World Trade Center in Manhattan and, most recently, the Sony Center in Berlin, Germany. The Sony Center, a billion-dollar, eight-building, mixed-use complex, designed to showcase Sony's technological prowess, is considered one of the most successful developments in Berlin and a premier example of mixed-use development in Europe.



Graduated *Magna Cum Laude*

Born in Brooklyn, DeBenedittis graduated from Brooklyn Tech at age 16 and went on to earn a bachelor's *magna cum laude* from Polytechnic. While studying at Poly, he honed his leadership skills as president of the student chapter of the American Society of Civil Engineers (ASCE), and enrolled in the Army ROTC, which prides itself as the best leadership course in America.

In 1957, the ASCE gave DeBenedittis its Ridgeway Award for being an outstanding member of the organization's student section.

Following graduation, DeBenedittis was commissioned a 2nd lieutenant in the U.S. Army Corps of Engineers and served as company commander of an engineer construction company in Korea, building military and civilian facilities. He was awarded a Bronze Star Medal for meritorious service in wartime Korea. Returning home in 1954, DeBenedittis joined Tishman Realty and Construction Company, the predecessor company of Tishman Speyer Properties, and began his career in high-rise design and construction.

New Construction Management Degree

DeBenedittis is a strong advocate for a greater emphasis on construction-management education in the nation's technological universities. With his financial support, Polytechnic is now offering one of the first undergraduate degree programs in construction management in the New York metro area. The program will prepare students for leadership-track positions in the construction industry.

"Charlie DeBenedittis and other industry leaders have made it known that there is a critical need for entry-level graduates who are proficient in construction management and who have the potential to be leaders," says Dr. Fletcher (Bud) Griffin, vice president and dean of engineering and applied sciences. "Our new bachelor's program will help fill that need."

Charles A. DeBenedittis with a model of the 70-story Messeturm office building in Frankfurt, Germany. He launched the European operations of Tishman Speyer Properties with the construction of the Messeturm in 1991, at the time, the tallest building in Europe.

The new degree program will be administered by the University's Center for Construction Management Technology, housed in the Department of Civil Engineering. Polytechnic currently offers MS and PhD degrees in Construction Engineering (for engineers) and Construction Management (for non-engineers).

In recognition of DeBenedittis's illustrious professional career and support for Polytechnic, the University will name a new lounge in his honor. The Charles A. DeBenedittis Student Lounge for Students of Civil Engineering and Construction Management will open in November in Rogers Hall on the MetroTech campus.

"This is a great honor," says DeBenedittis. "Poly gave me the fundamentals to pursue a challenging and rewarding career in building design and construction. I am pleased that future generations of engineering students at Poly will have the same opportunity."

— John F. Kelly
Director of Media Relations

NOMINATIONS FOR HONORARY DEGREES

Nominations for honorary degrees to be conferred at Commencement 2003 are invited from University alumni and friends. Candidates need not be Polytechnic alumni but should have demonstrated extraordinary contributions to technology, science or society.

Nominations, including a biography and statement regarding the nominee's extraordinary contributions, should be sent by **November 30** to **Vice President Richard S. Thorsen** at Six MetroTech Center, Brooklyn, NY 11201 or faxed to 718/260-3755.

CLASS NOTES

Now You Can Read and Submit Class Notes Online. Visit www.poly.edu/alumni and click on "Class Notes Online."

49 EDWIN W. BAUER (EE) '52 (EE) is vice-president of the IBM Mid-Hudson Valley QC Social Club.

51 DANIEL KATZENSTEIN (AE) is volunteering as a docent at the Cradle of Aviation Museum on Long Island and is a member of the Grumman aircraft restoration team.

52 ANTHONY A. ANNUNZIATO (EE) '58 (EE) has been performing home inspections for 10 years and is a candidate member of the American Society of Home Inspectors. Recently he celebrated the birth of his seventh grandchild, Christy Ann. MICHAEL CAPOBIANCO (CH) '54 (CH) '64 (MA) plans to publish a book of religious inspirational passages entitled "Miriam: A Meditation" during the holiday season. ARTHUR GILBERT (CE) and his wife, Bea, celebrated their 61st wedding anniversary.

