

**Academic  
Curriculum vitae**



**Personal information**

Name and surname **Jelena Marković**  
Addresses Branilaca Bosne 17, 75000 Tuzla  
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E-mail/Web [jelena.markovic@untz.ba](mailto:jelena.markovic@untz.ba)  
Nationality BiH  
Date of birth 14.05.1967.  
Pole Female

**Current position/position/title** University of Tuzla-RGGF/Full Professor/Doctor of Technical Sciences

**Citations** ResearchGate (Citation count: 14; 2h-indeks);  
Google Scholar Citations (Citation count:19; 2h-indeks)

**Work experience**

Dates	2012 – present
Position / occupation / title	Teacher/Full Professor/Doctor of Technical Sciences in the field of mining
Basic Responsibilities and Duties	Lectures on courses: Natural hazards, fires and explosions; Chemical and physical measurements in mining; Natural Hazards and Disasters, Physical hazards; Theory of combustion and explosion; Fire and explosion protection; Forensic Engineering; Natural hazards and expert analyses; Disaster Management; Fire Engineering
Employer name	Faculty of Mining, Geology and Civil Engineering, University of Tuzla
Type of business activity of the employer	Education and Scientific Research
Dates	2006. – 2012.
Position / occupation / title	Teacher/Associate Professor/Doctor of Technical Sciences in the field of mining
Basic Responsibilities and Duties	Lectures on courses: Natural hazards in mines; Fires and explosions in mining and industry; Theory of combustion and explosion; Natural Hazards and Disasters, Natural and Fire Hazards, Fire and Explosion Expert Analysis, Fires and

explosions in drilling exploitation; Environmental protection; Forensic Engineering and Risk Management, Physical hazards

Employer name Faculty of Mining, Geology and Civil Engineering, University of Tuzla  
Type of business activity of the employer Education and Scientific Research  
Dates 2001.- 2006.  
Position / occupation / title Teacher/Assistant Professor/Doctor of Technical Sciences in the field of mining  
Basic Responsibilities and Duties Lectures on courses: Natural hazards; Fires and explosions in mining and industry; Theory of combustion and explosion; Natural hazards and disasters; Natural and fire hazards

Employer name Faculty of Mining, Geology and Civil Engineering, University of Tuzla  
Type of business activity of the employer Education and Scientific Research  
Dates 1996. – 2001.  
Position / occupation / title Associate/Senior Assistant/Master of Technical Sciences in the field of mining  
Basic Responsibilities and Duties Holding exercises on subjects: Ventilation, Natural hazards, Environmental protection

Employer name Faculty of Mining, Geology and Civil Engineering, University of Tuzla  
Type of business activity of the employer Education and Scientific Research

Dates 1993. – 1996.  
Position / occupation / title Mining Assistant/B.Sc. in Mining  
Basic Responsibilities and Duties Holding exercises on subjects: Ventilation, Natural hazards

Employer name Faculty of Mining and Geology, University of Tuzla  
Type of business activity of the employer Education and scientific research

Dates 1991. – 1993.  
Position / occupation / title Research Assistant – Associate on the project DC-XVI, TO 5.4. (Department of Ventilation and Natural Hazards)  
Basic Responsibilities and Duties Participation in scientific research work (study of literature, study of the level of research in this issue, development of work plans, collection of data on research objects)

Employer name Faculty of Mining and Geology, University of Tuzla  
Type of business activity of the employer Education and scientific research

### **Education and training**

Dates 1973. – 1981.  
Acquired qualification Primary education  
Field of science and profession, acquired titles and skills Primary education  
Name and type of organization Elementary School "Vladimir Nazor" Živinice  
Dates 1981.- 1985.  
Acquired qualification Secondary education SSS

Field of science and profession, acquired titles and skills	Secondary education
Name and type of organization	Secondary School Center, Živinice
Dates	Faculty of Mining and Geology Tuzla (1985-1989)
Acquired qualification	VII degree of VSS (certificate No. 1224/89, dated 21 December 1989)
Field of science and profession, acquired titles and skills	Mining, Mine ventilation, Natural hazards
Name and type of organization	Bachelor of Science in Mining Engineering
Dates	Faculty of Mining and Geology
Acquired qualification	1995.
Field of science and profession, acquired titles and skills	VIII Degree-Master's Degree (certificate No. 107, dated 21 December 1995)
Name and type of organization	Mining, Mine ventilation, Natural hazards
Dates	Master of Technical Sciences in the field of mining
Acquired qualification	University of Tuzla, Faculty of Mining, Geology and Civil Engineering
Field of science and profession, acquired titles and skills	2001.
Name and type of organization	Doctor of Technical Sciences in the field of mining (certificate No. 206, dated December 18, 2001).
Dates	Mining, Mine ventilation, Natural hazards
Acquired qualification	2024.
Field of science and profession, acquired titles and skills	Advancing professional knowledge in the field of climate change and sustainability
Name and type of organization	Ecology; Environmental Engineering; Sustainability Science
Dates	jOiNEd For sUsTainability – bUilding climate REsilient communities in WB and EU - 1FUTURE" broj 101082815-1FUTURE-ERASMUS-EDU-2022-CBHE.(2023-2026), Faculty of Technical Sciences, University of Novi Sad
Acquired qualification	2000.
Field of science and profession, acquired titles and skills	Enhancing professional knowledge in the field of soil ecology, intensive German language course
Name and type of organization	Soil ecology
Dates	Tempus Phare Joint European Project No. AC-JEP-14377-1999-2001, University of Kaiserslautern, Germany
Acquired qualification	1998.
Field of science and profession, acquired titles and skills	Enhancing expertise in the field of natural hazards in mines
Name and type of organization	Natural hazards (fires, gases in mines)
Dates	Specialization at the Main Institute of Gornictwa in Katowice, Republic of Poland
Acquired qualification	1992.
Field of science and profession, acquired titles and skills	Enhancing expertise in the field of natural hazards in mines
Name and type of organization	Natural hazards (testing of explosive and flammable characteristics of coal dust in laboratory and mine conditions, protective measures against hazardous coal dust)

Name and type of organization Specialization at the Main Institute of Gornictwa in Katowice, Republic of Poland

