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CONTACT

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EDUCATION

- 2002: Engineer studies - Technical University in Zvolen, Faculty of Forestry, study field/programme: Forestry. Awarded qualification: Engineer (Eng.). Title of the diploma thesis: *Optimization of opening up of the LHC Harmanec area with the use of G/S.*
- 2006: Doctoral studies (full-time form of study) - Technical University in Zvolen, Faculty of Forestry, study field/programme: Forest Management. Awarded qualification: Philosophiae doctor (PhD.). Title of the PhD. thesis: *Forestry applications of digital image analysis of high spatial resolution remote sensing data.*
- 2015: Doctoral studies (part-time form of study) – University of Zilina, Faculty of Security Studies. Study field/programme: Rescue Services. Awarded qualification: Philosophiae doctor (PhD.). Title of the diploma thesis: *Information systems for effective deployment of firefighting units at forest fires in a selected territory of the Slovak Republic.*
- 2016. Habilitation proceedings – Academy of Police Corps in Bratislava, study field: the Protection of Persons and Property. Acquired qualification: associate professor (doc.). Title of the habilitation thesis: *Applications of spatial decision support tools in the risk management.*
- 2021: Postgraduate studies – IPE Management School - Paris and University of Security Management in Kosice, study field: Management, specialisation Strategic management. Awarded qualification: Master of Sciences (MSc.). Title of the postgraduate thesis: *Design of adaptation strategies to mitigate the impacts of climate change from the perspective of internal security of the Slovak Republic.*

- 2023: Inauguration proceedings – Technical University in Zvolen, Faculty of Wood Sciences and Technology, study field: Rescue Services. Awarded qualification: professor (prof.). Title of the inauguration lecture: *Progressive methods in forest fire risk management*.
- 2023: Bachelor study (part-time form of study) – Matej Bel University in Banska Bystrica, Faculty of Law, field of study: Law. Awarded qualification: bachelor (Bc.). Title of the bachelor thesis: *Restrictions on the acquisition of ownership of immovable property by the rules of administrative law*.
- 2025: Master's studies (part-time form of study) – Matej Bel University in Banska Bystrica, Faculty of Law, field of study: Law. Awarded qualification: Master (Mgr.). Title of Master's thesis: *Tax obligations of civic associations*.

LONG-LIFE EDUCATION

- Higher education pedagogy course.
- Andragogy Minimum.
- Quality manager, internal auditor of quality management system.
- ISO 45001:2018 internal auditor.
- Analysis and tools for improvement and customer satisfaction.
- Metrology.
- Specialist in the field of civil protection.
- Fire protection technician.
- OSH specialist.
- Specialist in the prevention of major industrial accidents.
- First aid course (33 hrs).
- Basic and specialized training of the Fire and Rescue Service officers.
- Lifelong learning programme eMERGE, Europa-Universität Flensburg, Germany, 2021, Virtual Semester, course *Sustainability and Political Ecology*.
- Course *Innovative Methodologies for Teaching & Learning*, English Matters, 2022, Dublin, Ireland.
- ANSYS Fluent Workflow basic training, TechSoft Engineering, spol. s r.o., 2023, Prague, Czech Republic.
- Summer Course on Wildfire Research, Forest Fire Research Centre of ADAI, University of Coimbra, 2025, Coimbra, Portugal.

OCCUPATION

- 10/2005 - 02/2014 Technical University in Zvolen, Faculty of Wood Sciences and Technology, Department of Fire Protection, assistant professor.
- 03/2014 - 12/2014 Ministry of the Interior of the Slovak Republic, Fire and Rescue Service, Fire Research Institute of the Ministry of the Interior of the Slovak Republic, Chief Inspector, Analytical and Expertise Department.
- 01/2015 - 12/2015 Ministry of the Interior of the Slovak Republic, Fire and Rescue Service, Presidium of the Fire and Rescue Service, Head of the Development Projects Department.

- 01/2016 - 04/2017 Technical University in Zvolen, Faculty of Wood Sciences and Technology, Department of Fire Protection, assistant professor.
- 05/2017 – 06/2024 Technical University in Zvolen, Faculty of Wood Sciences and Technology, Department of Fire Protection, associate professor.
- 07/2024 – present Technical University in Zvolen, Faculty of Wood Sciences and Technology, Department of Fire Protection, professor.
- 05/2024 – present Technical University in Zvolen, Faculty of Wood Sciences and Technology, Department of Fire Protection, Head of the Department
- 09/2020 – present Technical University in Zvolen, Department of Civil Protection, Defence and Classified Information, expert.