53 Members of the Class of '53 who would like to volunteer to work on the upcoming Golden Jubilee Reunion or to contact members of their class about the event should contact Donald N. Ivanoff Jr., director of alumni relations at 718/260-3885 or divanoff@poly.edu.

56 MICHAEL DALEY (CE) owns Delta International Associates, a firm involved in structural, mechanical and civil engineering projects such as land surveying and topography.

57 IRVING GOODMAN (EE) has retired and moved to Florida. RALPH J.

MADSEN (CM) is a retired elementary school teacher and volunteers as a math tutor in the Cambridge, Mass., public schools. He also enjoys babysitting his grandchildren. ALVIN PERLMUTTER (EE) and his wife, Eve, were honored by the Merrick Jewish Center where he serves on the Board of Directors. BERNARD SELIG (ME) received a Dedicated Service Award from ASME for his years of service as a member of its research and technology development board. RICHARD J. ZALOUM (ME) sends best wishes to all the brothers of Alpha Phi Delta and their wives and children.

59 LEONARD FORMAN (EE) and his wife, Cathy, spent a week in Starks, Maine, in August providing the music at a Vacation Bible School for the local children. They were recently appointed to the Scotland Christian Missions Outreach Team (SCOT) Board of

Governors. SCOT sends missionaries to Scotland for one week each summer to teach.

61 EDWARD F. WEINGART (EE) recently had a digital photography exhibit at the Hampstead Arts Gallery in North Carolina.

62 IVAR PLESCOV (CE) has retired as supervisor of capital outlay-boating facilities, for California's Department of Boating and Waterways.

64 CLIVE DYM (AM), professor at Harvey Mudd College, was honored by the

FOURTH ANNUAL NORCAL CHAPTER PICNIC

Polytechnic's Northern California Alumni section held its fourth annual summer picnic on Sunday, August 25, at Mitchell Park in Palo Alto, Calif. The picnic was co-sponsored by the local alumni chapters of City College of New York and Brooklyn College.

Poly alums who attended the event included Naomi and Sy Alpert '52, Roslyn and Art Bienenstock '55 '57 H'98, Alice and Herb Fischgrund '55, Laurie Longway and John Green Jr. '68 '72, Helene and Jesse Kanarek '49, Mike Korek '52 '53, Sofia '63 and Jan '63 Laskowski, Judy and Joseph Manganaro '62, Marianne and Steve Marx '55, Thomas Montelbano '60 '62 '65, Judy Finer and Martin L. Perl '48 H'96, Janice and Bernie Rosen '57, Esther and Matthew Simon '78 '79 and Neil Weiser '73.

The section's next event will be a reception on December 4 at 7 p.m. at the Fremont Hills Country Club in Los Altos Hills, Calif., featuring a presentation by Professor Bruce A. Garetz of the Department of Chemical Engineering, Chemistry and Materials Science. For more information, call (650) 366-5846 or e-mail polyalum@yahoo.com before November 20.

If you are interested in knowing more about the section's activities, e-mail Herbert Fischgrund at herbalf@pacbell.net.



From Left: Weiser and the Laskowskis



EROL GELENBE HONORED WITH FRENCH GOVERNMENT AWARD

Dr. Erol Gelenbe '68 '70 received the medal of Officer of the National Order of Merit of France on July 14, 2002, at a reception at the Embassy of France in Washington, D.C. The award was presented to Gelenbe by the French ambassador, Francois Bujon de l'Estang.

The award is given by decree of the president of France in recognition of a lifetime of significant and exceptional work in one's chosen field.

Gelenbe's work has focused on three areas of inquiry. He has researched performance modeling of computer networks and related mathematical techniques. He has also designed novel computer-communications systems, such as the first Ethernet-like fiber optics system, which he built in the 1970s before Ethernet actually existed. His current work includes the development of large-scale neural networks that mimic the behavior of real neurons, and computer networks in which packets move autonomously towards their destination through wired or wireless connections.

Gelenbe is currently university chair professor and director of the School of Electrical Engineering and Computer Science at the University of Central Florida in Orlando. Previously, he was the Nello L. Teer Professor and chair of the electrical and computer engineering program at Duke University. He has also taught at the University of Paris, the University of Liège and the University of Michigan at Ann Arbor.

