

HOTLINE NEWSLETTER

FIRE PROTECTION ENGINEERING

A. JAMES CLARK SCHOOL OF ENGINEERING
UNIVERSITY OF MARYLAND

Spring 2020

CHAIR'S MESSAGE

It's certainly an interesting semester at the University. As of late March, virtually all buildings on campus are closed, with faculty and staff working remotely. Zoom has become a daily tool and some faculty members have developed interesting backgrounds to display during meetings. Courses will continue remotely, too, for the remainder of the semester. We're committed to providing a means for all students to make progress toward their degrees and not be penalized by the pandemic.

Impact on department activities includes postponing 'burn day' for the FPE Design Challenge, a competition that the department leads with local high schools. This year, we had a record number of schools (7) and participating students (190). Burn day is the event where student designs are tested. We're hopeful this event can be rescheduled in the summer or early fall.

Planning is continuing for the annual alumni dinner at the NFPA Conference in June. The event will occur on **Tuesday, June 16**. More information will be provided on the [FPE website](#) and through the [Alumni Club](#).

Also, we were excited to learn Dean Darryll Pines will be UMD's next president. He has always been a strong supporter of our department, so I believe it will benefit us to have a university president who appreciates the work we do.

- J. Milke

LEGACY OF WARREN ISMAN OFFERS NEW OPPORTUNITY FOR FPE UNDERGRADUATES

Warren Isman (father of FPE Clinical Professor, Ken Isman) had a long and distinguished career in fire protection service. Originally from New York, he was offered a full-time position as a senior instructor at the UMD Fire Service Extension of the School of Engineering, later renamed the Maryland Fire and Rescue Institute (MFRI), in 1968. Isman spent his days rubbing elbows with FPE Professors, John Bryan and Harry Hickey. He brought his engineering experience into training programs and developed pumps and hydraulics expertise.

Later on, Isman accepted the position of captain at the newly formed Montgomery County Department of Fire and Rescue Services where his mandate was to design and direct the new Fire Training Academy. He rose through the ranks, becoming chief of the department and an internationally renowned hazardous materials expert. Isman later became chief of the Fairfax County Virginia Fire and Rescue Services, and formed an urban rescue, cave-in and structural collapse rescue team, which responded to earthquakes and cave-ins all over the world. Isman

convinced the NFPA to start a series of standards, and offered best practices for firefighter

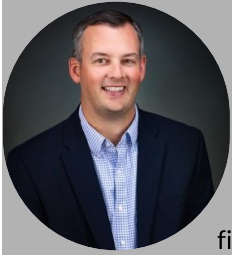
response to hazardous materials incidents. He helped the NFPA develop a committee, and draft NFPA 471 and NFPA 472. While serving as the first chair of the Technical Committee on Hazardous Materials, he was responsible for shepherding these documents through the NFPA development and revision process.

After 30 years of service, Isman passed away in 1991. An outpouring of support from all over the globe led the International Association of Fire Chiefs to start a collection of funds devoted to a scholarship, which the NFPA now manages. In coordination with the Isman family, the NFPA established the Warren Isman Endowed Memorial Scholarship in FPE, returning the memorial to Warren to his Maryland roots.

Awards to FPE undergraduates will be based on merit with support lasting four years max. POC: Kyle Zeller (kzeller@umd.edu).



ALUMNI PROFILE: STEVE KERBER (05')



Steve Kerber (M.S. '05) grew up in a fire service family just outside of Philadelphia, Pennsylvania. His dad was a volunteer firefighter and is currently the director of a firefighter training academy. His grandfather was fire chief of a volunteer fire department for 27 years and a fire marshal. "Growing up in this environment had me spending many hours at the fire station and fire academy," said Kerber. "I learned by watching for many years before I could participate in the fire service myself."

Kerber always enjoyed math and science, too, so while researching possible colleges, engineering was a natural fit. During that time, Kerber stumbled upon FPE at UMD. "I was fortunate to be accepted into the University and also received a live-in position at the [College Park Volunteer Fire Department \(CPVFD\)](#)," he said.

