



SFPE Educational & Scientific
Foundation 2022 Annual Report



SFPE Educational & Scientific Foundation

2022 Annual Report

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Introduction & Organizational Growth

Thank you for your interest in the SFPE Foundation! We invite you to browse this full-length *2022 Annual Report*, where we cover some of the many highlights from our activities and programs over the past year. To learn more, check out our [website](#) and follow us on social media ([LinkedIn](#), [Twitter](#), [YouTube](#)) so you'll always be informed about new initiatives and opportunities available through the Foundation. To view a short, one-page summary, please check out our *2022 Annual Report Summary*.

Overview

The Society of Fire Protection Engineers (SFPE) established the SFPE Educational and Scientific Foundation in 1979. The SFPE Foundation (or, the Foundation), is a 501(c)(3) organization incorporated in the United States that facilitates research and educational initiatives to advance the scientific understanding of fire in the natural and built environments. With the support of external grants and individual, corporate, and SFPE chapter donations, the Foundation funds professional awards, student scholarships, and research grants; leads cross-sectoral research collaborations; conducts research workshops and meetings; develops new initiatives to support the next generation of fire protection engineers; and disseminates knowledge to advance the field of fire engineering and fire safety science globally. Learn more by reviewing this *2022 Annual Report*, and by visiting our website at: www.sfpe.org/foundation/.

This year has been one of tremendous growth at the Foundation, as summarized in this message from the Chair of the SFPE Foundation Board of Governors, Peter Senez:

*For the last 43 years, the SFPE Foundation has been working hard to facilitate **research** and **education** that advances the scientific understanding of fire in the natural and built environment while supporting the profession of fire safety and fire protection engineering globally. In just the last two years, donor support helped us fund:*

- [15 student research grants](#)
- [6 student scholarships \(such as the Mowrer Global Scholar Award\)](#)
- [4 professional awards \(such as the Guise Medal\)](#)
- [6 major research projects](#)
- [The Grand Challenges Initiative](#)
- [The Wildland-Urban Interface Working Group Initiative](#)
- [The Student Travel Fund](#)

Due to donations, the SFPE Foundation is able to offer annual technical presentations to 144+ chapters globally and free [Research in Fire Engineering webinars](#) accessible on our website (six Professional Development Hours at no cost!).

As you can see from our 2022 Annual Report, our research and educational support has expanded. We look forward to an even greater impact globally with the continued support of our donors and partners.

Peter Senez, Chair, SFPE Foundation Board of Governors, September 2022

It's never been more important to expand access to fire engineering expertise, and we still have much work to do. Turn on the news today, and you'll see evidence of the growing threat of fire and related hazards in the wildland-urban interface, as well as in urban and suburban areas; how heat waves, drought conditions, and even ice storms are impacting the water supplies we depend on for fire suppression and mitigation activities; how the development of new energy technologies creates new fire protection systems design challenges; how new knowledge of human behavior in egress and emergency situations challenges our existing models; and many more areas where fire protection engineering has a role to play. With your support, we continue to fund innovative research that expands our knowledge in key areas.

New Staff Support

To support our expanding portfolio of projects and initiatives, the SFPE Foundation brought on two new staff positions in late 2021 and early 2022. Please join us in welcoming our new team members:

Steffen Blings, PhD, Research Project Manager



Steffen Blings, Ph.D., is the Research Project Manager at the SFPE Foundation. He is responsible for leading the Foundation's research initiatives, including developing the SFPE Research Roadmap and disseminating research outcomes. He also manages the Foundation's academic/university partnerships, including the Academic Leadership Council.

Before coming to SFPE, Steffen served as an assistant professor at Utah State University and as a visiting assistant professor at Oberlin College. At those institutions, he taught various classes, supervised student research, secured grants to support research and course development, and managed research teams. Steffen earned his Ph.D. and master's in Government at Cornell University and a master's and bachelor's degree in political science at the University of Bremen in Germany. He has also been a visiting scholar at the Institute for Future Studies in Stockholm (Sweden), as well as the University of Frankfurt (Germany), and studied at the University of Groningen (Netherlands).

Aimee Zube, Donor Relations Manager



Aimee Zube is the Donor Relations Manager at the SFPE Foundation. Aimee's role at the Foundation is to create new opportunities for donor engagement and stewardship, build a planned giving portfolio and create clear pathways for donors to support the field of fire protection engineering through the creation of scholarships and awards.