*Congratulations
Class of 1957*

Most money raised during 2001/2002 for the Polytechnic Fund.

American Society for Engineering Education with the Fred Merryman Design Award for excellence in teaching engineering design. IRVING ENGELSON (EE) was the keynote speaker at seminar on effective meeting management and parliamentary procedure presented by the Rochester section of the Institute for Electrical and Electronics Engineers. HOWARD H. TAUB (PH) '65 (PH) '69 (PH) has been promoted to vice president at Hewlett-Packard Company and is director of the printing and imaging research center of HP Labs. GASPARE SANTORO (CE) '71 (CE) supervises the design, inspection and construction of buildings, roadways and support facilities with special focus on retaining structures and drainage facilities.

67 HOWARD HAUSMAN (EE) '71 (EE) is vice president of engineering of Miteq Inc.

69 FREDERICK J. DYMEK (ME) works DMJM & Harris as a project oversight manager for the installation of gas turbine peaking facilities at three sites operated by the Long Island Power Authority.

70 FREDERIC A. ERDBERG (IE) is the director and co-founder of American Home Care LLC, an independent non-medical-caregiver organization in New Jersey and New York.

71 ALFRED AMOROSO (SE) '73 (OR), president of Meta Group Inc., was recently profiled in the Los Angeles edition of *Investor's Business Daily*.

72 KIM GOLDENBERG (BI) has had his term as president of Wright State University in Dayton, Ohio extended until 2007. He has held the position since 1998. STEPHEN PERTUSIELLO (EE) '76 (MG) is a program manager in marketing and sales for Con Edison. WARREN SICHERMAN (CH) works in equipment installation and training for Reliance Communications.

Hugh Seidman '61

Hugh Seidman '61 (MA), wrote "Macy's Elegy" about his father, Monus "Max" Seidman '25 (CM).



The poem was first published in *The New Yorker* in April 2002. Seidman's poetry has won several awards, and his last book, *Selected Poems: 1965-1995*, was named among the best books of 1995 by the *Village Voice* and by *The Critics Choice*. He is the author of three other books of poems: *People Live, They Have Lives; Throne/Falcon/Eye, Blood Lord* and the forthcoming *12 Views of Freetown; 1 View of Bumbuna*. He has taught writing at the Yale University, Columbia University, the New School University and University of Wisconsin.

Macy's Elegy

Once—my delusional father.

*His "oracle" had ordered:
Scrap the gray coat; get the brown coat.*

I could not help him on the buy-and-sell floor.

*Now—the gourmet fast food:
pesto asparagus, penne, sun-dried tomatoes.*

A man and son eating salmon,

*Masonic Ring like my father's:
compass, right-angled ruler—encircling a diamond.*

*Brother in the fraternity of Father.
Anonymous, infinite as one.*

Thwarting hunger, slaking thirst.

As the adepts teach: Praise where you are.

—HUGH SEIDMAN

73 MARSHA RABINOWITZ ANDERSON BOMAR (MA) was named the 2002 Gwinnett Alliance for Gifted Education (GAGE) Parent of the Year. Over the last several years, Marsha has sponsored numerous Future Problem Solver teams and provided hands-on assistance to coach teams through the state competition. MICHAEL F. YOUNG (EE) is president, CTO and founder of Young Design Inc. (YDI) in Falls Church, Va. YDI specializes in producing high-speed wireless data equipment for license-free radio bands.

75 RAHUL MEHRA (BI) is a Bakken Fellow and senior director of research at Medtronic Inc. in Minneapolis, Minn. He is performing research on the development of implantable medical devices.

76 YVONNE ISAAC (TP) is a senior vice president at Bovis Lend Lease in Atlanta, Ga.

78 SALLYANN ALIQUO-GIUFFRIDA (MO) received the 2001 Jane Skrzypek Volunteer of the Year Award for the South-eastern District New York State PTA. She is also an instructor of meteorology and physical sciences in the Engineering Science Department at Broome Community College in Binghamton, N.Y.

