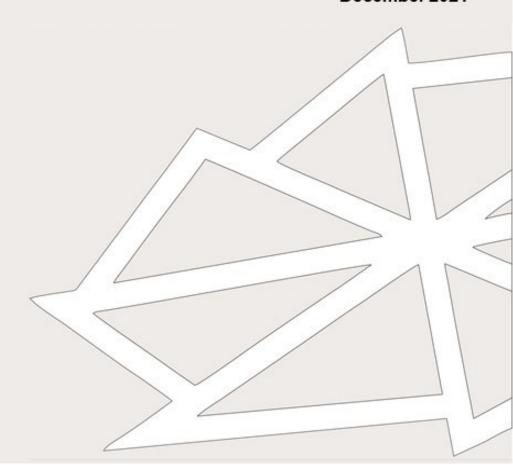
# FACULTY OF WOOD SCIENCES AND TECHNOLOGY DEPARTMENT OF FIRE PROTECTION



# FIRE PROTECTION & SAFETY Scientific Journal

Vol. 15 lss. 2 December 2021



# **Description**

**Delta** is an international scientific journal, published twice a year, in electronic and print form, in English.

**Delta** journal publishes reviewed original scientific papers, review papers, case studies and short communications devoted to research on fire protection and safety, occupational health and safety, protection of persons and property and rescue services.

# **Topics**

# Fire and Its Propagation

(Scientific Guarantor: prof. Danica Kačíková)

- Combustion and Fire Chemistry and Physics
- Fire Behaviour Modelling
- Fire Dynamics
- Fire Investigation
- Smoke Control and Combustion Toxicity

# Effect of Heat and Fire on Materials and Products

(Scientific Guarantor: prof. Danica Kačíková and prof. František Kačík)

- Fire Properties of Materials
- Fire Testing
- Thermal Stability and Thermal Degradation of Materials and Products

# **Buildings Fire Safety**

(Scientific Guarantor: assoc. prof. Martin Zachar)

- Active and Passive Fire Protection Systems and Methods
- Fire Safety Design of Buildings and Technology

## Occupational Health and Safety

(Scientific Guarantor: assoc. prof. Martin Zachar)

- Injury Investigation Methods
- Safety Engineering

# Protection of persons, property, and environment

(Scientific Guarantor: assoc. prof. Andrea Majlingová)

- Environmental Impacts of Emergency
- Disaster Planning, Vulnerability Assessment and Resilience Evaluation

# Emergency/Rescue Services

(Scientific Guarantors: assoc. prof. Rastislav Šulek and assoc. prof. Andrea Majlingová)

- Contingency Management, Contingency Planning, Infrastructure Dependence
- Multidisciplinary Approaches
- Visualisation, Simulation, Optimisation, Intelligent Agents
- Emergency Preparedness and Planning, Logistics
- Incident Command Systems, Emergency Communication

# TECHNICAL UNIVERSITY IN ZVOLEN FACULTY OF WOOD SCIENCES AND TECHNOLOGY DEPARTMENT OF FIRE PROTECTION



# FIRE PROTECTION & SAFETY Scientific Journal

Vol. 15 lss. 2 December 2021

# Editorial Office of the ∆Delta journal

#### **Contact**

Technical University in Zvolen

Faculty of Wood Sciences and Technology, Department of Fire Protection, T.G. Masaryka 24, 960 01 Zvolen, Slovak Republic, e-mail: delta@tuzvo.sk, website: https://kpo.tuzvo.sk/sk/delta-scientific-journal

#### **Technical Editor**

Eva FEKIAČOVÁ

#### **Editors**

František KAČÍK, Danica KAČÍKOVÁ, Ivan KUBOVSKÝ, Andrea MAJLINGOVÁ, Jaroslava ŠTEFKOVÁ, Rastislav ŠULEK, Ľudmila TEREŇOVÁ, Martin ZACHAR

