WHAT A GREAT YEAR for the department! By the time this newsletter is in your hands, most of our faculty and students will be occupying the department’s new laboratories. We are planning a Laboratory Grand Opening and Luncheon Celebration on December 5 to thank everyone who helped us make these new facilities possible (see page 2).

Our newest enhancements include the RJA Fire Science Laboratory and the Dr. Harry E. Hickey Fire Suppression Laboratory. These two unique facilities will enable our faculty and students to conduct research and testing on a scale unprecedented among universities throughout the nation. In addition, the FM Global Fire Phenomenon Laboratory will provide an environment for high-tech, cutting-edge measurements of plume dispersion as well as flame diagnostics for a broad range of applications. Three Laboratory Facilities (LFs) will complement the larger labs: the East Coast Fire Protection LF, the EBL Fire Engineering LF and the James and Pamela Boyer BFPE LF will house a variety of small- and medium-scale research projects. The Underwriters Laboratories Fire Modeling Laboratory and the Koffel Associates Fire Standards Laboratory, which opened last academic year and already are used extensively by our faculty and students, round out our excellent range of facilities.

Faculty Accomplishments
Jim Milke’s dedication to students and to the profession has been recognized with his promotion to professor, which further strengthens the leadership of the department. I am extremely proud of this outcome and am honored to have contributed to making this possible with the support of the alumni, Clark School Interim Dean Herbert Rabin and Provost Nariman Farvardin, former dean of the Clark School.

Peter Sunderland has been invited to join Keystone: the Clark School Academy of Distinguished Professors. This honor could not have been bestowed on a more deserving person. Peter’s accomplishments in teaching, advising and recruitment are legendary. Membership to the academy is usually reserved for tenured faculty. It is truly exceptional that this accolade has been given to an assistant professor; it speaks volumes about Peter’s phenomenal gift for teaching and for the extraordinary care and dedication he shows students.

Online Program Expands
The online Master of Engineering program is growing at an unprecedented rate. In 2007-2008 a total of 216 students enrolled in eight classes, which far surpasses our most optimistic expectations. We fully intend to enhance the quality and scope of the program. The increased revenues from our online Master of Engineering will be used to expand our undergraduate program. Our goal is to increase undergraduate class size and to complement lectures with small discussion and recitation groups led by instructors drawn from the profession. In the long term, we are exploring the possibility of an online undergraduate program as well.

Faculty Changes
We face significant changes in the membership of our faculty this year. Fred Mower will retire in January. Fred will continue to teach and to direct the FIRE Center and co-direct the online master’s program. I am reassured to know that Fred will continue continued on page 2
to play a major role in the life of the department, and I thank him for his continuous support and dedication.

We have initiated a junior faculty search chaired by Jim Quintiere. For the first time in years, we have a number of candidates with outstanding fire protection engineering backgrounds that will be considered for this position. I am sure that with his committee Jim will identify well-qualified candidates able to further advance the research activities of the department.

**FPE Strategic Plan**

We are now discussing at length the department’s new five-year strategic plan. The centerpiece of the plan is the implementation of a doctoral program. The preconditions to the actual establishment of the program are the completion of the strategic planning exercise and sustained research funding to justify and support the development of doctoral-level research activities. With the significant contributions of current and future faculty, I am confident that both requirements will be met in short order.

In conclusion, it has been a great pleasure and honor to report our major accomplishments for the first half of the year, and I look forward to seeing you soon. I thank you all for your support and I wish you the very best.

Marino di Marzo
Professor and Chair

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**Faculty News**

**JAMES A. MILKE** has been promoted to the rank of professor. “Jim Milke embodies the unique qualities of the Department of Fire Protection Engineering. He is an outstanding teacher and a truly exceptional mentor and advisor for our undergraduate students,” says Marino di Marzo, professor and chair of the department. “I have heard expressions of esteem, gratitude and affection from countless alumni who see Jim as a major national and international reference point in our field, both in the practice and academics of fire protection engineering. The promotion to professor recognizes his achievements and holds great promise for his future endeavors. I am extremely proud to have him join me in the leadership of the Clark School of Engineering.”