### Scientific Papers in the Field of Formal Education

Title of the work Doctoral dissertation "Reduction of Hazards from the Processes of Endogenic Fires in Coal Mines by Application of New Methods and Insulation Objects"

The institution at which the work was made University of Tuzla, Faculty of Mining, Geology and Civil Engineering

Year and place. 2001, Tuzla

Title of the work Master's thesis "Research into influence of the advance rate of longwall excavation on methane release in the S-19/2 excavation block of the "Sretno" pit of the "Breza" Brown Coal Mine in Breza"

The institution at which the work was made University of Tuzla, Faculty of Mining, Geology and Civil Engineering

Year and place. 1995, Tuzla

### Selected publications and presentations

Publication title Testing of dustiness of the DTO system in the "wet" and "dry" period in the open pit mine

Authors S.Mičević, H.Tanović, **J.Marković**

Publisher, year and place 1st Conference on Safety in Surface Mining of Brown Coal, Proceedings, Wrocław, Poland, 23-25 October 1996

Publication title Release of methane in the function of the longwall face advance rate

Authors **J.Marković**, H.Tanović, S.Mičević

Publisher, year and place 27th International Conference (Congress) of Mining Safety and Safety, New Delhi, India Proceedings, 20-22 February 1997

Publication title The state of atmospheric pollution of an open-pit brown coal mine in relation to the permissible values

Authors H.Tanović, S.Mičević, **J.Marković**

Publisher, year and place 2nd World Mining Congress, Proceedings, Katowice, Poland, 13-16 May 1997

Publication title Extraction of methane from the open surface of the seam and excavated coal as a function of the advancement of the wide-face excavation

Authors **J.Marković**

Publisher, year and place Reconstruction and Development in Bosnia and Herzegovina, Tuzla Seminars: "The Impact of Work Stoppages on the Stability and Safety of Production in Mines with Surface and Underground Exploitation", Tuzla, 30.10.1998, (86-91).

Publication title Results of dustiness researching by using water plugs at blasting in mines of brown coal in Bosnia and Herzegovina

Authors H.Tanović, S.Mičević, **J.Marković**

Publisher, year and place 28th International Conference on Safety in Mines research Institutes, Proceedings of Sinaia, Romania, 7-10 June 1999.

Publication title Change of mine air temperature in underground lignite mines

Authors H.Tanović, S.Mičević, **J.Marković**

Publisher, year and place 9th Plenary Session of the International Mining Bureau – Thermophysics "IBMT 2000", Proceedings, Gliwice, Poland, September 18-22, 2000

- Publication title Interaction investigation of power plant Tuzla electric-filter ashes and slag with salt wells "Trnovac" brine in laboratory conditions  
 Authors S.Mičević, **J.Marković**  
 Publisher, year and place III International Symposium "Mining and Environmental Protection", Proceedings, Belgrade, May 21-23, 2001.
- Publication title Prevention of oxidation processes applying new materials for the construction of insulation structures  
 Authors **J. Marković**, A. Adilović, H. Tanović  
 Publisher, year and place 29th International Conference of Safety in Mines Research Institutes, Katowice 8-11.10.2001. Subsequently published in the journal "Safety in mines research" by A. R. Green, Amsterdam-New York-Sydney, 2001.
- Publication title Testing of permeability of insulation structures as a function of embedded material and building parameters  
 Authors **J.Marković**,A.Bašić, A.Adilović, S.Mičević  
 Publisher, year and place Proceedings- RGGF (ISSN 1512-7044), no. XXV, RGGF, Tuzla, 2003 (51-55)
- Publication title Determination of cereal crops dust explosive characteristics  
 Authors S.Mičević, J.Sadadinović, **J.Marković**  
 Publisher, year and place XVIII Meeting of Chemists and Chemical Engineers, Proceedings (ISBN 953-6894-08-4; UDK 66(063)(048); CAB Zagreb, February 16-19, 2003
- Publication title Immission of Styrene Monitoring near Building for Production of Polyester Gallantry in Different Technological Conditions in Gradačac  
 Authors S.Mičević, Š.Goletić, **J.Marković**  
 Publisher, year and place 8th International Conference "Trends in Machining and Tool Technology", Neum, September 15-19, 2004 Proceedings (ISBN 9958-517-28-5)
- Publication title Explosiveness of brown coal dust as a function of moisture and ash content  
 Authors **J.Marković**, K.Bajramović, S.Mičević  
 Publisher, year and place Proceedings of the RGGF (ISSN 1512-7044) no. XXVII Tuzla, 2004 (107-111)
- Publication title Position of the ventilation corridor in wide-face excavation in the function of gas and fire hazard  
 Authors R.Kurbašić, **J.Marković**, A. Adilović  
 Publisher, year and place Proceedings of the RGGF No. XXIX/I (ISSN 1512-7044) Tuzla, 2005 (115-121)
- Publication title Industrial waste – Possibilities for use in Mining Industry  
 Authors **J.Marković**,S.Mičević, R.Redžepović  
 Publisher, year and place Journal of Environmental Protection and Ecology BENA,No 3, Vol.6, 2005.
- Publication title Hazard Sources Identification in Mining Industry  
 Authors **J.Marković**, S. Mičević, A.Adilović  
 Publisher, year and place Proceedings of the RGGF (ISSN 1512-7044) no. XXVIII Tuzla 2005 (17-20),
- Publication title Explosiveness of brown coal dust as a function of granulometric composition  
 Authors S.Mičević, **J.Marković**, K. Bajramović  
 Publisher, year and place Proceedings of the RGGF (ISSN 1512-7044) No. XXIX/1, Tuzla 2005 (127-131)