SCIENTIFIC SPECIALIZATION

Research focused on modelling fire behaviour in enclosed spaces and natural environments, mapping and quantification of forest fuel, risk management theory, and the implementation of geoinformatics knowledge in the fields of fire protection, crisis management, civil protection, rescue services, and the prevention of major industrial accidents.

PROFESSIONAL AND PEDAGOGICAL ACTIVITIES

TEACHING

Bachelor's study programme Fire Protection and Safety:

- Organization of the Integrated Rescue System and Fire Brigades
- Introduction to GIS in Fire Protection and Safety
- Introduction to Crisis Management

Master (engineer) study programme Fire Protection and Safety:

- Management and Organization of IRS And Fire and Rescue Service
- Management of Crisis Situations
- Safety and Security Risk Theory

Doctoral study programme Fire Protection and Safety:

- Crisis Management and Tactics of Rescue Operations
- Modelling and Simulation in Safety and Security Sciences

IMPLEMENTED PROJECTS

VEGA (Scientific Grant Agency of the Ministry of Education, Science, Development and Youth of the Slovak Republic):

- Identification of fuel models on the territory of Slovakia for modelling and simulation of forest fires, VEGA 1/0313/09, 2009 - 2011, principal investigator
- Economic modelling of climate change risk in forest land management in Slovakia, VEGA 1/0896/09, 2009 - 2011, principal investigator

- Research on principles and methods of precision forestry, VEGA 1/0434/10, 2010 - 2012, investigator
- Geographical information on forest and forest landscape – specifics of creation and use, VEGA 1/0953/1, 2013 - 2015, investigator
- Progressive methods for assessing the contribution of lignocellulosic materials and products to fire development after fire treatments, VEGA 1/0493/18, 2018 - 2020, investigator
- Research on selected properties of sustainable insulation materials with potential for use in wooden buildings, VEGA 1/0714/21, 2021 - 2023, investigator

KEGA (Cultural and Educational Grant Agency of the Ministry of Education, Science, Development and Youth of the Slovak Republic):

- Integration of knowledge from the fields of protection of persons and property and rescue services in the Central European area, KEGA 003TUZ-4/2012, 2012 - 2013, principal investigator
- eLearning in Emergency Health Care and Rescue Services, KEGA 032PU-4/2018, 2018 - 2020, principal investigator
- E-learning educational modules focused on plantations of fast-growing trees, KEGA 013TU Z-4/2017, 2019, investigator
- Implementation of Progressive Technologies, Methods and Forms into Education in the Study Field Safety and Security Sciences, KEGA 001TU Z-4/2020, 2020 - 2022, investigator
- Supporting university education in world language through the fusion of professional and linguistic content in non-philological faculties, KEGA 003TU Z-4/2020, 2021 - 2022, investigator
- Preparation of Multilingual Electronic Study Materials as a Support for the Internationalization of Education in the Study Programmes Fire Protection and Safety, KEGA 009TU Z-4/2023, 2023-2025, investigator

APVV General Calls (Slovak Research and Development Agency, Ministry of Education, Science, Development and Youth of the Slovak Republic):

- Modelling and simulation of fires, APVT 51-037902, 2002 - 2004, investigator
- Systematic approach to the study of changes in fire parameters using advanced analytical and forensic methods, APVV-17-0005, 2018 - 2022, investigator
- Modelling the impact of the risk of occurrence of destructive natural disasters on the forestry - timber economic complex in conditions of continuing climate change, APVV-19-0612, 2020 - 2023, investigator
- Design of Smart solutions for linking fire testing results with computer-aided modelling to improve the quality of safety research outputs, APVV-22-0030, 2023 - 2026, investigator

APVV Bilateral projects:

- Wood and wood materials fire protection, APVV SK-CN-0006-09, 2010 - 2011, investigator

