Academic curriculum vitae

Personal information

Name and surname	**ZEHRA SALKIĆ**
Addresses	Home: M.Suljetovića 7, 75 000 Tuzla
	Work: Urfeta Vejzagića No 2, 75 000 Tuzla
Phones	Work: 00387 35 320 583 GSM: 061 135 232
Fax	-
E-mail/Web	zehra.salkci@untz.ba; salkicz@yahoo.com
Citizenship	BiH
Date of birth	27.08.1965.
Gender	female

Current job/position/title

Faculty of Mining, Geology and Civil Engineering, Specialization "Mineralogy and Petrology"/Associate Professor/Doctor of Technical Sciences in the field of geology

Working experience

Date	February 2011-present
Position / Occupation / Title	**Associate Professor**
Main responsibilities and duties	Lectures on the subjects: Fundamentals of Geology and Petrology, Basic Geology, Mineralogy and Petrography, Geochemistry, Applied Geochemistry, Hydrocarbon Geochemistry, Metallogeny, Petrology of rocks of BiH (postgraduate study)
Name of employer	University of Tuzla, Faculty of Mining, Geology and Civil Engineering, Urfeta Vejzagića 2, Tuzla, BiH
Type of employer's business activity	Higher education and scientific research
Date	February 2006-February 2011
Position / Occupation / Title	**docent**
Main responsibilities and duties	Lectures on the subjects: Geochemistry, Metallogeny, Petrology of igneous and metamorphic rocks, Sedimentology, Isotopic geochemistry in the examination of rocks and minerals, Application of geochemical data, Methods of examination of rocks and minerals (postgraduate study), Petrology of rocks of Bosnia and Herzegovina (postgraduate study)
Name of employer	University of Tuzla, Faculty of Mining, Geology and Civil Engineering, Urfeta Vejzagića 2, Tuzla, BiH

Type of employer's business activity	Higher education and scientific research
Date	June 2001-September 2006
Position / Occupation / Title	**Senior assistant**
Main responsibilities and duties	Exercises: Geochemistry, Metallogeny, Special Petrography, Special Mineralogy, Optics of Petrogenic Minerals, Optics of Ore Minerals, Mineralogy and Petrography, Minerals of Bosnia and Herzegovina
Name of employer	University of Tuzla, Faculty of Mining, Geology and Civil Engineering, Urfeta Vejzagića 2, Tuzla, BiH
Type of employer's business activity	Higher education and scientific research
Date	June 2001-September 2004
Position / Occupation / Title	Senior assistant
Main responsibilities and duties	Exercises: Basic Mineralogy
Name of employer	University of Tuzla, Faculty of Science and Mathematics, Univerzitetska, Tuzla, BiH
Type of employer's business activity	Higher education and scientific research
Date	September 2001-September 2005
Position / Occupation / Title	Senior assistant
Main responsibilities and duties	Exercises: Mineralogy with crystallography
Name of employer	University of Zenica, Faculty of Metallurgy and Materials, Zenica, Bosnia and Herzegovina
Type of employer's business activity	Higher education and scientific research
Date	October 1996-January 2001
Position / Occupation / Title	**Assistant**
Main responsibilities and duties	Exercises: Special petrography, Special mineralogy, Mineralogy and petrography, Mineralogy, Mineralogy with crystallography
Name of employer	University of Tuzla, Faculty of Mining, Geology and Civil Engineering, Urfeta Vejzagića 2, Tuzla, BiH; University of Zenica, Faculty of Metallurgy and Materials, Zenica, Bosnia and Herzegovina
Type of employer's business activity	Higher education and scientific research

Education and training

Date	June 1980.
Acquired qualification	**Primary education**
Field of science and profession, acquired titles and skills	Completed eight years of elementary school
Name and type of organization	Elementary school „Franjo Rezač“, in Tuzla
Date	June 1984
Acquired qualification	**V degree of expertise, complex profession**
Field of science and profession, acquired titles and skills	Graduated technician in building construction, participating in the development of conceptual and main designs of residential buildings
Name and type of organization	Secondary construction school in Tuzla
Date	26.06.1991
Acquired qualification	**VII degree**
Field of science and profession, acquired titles and skills	Engineering Geology, Graduate Engineer in Geology, application of general knowledge in engineering geology for field work and/or for conducting exercises with students
Name and type of organization	Faculty of Mining and Geology, University of Tuzla