Publication title	Occurrence and Development of Coal Spontaneous Fire in «Posušje» Bouxite Mine
Authors	A.Adilović, S.Mičević, <b>J.Marković</b>
Publisher, year and place	31st International Conference of Safety in Mines Research Institutes, 2-5 October 2005, Brisbane, Queensland, Australia
Publication title	Influence of the equivalent longwall orifice on occurrence of spontaneous mine fire
Authors	A.Adilović, <b>J.Marković</b> , K.Gutić
Publisher, year and place	International Mining Symposium, Exploration, Exploitation and Processing of Solid Mineral Raw Materials, Dubrovnik, Proceedings (ISSN 1846-2766) , Croatia 8-10 November 2006 (164-169)
Publication title	Truck transportation of coal waste through settlement «Mrdići»- influence on air pollution
Authors	S.Mičević A.Adilović, <b>J.Marković</b> , A.Bašić
Publisher, year and place	International Mining Symposium, Exploration, Exploitation and Processing of Solid Mineral Raw Materials, Dubrovnik, Proceedings (ISSN 1846-2766) Croatia, 8-10 November 2006 (310-315)
Publication title	Carbon Dust Emissions in Wide-Face Excavation and Explosion Hazard Assessment
Authors	<b>J. Marković</b> , K.Bajramović, S.Mičević
Publisher, year and place	Monograph of the Proceedings of the RGGF (ISSN 1512-7044) No. XXXII, 2006 (112-114)
Publication title	Air pollution caused by coal transportation system at open pit mine "Ćubrić",
Authors	Snežana Mičević, A.Adilović, <b>J.Marković</b>
Publisher, year and place	Scientific and Professional Conference "Ecological Truth", Proceedings (ISBN 978-86-80987-51-4) Soko Banja, 2007. (135-139)
Publication title	Explosive Characteristics of Coal Dust out of Sediment Comparing to Aqueous Dust According to the Example of Brown Coal Mine Zenica
Authors	S. Mičević, <b>J. Marković</b> , M. Delalić , A.Bašić
Publisher, year and place	Proceedings of the RGGF (ISSN 1512-7044), issue XXXIV Tuzla, 2007 (17-22)
Publication title	Deforestation and its influence on natural water springs
Authors	J.Marković,S.Mičević,A.Bašić
Publisher, year and place	Scientific and Professional Conference "Ecological Truth", Proceedings (ISBN 978-86-80987-51-4) Soko Banja, 2008.
Publication title	Gaseous composition of air after blasting in different working environment conditions
Authors	M.Zaimović, A. Adilović, S. Mičević, <b>J. Marković</b>
Publisher, year and place	Proceedings of the RGGF (ISSN 1512-7044) no. XXXIV, Tuzla, 2010/11 (str.59-64)
Publication title	Influence of transport systems at surface mines on air pollution and noise to surrounding settlements
Authors	S.Mičević, <b>J.Marković</b> , A.Adilović, Z.Karadžin
Publisher, year and place	TMT 2009, Hammamet, Tunisia, October 16-21, 2009
Publication title	Contents of Pb, Zn, Ni, Cd and Ti in sedimentary dust in the city of Tuzla

Authors S.Mičević, **J.Marković**, A.Bašić, A.Adilović  
 Publisher, year and place Proceedings of the 14th International Research/Expert Conference TMT, Mediterranean Cruise, September 2010 (pp. 317-320).

Publication title Influence Transpirator Substance and Ash in Coal Seam on Readiness of Coal to Self-Ignition  
 Authors **J. Marković**, S. Mičević, S. Bijelić, E.Halilčević  
 Publisher, year and place Proceedings of the RGGF (ISSN 1512-7044) no. XXXIV, Tuzla, 2010/11 (pp.95-98).

Publication title Simulating a fire extinguishing above the 10th floor  
 Authors I. Hadžić, A. Adilović, **J. Marković**  
 Publisher, year and place Proceedings of the RGGF (ISSN 1512-7044) no. XXXIV, Tuzla, 2010/11 (pp.99-104).

Publication title Rapeseed Meal Drying as a Potential Cause of Fires and Explosions in the Oilseed Processing Industry  
 Authors S.Mičević, **J.Marković**, M.Lišić  
 Publisher, year and place Proceedings 7. International "Ex" Forum, Fruška Gora, 21-23 September 2011 (str.121-131).

Publication title Risks of Coal Self-Combustion in Watery Lignite Deposits  
 Authors **J.Marković**, S.Bijelić  
 Publisher, year and place Proceedings of the RGGF (ISSN 1512-7044) no. XXXVI, Tuzla, 2012 (pp.7-11).

Publication title Soil analysis for PCB content in the area of RMU "Banovići"  
 Authors S.Mičević, **J.Marković**, S.Karić  
 Publisher, year and place Proceedings of the RGGF (ISSN 1512-7044) no. XXXVI, Tuzla, 2012 (pp.39-43).

Publication title Analyses of the river sediments on the mouth of the Spreča river into the Modrac accumulation with goal of definition its using value  
 Authors S.Mičević, **J.Marković**, J.Sadadinović, E.Babajić, A.Babajić  
 Publisher, year and place Proceedings of the 2nd International Symposium on Environmental and Material Flow Management "EMFM 2012" Zenica, B&H, 07-09 June 2012 (str.89-95).

Publication title Inerting in coal dust  
 Authors S.Mičević, **J.Marković**, M.Mačković  
 Publisher, year and place Bulletin of the Agency for Explosive Atmospheres Endangered Vol. 40, no. 1-2, 2012, ISSN 1845-0172 (h1-h6).

Publication title Gas Pollutants and Dust from Truck Transport on the Open Pit "Grivice" RMU "Banovići"  
 Authors S.Demirović, S.Gutić, **J.Marković**  
 Publisher, year and place 23rd International Mining Congress & Exhibition of Turkey, 16-19 April 2013. Antalya (str.187-194)

Publication title The Importance of Knowing the Minimum Ignition Temperature of Flammable Dust Clouds in the Determination of DGE Dust in a Hybrid Mixture  
 Authors **J.Marković**, M. Mačković  
 Publisher, year and place Bulletin of the Agency for Explosive Atmospheres Endangered Vol. 42, no. 1-2, 2014, ISSN 1845-0172 (c1-c6)