Milke joined the faculty in 1977 and serves as associate chair of the department. His research interests include smoke management, fire detection and analysis of the response of materials exposed to fire conditions. He is director of undergraduate studies for the department and is co-director of the online Professional Master of Engineering program. During the past year the National Fire Protection Association Board of Directors appointed Milke to the association’s Standards Council, a 13-member body charged with overseeing the NFPA codes and standards-making process. Milke was on sabbatical during the 2007-2008 academic year and spent time working with colleagues at Arup in San Francisco and London; Underwriters Laboratories, Inc. in Chicago; and at the University of Canterbury in Christchurch, New Zealand.

**ANDRÉ W. MARSHALL**, associate professor, recently attended the 9th International Association for Fire Safety Science (IAFSS) Symposium in Karlsruhe, Germany. The IAFSS sponsors the world’s premier symposium for the dissemination and discussion of peer-reviewed scientific research focused on the prevention and mitigation of fire losses. Marshall was honored with the IAFSS Best Image Award, given for the first time this year. The awards committee based its decision on originality, scientific significance and artistic/aesthetic appeal. Marshall won for his poster entitled, “Advances in water-based fire suppression mod-}

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**Laboratory Grand Opening and Donor Recognition**

A luncheon and tour to celebrate the grand opening of the department’s newly renovated laboratory facilities are planned for Friday, December 5. The events will recognize everyone who has so generously supported this transformation and will provide an opportunity to tour our state-of-the-art facilities. Please contact Sharon Hodgson at shodgson@umd.edu or 301-405-3963 for more information.

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**Peter B. Sunderland**, assistant professor, was selected to join Keystone: the Clark School Academy of Distinguished Professors. The appointment is a well-deserved recognition of his outstanding commitment to undergraduate education. Since his first semester at Maryland, Sunderland has eloquently demonstrated teaching excellence within both the department and the Clark School. Sunderland is the first faculty member in the Department of Fire Protection Engineering to be recognized with this distinction. The Keystone program is dedicated to improving undergraduate education with special emphasis on the freshmen and sophomore years. Under the leadership of Professor William Fourney, only the best faculty who exhibit exemplary undergraduate teaching skills and commitment to excellence are selected for this program. Sunderland will teach two lower-level engineering courses each year and will provide leadership to enhance the content and delivery of those courses. He will receive a salary supplement as well as discretionary funds to support education and research. The department congratulates Sunderland in this achievement and wishes him the very best in this endeavor. For more information about the Keystone program, visit www.eng.umd.edu/giving/keystone.html.

**Arnaud Trouvé**, associate professor, has been appointed associate editor of *Combustion Theory and Modelling* and the *Proceedings of the International Symposium on Combustion*. As associate editor, Trouvé will promote the presence and visibility of fire research within these journals. The appointments recognize his academic expertise in the area of fire and combustion and his international reputation within the scientific community.
Retired Faculty Stay Active in Field

by Robert M. Gagnon, P.E. (B.S. ’90, M.S. ’95)

We have been truly fortunate to have been served by several extraordinary Department of Fire Protection Engineering chairs and professors. This article will bring you up to date on their current activities, and they are as busy as ever.

JOHN L. BRYAN was the first professor and chair of the department. He retired from the university after 25 years of service in 1985. In 2007, he was elected as the first vice president of the National Fire Heritage Foundation, established to preserve the perishables of the American fire service and allied fire protection disciplines. He remains involved with Wyoming County, N.Y., recently working on the County Wide Alternative Water Supply Program. In 2007, he was appointed as the special programs officer for the Lancaster County, Pa., Office of Emergency Services, where he is continuing his work on alternative water supplies. He has also written a guide on public protection for the Insurance Services Office.