Aimee has worked in non-profit fundraising and development for over fifteen years. Her experience ranges from donor engagement, events, board education, planned giving, donor database management, grant-writing, volunteer management, and much more. Previously, she served as

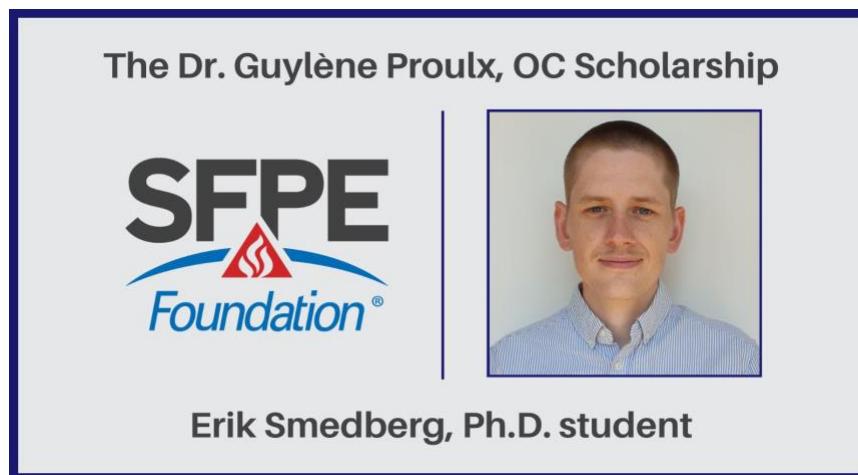
Foundation and Community Relationship Manager at Easter Seals of Massachusetts, and as Foundation and Corporate Relations Development Officer at Ascentria Care Alliance of New England.

Education – Student Awards & Scholarships

Dr. Guylène Proulx, OC Scholarship

The [**Dr. Guylène Proulx, OC Scholarship**](#) honors Dr. Guylène Proulx, one of the preeminent researchers and communicators in the field of human behavior in emergencies.

Please join us in congratulating the 2022 Dr. Guylène Proulx, OC Scholarship recipient: [Erik Smedberg](#), Ph.D. student at [Lund University](#), Sweden, and his faculty advisor, Prof. [Enrico Ronchi](#). Erik Smedberg was chosen for his research on how exit choice is influenced by the presence of people with mobility limitations, specifically its relevance to the SFPE [Research Roadmap](#) and the direct impact it has on increasing our understanding of human behavior.



Student Scholar Award

The Foundation's Student Scholar Award recognizes outstanding student scholars around the world in support of the science and practice of fire protection engineering.

Please join us in congratulating the 2022 [**Student Scholar Award**](#) recipient: [Iffah Umairah Zulmajdi](#), Ph.D. candidate at [Universiti Putra Malaysia](#), Malaysia. Iffah Umairah Zulmajdi was selected for her research titled, "Fire Simulation Assessment of Residential Compartment Fire Scenarios." Her work contributes to addressing knowledge gaps in the Building Fires and Fire Dynamics threads of the SFPE Research Roadmap by investigating the visibility effects of fire in residential buildings using a probabilistic approach.

Student Scholar Award



Iffah Umairah Zulmajdi, Ph.D. candidate

Frederick W. Mowrer Global Scholar Award

The aim of the Mowrer Global Scholar Award is to impact safety around the world by supporting students to build fire protection expertise in developing countries with rapidly expanding infrastructure. Endowed by Kathleen Almand, PE, FSFPE, this scholarship honors Dr. Mowrer's impact on the field of fire protection engineering and the development of fire protection engineering as an international academic discipline.

Join us in congratulating the 2022 [Frederick W. Mowrer Global Scholar Award](#) recipient: [Hafizha Mulyasih](#), ST, MT, [Universitas Indonesia](#), Indonesia. Hafizha Mulyasih, was selected for her project, "Study of Peat Smoldering Combustion and Suppression Methods using an Integrated Experimental Rig at Laboratory-Scale." Her research contributes to addressing knowledge gaps in the Resilience/Sustainability and Wildland/WUI Fires threads of the SFPE Research Roadmap.

Frederick W. Mowrer Global Scholar Award



Hafizha Mulyasih, S.T., M.T.

Education & Research – Support for Student Projects

Student Research Grants

The SFPE Foundation supports a number of initiatives designed to further its mission to enhance the scientific understanding of fire and its interaction with the natural and built environments. An important part of this mission is developing the next generation of fire protection engineers. The Foundation encourages this through an emphasis on student involvement in large research projects associated with addressing gaps identified in the SFPE [Research Roadmap](#), as well as through the Student Research Grant program.

Student Research Grant recipients receive \$5,000 USD to support a research project relevant to the field of fire engineering. Proposals are usually accepted in May and November, with two rounds of awards made each year. Please join us in congratulating the November 2021 and May 2022 Student Research Grant recipients:

November 2021



Juliette Franqueville (PhD student, UT Fire Research Group, Department of Mechanical Engineering, University of Texas at Austin, USA) was awarded a student research grant for her project "**Deep-Learning for Flame Characterization in Compartment Fires.**" This project aims to develop a low-order model based on artificial neural networks (ANNs), which are machine learning algorithms inspired by biological neural networks, to characterize the effects of vent flows on pool fires in compartment fires. The ANNs training process will leverage transfer learning, which has the potential to make the training of the ANN faster and to produce more accurate flame position predictions. This project contributes to the Fire Dynamics thread of the SFPE Research Roadmap.



