

# PROCEDURES FOR THE CONDUCT OF RESEARCH PROJECTS OF THE SFPE EDUCATION AND SCIENTIFIC FOUNDATION

## 1. General

### 1.1. Purpose

The SFPE Foundation identifies and promotes research pertinent to the development, advancement, and application of scientific and engineering principles to safeguard people, property, mission, heritage, and the environment from the negative impacts of unwanted fire. The general scope for this work is outlined in the SFPE Research Roadmap.

The SFPE Foundation implements this vision through a research program funded by its donors and conducted by leading research institutions around the world.

The Foundation's Technical Committee (TC) has responsibility for the facilitation of this program.

### 1.2. Scope

The SFPE Foundation has a number of different programs to help accomplish its mission statement. This document provides a description of the programs and overview of roles and responsibilities for SFPE Foundation research activities.

## 2. Research Roadmap Project Program

As part of the Foundation's mission the Foundation Technical Committee will undertake an annual assessment of the SFPE Research Roadmap.

**Goal:** The goal of the research roadmap project program is to conduct research that advances fire safety engineering by overseeing and coordinating research efforts, to build and strengthen partnerships with research organizations, and to act as a bridge between research and practice.

### 2.1. Topic Identification

The Technical Committee will make periodic recommendations to the

Foundation Board of Governors on a suitable research portfolio for the Foundation which aligns with the Roadmap. Potential research topics may come from: the SFPE Research and Innovation Task Group; topics which are aligned with donor or grant funding sources; collaborative opportunities with other organizations; emerging special topics of concern to the profession; or other relevant sources.

The Technical Committee, with additional advice/expertise as needed, will develop an implementable research scope, timeline, and deliverables for the research topic which can be feasibly conducted within Foundation financial and project management resources.

## **2.2. Request for Proposals**

A Project Panel will develop an open Request for Proposals (RFP) which will be widely publicized through SFPE and other channels. Research contractors will be selected based on Panel evaluation of proposal quality and responsiveness to the RFP, scientific merit of approach (30%), achieveability (25%), project value (20%), research qualifications (20%), and engagement of students (5%). Details on the evaluation criteria are provided in §2.4.

## **2.3. Proposal Recommended Content**

While a standard format is not required for the submission of a proposal, it is recommended to include the basic contents as specified below ensuring that each of the merit criteria is adequately addressed. Recommended content for proposals:

- Specific Aims (Objectives)
- Background and Significance
- Methods and Procedures
- Budget and Justification
- Timing and Deliverables
- Conflicts of Interest or Restrictions on Publication
- Biographical Sketch of Principal Investigator, key staff and students
- References

## **2.4. Evaluation Criteria and Selection of Research Team**

The Technical Committee will serve as the project review panel for all Foundation projects; in some cases, additional relevant expertise may be sought for a given project. The Technical Committee chair will appoint a panel chair. If a Technical Committee member has a potential direct business interest in a given project, he/she will recuse themselves from participation in that panel. (All Technical Committee members will abide by the SFPE Conflict of Interest Policy.)

Grants will be awarded based on the evaluation of five primary criteria:

1. **Scientific Merit (30%):** scientific merit will be gauged on the clarity of the objective of the proposal and the scientific validity of the approach. The proposal should demonstrate the research team's scientific knowledge of the problem.
2. **Achievable (25%):** the project must be shown to be achievable in the proposed timeline and within the budget of the award. Proposed methods and procedures for achieving the objectives should be provided along with any significant risks that are perceived to completing the project. Any resources or perceived critical obstacles to the project should be identified.
3. **Project Value (20%):** the proposal should clearly illustrate how the proposed work meets the objectives of the RFP. A description of the anticipated deliverables and any additional value the research team is offering should clearly be enumerated (i.e., additional work beyond that required in the RFP and/or cost-sharing).
4. **Research Team Qualifications (20%):** the proposal should clearly and succinctly provide qualifications of the proposed research team. This should include relevant prior research work, demonstrated success at carrying out research projects by meeting project deliverable dates and budgets, and research team skills and education. Up to three (3) letters of recommendation may be submitted along with the proposal to support the research team qualifications.
5. **Student Engagement (5%):** while not required in order to receive a

Research Roadmap grant, it is highly encouraged to include students as part of the research team. A clearly defined anticipated role(s) should be included for any proposed student and a short student bio should also be included.

## **2.5. Technical Committee and Project Panel Role**

The Panel will provide timely engagement in the project review process including participation in three or more teleconferences during the course of the project (one during the project kickoff/contractor introduction, one after the submission of a draft report, and one after review of the draft final) with others as necessary. The panel will advise the contractor through the project process as necessary and will review and approve the final report for content and format for publication.

## **2.6. Multiple Proposals from Same Proponent**

Proponents are permitted to submit a single proposal, should multiple proposals be received the Proponent will be given the choice of which to review.

# **3. Student Research Grant Program**

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 environment. An important part of this mission is developing the next generation of fire protection engineers. The foundation encourages this through emphasis on student involvement in the Research Roadmap program as well as through the Student Research Grant Program.

**Goal:** Realize the SFPE Foundation vision through providing educational and research opportunities for the next generation of fire protection engineers.