#### **Editorial Board**

#### **Editorial Board Chief**

Danica KAČÍKOVÁ

#### **Editorial Board Members**

Andries JORDAAN, University of the Free State, Bloemfontein, South Africa

František KAČÍK, Technical University in Zvolen, Slovak Republic

Ivan KUBOVSKÝ, Technical University in Zvolen, Slovak Republic

Omer KUCUK, University Kastamonu, Turkey

Peter LOŠONCI, University of Security Management in Kosice, Slovak Republic

Andrea MAJLINGOVÁ, Technical University in Zvolen, Slovak Republic

Linda MAKOVICKÁ OSVALDOVÁ, University of Zilina, Slovak Republic

Jozef MARTINKA, Slovak University of Technology in Bratislava, Slovak Republic

Esko MIKKOLA, KK-Fireconsult Ltd., University of Helsinky, Finland

Andrei NIKULIN, National Mineral Resources University, Saint Peterburg, Russia

Anton OSVALD, Slovak Republic

Jiří POKORNÝ, VSB-TU Ostrava, Czech Republic

Ágoston RESTÁS, National University of Public Service, Budapest, Hungary

Branko SAVIĆ, Higher Education Technical School of Professional Studies in Novi Sad, Serbia

Maroš SOLDÁN, Slovak University of Technology in Bratislava, Slovak Republic

Marianna TOMAŠKOVÁ, Technical University in Košice, Slovak Republic

Ivana TUREKOVÁ, Constantine the Philosopher University in Nitra, Slovak Republic

Qiang XU, Nanjing University of Science and Technology, P. R. China

Martin ZACHAR, Technical University in Zvolen, Slovak Republic

### **Publisher**

Technical University in Zvolen, T. G. Masaryka 24, 960 01 Zvolen, Slovak Republic, IČO 00397440

Published twice a year

1st Edition – July 2021

EV 3857/09

ISSN (print) 1337-0863

ISSN (online) 2585-9730

## **Print**

Technical University in Zvolen T. G. Masaryka 24 960 01 Zvolen Slovak Republic

# Content / Obsah

Marek Hodálik, Veronika Veľková, Danica Kačíková:	
The Effect of Weathering Time on the Change in the Gasoline Residues Composition	7
Elena Kmeťová, Iveta Mitterová, Danica Kačíková:	
Assessment of Flame Spread on Retardant – treated Wood	16
Dominik Špilák:	
Enthalpy and Specific Heat as Material Characteristics in Thermal Analysis of Wood Exposed	to
Fire	23

## **Guide to Authors**

The Authors guarantee that the paper is original and fully in correspondence with the scope of the *Delta* journal. They are also responsible for the language, terminological and metrological consistency of their papers. Both American and British usage is accepted, but not a mixture of these.

The Corresponding author must be familiar with the  $\Delta Delta$  journal's publication ethics. He is solely responsible for communication with the journal and managing communication between the co-authors.

The scientific papers are reviewed by a minimum of two reviewers.

All papers are subject to proof-reading. The editors will require authors to modify the text in the light of the recommendations made by reviewers and they reserve the right to suggest text improvements.

# Paper submitting

The Authors should upload their submission directly to the *Delta* journal editorial system website. To submit your paper, use the following link: <a href="http://194.160.170.33/index.php/delta">http://194.160.170.33/index.php/delta</a>

## Paper text formatting

The papers submitted shall consist of no more than 10 A4 sheets, including tables and figures. To write your paper, use the Delta journal paper template. Longer papers should be separated to two or more parts.

# Proof-reading process

Before publishing, the paper will be sent to the author for revisions accepting all the reviewer's requirements and recommendations. The revised paper, together with the list of corrections made and the subscribed form for the transfer of copyrights from the author to the publisher, should be sent back to the Editor's Office in specified time.

### **Offprints**

Corresponding author will receive 1 print copy of the journal on request. The electronic form of the journal is published at the journal website.