- Implementation of DSS in the forest management practice, APVV SK-PT-0026-10, 2011 - 2012, investigator
- Flammability and fire behaviour research of selected polymers for energy efficient buildings, APVV SK-CN-2017-0018, 2018 - 2019, investigator
- Advanced Fire Safety of Buildings Being a Part of Cultural Heritage, APVV SK-CN-21-0002, 2022-2023, principal investigator
- SMART technologies to improve fire safety and resilience of WUI communities, APVV SK-CN-23-000, 2024-2026, principal investigator

Projects funded by the EU Structural Funds:

- Centre of Excellence "Decision Support in Forest and Landscape", OP Research and Development, ITMS 26220120069, 2011 - 2014, activity principal investigator, sub-activity principal investigator
- Progressive research of performance properties of wood-based materials and products (LignoPro), OP Research and Innovation, ITMS 313011T720, 2016 - 2019, investigator
- FDAAS - automated system for evaluating the danger of fire / FDAAS - Fire Danger Assessment Automatized Systemu, OP Integrated Infrastructure, ITMS+ 313012Q879, 2020 - 2021, principal investigator (scientific guarantor)

Implementation projects:

- Project of forest fire protection in the High Tatras Mts. after the wind disaster disturbance. Technical University in Zvolen, 2005, investigator
- Project of fire protection of forest on the territory of LHC Ďumbier - Lesy mesta Brezno s. r. o. Technical University in Zvolen, 2006, investigator
- Project of fire protection of forest on the territory of LUC Ďumbier, Bystrá dolina - Lesy SR, š.p., OZ Čierny Balog. Technical University in Zvolen, 2006, investigator
- Project of forest fire protection in the locality Pod Jamským plesom.. Technical University in Zvolen, 2006, investigator
- Causes of fires and the current state of fire protection in the territory of the Military District of Záhorie. GITech s r.o., 2009, principal investigator

International research projects:

- Forest Management Decision Support Systems (FORSYS), FPS COST (European Cooperation in Science and Technology) Action FP0804, 2009 - 2013, investigator, Management Committee member
- Geoinformatics & ICT Market Research (GiMAR), ERASMUS IP 2011-1-GR1-ERA10-04404, 2010 - 2012, researcher
- Geoinformatics in the Disaster Risk Management (GeoDRM), ERASMUS IP 11203-1676/ZVOLEN01, 2011, investigator
- 2011 - 2013 LLP Leonardo da Vinci - Partnership, 2011-1-TR1-LE004-242272: Comparison of Occupational Health and Safety Policies and Conditions in EU Countries and Adaptation of Good Practices at VET Schools (Co-Safe) - researcher

- 2012 - 2014 Project of 7th FP EU, ENV.2011.2.1.6-1 Land-use and European forest ecosystems: Future-Oriented Integrated Management of European Forest Landscapes (INTEGRAL), researcher
- Fire in the Earth System: Science & Society (FireLinks), FPS COST (European Cooperation in Science and Technology) Action CA18135, 2019 - 2023, investigator, Management Committee member
- Integrated Technological and Information Platform for Wildfire Management (SILVANUS), HORIZON 2020, H2020-LC-GD-2020-3 (Building a low-carbon, climate resilient future: European Green Deal). 2021 - 2025, TUZVO principal investigator, TUZVO key researcher, WP2 a tasks T2.1 and T2.2 leader, Slovak Pilot study coordinator
- european Network on Extreme fiRe behaviOr (NERO), COST (European Cooperation in Science and Technology) Action CA22164, 2023 - 2027, investigator, Management Committee member
- eXtended reality for Awareness and Learning in Forestry 5.0 (X-ALFY), Horizon Europe XR2LEARN, 2024 - 2024, TUZVO principal investigator, TUZVO key researcher, WP3 and task leader.
- Nature-Based Solutions for Demonstrating Climate-Resilient Critical Infrastructure (NATURE-DEMO), Horizon Europe, SEP-210963855, 2024 - 2027, TUZVO principal investigator, TUZVO key researcher, WP3 a task T3.1 leader, coordinator of the Slovak demonstration (Living Lab)

Matching grants to funds obtained under the HORIZON 2020 and Horizon Europe programmes:

- Knowledge base on fuel and fire risk in the wildland environment being part of the SILVANUS Information and Technology Platform (SK-WILDFIRE-DATA), Recovery and Resilience Plan of the Slovak Republic, 09I01-03-V04-00009, 2024 - 2026, principal investigator
- Development, testing, demonstration and validation of conceptual methodological and technological solutions to increase the resilience of stands infested by spruce bark beetle (STAND_TECH_SOL), Recovery and Resilience Plan of the Slovak Republic, 09I01-03-V04-00088, 2025 - 2026, principal investigator