Publication title Methane outburst at water exploration drillhole

Authors	<b>J.Marković</b> , S.Mičević
Publisher, year and place	Bulletin of the Agency for Explosive Atmospheres Endangered Vol. 43, no. 1-2. 2015, ISSN 1845-0172 (d1-d4)
Publication title	Preliminary Assessment of Flood Risks in the Municipality of Lukavac
Authors	<b>J.Marković</b> , E. Nukić, M. Delmanović
Publisher, year and place	Proceedings of International Conference on Innovative Technologies in Safety Engineering), 2015 Rijeka (str 31-35)
Publication title	Aggressiveness of mineral dust
Authors	S.Mičević, <b>J.Marković</b> , E.Babajić, M.Fehratović
Publisher, year and place	Proceedings of International Conference on Innovative Technologies in Safety Engineering), 2015 Rijeka (pp 25-30)
Publication title	Testing of dust explosion characteristics of brown coal at reduced oxygen content
Authors	<b>J.Marković</b> , R.Šišić, S.Demirović
Publisher, year and place	Journal of Society for Development of Teaching and Business Processes in new net Environment in B&H, TTEM, ISSN 1840-1503, Vol.10 (2015), No2
Publication title	Impacts of Slag and Ash Deposition on Surrounding Agricultural Soil
Authors	<b>J.Marković</b> , S.Mičević, Z.Karadžin
Publisher, year and place	19th International Research/Expert Conference "Trends in the Development of Machinery and Associated Technology" TMT 2015, Barcelona, Spain, 22-23 July 2015
Publication title	The change of technical characteristics of coal dust as parameters for defining the location of inflammation and the explosion of coal dust
Authors	S.Mičević, <b>J.Marković</b>
Publisher, year and place	Bulletin of the Agency for Areas Endangered by Explosive Atmospheres Vol. 44, no. 1-2. 2016, ISSN 1845-0172 (d1-d5)
Publication title	Fire Risk Management in the Oil Exploitation Process – The Importance of Employee Training
Authors	D.Malkočević, <b>J.Marković</b>
Publisher, year and place	Third International Scientific Conference: Status and Directions of Development of Civil Engineering and Environmental Engineering – EGTZ 2016, Tuzla, 2-4 June 2016
Publication title	Effects of implementing technical measures on admission oilseed in aiming to prevent occurrence of endogenous fire in silo
Authors	M.Lišić, <b>J.Marković</b>
Publisher, year and place	Geosciences Applied to Solve Humanitarian Problems All Over The World May 24-26, 2017, Belgrade, Serbia
Publication title	Electrostatic risk – „RIBC“ plastic containers with flammable liquids <a href="https://www.researchgate.net/publication/341203590_OPASNOSTI_OD_STATIC_KOG_ELEKTRICITETA_KOD_UPOTREBE_PLASTICNIH_REZERVOARA_ZA_ZAPALJIVE_TEKUCINE_RIBC">https://www.researchgate.net/publication/341203590_OPASNOSTI_OD_STATIC_KOG_ELEKTRICITETA_KOD_UPOTREBE_PLASTICNIH_REZERVOARA_ZA_ZAPALJIVE_TEKUCINE_RIBC</a>
Authors	D.Malkočević, <b>J.Marković</b>
Publisher, year and place	9th International Ex Forum: Institute for Prevention, Occupational Safety, Fire Protection and Development Ltd., Fruška gora, June 1-2, 2017
Publication title	Preliminary flood vulnerability assessment in the framework of spatial planning
Side 8 - Curriculum vitae	University of Tuzla

Authors E.Fehratbegović, **J.Marković**  
 Publisher, year and place 1st International Symposium K-Force (Knowledge FORe Resilient soCiEty K-FORCE), Novi Sad 14-15.09.2017.

Publication title Introduction of contemporary education programs in the field of risk management of disaster events and fire protection engineering in the Western Balkan Countries  
[https://www.researchgate.net/publication/341154582\\_Introduction\\_of\\_contemporary\\_education\\_programs\\_in\\_the\\_field\\_of\\_risk\\_management\\_of\\_disaster\\_events\\_and\\_fire\\_protection\\_engineering\\_in\\_the\\_Western\\_Balkan\\_Countries](https://www.researchgate.net/publication/341154582_Introduction_of_contemporary_education_programs_in_the_field_of_risk_management_of_disaster_events_and_fire_protection_engineering_in_the_Western_Balkan_Countries)

Authors R.Šišić, Z.Karadžin, **J.Marković**  
 Publisher, year and place Occupational Safety and Health; 7th International Professional and Scientific Conference, Croatia, Zadar, 12-15-September 2018, (735-740).

Publication title Determining of circumstances and causes of methane ignition in chamber workings using CFD simulation of gas-ventilation parameters  
[https://www.researchgate.net/publication/344281661\\_DETERMINATION\\_OF\\_CIRCUMSTANCES\\_AND\\_CAUSES\\_OF\\_METHANE\\_IGNITION\\_IN\\_CHAMBER\\_WORKINGS\\_USING\\_CFD\\_SIMULATION\\_OF\\_GAS-VENTILATION\\_PARAMETERS](https://www.researchgate.net/publication/344281661_DETERMINATION_OF_CIRCUMSTANCES_AND_CAUSES_OF_METHANE_IGNITION_IN_CHAMBER_WORKINGS_USING_CFD_SIMULATION_OF_GAS-VENTILATION_PARAMETERS)

Authors **J.Marković**, R.Šišić, Z.Karadžin  
 Publisher, year and place Bulletin of the Faculty of Mining, Geology and Civil Engineering Tuzla, 7/2019 (53-59).

Publication title Managing the fire risk in the oilseeds storage  
 Authors M.Laban, **J. Marković**, N. Ostojić  
 Publisher, year and place 2st International Symposium K-Force (Knowledge FORe Resilient soCiEty K-FORCE), Epoka University, Faculty of Architecture and Engineering, University Tirana, Faculty of Economy, Department of Finance, Tirana 2019 (265-272).