79 JOSEPH P. BORODEN (CE) is currently the plant manager at CYTEC Industries Mobile, Ala., facility.

80 URSULA M. BURNS (ME) has been named to the Board of Trustees at the University of Rochester. She is a corporate senior vice president and president of the Document Systems and Solutions Group at Xerox, Inc. and Polytechnic trustee.

81 ANIL M. BATRA (MS) is the director of development for a network security company.

MAJOR CODES

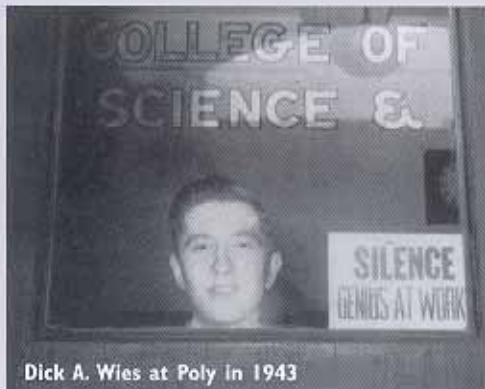
Refer to the following major codes used in parentheses:

- AA Aeronautics & Astronautics
- AD Administration
- AE Aerospace Engineering
- AM Applied Mechanics
- AS Applied Statistics
- BI Bio-Engineering
- CH Chemical Engineering
- CM Chemistry
- CE Civil Engineering
- CY Computer Engineering
- CP Chemical Physics
- CS Computer Science

- DM Dental Materials Science
- EB Environment-Behavior Studies
- EE Electrical Engineering
- EL Electrophysics
- EN Environmental Health Science
- ES Economic Systems
- EV Environmental Engineering
- HI History of Science
- HR Human Resources
- HU Humanities
- HS Humanities-Special
- IA Industrial & Applied Math
- IC Industrial Chemistry
- IE Industrial Engineering
- IF Information Systems/Management

- IS Imaging Sciences & Engineering
- IT Information Systems Engineering
- JO Journalism
- LE Life Science/ Electrical Engineering
- LS Life Sciences
- MA Mathematics
- MC Management of Technology
- ME Mechanical Engineering
- MG Management
- MH Mathematical Statistics
- MM Metallurgy & Materials Science
- MN Manufacturing Engineering
- MO Meteorology & Oceanography
- MS Material Science & Engineering/Management
- MT Metallurgical Engineering

- NE Nuclear Engineering
- OB Organizational Behavior
- OR Operations Research/Management
- PH Physics
- PO Polymeric Materials
- PS Polymer Science Engineering
- PY Physical Metallurgy
- SC Systems Science
- SE Systems Engineering
- SS Social Sciences
- TM Telecommunications Management
- TP Transportation Planning/Engineering/Management



Dick A. Wies at Poly in 1943

My Favorite Poly Memory

by Dick A. Wies '48 (EE)

When I enrolled in Poly in January 1943, World War II was on and I was registered for the draft. The odds that I would finish were dismal. The Army had taken over the school for their Army Specialized Training Program, and the semesters were structured for 12 weeks with no

breaks in between. The GIs would march down Livingston Street to and from classes, singing whatever GIs sing. I was commuting from the Bronx and the workload of this accelerated program required seven days of heavy work. Little by little my electrical engineering class dwindled in size because of the draft, and when I was finally called only eight of us were left.

With my engineering background, I was naturally assigned to the infantry, survived the Battle of the Bulge and seven months in the hospital before returning to Poly to complete my bachelor's.

One of the highlights of my time at Poly was having Thomas Donahue as a professor.

His English classes were always a delight and a welcome respite from the often-humorless engineering classes. One thing I remember 60 years later is Professor Donahue's assignment on the first day of class to the student sitting closest to the door: It was that person's job to examine Professor Donahue as he entered the room and let him know if his clothes (and specifically his trousers) were not adjusted properly. Truly an interesting and memorable man.



Wies today and his wife, Ruth.

DO YOU HAVE A FAVORITE POLY MEMORY? Send your story to Therese E. Tillett.

E-mail: ttillett@poly.edu; Fax: 718/260-3084; Mail: Polytechnic University, Six MetroTech Center, Brooklyn, NY 11201. Your story cannot exceed 250 words and may be edited for clarity and space. Please include your name, class year(s) and telephone number.