Yohannes Shewalul (PhD student, Fire Engineering Research Unit, Stellenbosch University, South Africa) was awarded a student research grant for his project "**Fire Behavior of Construction Systems Incorporating Waste Materials.**" This project will identify commonly used waste materials in construction systems for which fire ratings have not been obtained and conduct experimental fire testing on construction systems incorporating such waste materials. The results of this study hold the potential to inform strategies of the fire service when responding to incidents where large quantities of oil-based recycled materials are encapsulated in walls. This project contributes to the Building Fires thread of the SFPE Research Roadmap.

May 2022



Rocio Cortez (Masters student, [Texas State University](#), USA) was awarded a student research grant for her project “**Integrating Wildlife Rescue and Rehabilitation into Disaster Loss Reduction Planning.**” This project will further empirical and practical understandings of the dynamics that explain wildlife rehabilitation and rescue’s (WRR) capacity to help minimize the consequences of wildfires. It will analyze the conditions and factors that affect WRR’s ability to readily and effectively partake in wildfire response, and it will assess the nature of information exchange’s influence in wildfire response preparedness via cross-agency communication, coordination, and information exchange. This project contributes to the Wildland/WUI Fires thread of the SFPE Research Roadmap.



Marika du Plessis (MEng/PhD student, [Stellenbosch University](#), South Africa) was awarded a student research grant for her project “**Experimental and Numerical Testing of Mass Timber Connections Considering Gap Size and Passive Protection.**” This project aims to understand if the fire behavior of mass timber connections can be predicted reliably and improved by using passive fire protection intumescence mastics. This project contributes to the Fire Dynamics thread of the SFPE Research Roadmap.



Andrea Franchini (PhD student, Department of Civil, Environmental and Geomatic Engineering, [University College London](#), UK) was awarded a student research grant for his project “**A Novel Risk-Based Fire Design Method for Sustainable Structures.**” This project is focused on developing an extension to the Maximum Allowable Damage approach using machine learning techniques and on implementing the approach into safe and sustainable structural optimization. Furthermore, the project will apply the proposed computational risk-based design framework to bridge structures. This project contributes to the Building Fires and Resilience/Sustainability threads of the SFPE Research Roadmap.



Zilong Wang (PhD student, Research Centre for Fire Safety Engineering, [The Hong Kong Polytechnic University](#), Hong Kong/China) received a student research grant for his project “**Smart Fire Calorimetry Driven by Image Analysis and Artificial Intelligence.**” This project aims to develop a smart fire calorimetry system using fire scene images and artificial intelligence. The outcome of this research will provide a simple and convenient way to measure the fire heat release rate, which shows great potential in future smart firefighting applications. This project contributes to the Building Fires and Resilience/Sustainability threads of the SFPE Research Roadmap.

Research – Awards & Recognition

Arthur B. Guise Medal

Initiated in 1982, the Arthur B. Guise Medal recognizes eminent achievement in the advancement of the science and technology of fire protection engineering and is named in memory of the achievements of Arthur Guise, who singularly developed dry chemicals for use as fire extinguishing agents. The achievement may be in research, development, design, innovation, management, education, or literature.

Please join us in congratulating the 2022 [Arthur B. Guise Medal](#) recipient: [Dr. Albert Simeoni](#), Professor and Department Head of [Worcester Polytechnic Institute's](#) Department of Fire Protection Engineering, who has been instrumental in advancing the research and understanding of wildfires on an international level.

Over the past 20 years, Dr. Simeoni has worked at organizations in France, the United Kingdom, and the United States, leading efforts to connect wildland fire science and fire safety science so that wildland and wildland-urban interface fire threats can be better addressed as a component of Fire Protection Engineering practice. His research encompasses fuel flammability and fire behavior -- including the development and implementation of experimentation -- and has led to more than 50 journal publications, more than 80 conference papers, and numerous book chapters and reports. He has helped establish the Worcester Polytechnic Institute as a leading wildfire research center, developing collaborations with the U.S. Forest Service, Los Alamos National Laboratory, FM Global, the American Wood Council, and other research universities, among others; as well as expanded WPI's wildland fire testing capabilities. He previously held leadership positions in fire research at the [The University of Edinburgh](#) (BRE Centre for Fire Safety Engineering) and at the University of Corsica (France). Dr. Simeoni has also devoted countless hours of volunteer service to the field across multiple organizations. Please join us in congratulating him on this tremendous achievement.



Jack Bono Award for Engineering Communication

Established in 1994, the Bono Award is named after Jack A. Bono, a Fellow and Past President of the Society who worked at Underwriters Laboratories, Inc. (UL) for 44 years. This award recognizes the author(s) of the paper published in the SFPE journal, *Fire Technology*, during the prior year that has most contributed to the advancement and application of professional fire protection engineering.