Publication title A Real Application of Air Recirculation in Underground Coal Mine  
[https://www.researchgate.net/publication/342802605\\_A\\_Real\\_Application\\_of\\_Air\\_Recirculation\\_in\\_Underground\\_Coal\\_Mine](https://www.researchgate.net/publication/342802605_A_Real_Application_of_Air_Recirculation_in_Underground_Coal_Mine)

Authors S.Demirović, **J.Marković**  
 Publisher, year and place Journal of Mining Technologies and Mineralogy 2000. Vol 1(1) (1-4)

Publication title Minimum Ignition Energy of Lignite and Brown Coal Dust Clouds in Coal with and without Interlayers  
<https://drive.google.com/file/d/1Kcv3Dj1vH0mBX0GALn8SJqw5F3YyWO9i/view>

Authors **J.Marković**, S.Mičević, M.Delalić, E.Nukić  
 Publisher, year and place Journal of Faculty of Mining, Geology and Civil Engineering, 9/2021 pp.98-106

Publication title Assessing Possibility of Using Inert Dust For Explosion Protection in Brown Coal Mines  
[https://www.researchgate.net/publication/363896339\\_ASSESSING\\_POSSIBILITY\\_OF\\_USING\\_INERT\\_DUST\\_FOR\\_EXPLOSION\\_PROTECTION\\_IN\\_BROWN\\_COAL\\_MINES](https://www.researchgate.net/publication/363896339_ASSESSING_POSSIBILITY_OF_USING_INERT_DUST_FOR_EXPLOSION_PROTECTION_IN_BROWN_COAL_MINES)

Authors **J.Marković**, K.Bajramović, E.Nukić, Z.Karadžin  
 Publisher, year and place 8 th International Scientific Conference: Safety Engineering Conference with International Participation on Fire and Explosion Protection, 2022 At: Budva, Montenegro.

Publication title Comparative Analysis of Numerical Methods for Public Buildings Fire Risk Assessment  
[https://www.researchgate.net/publication/363896237\\_COMPARATIVE\\_ANALYSIS\\_OF\\_NUMERICAL\\_METHODS\\_FOR\\_PUBLIC\\_BUILDINGS\\_FIRE\\_RISK\\_ASSESSMENT](https://www.researchgate.net/publication/363896237_COMPARATIVE_ANALYSIS_OF_NUMERICAL_METHODS_FOR_PUBLIC_BUILDINGS_FIRE_RISK_ASSESSMENT)

Authors E. Nukić, **J.Marković**, Z.Karadžin, S.Mekić

Publisher, year and place 8 th International Scientific Conference: Safety Engineering Conference with International Participation on Fire and Explosion Protection, 2022 At: Budva, Montenegro.

Publication title Safety Risk Management in BiH Coal Mines - Objective Need or a Burden  
 DOI: 10.51558/2303-5161.2022.10.10.31  
[https://www.researchgate.net/publication/367022995\\_SAFETY\\_RISK\\_MANAGEMENT\\_IN\\_BIH\\_COAL\\_MINES\\_-\\_OBJECTIVE\\_NEED\\_OR\\_A\\_BURDEN](https://www.researchgate.net/publication/367022995_SAFETY_RISK_MANAGEMENT_IN_BIH_COAL_MINES_-_OBJECTIVE_NEED_OR_A_BURDEN)

Authors E.Nukić, E.Delić, R.Šišić, **J.Marković**

Publisher, year and place Journal of Faculty of Mining, Geology and Civil Engineering, 10/2022 pp.31-40

Publication title Influence of Various Longwall Face Ventilation Regimes on Spontaneous Mine Fire Occurrences and Increased Gas Release in "Raspotočje" Mine of Zenica Brown Coal Mines  
 DOI:10.51558/2303-5161.2022.10.10.41  
[https://www.researchgate.net/publication/367052057\\_INFLUENCE\\_OF\\_VARIOUS\\_LONGWALL\\_FACE\\_VENTILATION\\_REGIMES\\_ON\\_SPONTANEOUS\\_MINE\\_FIRE\\_OCCURENCES\\_AND\\_INCREASED\\_GAS\\_RELEASE\\_IN\\_RASPOTOCJE\\_MINE\\_OF\\_ZENICA\\_BROWN\\_COAL\\_MINES](https://www.researchgate.net/publication/367052057_INFLUENCE_OF_VARIOUS_LONGWALL_FACE_VENTILATION_REGIMES_ON_SPONTANEOUS_MINE_FIRE_OCCURENCES_AND_INCREASED_GAS_RELEASE_IN_RASPOTOCJE_MINE_OF_ZENICA_BROWN_COAL_MINES)

Authors **J.Marković**, Z.Karadžin, R.Kurbašić, A.Velić

Publisher, year and place Journal of Faculty of Mining, Geology and Civil Engineering, 10/2022 p.41-48

Publication title Proposal of a Feasible Energy Mix in Bosnia and Herzegovina  
[https://www.researchgate.net/publication/363896172\\_PROPOSAL\\_OF\\_A\\_FEASIBLE\\_ENERGY\\_MIX\\_IN\\_BOSNIA\\_AND\\_HERZEGOVINA](https://www.researchgate.net/publication/363896172_PROPOSAL_OF_A_FEASIBLE_ENERGY_MIX_IN_BOSNIA_AND_HERZEGOVINA)

Authors Z.Karadžin, A.Mostarlić, E.Nukić, **J.Marković**

Publisher, year and place 8 th International Scientific Conference: Safety Engineering Conference with International Participation on Fire and Explosion Protection, 2022 At: Budva, Montenegro.

Publication title Professional Exposure of Workers to Inhalable Dust in Wood Processing Sector  
[https://www.researchgate.net/publication/364165911\\_PROFESSIONAL\\_EXPOSURE\\_OF\\_WORKERS\\_TO\\_INHALABLE\\_DUST\\_IN\\_WOOD\\_PROCESSING\\_SECTOR](https://www.researchgate.net/publication/364165911_PROFESSIONAL_EXPOSURE_OF_WORKERS_TO_INHALABLE_DUST_IN_WOOD_PROCESSING_SECTOR)

Authors **J.Marković**, S.Mičević, E.Nukić

Publisher, year and place 8th International Professional and Scientific Conference Occupational Safety and Health, 2022, at: Zadar, Croatia

Publication title Analysis and Remediation of Endogenous Fire at Longwall Total Coal Thickness Mining of the Main Coal Seam in the Distribution of Mine of Zenica Brown Coal Mines,  
 DOI: 10.51558/2303-5161.2024.12.12.52