HARRY HICKEY was the second full-time faculty member hired by the department. He retired from the university after 25 years of service in 1985. In 2007, he was elected as the first vice president of the National Fire Heritage Foundation, established to preserve the perishables of the American fire service and allied fire protection disciplines. He remains involved with Wyoming County, N.Y., recently working on the County Wide Alternative Water Supply Program. In 2007, he was appointed as the special programs officer for the Lancaster County, Pa., Office of Emergency Services, where he is continuing his work on alternative water supplies. He has also written a guide on public protection for the Insurance Services Office.

STEVEN M. SPIVAK was the second distinguished professor to serve FPE as chair. Spivak and his wife recently completed construction of a second home in Puerto Rico. Spivak’s specialty was textile engineering, including a number of important flammability studies of children’s clothing. He is the principal of Stantex Consultants, specializing in standardization, textiles, clothing, interiors and furnishings, textile products, and fire safety engineering. The firm has offices in Falls Church, Va., and Bayamon Sur, Puerto Rico. Spivak was recently appointed to chair the Science Advisory Council for the Cleaning Industry Research Institute and currently serves as technical advisor for standards, textiles and furnishings with the Restoration Industry Association. He also serves as a pro bono fire science advisor with the U.S. National Association of State Fire Marshals.

VINCENT BRANNIGAN recently retired as a professor, but remains busy. He presented a paper on a new approach to historic building fire safety in Graz, Austria. He is one of the co-chairs of the Fireseat meeting in Edinburgh, Scotland, where he will present his paper on innovation in performance safety standards. He rewrote the University of Maryland freshman engineering (ENES 100) chapters on ethics and safety, and lectures on ethics in all of the ENES 100 sections. He is working on an analysis of NFPA 921 and arson evidence. He recently taught ENFP 435, a course on product liability and government regulation, and will be teaching a version of it in Germany in February. He is lecturing at various fire departments and writing grant proposals to fill his busy schedule.

An important lesson can be learned from all of these professors. Fire protection engineers spend their lives saving lives, and their contributions do not stop with retirement. They are role models for us all.
FPE to Host Two Major Meetings

The Department of Fire Protection Engineering has been selected to host two major technical meetings in the coming years. The meetings will provide unique opportunities to showcase and promote the activities of the department. If you would like more information on the conferences, please check the websites or contact Arnaud Trouvé at atrouve@umd.edu.

The Fall Meeting of the Eastern States Section of the Combustion Institute (ESSCI) will be hosted by the department October 18-21, 2009. The goal of the meeting is to convene researchers involved in experimental, theoretical and computational investigations in the general area of combustion. This fall technical meeting is held every other year and is typically attended by 100 to 150 participants. Visit the ESSCI website at www.ecs.umass.edu/ESCI/ for more information on this organization.

In June 2011, the department will host the 10th International Symposium of the International Association for Fire Safety Science (IAFSS), the premier fire safety science symposium in the world that has been organized triennially since 1985 by the IAFSS. This symposium is usually attended by some 300 to 400 researchers from America, Europe and Asia. Visit the IAFSS website at www.iafss.org for more information.

FPE Enrollments Increase

At the May 2008 Commencement a total of 33 students graduated from the fire protection engineering program: 11 bachelor of science graduates, eight master of science graduates and 14 master of engineering graduates, including 13 from the online program. Two students, who were formally enrolled in other departments, received their doctoral degrees in fire protection engineering in May. In August, one student received a bachelor’s degree, two students received master’s degrees and there were two master of engineering graduates, including one graduate from the online program.

Twenty-two freshmen entered the program this fall, representing one of the largest groups of entering freshmen in the history of the department. All of the incoming freshmen are from the U.S., including 17 students from Maryland. Other students are from California, Connecticut, New York and Pennsylvania. The group includes 17 male students and five female students. Fifty-two students are enrolled in two sections of the optional freshman course, “Hot Topics in Fire,” and 51 students are enrolled in ENFP 250, “Introduction to Life Safety Analysis,” the first required course in the major. These enrollment numbers suggest a growing interest in the major among first- and second-year students on campus.