Please join us in congratulating the 2022 [Jack Bono Award for Engineering Communication](#) co-author recipients:

- [Haavard Boehmer](#), PE, Senior Fire Protection Engineer, [Performance Based Fire Protection Engineering, LLC.](#), USA
- [Mike Klassen](#), PhD, PE, Principal Research Engineer, [Combustion Science & Engineering](#), Inc., USA
- [Stephen Olenick](#), MSFPE, PE, MBA, Principal Engineer, [Combustion Science & Engineering](#), Inc., USA

Their article, "Fire Hazard Analysis of Modern Vehicles in Parking Facilities," can be found in *Fire Technology* journal here: <https://bit.ly/3BgK3P>



Research – Advancing Science through Grantmaking

Projects Active in 2022

Beyond the Checklist – A Virtual Handbook of Engineering Resources for WUI Property Fire Risk Assessment and Mitigation

This project was made possible with federal funding support from the Department of Homeland Security's Federal Emergency Management Agency's Fire Prevention & Safety Grant Program (FY 2020). The aim of this project is to develop a virtual handbook of engineering-based resource materials to support fire department WUI property fire risk assessments and recommended mitigation strategies for use in the field. A project team from [Jensen Hughes](#), led by Darlene Rini, PE, was selected for this project. The project is supported by an Advisory Panel composed of fire engineers, fire service personnel, and members of SFPE's Fire Service Subcommittee. Following the December 2021 kick-off workshop, the tool was piloted and evaluated in cooperation with two fire departments in the US. The handbook will be launched at the 2022 SFPE Annual Conference & Expo, with project completion expected by end of 2022.

This project contributes to the **Building Fires, Fire Service, Fire Safety Systems**, and **Wildland/WUI Fires** threads of the SFPE Research Roadmap.

Water Supply & Climate Change: The Impact of Water Stress on Fire Protection Systems

It is widely acknowledged that the impacts of climate change include more widespread and prolonged drought conditions, increased risk of flooding, rising temperatures, reduced snowpack, and shifts in weather patterns globally. Many of these changes not only increase the risk of fire events, but also place additional strain on the public water supplies that are an integral part of many fire protection systems. To design for more resilient communities in this context, fire protection engineers need to understand the linkages between climate change, public water supplies, and fire protection systems design. Our focus in this project is on the built environment and in-building fires, though we recognize structures may be in areas where wildfires and the wildland-urban-interface are also a consideration for fire systems design. A research team from [Oklahoma State University](#), led by Prof. Virginia Charter, was selected for this project. Findings of the study will be presented at the SFPE Annual Conference and Expo in Detroit, MI, USA, October 12-14, 2022, and published on the Foundation's website in late 2022.

This project contributes to the **Resilience/Sustainability** and **Fire Safety Systems** threads of the SFPE Research Roadmap.

Environmental and Health Impacts of Fire and Fire-Suppression Activities During Large-Scale Fire Events

The primary objective of this research project is to characterize the environmental and health impacts following large-scale wildland and structural fire events. The primary research includes a literature review, identification of current systems for monitoring large-scale fire incidents, identification of current tools and resources used to quantify the impact of large-scale fire events, and a gaps analysis to inform future research. A research team from [FireTox, LLC](#), led by Principal Investigator Jamie L. McAllister, PhD, PE, and Co-Investigator Brendan McCarrick, PE, was selected for this project. Findings of the study will be presented at the SFPE Annual Conference and Expo in Detroit, MI, USA, October 12-14, 2022, and published on the Foundation's website in late 2022.

This project contributes to the **Resilience/Sustainability, Fire Service, and Wildland/WUI Fires** threads of the SFPE Research Roadmap.

Risk and Performance Assessment Framework for Sustainable and Fire Resilient Buildings

This project aims to lay the groundwork for the future development of a wide range of risk-informed performance-based tools for the assessment of sustainable and fire resilient buildings. This involves characterizing the problem, researching and identifying appropriate assessment methods, identifying necessary attributes and requirements for input data, and developing a framework to underpin a risk-informed performance-based assessment methodology. The framework for the methodology will be informed by recognized and accepted risk and decision assessment approaches. Any underpinning methodology is expected to make use of readily available data and incorporate qualitative and/or semi-quantitative methods for the treatment of uncertainty, characterization of risk, and weighting of decision variables. The application of the framework will identify areas of risk to be mitigated based on performance expectations and design variables. In May of 2022, the Foundation granted an award to Dr. Brian J. Meacham ([Meacham Associates](#), USA) and Professor Håkan Frantzich and Professor Margaret McNamee, (both from the Division of Fire Safety Engineering, [Lund University](#), Sweden) to conduct this study. The project will kick off in September 2022. The findings of the study are expected to be published and presented at the SFPE Annual Conference and Expo in October 2023.

This project will contribute to the Foundation's research portfolio in the [SFPE Research Roadmap](#) threads of **Building Fires and Resilience/Sustainability**.

Projects Completed in Late 2021

Development of Fire Practitioner Tools

In August 2020, the Foundation granted an award to the [Fire Research Group](#) of New Zealand for the “Development of Fire Engineering Practitioner Tools.” The goal of this project was to understand the range of models and tools practicing fire engineers use around the world, identify gaps in needs and tool usage, and make recommendations to SFPE and SFPE Foundation regarding future initiatives to support optimal tool usage worldwide. This project included an international survey of current practices, an assessment of available tools, a gaps analysis, and a report that summarizes the findings and priorities for industry tool development.

