Through our international collaboration programmes with academia, industry, and the public sector, we ensure the competitiveness of the Swedish business community on an international level and contribute to a sustainable society. Our 2,200 employees support and promote all manner of innovative processes, and our roughly 100 testbeds and demonstration facilities are instrumental in developing the future-proofing of products, technologies, and services. RISE Research Institutes of Sweden is fully owned by the Swedish state.
PREFACE

These proceedings include papers and extended abstracts from the 5th International Conference on Fires in Vehicles – FIVE 2018, held in Borås, Sweden October 3-4, 2018. The proceedings include an overview of research and regulatory actions coupled to state-of-the-art knowledge on fire related issues in vehicles, such as passenger cars, buses, coaches, trucks and trains.

Fires in transport systems are a challenge for fire experts. New fuels that are efficient and environmentally friendly are rapidly being introduced together with sophisticated new technology such as e.g. fuel cells and high energy density batteries. This rapid development, however, introduces new fire risks not considered previously and we risk getting a situation where we do not have enough knowledge to tackle them. In this context FIVE represents an important forum for discussion of the fire problem and for exchange of ideas.

Fire protection in road, rail, air, and sea transport is based on international regulations since vehicles cross borders and the safety requirements must be the same between countries. Therefore, understanding of safety and regulations must be developed internationally and the FIVE-conference has a significant role to play as a place to exchange knowledge.

FIVE attracts researchers, operators, manufacturers, regulators and other key stakeholders. Of particular value is the mix of expertise and the international participation in the conference. The conference is unique as it includes fires in different vehicles. It is not confined to bus fires or train fires but includes them both, naturally since fire problems are often similar regardless of type of vehicle. This means that for example solutions for trains are useful for fire problems in buses and vice versa.

In the proceedings you will find papers on the fire problem, alternative fuel and electric vehicles, fire investigations and case studies and finally fire mitigation. We are grateful to the renowned researchers and engineers presenting their work and to the keynote speakers setting the scene. We sincerely thank the scientific committee for their expert work in selecting papers for the conference.

Petra Andersson                      Ola Willstrand
Chair FIVE 2018 Scientific Committee  FIVE 2018 Organizing Committee

Note: the views expressed in the papers are those of the authors and not necessarily those of RISE Research Institutes of Sweden.
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