Authors **J.Marković**, R.Kurbašić, Z.Karadžin, E.Nukić

Publisher, year and place Journal of Faculty of Mining, Geology and Civil Engineering, 12/2024  
[https://rggf.ba/glasnik/2024-12/ERAD\\_7a.pdf](https://rggf.ba/glasnik/2024-12/ERAD_7a.pdf)

- Publication title Mine Fires, Experiences in Extinguishing Large Underground Mine Fires  
DOI: 10.11648/j.ogce.20241202.1, LicenseCC BY 4.0  
<https://www.sciencepublishinggroup.com/article/10.11648/j.ogce.20241202.11>
- Authors S.Demirović, **J.Marković**
- Publisher, year and place International Journal of Oil, Gas and Coal Engineering, 2024, Vol.12, No2, pp 46-56.
- Publication title Comparative Analysis of Sustainability Practices in Western Balkans  
[https://untz.ba/wp-content/uploads/2025/04/The-Albanian-Journal-of-EconomyBusiness\\_SpecialIssue\\_1Future.pdf](https://untz.ba/wp-content/uploads/2025/04/The-Albanian-Journal-of-EconomyBusiness_SpecialIssue_1Future.pdf)
- Authors E.Nukić, **J.Marković** and dr
- Publisher, year and place 1Future Issue: Climate and Sustainability, THE ALBANIAN JOURNAL OF ECONOMY & BUSINESS, No.1, 2025.
- Publication title GIS-based Flood Vulnerability Assessment in Spreca River Basin  
[https://untz.ba/wp-content/uploads/2025/04/The-Albanian-Journal-of-EconomyBusiness\\_SpecialIssue\\_1Future.pdf](https://untz.ba/wp-content/uploads/2025/04/The-Albanian-Journal-of-EconomyBusiness_SpecialIssue_1Future.pdf)
- Authors E.Fehratbegović, **J.Marković**, E.Nukić
- Publisher, year and place 1Future Issue: Climate and Sustainability, THE ALBANIAN JOURNAL OF ECONOMY & BUSINESS, No.1, 2025.
- Publication title Information technology and humanitarian response efficiency: A case study of the red cross society of Bosnia and Herzegovina
- Authors Abdurahman Aljic, Edisa Nukic, **Jelena Marković**
- Publisher, year and place Proceedings 1FUTURE International Symposium 16 – 17 October 2025 Podgorica, Montenegro(140-151)  
(CIP-Katalogizacija u publikaciji Nacionalne biblioteke Crne Gore, Cetinje, ISBN 978-9911-9616-0-0, COBISS.CG-ID 35906052)
- Publication title Assessment of pollution load from coal mines on the Modrac multipurpose water reservoir: ecological and socio-economic implications
- Authors Maja Kin, Zvezdan Karadžin, Edisa Nukić, **Jelena Marković**
- Publisher, year and place Proceedings 1FUTURE International Symposium 16 – 17 October 2025 Podgorica, Montenegro(186-201)  
(CIP-Katalogizacija u publikaciji Nacionalne biblioteke Crne Gore, Cetinje, ISBN 978-9911-9616-0-0, COBISS.CG-ID 35906052)
- Publication title Importance of communication in disaster risk management
- Authors Edisa Nukić, Aida Krić, **Jelena Marković**, Zvezdan Karadžin
- Publisher, year and place Proceedings 1FUTURE International Symposium 16 – 17 October 2025 Podgorica, Montenegro (485-498)  
(CIP-Katalogizacija u publikaciji Nacionalne biblioteke Crne Gore, Cetinje, ISBN 978-9911-9616-0-0, COBISS.CG-ID 35906052)
- Selected projects and presentations**
- Name Implementation of dust protection measures with special reference to coal dust
- Authors **J.Marković**
- Publisher, year and place Ex-seminar with international participation and a one-day round table "Safety and security in areas endangered by explosive atmospheres. University of Tuzla, Faculty of Electrical Engineering, 2008.

Name	Within the Summer University "Quality as a Tool for Autonomy, Autonomy as a Condition for Quality", 7-17.7.2003. a paper on the topic "Geotechnics and Environment" was presented.
Authors	<b>J.Marković</b>
Publisher, year and place	Published in the scientific journal Angry in 2003.
Name	Presentation of the paper on the topic: Floating dust at the workplaces of the pit "Main Layer" district "Dobrnja" RL Mramor
Authors	<b>J.Marković</b>
Publisher, year and place	Proceedings of the Kreka Mine in Tuzla, papers of the Round Table on the topic: Floating coal dust, Tuzla, June 9, 2004
Name	Presentation of the paper on the topic «Water as a Cause of Disasters»
Authors	<b>J.Marković</b>
Publisher, year and place	Within the Scientific Conference "Management of Natural, War and Other Disasters" within the 14th International Summer University of Tuzla, 29.06-10.07.2009.
Name	As part of the 6th Ex Forum, organized by the Institute for Prevention, Occupational Safety, Fire Protection and Development Ltd. Novi Sad, a lecture was held on the topic "Revitalization of the Laboratory for Testing Flammable and Explosive Characteristics", Tara, September 22-26, 2009
Authors	Snežana Mičević, <b>Jelena Marković</b>
Publisher, year and place	Lecture published in Proceedings 6 Ex tribine, Institute for Prevention, Occupational Safety, Fire Protection and Development Ltd., Novi Sad 2009 (pp.30-33).

### **Acknowledgments and awards**

Name	Acknowledgment
Institution	Kreka lignite mine
Origin (reason)	Sacrifice and courage were shown in the evacuation of the injured miners and the elimination of the consequences of the accident - on the occasion of the tragic accident in the "Dobrnja" Mine in 1990.

### **Membership in professional associations**

Name of the association / association	BENA Balkan Association for the Protection of the Environment
Brief description of the association / association	The Balkan Environmental Association (B.EN. A) was founded on 19 November 1998 in Thessaloniki, Greece, as a non-profit and non-governmental organization. It is recognised under Greek law and European Union law, under act 22705/30.08.1999, by the Ministry of Foreign Affairs of Greece, under act 57/14.12.2000.
Address of the association / web reference	<a href="http://www.gen.teithe.gr/~bena/index.htm">http://www.gen.teithe.gr/~bena/index.htm</a>
Position in the Association	Member (2005-?)
Comment	

Name of the association / association	Technical Committee BAS/TC 27 (Mining), Association of Mining Engineers of Bosnia and Herzegovina, AteX Association for Explosion Protection and Safety of the Work and Environment.
Position in the Association	Member

### Participation in the teaching process

For the current academic year.