This project contributes to the Foundation’s research portfolio in the Research Roadmap threads of **Building Fires, Resilience/Sustainability, and Fire Dynamics**.

Design Fire and Material Performance

The Foundation initiated a project whose overall goal was to develop the architecture for a “living” comprehensive dataset that could be used for assessing hazards and creating design fires. Additionally, the project aimed to develop a framework that may be used by engineers to develop design fires, aligned with the state of the practice as described in the 5th edition of the *SFPE Handbook of Fire Protection Engineering* and the *SFPE Engineering Guide to Performance-Based Fire Protection*. The Foundation selected a team of researchers from [Poole Fire Protection](#), [Performance Based Fire Protection Engineering](#), and the [University of Maryland Department of Fire Protection Engineering](#) to complete the project.

This project contributes to the Foundation’s research portfolio in the Research Roadmap threads of **Building Fires and Fire Dynamics**.

Final reports and other public project-related materials for completed Foundation-funded projects are available on the Foundation’s [website](#). All large research projects, such as those listed above, also include a one-hour webinar presentation, available through the SFPE Foundation’s new open access [Research in Fire Engineering Webinar Series](#).

SFPE Chapters may also request virtual chapter presentations on research topics of interest to their membership by contacting Aimee Zube, Donor Relations Manager, at AZube@sfpefoundation.org.

New Research Initiatives – Advancing Science through Collaboration

Grand Challenges Initiative

The SFPE Foundation's [Grand Challenges Initiative](#) (GCI) is a three-year flagship program launched in early 2022 that brings together industry, academia, research institutes, government agencies, nonprofits, and other stakeholders to develop a coordinated plan for action on pressing global issues. Our approach is to begin with topics that are not unique to fire engineering, but instead represent global challenges where fire safety science and engineering can contribute to ongoing discussions that affect the daily lives of billions. We conducted interviews and small group discussions, and we polled the SFPE community, fire experts, and other stakeholders from around the world to decide on the GCI's four focus areas, each constituting its own Working Group:

1. Energy & Infrastructure
2. Resilience & Sustainability
3. Climate Change
4. Digitalization, and Artificial Intelligence, & Cybersecurity

The initiative kicked off with a three-day, virtual Grand Challenges Summit in April 2022. With 30+ GCI Founding Partner organizations and growing, the initiative is in the Working Group phase until May 2023, when each topic area is expected to publish a 10-year plan for coordinated action in the form of a white paper. GCI Working Groups meet monthly, with each supported by a Working Group Chair and a GCI Research Fellow.

GCI Founding Partners (as of 9/1/22):

Fire Safety Research Institute	University of Maryland (USA)
HGI	Oklahoma State University (USA)
Jensen Hughes	Stellenbosch University (South Africa)
FM Global	Western Sydney University (Australia)
National Ready Mix Concrete Association	ZAG (Slovenia)
SGH	University of Waterloo (Canada)
Telgian Engineering & Consulting	Cal Poly (USA)
Senez Consulting	Ghent University (Belgium)
Fire Protection Research Foundation	RMIT University (Australia)
LMDG	Lodz University & WIPOS (Poland)
Fisher Engineering	University of Tennessee (USA)
Thornton Tomasetti	University of Canterbury (New Zealand)
Performance-Based Fire Protection Engineering	Imperial College London HazeLab (UK)
US Resiliency Council	National Research Council Canada (Canada)
Worcester Polytechnic Institute (USA)	Sandia National Laboratories (US)

**Introducing the GCI
Student Research Fellows**

DR. ENRICO DANZI
Energy & Infrastructure

DR. NATALIA FLORES QUIROZ
Resilience & Sustainability

DR. ANKIT SHARMA
Climate Change

TIANHANG ZHANG
Digitalization, Artificial Intelligence, & Cybersecurity

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Wildland-Urban Interface (WUI) Working Group Initiative

In January and February 2022, the SFPE Foundation kicked off the [Wildland-Urban Interface \(WUI\) Working Group Initiative](#) with initial planning meetings. The WUI Working Group is developing an outline of the areas where fire engineering can contribute to addressing the problem of fire and related hazards in the WUI. This draft “Table of Contents” for a theoretical WUI Fire Engineering Handbook will set out to define the scope and range of areas where fire engineering expertise can contribute globally. Beginning in the summer of 2022, the three modules of the Working Group (Individual Asset Protection, Community Evacuation & Notification, and Community Wildland Fire Protection) have begun working on that draft in regular meetings. The module leads are expected to present their progress for feedback from the broader community and external stakeholders at the SFPE Foundation WUI Symposium in early 2023.