82 TERTULIEN AUGUSTIN (CH) '88 (TP) is an associate vice president at DMJM & Harris. **JOHN F. MAHONEY (EE) '86 (BI)** is assistant dean for medical education at the University of Pittsburgh's School of Medicine. **ROBERT M. MCDERMOTT (CS)** is a patent lawyer in Montross, Va. He received his Juris Doctorate from Quinnipiac University in Hamden, Conn. **VICTOR SIMUOLI (EE) '84 (EE)** is the systems project manager for the JFK Airtrain, a \$1.8-billion project for an automated light-rail system that will connect JFK airport to the Howard Beach and Jamaica train stations.

83 SETH MARGOLIES (CM) is consumer affairs specialist at the Austin Travis County Mental Health Mental Retardation Center in Austin, Tex.

85 CORNELIUS J. O'CONNOR (AE) is head of the crew systems branch for airborne systems competency at the NASA Langley Research Center.

86 MICHAEL P. DONOGHUE (TP) was appointed to the Board of Directors of

the National Industrial Transportation League. He is a logistics manager at ENAP Inc. in New Windsor, N.Y.

87 RACHEL BLOCK (EE) '88 (EE) and her husband, Ron, live in Robbinsville, N.J. with daughters Rebecca and Nicole Julia. **DINESH GAMBHIR (CS) '92 (CS)** is chief technology officer at 4GL School Solutions Inc. of Towson, Md. He was recently profiled in the *Washington Post*.

88 FRANK CORRADO (OR) '91 (TP) is a technical program manager in traffic operations, safety and intelligent transportation systems the Federal Highway Administration.

89 MARK MUSANTE (CS) is pleased to announce the birth of his second child, Samantha Adele, in April.

93 DAVID BRETAN (EE) is a director in the Global Reengineering Department at American Express. He married Acela Badiola on September 28, 2002.

96 KATHIE KEEGAN (TP) retired from her position as the New York City Department of Transportation's Brooklyn Borough commissioner.

97 ROGER D. EISENHARDT (OB) is deputy director of human resources for the Kings County District Attorney's Office in Brooklyn, N.Y. Roger, his wife, Eloise, and sons, Roger and Christopher live in Wantagh, N.Y. **BRADLEY C. ENO (TM)** is director of systems integration for Lockheed Martin Corporation and resides in Evergreen, Colo. with his wife, JoAnne and son, Graham. **DANIEL MORELLO (EE)** is a senior customer support engineer in Adventura, Fla.

98 DARYL BLOWES (CS), owner of Compusolve, is engaged to Noel Maliar.

00 CHRISTINE FERRARI (CH) is advanced engineer at ExxonMobil Process Research in Baton Rouge, La. **RAYMOND GARGUILO (ME)** has earned his Juris Doctorate degree from Cardozo School of Law and will be working for the intellectual property law firm of Lerner, David, Littenberg, Krumholz and Mentik LLP.

NOMINATE AN ALUM FOR A POLY AWARD

Nominations for the Polytechnic Distinguished Alumni Award and the Polytechnic Dedicated Alumni Award are being accepted for 2003.

These awards are the highest honors conferred by the POLYTECHNIC ALUMNI. The Distinguished Alumni Award recognizes extraordinary contributions in science, business, public service or academia. The Dedicated Alumni Award recognizes extraordinary service to the POLYTECHNIC ALUMNI. Alumni may complete a nomination form at www.poly.edu/alumni or request a form from:

Frank Namad '68

Chair, POLYTECHNIC ALUMNI Awards Committee

Mail: Box 51, Polytechnic University
Six MetroTech Center
Brooklyn, NY 11201
Fax: 718/260-3114
E-mail: alumni@poly.edu

Please send as much biographical information as possible on the candidate.

In Memoriam

Edward J. Smith '48 '50

Professor Emeritus Edward J. Smith died on August 20 in Brooklyn, N.Y. He was 81.

A native of New York, Smith earned a bachelor's degree in electrical engineering from Cooper Union in 1945 and master's and doctoral degrees in the same discipline from Polytechnic in 1948 and 1950, respectively.