A degree in fire protection engineering, combined with fire service experience, steered Kerber into fire safety research. "I was fortunate to turn a co-op at [NIST](#) into a full-time job," he said. "Later, I accepted a position with [Underwriters Laboratories](#) where I've been for 10 years."

Currently, Kerber is the UL Vice President of Research and Director of the [UL Firefighter Safety Research Institute](#). He leads a fire safety research team dedicated to addressing the world's unresolved fire safety risks and emerging dangers to reduce death, injury and loss from fire. Kerber is a 13-year veteran of the fire service, primarily provided at CPVFD, and he received his bachelor's and master's degrees in FPE. Kerber expects to receive his doctorate from Lund University later this year. Moreover, he serves on the FPE BOV, helping to support the program that gave him so much.

"This is important to me because FPE at Maryland is unique and serves a critical role in society," said Kerber. "It's essential that we maintain and grow the department to fill that societal need."

UMD/FPE LAUNCHES INTERNATIONAL FIRE SAFETY CONSORTIUM

Last month, an international group of fire safety experts convened in the Department of Fire Protection Engineering (FPE) at UMD to further develop a recent initiative: the U21 International Fire Safety Consortium (IFSC). The group, made up of representatives from UMD, the University of Edinburgh, Lund University, the University of Melbourne and the University of Queensland, met February 10 - 13 to discuss issues related to fire safety engineering, and how the Consortium might bolster research, education and public policy in areas such as fire in the developing world, community resilience, and wildfires and fires at the wildland-urban interface (WUI).

"The problems are becoming more intense and more difficult at a pace that is higher than the pace at which we are producing new knowledge and technical expertise," said FPE Professor, Arnaud Trouvé.

According to the International Fire Safety Consortium (IFSC) website, the group brings together international "expertise to tackle the most critical and emerging fire safety challenges of our time. As the impact of urbanization, social inequality, climate change and

human migration continues to grow, greater worldwide coordination and action addressing fire safety is urgently needed. The Consortium engages in research, education and collaboration with industry, government and non-governmental organizations to help inform policy and practice, protect property and save lives." Going forward, the group seeks to draw attention to the importance of fire safety at the global scale in general, and on the following driving themes in particular: inequality in fire safety; wildland fires/WUI, and performance-based design for fire safety. The Consortium encourages funding opportunities relevant to these themes.

Attendees included Drs. Margaret McNamee (Lund University, Sweden; IFSC Chair), Arnaud Trouvé and Stanislav Stoliarov (UMD), Rory Hadden and Graham Spinardi (University of Edinburgh), Tuan Ngo, Lu Aye and Alexander Filkov (University of Melbourne), David Lange (University of Queensland), and Ted Knight (IFSC Administrator at UMD College Park). For more information, please contact Professor Trouvé (atrouve@umd.edu).

ANNOUNCEMENTS & EVENTS

On February 4, FPE hosted its **2nd Annual Academic Recognition Luncheon** honoring the following undergrads: Liora Mervis (First-year), Thomas Roche (Sophomore), Shuvam Roy (Junior), and Madison West (Senior). These students will each receive scholarships to acknowledge their achievements. The Luncheon was sponsored by Jensen Hughes. Speakers included James Milke, Raj Arora (JH CEO) and Emily Thomas (FPE Senior).

The FPE team for the **2020 Alumni Cup Competition** designed a pirate

invasion machine, including a pirate ship, treasure chest and treasure map. Some technical elements included a small heptane fire designed to burn through string, propelling the basketball forward (theoretically into a net), and a small hovercraft. The theme and all technical details were developed with input by all team-members who met frequently for brainstorming sessions.

Dean **Darryll Pines** will become the 34th President of UMD effective June 1. MSE Professor **Robert Briber** has taken over as Interim Dean of Engineering.