WUI Working Group Leadership:

Co-chairs: Albert Simeoni (WPI, USA) & Alexander Maranghides (NIST, USA)

Module 1: Individual Asset Protection

- Pedro Reszka, Universidad Adolfo Ibáñez, (Chile)
- Pascale Vacca & Elsa Pastor, CERTEC (Spain)

Module 2: Community Notification & Evacuation

- George Braga, Federal District FD (Brazil)
- Max Kinateder, National Research Council Canada (Canada)
- Rino Lovreglio, Massey University (New Zealand)

Module 3: Community Wildland Fire Protection

- Domingos Viegas, University of Coimbra (Portugal)
- Dee Withee, Colorado Springs Fire Department (USA)

New FEMA FP&S Grant

In September of 2022, the SFPE Foundation was awarded its first [U.S. Department of Homeland Security FEMA](#) Fire Prevention & Safety Grant to develop a curriculum of engineering-based science, tools, and resources to address unmet training needs and support fire departments operating in the Wildland-Urban-Interface (WUI). The project, “Engineering Science for the Fire Service: Developing a WUI Risk Assessment & Mitigation Curriculum,” will build on existing and emerging initiatives.

Research Dissemination & Education

Research in Fire Engineering Webinar Series

The SFPE Foundation administers the [Research in Fire Engineering Webinar Series](#), which hosts presentations from leading scholars and practitioners of fire safety science and fire protection engineering around the world. Presentations feature SFPE Foundation grant-funded projects and research from faculty and students at fire engineering programs affiliated with the Academic Leadership Council (ALC).

In 2022, the Research in Fire Engineering Webinar Series hosted presentations on SFPE Foundation-funded projects “Developing a Design Fire and Material Performance Database” and “Development of Fire Protection Engineering Practitioner Tools,” as well as a presentation -- “Experimental and Numerical Investigation of Gypsum Calcination under Fire Exposure” -- by Ethan Fowlie from ALC member institution Eastern Kentucky University.

Dissemination

Beyond the webinar series, the SFPE Foundation engages in numerous activities to disseminate results from Foundation-funded research projects. Many grant recipients attend SFPE and SFPE Foundation-sponsored conferences and events and present their findings in that context. For instance, 2021 Student Grant Recipient Iffah Umairah Zulmajdi presented her project at the 2022 SFPE International Performance-Based Codes & Fire Safety Design Methods Conference, and 2020 Student Grant Recipient Francesca Lugaresi will present her project at the SFPE 2022 Annual Conference & Expo. Additionally, the SFPE Foundation assists grant recipients in publishing their results in SFPE publications, like the FPE eXTRA, which dedicated its July 2022 issue to an [article](#) by 2021 Student Grant Recipient David Morriset and his co-authors providing initial results from his project.

Academic Leadership Council

SFPE and SFPE Foundation's [Academic Leadership Council](#) (ALC) is made up of fire protection and fire safety engineering and engineering technology programs around the world. The ALC fosters communication between the Society, the Foundation, and the universities that educate our next generations of fire protection engineering professionals. It also serves to facilitate the sharing of information amongst the global academic community and provide an opportunity for collaboration and partnerships on larger and broader initiatives.

The ALC met in May 2022 to discuss ALC member departments' involvement in the Grand Challenges Initiative and future SFPE & SFPE Foundation conferences and events, ALC initiatives, including opportunities to present in the Research in Fire Engineering Webinar Series, and a survey of member departments to begin a process of data collection about program outcomes. The full survey will be fielded later in 2022 ahead of a second meeting of the ALC.

How to Support Our Work

The Foundation continues to make an impact internationally due, in large part, to our many generous donors. Our donors include corporations, SFPE Chapters, and individuals. The Foundation is very grateful to every donor for their support and confidence, regardless of the amount donated. Every dollar counts! The Foundation is a charitable 501(c)(3) organization incorporated in the United States of America. If you contribute, you should consult a tax advisor to determine whether your contribution is tax deductible.

Annual Giving Campaign

SFPE Foundation's 43rd birthday and kick-off of our Annual Giving Campaign began on August 7th! This event officially kicks off the 2022 Annual Giving Campaign, which runs until the last day of the SFPE Annual Conference and Expo on October 14, 2022.

Last year the SFPE Foundation held its first Annual Campaign with great success, receiving donations from 46 unique individuals and raised nearly \$30,000! With your help, we can exceed this in 2022. All donors contributing any size gift between August 7th and October 14th will automatically be entered into a random drawing for the chance to win an iPad!

For the last 43 years, the SFPE Foundation has been working hard to facilitate research and education that advances the scientific understanding of fire in the natural and built environment while supporting the profession of fire safety and fire protection engineering globally. In just the last two years, donor support helped us fund:

- 15 [student research grants](#)
- 6 student scholarships (such as the [Mowrer Global Scholar Award](#))
- 4 professional awards (such as the [Guise Medal](#))

- 6 major [research projects](#) (some completed, some in progress!)
- [The Grand Challenges Initiative](#)
- [The Wildland-Urban Interface Working Group Initiative](#)

We rely on the support of dedicated individuals to make these programs possible. To support the mission of the Foundation with your donation and help us grow our impact, please visit our PayPal [donation portal](#).