After working at Sperry Rand Company and the Lepel High Frequency Laboratories, he joined the Microwave Research Institute at Polytechnic as a senior research fellow studying nonlinear electrodynamics and computer organization and automata. In 1951, he developed "Principles of Computers", the first computer science course at Polytechnic and the precursor of a graduate sequence that was to follow. He continued at the institute until 1957, when he joined the Department of Electrical Engineering as an associate professor at the behest of Dr. John Truxal, then department head. The two worked to develop an undergraduate program that included computer science. The first computer science course was offered in 1958.

Smith also served as professor of electrical engineering, director of the computer science division and department head. He retired in 1986.

Smith served as a member of the Institute of Electrical and Electronic Engineers (IEEE) Committee on Switching and Automata and as a member of the education committees of the ACM and the Computer Society. In 1983, he received IEEE's Charles J. Hirsch Memorial Award for contributions to educational and research programs in electrical engineering and computers. He was also a fellow of the American Association for the Advancement of Science.

He is survived by his wife, Carmita; children Christopher and Louise '80; and two grandchildren, Brian and Brendan.

A scholarship fund has been established in Smith's name. For more information, contact Thomas Daly, director of development, at 718/260-3364.



Edward J. Smith
'48 '50

Charles E. Schaffner '44

Charles E. Schaffner '44, former Poly professor and administrator, died July 12 in Locust Valley, N.Y. He was 82.

Schaffner earned a master's in civil engineering at Poly after receiving a bachelor's degree from Cooper Union. In 1946, after a two-year stint in the Army Corps of Engineers, he joined Poly's Department of Civil Engineering. During his 37-year career at the University, he served as professor of civil engineering and director of evening programs before moving into administration and rising from dean and director of buildings and facilities to vice president for administration. In the mid-1960s, Schaffner oversaw the revision of

the New York City Building Code, the first such major revision in more than 35 years.

In 1970, he left Poly to become vice chairman and director of the engineering firm Syska and Hennessy Inc. He also served as director emeritus and past president of the New York Building Congress.

He is survived by his wife, Olga; children Charles E. Schaffner II and Linda Schaffner Downes; four grandchildren; and one great-grandchild.



Charles E.
Schaffner '44

Barton Kreuzer '28

Barton Kreuzer, electronics pioneer and retired executive vice president of RCA, died on August 26 at his home in Princeton, N.J. He was 93.

Kreuzer began his career with RCA shortly after earning a bachelor's degree in electrical engineering at Polytechnic in 1928. One of his earliest successes was supervising the conversion and installation of sound systems in movie theaters at the dawn of the talking movies. He oversaw the operation of RCA's first television station, W2XBS, in New York, and in 1943, became manager of RCA theater-equipment activities.

He moved through positions of increasing responsibility to become director of product planning and, eventually, a founding member of the station's Astro-Electronics Products Division, serving as division vice president and general manager from 1960 to 1967. Under his direction, the division successfully developed and built the TIROS and ESSA weather satellites, the RELAY communications satellite and the Ranger Space Vehicle, which took the first pictures of the moon's surface. In 1967, he became vice president and general manager of the commercial electronics division and in 1970, he was named executive vice president of consumer electronics.

Kreuzer was active in many professional organizations and was a fellow of the Institute of Electrical and Electronics Engineers, the Society of Motion Picture and Television Engineers and served as the society's president from 1957 to 1958. In 1969, he received the Polytechnic Distinguished Alumnus Award.

He is survived by his wife, Virginia; his sons Justin and Lloyd; five grandchildren; and two great grandchildren.

Winfield E. Fromm '48 H'74

Trustee Emeritus Winfield E. Fromm, retired vice president of instruments and systems operations and president of the AIL Division of Eaton Corp., died in August in Fort Myers, Fla. He was 84.

A native of New Jersey, Fromm earned a bachelor's degree in electrical engineering at Drexel University in 1940 and a master's degree in the same discipline and an honorary doctorate from Polytechnic in 1948 and 1974, respectively. He was named a distinguished alumnus that same year and elected a Polytechnic Fellow in 1978.

