



Date: 26 Sep 2018

Place: Novi Sad

Knowledge FOR Resilient soCiEty

**CONSORTIUM MEETING, WBB MEETING,
S-FORCE SYMPOSIUM**

University of Novi Sad

University of Tuzla

University of Banja Luka



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Text books:

- *Thematic – interdisciplinary nature of the DRM& FSE field*
- *Publisher: Faculty of Technical Sciences*
- *Edition: Technical Sciences – Textbooks (in Serbian)*
- *Rule on publishing – 2 reviewers*
- *In English and local languages*
- *E-book to be published in March 2019 (ISBN / CIP)*
- *UNS will print national edition in Serbian*



TEXTBOOK TITLE: ***Fire Safety in Buildings***

- **Editors:** *M. Laban (UNS),
G. Broceta (UBL)
E. Nukic (UTZ)*
- **Reviewers:** ***M. Cvetskovska, E. Ronchi and F. Markert?***

 *Final content will be defined during this meeting*



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TITLE: Fire Safety in Buildings

Authors (UNS): M. Laban, ?
 Authors (UTZ): J. Marković, E. Nukić
 Authors (UBL): G. Broćeta, ?

Chapters	Selected Topics	Authors (proposal)
Introduction	Fire prevention history in WBC Overview of Fire Statistics in WBC	The Editors
Section 1: Fire Safety Engineering		
1. Design Concerns, introduction		Jelena Markovic
2. Control of ignition	Control of flammability Control of growth of fire Fire safety management	Jelena Markovic
3. Fire protection passive measures	Fire spread between structures Compartmentation Fire Barriers	Edisa Nukic
4. Fire protection active measures	Fire detection Smoke control Fire-fighting systems	Edisa Nukic
5. Means of Escape	Occupancy and exit capacity Travel distances and times Minimum fire protection measures	Edisa Nukic



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Section 2: Fire Safety Building Analysis

1. Introduction		The Editors
1. Short overview of buildings and settlements in WBC	History of Settlements' development Building Typology Typology of construction technology	Miroslav Malinovic Mirjana Laban
2. Properties of materials at elevated temperatures	CPR Brick Concrete Steel Wood Plastics	Gordana Broceta Vesna Bulatovic
3. Fire Resistance of Structures	Structure collapse Eurocodes – structural fire design Fire load calculation methods	Damir Zenunovic Gordana Broceta Miroslav Malinovic Igor Dzolev



Section 3: Tools for Fire Risk assessment and management

1. Introduction		The Editors
2. Risk identification	Fire hazard and risk Exposure to fire risk Fire risk prevention and mitigation	Mirjana Laban Edisa Nukic
3. Social Vulnerability and impact analysis	Vulnerability of structures Social vulnerability	Mirjana Laban Rijad Sisic
4. Qualitative Fire risk assessment	Risk Matrix Event-Tree Method	Mirjana Laban Suzana Draganic
5. Quantitative Fire risk assessment	Risk Matrix Event-Tree Method	Mirjana Laban Suzana Draganic
6. Evacuation calculation and modelling	PyroSim Pathfinder	Suzana Draganic



Section 4: Perspective on Fire Risk Management in the Balkans

1. Serbia	Actual practice Legislation Case studies	UNS/VTSNS (M. Laban; V. Milanko)
2. Bosnia and Herzegovina		UBL/UTZ (G. Broceta, J. Markovic, M. Malinovic)
3. Albania ????		UT/EPOKA (S. Dervishi?)
4. Montenegro ???		UM/UkiM (M. Knezevic?)
5. Macedonia ???		UKiM/UM (Čifliganec Cvetanka)

Section 5: Concluding remarks

1. FS in the Balkans and beyond – A comparative Overview and Recommendations		The Editors
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Work plan

	July – September	September – December	Dec-January	January- March	March - April
1. Finalizing the table of contents					
2. Finalizing the list of authors					
3. Writing of respective chapters					
4. Submission to the editors					
5. Review process					
6. Submission to the publisher					
7. Final revisions and publication					



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Initial literature:

- *Andrew H. Buchanan „Structural design for fire safety“*
- *John A. Purkiss „Fire Safety Engineering Design of Structures“*
- *D. Rabash (et al.) „Evaluation of Fire Safety“*
- *Hurley Morgan „Performance based fire safety design“*
- *Y C Wang „Fire Safety management handbook..“)*
- *Cote A.E. et al. „Fire Protection Handbook“:*
- *Todd Colin S. „Comprehensive Guide to Fire Safety“*
- *Paul Stollard and John Abrahams ;„Fire from First Principles“*
- *Robert W. Fitzgerald „Building fire performance analysis“*
- *Charles A. Harper „Handbook of Building Materials for Fire Protection“*
- *A.M. Hasofer, V.R. Beck, I.D. Bennetts „Risk Analysis in Building Fire Safety Engineering“*
- *James G. Quintiere „Fundamentals of Fire Phenomena“*
- *David Yung „Principles of Fire Risk Assessment in Buildings“*
- *Zhenhai Guo, Xudong Shi „Experiment and Calculation of Reinforced Concrete at Elevated Temperatures“*



Initial literature:

- *EN 1992-1-2 Eurocode 2: Design of concrete structures – Part 1-2: General Rules- structural fire design*
- *EN 1993-1-2 Eurocode 3: Design of steel structures – Part 1-2: General Rules- structural fire design*
- *EN 1994-1-2 Eurocode 4: Design of composite steel and concrete structures – Part 1-2: General Rules- structural fire design*
- *EN 1995-1-2 Eurocode 5: Design of timber structures – Part 1-2: General Rules- structural fire design*
- *EN 1996-1-2 Eurocode 6: Design of masonry structures – Part 1-2: General Rules- structural fire design*
- *Regulation (EU) No 305/2011 - construction products*





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Thank you
for your attention

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