*(Note: You can enter only classes in which you are the teacher in charge, and you can also enter classes in which you are an associate teacher)*

In previous academic years

*(Note: You can enter only classes in which you are the teacher, and you can also enter classes in which you are an associate teacher. Also, you can only enter for one previous year)*

Natural hazards, fires and explosions; Chemical and physical measurements in mining; Physical hazards; Theory of combustion and explosion; Fire and explosion protection; Forensic Engineering; Natural hazards and expert analyses; Disaster Management; Fire Engineering; Geo-environmental Risk Management

I cycle - Natural hazards, fires and explosions; Chemical and physical measurements in mining; Physical hazards; Theory of combustion and explosion; Fire and explosion protection; Forensic Engineering;

2nd cycle - Natural hazards and expert analyses; Disaster Management; Fire Engineering

III cycle - Mine fires: prevention, detection and extinguishing; Dust explosions - Prevention and protection

### Mentorships

#### **Doctoral dissertations**

1. Kasim Bajramović: «Inert Solid Content and Explosive Characteristics of Deposited Coal Dust of Older Miocene Deposits" - defended on 03.09.2011.
2. Elvir Fehratbegović: "Management of environmental exogenous natural risks in the function of reducing the vulnerability of space" – defended 09.09.2016.
3. Refik Kurbašić: "Graphoanalytical Method of Analysis of Complexes of Active and Passive Measures in Protection Against Underground Mine Fires" – defended 30.08.2019

#### **Master's thesis/Master's thesis**

1. Kasim Bajramović: «Explosiveness of brown coal dust as a function of inert matter content and particle size». RGGF defended on November 20, 2004.
2. Refik Kurbašić: «The position of the ventilation corridor in the wide-front excavation in the function of gas and fire hazard» defended on 18.12.2004.
3. Selma Bijelić: "Oxidative processes as a function of carbon bed rheology", defended 11.11.2009.
4. Adnan Velić: Explosiveness of brown coal dust as a function of oxygen content in air, Master's thesis defended on 18.07.2014.
5. Maida Delmanović: Risk Identification and Flood Protection Planning in the Municipality of Lukavac, master's thesis defended on 02.10.2014.
6. Mario Antić: Integration of Standard Operating Procedures for Intervention in Extraordinary Events at Split Airport, master's thesis defended on 05.12.2014.
7. Damir Malkočević: Selection and analysis of the optimal method of fire protection in the process of oil exploitation, paper defended 16.10.2015.
8. Emir Hamidović: "Implementation of the OHSAS 18001 standard in the company "NATRON-HAYAT" d.o.o. MAGLAJ", paper defended on 19.09.2018.
9. Almir Halilović: Principles of designing fire protection systems in industrial plants, paper defended in october 2020.

## Scientific Research Projects and Studies

1. Study of the impact of natural CO<sub>2</sub> exploitation on the environment of the locality Klokoti – Kiseljak, 1999 -2001. A.Bašić, S.Mičević, **J.Marković**
2. Scientific study: «Research of dustiness and harmful gases in the application of water plugs in blasting in brown coal pits of the Central Bosnia basin», University of Tuzla, RGGF 2002. H.Tanović, S.Mičević, **J.Marković**
3. Necessary research project: Inert solids content and explosive characteristics of deposited coal dust in the Omazići pit RMU Banovići, Government of TK and RMU Banovići, 2008. **J.Marković**, S.Mičević
3. Internal research project: Assessment of the alteration of protective columns in the Omazići pit RMU Banovići based on the content of humic acids, Ministry of Education, Science, Culture and Sports of TK and RMU Banovići, 2010. S.Mičević, **J.Marković**
4. Study on the geological-morphological characteristics of coal deposits at the "Tržac-Crnaja" site with the program of remediation of coal spontaneous ignition and landslides A.Bašić, **J.Marković**, S.Mičević, RGGF Tuzla, 2009
5. Impact of Directive EC 1999/92 (Atex-137), which refers to minimum requirements for achieving improved protection of the health of workers exposed to a potential risk of explosive atmospheres (fifteenth individual directive within the meaning of Article 16, paragraph 1 of Directive 89/391/EC) on Bosnia and Herzegovina (R.Jozić, S.Mičević, **J.Marković**) RIA, 2007
6. DC XVI, TO-5-5.4 "Investigation of Hazards and Preventive Measures Against Aggressive Mineral Dust", SIZ Sciences of Bosnia and Herzegovina, 1992. H.Tanović, S.Mičević, **J.Marković**
7. Vulnerability Study of Tuzla Canton, Bosna-S Oil Services Company and RGGF Tuzla. A.Bašić, **J.Marković**, S.Mičević, RGGF Tuzla, 2008
8. Scientific research study: «Possibility of a controlled process of consolidation of the massif in the subsidence zone at the Tuzla salt deposit», RGGF Tuzla, 1999/2001 (Final report written and submitted in 2002) A.Bašić, S.Mičević, **J.Marković**, RGGF Tuzla.
9. Preliminary Assessment of the Impact of the Orašje – Šićki Brod Motorway on the Surroundings, A.Bašić, **J.Marković**, S.Mičević, RGGF Tuzla 2009.  
Environmental Impact Assessment Study of the Orašje – Šićki Brod Motorway (LOT-1; LOT-2; LOT-3; LOT-4; LOT-5) Faculty of Mining, Geology and Civil Engineering, 2011/12, Tuzla  
S. Mičević, **J.Marković**, A.Bašić

