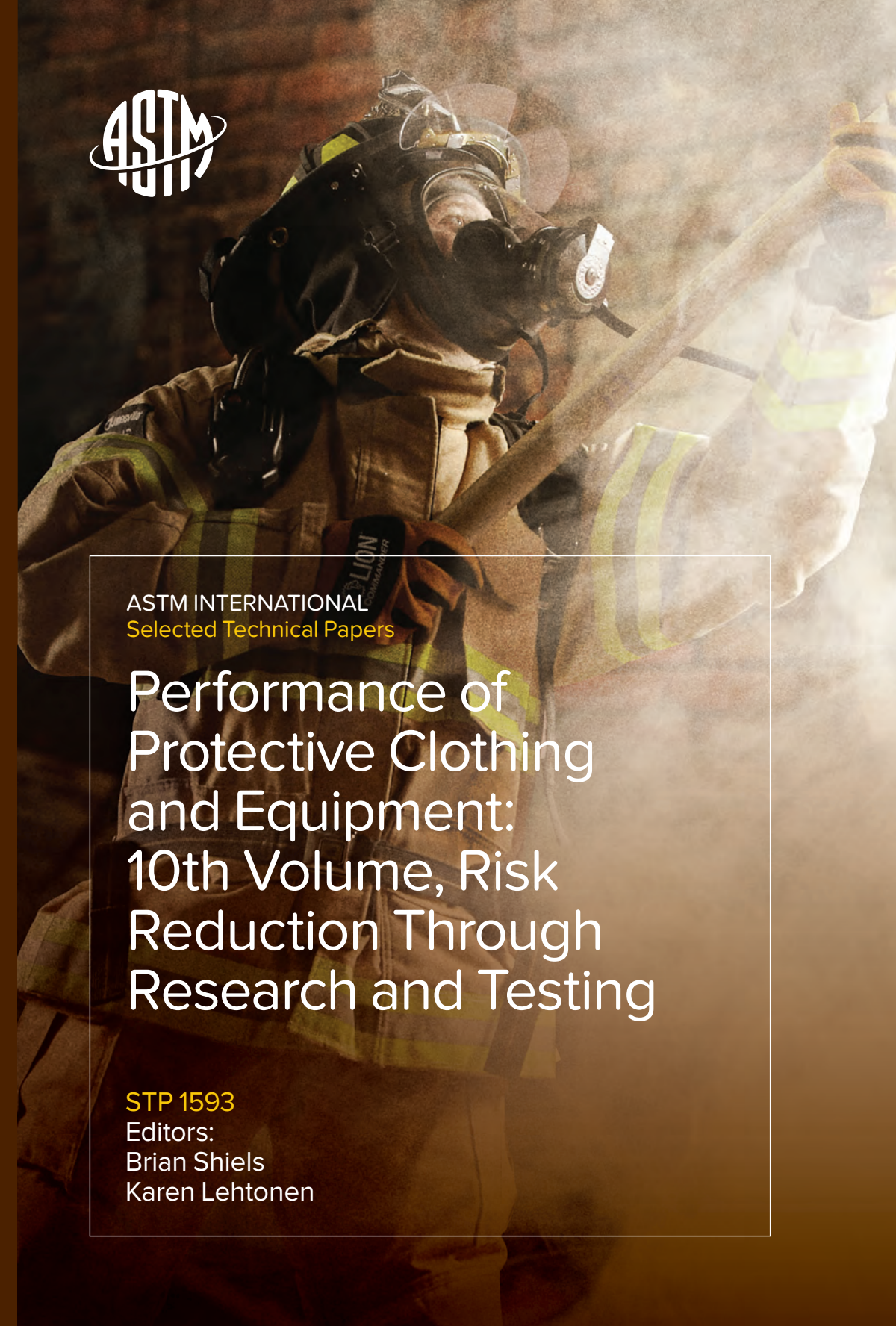

ASTM INTERNATIONAL
Selected Technical Papers

Performance of Protective Clothing and Equipment: 10th Volume, Risk Reduction Through Research and Testing

STP 1593
Editors:
Brian Shiels
Karen Lehtonen

SELECTED TECHNICAL PAPERS
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Foreword

THIS COMPILATION OF Selected Technical Papers, STP1593, *Performance of Protective Clothing and Equipment: 10th Volume, Risk Reduction Through Research and Testing*, contains peer-reviewed papers that were presented at a symposium held January 28–29, 2016, in San Antonio, Texas, USA. The symposium was sponsored by ASTM International Committee F23 on Personal Protective Clothing and Equipment.

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Overview

This volume contains a collection of 23 peer-reviewed papers from the Tenth Symposium on Performance of Protective Clothing and Equipment held January 28–29, 2016, in San Antonio, TX. The event was the tenth in an ongoing series of ASTM Committee F23 symposia that has spanned 30 years. The symposium theme, "Risk Reduction Through Research and Testing," drew academic and industrial researchers alike with a common goal to increase protection for the users of all varieties of protective clothing and equipment.

The symposium was preceded by two very full days of standards development during a bi-annual meeting of ASTM Committee F23 on Personal Protective Clothing and Equipment. To open the event, the symposium co-chairs invited Lieutenant Jim Reidy of the San Antonio Fire Department to deliver a welcome speech. The lieutenant's talk served as an excellent reminder to all those in attendance of the importance of ongoing research and testing and gave a personal connection to an end user whose life often depends on our success.

The overall objective of the symposium was to provide a forum for discussing the current state and future of the personal protective clothing and equipment industry. Specific objectives included:

- Showcase current research and advances in personal protective clothing and equipment
- Define and discuss challenges facing those developing, testing, and using personal protective clothing and equipment
- Promote communication and information sharing between researchers, manufacturers, users, and government agencies
- Assess the need for new and/or revised standards

Although many of the presentations covered topics involving flame exposures, the symposium co-chairs were pleased to welcome several discussions on the topics of chemical and biological protection, arc flash protection, and blast protection for military and law enforcement. The span of topics also shed light on important emerging issues, including a better understanding of physiological impact of protective clothing, and innovative ways to reduce heat stress. Particularly useful for the F23 Committee members in attendance were the topics focusing on improving upon existing test methods to better serve the protective clothing industry.

The symposium co-chairs express their gratitude to ASTM staff for all their contributions to planning throughout the many months preceding to the symposium. Furthermore, this STP would not have been possible without the attentiveness and countless hours volunteered by our peer reviewers to ensure that all of the following manuscripts were fit for publication. It is our sincere hope that these selected technical papers contribute significantly to the further advancement of personal protective equipment.

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