FPE Mentors Needed

The department needs mentors to assist sophomore fire protection engineering students enrolled in ENFP 255, “Special Hazards and Fire Alarm Design.” Mentors preferably should be department alumni; local to the Baltimore-Washington metropolitan area; able to escort one or more student teams to a job site to inspect a project related to special hazards suppression; and able to help the team to obtain reference drawings and sample specifications. Would you like to volunteer? Please contact Jim Milke at milke@umd.edu.
Fire Protection Grad Ensures Safety of South Pole Station

The frigid Antarctic cold is not the only hazard at the National Science Foundation’s new South Pole Station. Fire protection is essential in this inhospitable climate, and Samuel S. Dannaway, B.S. ’78, M.Eng. ’08, fire protection engineering (FPE), is playing a key role to ensure the station complies with fire safety standards.

Dannaway, president and chief fire protection engineer of S.S. Dannaway Associates, Inc., Hawaii’s leading FPE and building/fire code consulting firm, recently made two trips to the South Pole to inspect and test fire protection and life safety systems of the South Pole Station. Another trip is planned for January 2009.

Dannaway has called Hawaii home since he was transferred there from a position at the D.C. Naval Yard in 1979. He started his own company in 1985, and his early Navy connections led to the firm’s contract with the South Pole Station.

“The new station is designed to accommodate about 200 people during the busy summer months,” Dannaway explains. During the winter, the population drops to 30 people, who maintain the station and protect the U.S. rights to occupy the South Pole.

As an undergraduate, he planned to study pre-med at Maryland. But during volunteer work as a firefighter and an emergency medical technician at the Silver Hill Volunteer Fire Department in Prince George’s County, Md., he experienced the hazards of firefighting and changed his major to FPE. “Engineering is a fantastic field and you are always employable,” adds Dannaway, who was attracted to the field’s emphasis on problem solving.

While at the South Pole in January 2006, Dannaway was not only an inspector but a student. In fact, he may be the only Clark School student to submit coursework from that frigid end of the earth. Enrolled in the online professional master’s FPE program at the time, several of his class assignments were submitted to the Clark School directly from the South Pole.

Dannaway attended the 50th anniversary celebration of the FPE department at the Clark School two years ago, and stays connected with other graduates by attending annual meetings of the National Fire Protection Association and the Society of Fire Protection Engineers (SFPE). Last year Dannaway, a past president of SFPE, received the society’s John J. Ahern President’s Award in recognition of his contributions to the field.

“We are a small group of alumni, but we are strong supporters of FPE and of the school,” says Dannaway, a former scholarship recipient who recently committed $10,000 to help establish the Dr. Harry E. Hickey Scholarship Endowment for FPE students.

“You run into Maryland graduates constantly because we’ve done a good job establishing a reputation throughout the field,” adds Dannaway.

To prove that point, Dannaway recalls his stopover in Christchurch, New Zealand, while traveling to the South Pole in 2006. Half a world away from the Clark School, that evening Dannaway met two FPE graduates for dinner: Charles M. Fleischmann, B.S. ’85, civil engineering and FPE, an associate professor in civil and natural engineering at the University of Canterbury, and his wife Carol Ann Caldwell, B.S. ’81, FPE, a partner in a New Zealand engineering consulting firm.

This article is reprinted from the Fall 2008 issue of E@M.

Alumni Wall

As you may be aware, in honor of the department’s 50th anniversary and as part of the recent J.M. Patterson renovation, the names of alumni from 1956-2006 are etched into wall tiles located at the department’s entrance. We are currently reviewing these names to identify any discrepancies or errors. We would truly appreciate your help.

Please visit www.fpe.umd.edu and click on Alumni Wall to review your name. Please contact Sharon Hodgson by January 15, 2009, to alert her to any needed correction. You may reach Sharon at shodgson@umd.edu or 301-405-3963 or mail the form below directly to Sharon.