### International projects:

1. Scientific project: WUS-CEP program: Educational and Intervention Center for Aerology, Natural Hazards, Safety and Ecology in Mining, 1998, team member on behalf of the University of Tuzla
2. Scientific project: Tempus Phare Joint European Project Nr. AC-JEP-14377-1999: t: Curriculum and education in the field of soil ecology, University of Tuzla - RGGF Tuzla, University of Kaiserslautern (D), University of Ghent (B), University of Banja Luka. ETP – JEP, 1999/2001 (Final report written and submitted in 2002), team member on behalf of the University of Tuzla
3. Scientific project: DAAD-Project - Environmental Protection - Old Landfills: Kaiserslautern University, Germany, University of Banja Luka, University of Mostar, University of Tuzla, 2000 - 2001, team member on behalf of the University of Tuzla
4. Scientific project: DAAD – Project – «Environmental Protection – Old Landfills», University of Tuzla, University of Kaiserslautern Germany, University of Banja Luka, University of Mostar, 2003 – 2004, member of the team on behalf of the University of Tuzla
5. Erasmus+ "Knowledge For Resilient soCiEty – K-FORCE" (2016-2020) – team member on behalf of the University of Tuzla – team member on behalf of the University of Tuzla

6. Erasmus+"jOINEd For sUsTainability - bUilding climate REsiliEnt communities in WB and EU - 1FUTURE" in the period 2023-2026 A member of the team in front of the University of Tuzla

### Published books

- Book title Fires and explosions; Book I "The Theory of Combustion and Explosion"  
 Authors Marković J., Šišić R., Bašić A.  
 Publisher, Year and Place of Publication of the Book Ars grafika, Tuzla, 2010. (CIP – Cataloguing in the publication of the National and University Library of BiH, Sarajevo, UDK 614.841.41(075.8), Bibliography: pp. 155-159, ISBN 987-9958-894-04-6, COBISS. BH-ID 17954566).
- Book title Fires and explosions; Book II "Fires and Explosions in Mining and Industry"  
 Authors Šišić R., Marković J., Bašić A.  
 Publisher, Year and Place of Publication of the Book IN SCAN d.o.o., Tuzla, 2012. (CIP – Cataloguing in the publication of the National and University Library of BiH, Sarajevo, UDK 622.81/.82, Bibliography: p. 167.171, ISBN 987-9958-894-09-1, COBISS. BH-ID19369990).
- Book title Textbook "Fires in the Coal Mines"  
 Authors Marković J., Mičević S.  
 Publisher, Year and Place of Publication of the Book OFF-SET Tuzla, 2005. (CIP – Cataloguing in the publication National and University Library of BiH, Sarajevo, UDK 622.822/.824(075.8),ISBN 9958-609.40.1, COBISS. BH-ID14545670).
- Book title Soil ecology  
 Authors Adilović A., Marković J., Delić E.  
 Publisher, Year and Place of Publication of the Book The book was published within the Tempus project no.14377-1999 (COBISS. BH-ID 12958726)
- Book title Glossary of Terms in Disaster Risk Management and Fire Safety.  
[http://www.kforce.gradjevinans.net/images/Fajlovi/glossary/KForce\\_Glossary\\_online\\_edition.pdf](http://www.kforce.gradjevinans.net/images/Fajlovi/glossary/KForce_Glossary_online_edition.pdf)
- Authors M. Laban et al. (Z. Karadžin, J. Marković, E. Nukić)  
 Publisher, Year and Place of Publication of the Book ISBN 978-86-6022-197-3; COBISS.SR-ID 330486791, Novi Sad 2019.
- Book title Fire safety in buildings: a Western Balkan approach and practice.  
[http://www.kforce.gradjevinans.net/images/Fajlovi/Publications/EBook\\_Kforce\\_Fire\\_safety\\_in\\_buildings\\_EN.pdf](http://www.kforce.gradjevinans.net/images/Fajlovi/Publications/EBook_Kforce_Fire_safety_in_buildings_EN.pdf)
- Authors M. Laban et al. (J. Marković, E. Nukić)  
 Publisher, Year and Place of Publication of the Book ISBN 978-86-6022-279-6; COBISS. SR-ID 19894025; Novi Sad 2020.
- Book title Bezbednost zgrada od požara, Pristup i praksa zapadnog Balkana;  
[http://www.kforce.gradjevinans.net/images/Fajlovi/Publications/EBook\\_Kforce\\_Fire\\_safety\\_in\\_buildings\\_SRB.pdf](http://www.kforce.gradjevinans.net/images/Fajlovi/Publications/EBook_Kforce_Fire_safety_in_buildings_SRB.pdf)
- Authors M. Laban et al. (J. Marković, E. Nukić)  
 Publisher, Year and Place of Publication of the Book ISBN 978-86-6022-292-5; COBISS.SR-ID 21298697; Novi Sad 2020.

Book title Požarna bezbednost zgrada;  
<https://plus.cobiss.net/cobiss/sr/sr/bib/ubsm/81079817>

Authors M. Laban et al. (J. Marković, E. Nukić)  
Publisher, Year and Place of Publication of the Book ISBN 978-86-6022-531-5; COBISS.SR-ID 81079817; Faculty of Technical Sciences, Novi Sad 2022.

### Personal Skills and Competencies

Mother tongue **Bosnian**

Other languages

Understanding		Speech		Writing
Hearing	Reading	Speech interaction	Speech	
Good	Good	Good	Good	Good
Good	Good	Good	Good	Good

**English language**  
**German Language**

### Scientific, professional and social competencies

Competencies for conducting scientific research and teaching in higher education Experience, professional exam, publications

Competencies for participation in scientific research projects A large number of applied and development studies and projects, expertise in the field of mining, fire protection and environmental protection, cooperation with economic and scientific research institutions

Scientific research interest (occupation) and current training Doctor of Mining  
Expert for explosive, aggressive and flammable coal dust  
Expert for toxic, flammable and explosive gasses  
Expert for the mine fires  
Expert for environment protection

Planned training

Organizational Skills and Competencies Head of ITA Geoenvironmental Engineering

Technical skills and competences Knowledge of laboratory equipment (for testing microclimatic parameters; flammable, explosive and aggressive properties of dust, preparation of coal for self-ignition, determination of gas composition), research methods, and competence for databases, their use and inference.

Computer skills and competencies Mikrosoft Word, Excel, Power Point

Artistic skills and competencies

I, the undersigned, hereby certify that, to the best of my knowledge and on my behalf, the above information is correct in the description of me, my qualifications and my experience in my previous work.

Tuzla, 23.01.2026.

