

Visibility in Fire Safety Science and Engineering

Experimental Work, Modelling and Practical Applications · 23–25 September 2026 · Bergische Universität Wuppertal, Campus Haspel

Start	End	Speaker	Affiliation	Title
Wednesday, 23 September 2026				
9:00	9:30			Registration
9:30	10:00			Welcome & Introduction
Session 1 · Fundamentals & Modelling				
10:00	10:30	Lukas Arnold	Forschungszentrum Jülich / Bergische Universität Wuppertal	One Equation, Fifty Years, Fifteen People: Following a Photon from the Sign to the Eye — and What Happens After
10:30	11:00			Coffee Break
11:00	11:30	Jonathan Wahlqvist	Lund University	The Importance of Multiple Scattering When Modelling Visibility
11:30	12:00	Christoph Gnendiger	-	Extinction Coefficients from Aerosol Measurements
12:00	12:30	Kristian Börger	Bergische Universität Wuppertal	Physically Based Modelling of Evacuation Signage Visibility through Fire Smoke
12:30	14:00			Lunch Break
Session 2 · Visibility & Human Perception				
14:00	14:30	Wojciech Węgrzyński	Instytut Techniki Budowlanej (ITB)	Reappraisal of the Jin's Model for Common Building Situations
14:30	15:00	Jennifer Ellingham	University of Waterloo	Smoke Observation Studies: Lessons Learned
15:00	15:30			Coffee Break
15:30	16:00	Yuki Akizuki	University of Toyama	Application of Visual Environment Planning Methods in Architectural Environmental Engineering to Evacuation Behavior in Fires
16:00	16:30			Open Discussion / Wrap-up
16:30				End of Day 1
18:30				Joint Dinner
Thursday, 24 September 2026				
Session 3 · Experiments & Measurement				
9:00	9:30	Jennifer Ellingham	University of Waterloo	Smoke Layers, Visibility and the Radiance Method
9:30	10:00	Anna Troff	Brandschutz Consult Ingenieurgesellschaft mbH Leipzig	From Lab to Field: Applying LEDSmokeAnalysis to Smoke Experiments in Fire Safety Engineering
10:00	10:30	Manuel Osburg	Brandschutz Consult Ingenieurgesellschaft mbH Leipzig	Measuring and Modelling Smoke Light Extinction: Multi-Method Experiments and FDS Validation
10:30	11:00			Coffee Break
11:00	11:30	Bjarne Husted	DTU – Technical University of Denmark	Measurement of Soot Production from Medium Scale Fires
11:30	12:00	Jason Floyd	Fire Safety Research Institute	Soot Measurements and Modeling in a Closed Single-Room Compartment with a Propylene Fire
12:00	13:30			Lunch Break
Session 4 · Performance-Based Design & Application				
13:30	14:00	Gabriele Vigne	JVVA Engineering Consultancy S.L.	Practical Role of Visibility in Smoke Modeling in Everyday Fire Engineering
14:00	14:30			Panel Discussion
14:30				End of Day 2
16:00				Social Programme · Museum Visit
19:00				Joint Dinner
Friday, 25 September 2026				
Session 4 · Performance-Based Design & Application (continued)				
9:00	9:30	Flemming Ruddi Mørk	COWI A/S	Soot Yield's Great Impact on Fire Safety Design in Buildings Demands Focus on Implementing Enough Robustness and Assessing the Tenability Criteria of Visibility
9:30	10:00	Bryan Klein	Thunderhead Engineering Consultants, Inc.	Calculating Occupant Visibility through Smoke in Pathfinder
10:00	10:30	Mohcine Chraïbi	Forschungszentrum Jülich GmbH	A Modular Workflow for Visibility-Aware Evacuation Modelling
10:30	11:00			Coffee Break
11:00	11:30	Kristian Börger	Bergische Universität Wuppertal	Visibility Maps from Three-Dimensional CFD Smoke Data for Egress Assessment
11:30	12:00			Closing Discussion & Farewell
12:00				End of Seminar

Agenda updated on 03.09.2026