**CORRECTION FORM**

**NAME AS IT APPEARS ON ALUMNI WALL**

**NAME AS IT SHOULD APPEAR**

**GRADUATION YEAR**

**TELEPHONE**

**E-MAIL**

Please mail this information to:
Sharon Hodgson, Department of Fire Protection Engineering, University of Maryland, 3106 J.M. Patterson Bldg., College Park MD 20742

A. JAMES CLARK SCHOOL OF ENGINEERING • GLENN L. MARTIN INSTITUTE OF TECHNOLOGY
News From the Student Chapter of the SFPE

BY BRIAN SALYERS, PRESIDENT, SFPE STUDENT CHAPTER

The SFPE student chapter at the University of Maryland is staying busy this fall with a variety of career and social events. Several companies are scheduled to present on different types of career paths for FPE students. At these meetings, national student membership will be stressed. Social events also include a dinner hosted and cooked by Department Chair Marino di Marzo, an ice cream eating contest to benefit Alzheimer’s disease and football game tailgates. The annual bowling and pool recruiting event for undecided engineers is also planned for November. The student chapter is working hard to become an active member of the community by offering weekly free lunches in the new lounge and becoming involved in co-ed intramurals. The SFPE officers are also coordinating fire protection sportswear that will be available for students and alumni in the near future.

Alumni News

CRAIG P. CHRISTENSON, P.E. (B.S. ’85) was recently named the U. S. Department of Energy (DOE) Federal Engineer of the Year, an award sponsored by the National Society of Professional Engineers (NSPE). Christenson is a fire protection engineer for the DOE Office of River Protection (ORP) at the Hanford Site in the state of Washington. He serves as the office’s technical authority for fire protection engineering for Hanford’s tank farms and the Waste Treatment and Immobilization Plant Project, the largest and most complex federal project currently under design and construction. “Craig’s technical expertise and experience have resulted in a number of unique and innovative applications,” says DOE Assistant Secretary for Environmental Management James Rispoli. “His expertise is invaluable as we design and build the Waste Treatment Plant complex, an unprecedented nuclear facility for Hanford cleanup.” To be eligible for the award, an engineer must be employed and nominated by a federal agency with a minimum of 50 engineers. Christenson was nominated by DOE ORP Manager Shirley Olinger. “Over the past seven years, Craig has continued to impress me with his technical expertise and professionalism,” says Olinger. “He is an invaluable member of our team at the Office of River Protection.”

PHILLIP A. FRIDAY, P.E. (M.S. ’00), has been named the fourth principal owner of Harrington Group, Inc. The firm is a SFPE Corporate 100 Group member located in Duluth, Ga. Since joining Harrington Group in 2002, Friday has continuously demonstrated exceptional engineering and leadership skills that align perfectly with the firm’s core purpose and values. He is a professional member of SFPE and serves as president of the Greater Atlanta Chapter of the Society. Friday received his bachelor’s degree in chemistry from the University of Tennessee.

JOSEPH E. GOTT, P.E. (B.S. ’81), chief engineer and director of capital improvements, Naval Facilities Engineering Command Headquarters (NAVFAC) in Washington D.C., was installed as a member of the Senior Executive Service in June. The Senior Executive Service is the federal government’s corps of executives selected for their leadership qualifications. Members serve in key positions just below the top presidential appointees, overseeing nearly every government activity in approximately 75 federal agencies. Gott began his civil service career as a fire protection engineer at NAVFAC’s former Chesapeake Division in Washington D.C. He spent four years at the National Geospatial Intelligence Agency before returning to NAVFAC Headquarters, where he has held numerous positions of responsibility. In his role as chief engineer, Gott is responsible for the Navy’s military construction program; medical facilities design; anti-terrorism/force protection; and ocean facilities program. He oversees a budget of more than $5 billion per year in design and construction for the Navy, Marine Corps and other federal agencies around the world. Gott received the Navy’s Meritorious Civilian Service Medal in 2003 and the Navy’s Superior Civilian Service Medal in 2007.