Institutional projects:

- Design and development of a model fire warning system for the territory of the Technical University in Zvolen, IPA 02/09 (TUZVO), 2009, principal investigator
- Fuel mapping on the territory of VŠLP TU in Zvolen, IPA 10/11 (TUZVO), 2011, investigator
- Model of use of data and tools of GIS, SDSS and dynamic modelling in risk management of selected types of emergencies. Research project of the Academy of Police Force in Bratislava, 2015, principal investigator
- Interaction of human factors and forest fires: prevention through educational programmes, IPA 00/25 (TUZVO), 2025, investigator

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

- Association of Fire and Safety Engineering
- International Association of Wildland Fire

MEMBERSHIP IN ACADEMIC BODIES

- Scientific and Artistic Council of the Faculty of Wood Sciences and Technology, Technical University in Zvolen, since 2024 – member
- Dean's Board, Faculty of Wood Sciences and Technology, Technical University in Zvolen, since 2024 – member
- Programme Board "Fire Protection and Safety" – 1st, 2nd and 3rd level of the study programme Fire Protection and Safety, since 2024 – Vice-Chair
- Field Council of the doctoral study programme "Fire Protection of Forests, Wood Materials and Wood-Based Materials", Czech University of Life Sciences Prague, Faculty of Forestry and Wood Sciences, since 2022 – member
- Scientific Council of the Faculty of Safety Engineering, VSB – Technical University of Ostrava, since 2023 – member
- Field Council of the doctoral study programme "Fire Protection and Safety", Faculty of Safety Engineering, VSB – Technical University of Ostrava, since 2022 – member

KNOWLEDGE OF A FOREIGN LANGUAGE

- English Language – level B2 (IELTS Academic Certificate from 08/2023)
- German language – level B1
- Russian language – level A2

PUBLICATIONS

Type of publication	Number
Scientific monographs published by foreign publishers	1
Scientific monographs published by domestic publishers	14
University textbooks published by domestic publishers	15
Scientific papers in foreign indexed journals	24
Scientific papers in other foreign journals	16
Scientific papers in other domestic journals	35
Scientific papers in foreign journals registered in Web of Science or SCOPUS	4
Scientific papers in domestic journals registered in Web of Science or SCOPUS	6
Scientific papers in foreign peer-reviewed scientific proceedings, monographs	9
Scientific papers in domestic peer-reviewed scientific proceedings, monographs	14
Scientific papers in domestic non-peer-reviewed scientific proceedings, monographs	1
Published invited papers at domestic scientific conferences	1
Published papers at foreign scientific conferences	36
Published papers at domestic scientific conferences	59
Abstracts of invited papers from foreign conferences	1
Abstracts of invited papers from domestic conferences	1
Abstracts of papers from foreign conferences	10

Type of publication	Number
Abstracts of papers from domestic conferences	6
Posters from domestic conferences	2
Reports on completed scientific research tasks	10
Authorship certificates, patents, discoveries	8
Professional monographs published by foreign publishers	1
Professional monographs published by domestic publishers	5
Study scripts and teaching texts	12
Professional papers in other domestic journals	15
Professional papers in domestic peer-reviewed proceedings	1
Professional papers in foreign proceedings	6
Professional papers in domestic proceedings	7
Abstracts of professional papers from foreign events	3
Doctoral and habilitation theses	3
Professional translations of publications	3
Reviews in journals and proceedings	1
Review papers, professional translations in journals and proceedings	2
Editorial and compiling works of book character	16
Reports	7
Various publications and documents	6
Total	361

CITATIONS

Cat.	Category description	Number
1	Citations in foreign publications registered in Web of Science and SCOPUS	483
2	Citations in domestic publications registered in Web of Science and	43
3	Citations in foreign publications not registered in citation indexes	59
4	Citations in domestic publications not registered in citation indexes	147
Total		732

h-index WoS 10, h-index Scopus 10

In Zvolen, on 05 February 2026

prof. Mgr. Ing. Andrea Majlingová, PhD. et PhD., MSc.