[AmazonSmile Program](#)

Did you know the SFPE Foundation is on [smile.amazon.com](#)? Click [here](#) to sign up for [AmazonSmile](#) and set **SFPE Educational and Scientific Foundation** as your preferred non-profit organization to make a donation to the SFPE Foundation with every purchase. (Not available in all locations.) This will **not** increase the cost of your purchase and 0.5% of the purchase price will be donated to the SFPE Foundation on all eligible purchases. Remember to shop using [smile.amazon.com](#) or with AmazonSmile ON in the Amazon app and AmazonSmile will donate to the Foundation at no cost to you.

For more information, check out: <https://www.sfpe.org/foundation/waystogive/amazonsmile>.

[Individual Giving](#)

Generous giving by individuals has offered the Foundation stability and opportunities to expand its impact since the very beginning. Individuals can choose from a variety of giving methods that best suit their needs, including:

- Cash or check
- Credit card
- Redirection of SFPE or SFPE Foundation award or honorarium
- [Planned giving](#) (i.e., life insurance policy/equity; retirement plan assets, bequest provisions, etc.)
- [AmazonSmile program](#)

To give online, login and contribute through the [donation portal](#). Contact Donor Relations Manager Aimee Zube (Azube@sfpefoundation.org) to learn more about how you can donate to support our work, including planned giving options and major gifts.

[Corporate Giving](#)

Corporations can give at least \$5,000 annually and receive special recognition as follows:

- Kilowatt Level: \$5,000 - \$9,999
- Megawatt Level: \$10,000 - \$24,999
- Gigawatt Level: \$25,000 or more

The mission of the SFPE Foundation is to enhance the scientific understanding of fire and its interaction with the natural and built environment. There are hundreds of corporations whose mission aligns or overlaps with that of the Foundation. A number of [corporations give](#) to the Foundation at each of the three levels, and we are very grateful for their trust and support. We invite other corporations and

industry leaders who benefit from the Foundation's work to also give generously and become a Kilowatt, Megawatt, or Gigawatt Level supporter.

Corporate donors are given grateful recognition on the Foundation's website and during the Foundation's presentation at the Annual Business Meeting at the SFPE Annual Conference & Expo.

Chapter Giving

SFPE Chapters can support the SFPE Foundation by giving whatever amount the chapter membership feels is appropriate. Through giving, Chapters can contribute to the advancement of fire protection education and science in a way that is sustainable and has global reach. Any amount is welcome, and no amount is too small. [Chapters that donate](#) receive credit toward the [SFPE Chapter Excellence Award \(ACE\) program](#).

Directing Your Donation for Maximum Impact

The Foundation offers several funds to which you can direct your donation to achieve an impact that is most meaningful and important to you:

- [Robert W. Fitzgerald Challenge Fund](#):
Every dollar donated and directed here will be matched up to \$2,500 annually through 2026. This is a great way to multiply your donation. This fund is used to support the Proulx Scholarship Award, which bestows \$5,000 annually to a student (and their advisor) engaged in a research project in the field of human behavior related to fire or emergencies.
- [UL Solutions and William Henry Merrill Society Matching Campaign](#):
Every dollar donated by an individual or an SFPE Chapter and directed to the Annual Fund or the Robert W. Fitzgerald Challenge Fund will be matched by UL Solutions, up to a maximum of \$25,000 annually.
- [Annual Fund](#):
Every dollar donated and directed here will be used by the Foundation at the discretion of the Board of Governors to further the mission of the Foundation.
- [Student Travel Fund](#)
Donations to the Student Travel Fund will support the disbursement of travel stipends to individuals receiving honors, awards, and/or scholarships that include invitations to present at SFPE and SFPE Foundation affiliated in-person events, as well as any related operational expenses. Funds are awarded to individuals who can demonstrate a need and show that they will be used for travel expenses.

Planned Giving

New: SFPE Foundation Legacy Society

The Legacy Society honors individuals who have included the SFPE Foundation in their will, trust, charitable planned gifts or other significant endowed gifts in the creation of scholarships and awards. As a member of the Legacy Society, you find yourself among a circle of friends who see the value in planning to support research, education, and outreach that advances our understanding of fire and ensures that future generations will thrive in a fire-safe world. If you are considering a gift to the SFPE Foundation in your estate plans, we encourage you to contact Aimee Zube, Donor Relations Manager, at AZube@sfpefoundation.org to discuss your vision and ideas.

Trying to decide whether it's a good fit? Hear from a current Legacy Society member, [Jeff Harrington](#), on why he chose to donate to the SFPE Foundation:

"In my time with the Foundation as a Governor, I have seen impressive results. The Foundation Board of Governors and SFPE [Foundation] leadership have earned my trust. [...] [The Foundation] has proven to be a very good steward of the donations it receives, using them effectively and creatively in support of its mission."

Jeff Harrington, Former Vice Chair, SFPE Foundation Board of Governors

If you have already included the SFPE Foundation in your plans, it would be our honor to personally thank you and welcome you into the Legacy Society. Please contact Aimee Zube, Donor Relations Manager at AZube@sfpefoundation.org to be added as a Legacy Society Member.