**Purpose:** To support innovative baccalaureate and graduate level student research projects in fire safety science or fire protection engineering and to showcase the contributions of students to the advancement of fire protection engineering.

### **3.1. Award Incentive**

Nominally \$25,000 in grants will be awarded annually to support the following:

*Funding:* A \$5000 stipend will be provided to the student recipient of the grant. Travel support to the SFPE annual conference, or equivalent will also be provided.

*Student Innovation Showcase:* Grantees will have the opportunity to participate in the SFPE Foundation Student Innovation Showcase which includes the SFPE annual conference, SFPE website, and magazine exposure.

### **3.2. Eligibility**

This program is intended solely for undergraduate and graduate students enrolled in programs with a fire safety science or fire protection engineering focus.

### **3.3. Application Guidelines and Award**

The request must be submitted by the student and must include the student's faculty advisor recommendation. These should be sent to the SFPE Foundation at [foundation@sfpe.org](mailto:foundation@sfpe.org).

Submissions should not exceed 5 pages and should include a description of the innovative objective of the research project, describe the tasks that will be undertaken to achieve it, and state the proposed timeline for completion. Additionally, if this is supplemental funding it should be made clear how the additional funds will be used, the source of additional funding, and if any potential conflicts or restrictions exist that would impact the presentation and publication of the research.

Final decisions rest with the Foundation's Board of Governors, upon recommendation from the Technical Committee.

### **3.4. Proposal Recommended Format**

While a standard format is not required for the submission of a proposal, it is recommended to follow the basic layout and contents as specified in §2.3 above. Additionally the items listed below should be included in a cover page:

- Title of the project
- Name and affiliation of the student
- Name of academic supervisor/sponsor
- Description of any prior financial support.

### **3.5. Deadlines**

Submissions will be accepted at any time throughout the year; however, submissions are reviewed, and grants are awarded twice per year (assuming qualified submissions). Submissions must be received by November 1<sup>st</sup> to be awarded in January or by May 1<sup>st</sup> to be awarded in July.

### **3.6. Project Deliverables**

It is expected that the results of the research will result in the publication of a peer-reviewed research paper and that the results will be presented at an appropriate forum. The paper will additionally be hosted on the SFPE Foundation website for archival purposes.

## **4. Project Deliverables**

The contractor is responsible for the development of a report that is suitable for publishing by the SFPE Foundation. The report shall be issued in interim draft, final draft, and final form to the Project Panel for review.

The results of all Foundation research projects will be published on the SFPE website and distributed widely in the community. The role of contractor, the project panel and sponsor/granting agencies will be acknowledged in these reports.

In addition to the published report, it is expected that the contractor will author and submit the work to an appropriate peer-reviewed journal(s). The Foundation will provide Acknowledgements language that is to be included in the publication.

#### **4.1. Intellectual Property**

The SFPE Foundation retains the copyright on all data, written materials, computerized software, and other information developed under contract. The disposition of patents and inventions are the responsibility of the contractor, and its obligations in this regard are set forth in the contract as necessary. The general knowledge, know how, expertise, generalized ideas, concepts, methods, techniques and skills developed by the project contractor(s) during the course of the project can be used by the contractor in any dealings with third parties and/or in other projects so long as the contractor can do so without using any confidential information learned as a result of the project.

#### **4.2. Format and Branding**

The awarded contractor shall format the report in a manner that clearly lays out the background, literature review, methodology, results, analysis, conclusions, and other relevant sections of the report. A Table of Contents, Table of Figures, and Table of Tables shall be included as needed. References shall be in IEEE format.

The Foundation will provide a SFPE Foundation branded cover page and introductory material to the contractor report.

# **POLICIES OF THE SFPE EDUCATION AND SCIENTIFIC FOUNDATION**

## **Restricted Funds Policy**

Purpose. This document establishes the Foundation's policy concerning "Restricted Funds Accounts."

By-Laws. This policy may be revised at any time by a majority vote of the Foundation's Board of Governors.

Restricted Funds Account. A restricted funds account is an account established for a specific purpose within the Foundation's mission of "advancing the practice and science of fire protection engineering." A restricted funds account shall be established by majority vote of the Board of Governors.

A sponsoring organization such as an SFPE Chapter, individual, company or other interested party, may sponsor a restricted funds account. Monies distributed from a restricted fund account established by a sponsoring organization shall be distributed in accordance with the general funding objectives intentof the authorized representative(s) of that sponsoring organization. The authority and responsibility for disbursement, use and award of any monies from restricted funds accounts established by a sponsoring organization rests solely with the Board of Governors.

Prior to establishing a restricted funds account, the sponsoring organization shall submit a Charter to the Board of Governors for approval. The Charter shall establish the purpose, funding objectives and restrictions of the restricted funds account.

The Board of Governors shall be responsible for selecting and funding specific projects from restricted funds accounts established by a sponsoring organization. The selection process shall be by majority vote of the Board of Governors.

The Foundation shall be responsible for managing investments of restricted fund accounts. Restricted fund investment accounts shall be accounted for separately from the Foundation's general investment accounts. Restricted funds accounts investments shall be charged a pro-rated share of the Foundation's investment and administrative expenses.



The Foundation shall be responsible for reporting restricted fund investment results to the appropriate sponsoring organization as well as for complying with various tax and legal regulations and reporting such the law may require.