



Fire Protection Engineering Department **FPE SEMINAR SERIES**

Monday, October 28, 2024
Noon-12:50pm
50 Prescott St, Gateway II, Room 1226



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Understanding Wildfires: From Research to Community Resilience

ABSTRACT

In the last decade, extreme wildfire events have caused substantial social, economic, and environmental damage worldwide, threatening lives and resulting in billions of dollars in losses. Climate change is worsening fire seasons by increasing the number of hot, dry days, leading to more frequent and intense fires with severe ecological and community impacts. To mitigate these effects, a deeper understanding of wildfire behaviour, its future changes, and how this knowledge can enhance community resilience is crucial. This talk highlights recent and ongoing research on wildfires and wildland-urban interface fires conducted by the FLARE Wildfire Research Group at the University of Melbourne.

BIOGRAPHY

Dr Alexander Filkov is a Senior Research Fellow at the University of Melbourne, Australia. He received his M.S. and Ph.D. in Physical and Mathematical Sciences from Tomsk State University, Russia. Dr Filkov leads the fire behaviour theme within FLARE Wildfire Research group, focusing on better understanding of dynamic fire behaviours, their influence on ignition and combustion of fuels, transition mechanisms of wildland fires into Wildland-Urban Interface areas and fire performance of structural materials. He chairs the International Fire Safety Consortium and co-leads the "Ignition Resistant Communities" subgroup within the "Large Outdoor Fires and the Built Environment" working group, part of the International Association of Fire Safety Science. Additionally, he serves as Associate Editor for the Journal of Safety Science and Resilience. Dr. Filkov has been awarded the Early Career Award in Fire Science by the International Association of Wildland Fires and Laureate of the Tomsk Oblast Prize in the Field of Education and Science. He is co-author of over 60 journal articles and 40 conference papers.