Ready to leave a legacy? For your quick reference, key details about the SFPE Foundation are provided below, as well as sample bequest language to help you clarify your intent:

Legal name:	SFPE Educational & Scientific Foundation, Inc.
Employer Identification Number (EIN):	04-2701210
Incorporated in:	Massachusetts, USA
Address:	9711 Washingtonian Blvd., Suite 380 Gaithersburg, MD 20878

Sample Bequest Language

Below are the most common kinds of bequests with sample language for naming SFPE Foundation as a beneficiary. You may also change your beneficiaries at any time, should your circumstances change.

Residual Bequest

This is a very popular choice for charitable bequests because it ensures that loved ones receive their distribution before any distribution to charity. “I devise the residue of my estate, after the satisfaction of all specific bequests and the payment of all taxes and other costs attending my death, to the SFPE Foundation., a not-for profit corporation, Tax ID# 04-2701210, with principal offices currently located at 9711 Washingtonian Blvd., Suite 380, Gaithersburg, MD 20878.”

General/Fixed Dollar Bequest

A stated sum of money, usually cash, to a beneficiary. “I bequeath the sum of \$____ dollars to the SFPE Foundation., a not-for profit corporation, Tax ID# 04-2701210, with principal offices currently located at 9711 Washingtonian Blvd., Suite 380, Gaithersburg, MD 20878.”

Percentage Bequest

Enables your bequests to grow as your assets grow. “I bequeath to the SFPE Foundation., a not-for profit corporation, Tax ID# 04-2701210, with principal offices currently located at 9711 Washingtonian Blvd., Suite 380, Gaithersburg, MD 20878, an amount equal to _____ percent of the net value of my estate as finally determined for federal estate tax purposes.”

Contingent Bequest

Assumes you want to leave your entire estate to family and friends. However, in the event that you outlive any of your beneficiaries, it provides an opportunity to designate SFPE Foundation to receive that portion of the estate. “In the event that (name of the beneficiary) does not survive me, I designate to the SFPE Foundation, a not-for profit corporation, Tax ID# 04-2701210, with principal offices currently located at 9711 Washingtonian Blvd., Suite 380, Gaithersburg, MD 20878, as the devisee of this bequest of (see above for language specific to different types of bequests).”

Life Insurance Policy

Donors can name the SFPE Foundation as the beneficiary and/or owner of a life insurance policy that is no longer needed. Please follow the link below to read more about donating life insurance policies:
<https://www.northwesternmutual.com/life-and-money/donating-your-life-insurance-to-charity-how-it-works/>

Charitable Gift Annuities

A Charitable Gift Annuity allows you to make a gift to the SFPE Foundation while at the same time providing you with a guaranteed income stream. It is an ideal plan for those who would like to make a significant gift during their lifetime but depend on the income from their assets.

Charitable Remainder Trust

You can place cash or property in a trust that pays an annual income to you (or another named beneficiary) for life. After your death, the remainder of the trust transfers to the SFPE Foundation and is placed into the fund you have selected. You receive income tax benefits the year you establish your trust.

Charitable Lead Trust

You can place cash or property into a trust that pays a fixed amount to the SFPE Foundation for the number of years you select. Once this period ends, the assets held by the trust are transferred to the beneficiaries you name. In some cases, you receive a substantial reduction in federal gift and estate taxes.

Scholarship and Award Endowment

Endow a scholarship or award to provide funding for future generations to come. Endowment gifts remain in perpetuity and earn interest annually used to fund a named scholarship or award. A wonderful way to leave a legacy for yourself or a cherished loved one.

There are financial benefits to the donor associated with each of these philanthropic instruments. In all charitable estate planning matters, the SFPE Foundation encourages you to seek professional advice from your trusted advisors. For more information about estate planning, please contact your financial or legal advisors.

If you wish to learn more about how your estate can help secure the SFPE Foundation's future, please contact Aimee Zube, Donor Relations Manager at AZube@sfpefoundation.org.

Disclaimer: This information is intended to assist you in your charitable planning. It is not legal advice and should not be relied upon as such. Please consult with your attorney or other advisor for professional advice and to discuss how this information can benefit you as you consider your financial and philanthropic goals.

How to Give

- Online:
 - To give online, go to <https://sfpe.users.membersuite.com/donations> and select your desired options.
 - Or, give directly through our PayPal donation portal at:
https://www.paypal.com/donate/?hosted_button_id=G9RRQXLS3YFWU.

- Check by Mail:
 - Make check payable to “SFPE Educational & Scientific Foundation, Inc.” and send to:

SFPE Educational & Scientific Foundation Inc.
Attn: Donations
9711 Washingtonian Blvd. Suite 380
Gaithersburg, MD 20878

Note: in the memo line on the check, indicate the direction for your donation (i.e., Annual Fund, Fitzgerald Fund, Student Travel Fund, etc.)

You may also call Aimee Zube, Donor Relations Manager, to have your gift processed over the phone. She may be reached at: +1 301-915-9722.

Thank you!