In our Spring 2008 issue, we told you that SHAMIN RASHID-SUMAR was named the Dubai director of operations for Rolf, Jensen & Associates, Inc. We forgot to include her email address in that note. She can be reached at ssumar@rjagroup.com or call +971-4-801-9270.
Chi T. Do Strives For Perfection

Just five years ago, Chi T. Do emigrated to the U.S. from Vietnam with his family to continue his education. With very little knowledge of the language, Do immediately enrolled in fall 2003 at Montgomery College, where he earned a 4.0 grade point average (GPA). "It took me about a year to really understand lectures and learn how to convey my thoughts in written language," recalls Do.

While at Montgomery, Do attended a presentation by FPE Professor James Milke and his interest in the field was sparked. "I was studying physics at the time, but I always wanted my work to have a direct impact and to see the results," says Do, who graduated summa cum laude with his bachelor’s degree in FPE in May. Do received the Society of Fire Protection Engineering Chesapeake Chapter Outstanding Senior Award for achieving the highest GPA among graduating seniors. This award followed his receipt of the Robert J. Taylor Academic Achievement Award for the highest GPA among juniors.

Currently, he is pursuing his master’s in FPE with the support of a Clark School of Engineering Distinguished Graduate Fellowship. His research is now focusing on sprinkler atomization. “We are looking at high-pressure sprinklers and how to predict the performance of sprinklers based on the geometry of the device and other defining characteristics.” He has co-authored an article on his work that has been submitted to the International Association for Fire Safety Science.

Do has found FPE faculty, staff and students extremely helpful in his transition to Maryland. One of the biggest lessons he has learned: the importance of teamwork. “In physics, the work was more concentrated in small teams. In engineering, you work in much bigger teams. I enjoy working with others to solve problems,” admits Do.

Chi T. Do Strives For Perfection

Graduate Distance Education Program Gains Momentum

Enrollment in the department’s online graduate degree program continues to be very strong. Sixty-six students are enrolled in the two courses offered this fall: “Advanced Fire Suppression” and “Human Response to Fire.” While the program has provided a means for students who are not living near College Park to take courses, the department has also benefited by engaging faculty members who do not live near College Park. The online faculty include Marc Janssens (Texas), Steve Gwynne (Colorado), Dave Icove (Tennessee), Dave Purser (UK), and Susan Lamont (Dubai).

For the bachelor’s degree graduate, online courses offer a way to stay updated on current technologies and practices in the field. Ten courses are offered via the distance education option, all of which address a wide range of topics, including computer fire modeling, forensic fire analysis, smoke management and more. Courses provide discussions of FDS, evacuation models, structural response models and models used in smoke management design. The courses also provide a background in performance-based approaches for building fire safety analysis and design. Several graduates have obtained a degree in this program, including Sam Dannaway (B.S. ’78) who is profiled on page 5. Anyone interested in more information on the program should visit www.oaee.umd.edu/grad/fire/ or contact Jim Milke, milke@umd.edu.
Order the FPE 50th Anniversary History Book

Show your FPE spirit and celebrate the history of the Department of Fire Protection Engineering by ordering the 50th Anniversary History Book. This attractive volume is a “must have” for graduates and friends of the department. The hardcover book, with more than 200 glossy pages and color photographs, includes some rare historical photographs not previously published. Robert Gagnon, P.E. (M.S. ’95, B.S. ’90), donated the editing, formatting and printing of the book. A devoted alumnus, Gagnon was extremely generous with his creativity, time and resources in overseeing this project. The book is available for a minimum donation of $50. Thanks to Gagnon’s generosity, all proceeds will go to the department’s general fund to support renovation of space in the J. M. Patterson Building. Please visit the department’s website at www.fpe.umd.edu to print an order form and instructions, or contact Sharon Hodgson at shodgson@umd.edu or 301-405-3963 for more information.