Fromm wrote numerous papers on microwave development and magnetic airborne detection and was a lecturer at Hofstra University and Polytechnic. He also served on Polytechnic's Corporate Advisory Council for Long Island.

Among his many professional affiliations, Fromm served as director and consulting director of the Long Island Lighting Company and as a fellow of the Institute of Electrical and Electronics Engineers and the American Institute of Aeronautics and Astronautics. He was also a member of Phi Kappa Phi, Tau Beta Pi and Eta Kappa Nu.

He is survived by his wife, Twanette; daughters, Pamela Anne and Karen Elizabeth; and a son, David Gareth.

In Memoriam

Barton Kreuzer '28 • Lloyd P. Jones Sr. '44 • Charles E. Schaffner '44 • Edward J. Smith '48 '50 • Conrad Lanza '47 • Winfield E. Fromm '48 H'74 • John F. Bell '49 • Norman Reiter '49 • Albert Sutherland '49 • Morris Coffino '51 • Winters Adams Johnson '52 • Leo Spagnoli '52 • John A. Muller '53 '61 • Henry T. Vagt Jr. '54 • Ivan Perlman '59 • Hansel L. McGee '60 • Martin H. Tillingier '65 '65 '76 • Ronald Jenkins '81 • Enzo O. Lanzi '83

cable

Fall 2002 Vol. 29 No. 4

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*Polytechnic University is an equal
opportunity/affirmative action institution.*

BIG APPLE CHAPTER TO MEET STUDENTS

The Big Apple Chapter will host its
first **Alumni/Student Mixer** of
the 2002-2003 year on **Tuesday,
November 11, 2002**, from 5:30 to
7:00 p.m. The mixers are an excellent
opportunity for you to meet the
exceptional students at Poly and
to share your insights about the
importance of a Polytechnic
education and how it can be beneficial
in pursuing a professional career.
For more information, contact Donald N.
Ivanoff Jr., director of alumni relations
at 718/260-3885 or e-mail him at
divanoff@poly.edu.

Zahra Patterson Joins Alumni Relations

In September, Alumni Relations welcomed
Zahra Patterson as the department's new
administrative assistant. In addition to
assisting Director Donald N. Ivanoff Jr.,
Zahra will coordinate scheduling for alumni
events and committee meetings, the annual
meeting and reunion.

Zahra came to the University in 1990 as
an administrative aide in Financial Aid. She
remained in that position until 1995 when
she became an administrative aide in the
Department of Chemical
Engineering, Chemistry and
Materials Science.



Zahra
Patterson

She has been married for
19 years and has three
sons, Hassan, a sophomore
at Poly majoring in
computer science; Omar;
and Taj.



Photographs by
Polytechnic Trustee

John P. Schaefer '55

Through December 20

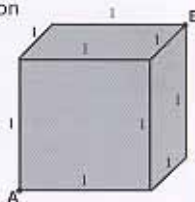
Polytechnic's Bern Dibner Library
of Science and Technology

5 MetroTech Center

THIS ISSUE'S POLY QUIZ

Here's a chance to test your Polytechnic education.
Correctly answer the question and be entered in a
drawing to win a Poly sweatshirt.

QUESTION: Using the solid cube below with the
length of each side as 1, what is the shortest distance
from point A to point B traveling on
the surface of the cube? Do not
travel inside or outside of the
cube; for instance, you cannot
draw a line from A to B inside
the cube. *Bonus question:* What is
the shortest distance in value?



This issue's question was provided by Jack S. Lee '93.

WINNER OF THE DRAWING FROM THE SUMMER '02 QUIZ: Ming Lam '96 '00

QUESTION: Where is the world's deepest
MAN-made hole?

ANSWER: The world's deepest man-made
hole is an exploratory geological drilling in the
Kola Peninsula in northern Russia. In 1984, it
was more than four-fifths of the way to its
target depth of 15,000 m (49,000 feet).

*To view the names of all respondents who submitted
correct answers, visit www.poly.edu/alumni.*

Send your answer to **Therese E. Tillett**. E-mail: ttillett@poly.edu; Fax: 718/260-3084;
Mail: Polytechnic University, Six MetroTech Center, Brooklyn, NY 11201

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