Date	30.01.2001.
Name and type of organization	**VIII/1 stepen**
Field of science and profession, acquired titles and skills	Natural geological disciplines, Master of Technical Sciences, use of different methods for examining sedimentary rocks and determining their possibility of application as raw industrial material
Name and type of organization	Faculty of Mining and Geology, University of Tuzla
Date	09.09.2005.
Acquired qualification	**VIII/2**
Field of science and profession, acquired titles and skills	Natural geological disciplines, Doctor of Technical Sciences, use of different methodologies for examining igneous rocks and determining their petrological and geochemical characteristics
Name and type of organization	Faculty of Mining, Geology and Civil Engineering, University of Tuzla
Date	18.07-08.08.1997.
Acquired qualification	**Certificate for land resources**
Field of science and profession, acquired titles and skills	Mineralogy and petrology, specialization in professional work, strengthening of an international corporation with colleagues from other countries
Name and type of organization	Faculty of Mining and Geology, International Summer University Tuzla
Date	17.07-31.07.1998.
Acquired qualification	**Certificate for modern techniques for characterizing raw materials for industry and later finished products**
Field of science and profession, acquired titles and skills	Mineralogy and petrology, specialization in professional work, strengthening of an international corporation with colleagues from other countries
Name and type of organization	Faculty of Mining and Geology, International Summer University Tuzla
Date	03.05.-30.05.1999.
Acquired qualification	**Certificate in Exploration and Evaluation of Underground Resources**
Field of science and profession, acquired titles and skills	Mineralogy and petrology, specialization in scientific and professional work, strengthening of an international corporation with colleagues from other countries
Name and type of organization	Institut MTA, Ankara, Turska
Date	29.04.27.05.2003.
Acquired qualification	**Certificate for industrial raw materials**
Field of science and profession, acquired titles and skills	Mineralogy and petrology, specialization in scientific and professional work, strengthening of an international corporation with colleagues from other countries
Name and type of organization	Institute MTA, Ankara, Turkey
Date	29.04.-30.05.2007.
Acquired qualification	**Paper published with a geology student**
Field of science and profession, acquired titles and skills	Mineralogy and Petrology; specialization in scientific and professional work, establishment and strengthening of an international corporation with colleagues and students from BiH and other countries in the region
Name and type of organization	1st Regional Congress of Students of Geotechnical Faculties, Faculty of Mining, Geology and Civil Engineering, University of Tuzla
Date	23.03.-13.04.2009.
Acquired qualification	**Coordinator for quality assurance in higher education**
Field of science and profession, acquired titles and skills	Internal self-evaluation in higher education; basic strategic issues of each organization, documentation of the quality management system, personnel analysis in self-evaluation
Name and type of organization	University of Tuzla

Date	16.11.-20.11.2009.
Acquired qualification	**Certificate for Tracer Tests for Aquifer Management: Applications and Modeling** (Demos Project "The NATO Science for Peace and Security Programme")
Field of science and profession, acquired titles and skills	Hydrogeology, specialization in scientific and professional work, strengthening of an international corporation with colleagues from other countries
Name and type of organization	Faculty of Mining, Geology and Civil Engineering, University of Tuzla
	25.01.-29.01.2010.
Date	
Acquired qualification	**Employee education: Introduction of an integrated quality system ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007**
Field of science and profession, acquired titles and skills	Basics of quality system management, methodology for developing basic quality system documents, internal audit, methods for process improvement and advancement
Name and type of organization	Faculty of Mining, Geology and Civil Engineering, University of Tuzla
	12.11.2010.
Date	
Acquired qualification	**Certificate of attendance at the seminar "Standardization, certification and legal regulations in geotechnics", Banja Vrućica**
Field of science and profession, acquired titles and skills	Acquired knowledge about standardization, certification and legal regulations in geotechnics in Bosnia and Herzegovina and the environment.
Name and type of organization	Society for Geotechnics in Bosnia and Herzegovina
	14.02.-15.02.2011.
Date	
Acquired qualification	**Certificate of attendance at extended trainings on quality assurance study programs**
Field of science and profession, acquired titles and skills	Preparation of self-evaluation reports of study programs based on criteria and indicators for the evaluation and accreditation of study programs in Bosnia and Herzegovina.
Name and type of organization	Agency for Development of Higher Education, Mostar
	16.06.2011.
Date	
Acquired qualification	**Certificate of participation at the XIV BMPC** („The XIV Balkan mineral processing congres“)
Field of science and profession, acquired titles and skills	New knowledge about mineral deposits and methods of their processing, strengthening of an international corporation with colleagues from other countries.
Name and type of organization	Faculty of Mining, Geology and Civil Engineering, University of Tuzla
	29.06.–08.07.2011.
Acquired qualification	**Certificate of participation at the Summer University in Tuzla 2011..**
Field of science and profession, acquired titles and skills	Participation in the Summer University 2011, in the workshop entitled "Regional experiences in the accreditation of study programs and laboratories; implementation of technical solutions in engineering", LJUT Coordinator, moderator and lecturer
Name and type of organization	Faculty of Mining, Geology and Civil Engineering, University of Tuzla
Date	07.06-09.06.2012.
Acquired qualification	**Certificate of participation in the Scientific Conference GTZ/GEO-EXPO 2012**
Field of science and profession, acquired titles and skills	Improving scientific and professional work, strengthening international partnerships with colleagues from other countries.
Name and type of organization	Faculty of Mining, Geology and Civil Engineering, University of Tuzla and Geotechnical Society of Bosnia and Herzegovina
Date	31.05-02.06.2013.
Acquired qualification	**Certificate of participation in the Scientific and Professional Event GEO-EXPO 2013**
Field of science and profession, acquired titles and skills	Improving scientific and professional work, strengthening international partnerships with colleagues from other countries.
Name and type of organization	Society for Geotechnics in Bosnia and Herzegovina

Date	24.09.-26.09.2014.
Acquired qualification	**Certificate of participation in the XX Congress of the Carpathian Balkan Geological Association in Tirana** ("XX Congress of the Carpathian Balkan Geological Association")
Field of science and profession, acquired titles and skills	Abstract of the paper entitled "Geochemistry of Oligocene Post-collisional Volcanic rocks in North Dinarides in Bosnia and Herzegovina" presented, exchanging new knowledge from various fields and strengthening international cooperation with colleagues from other countries.
Name and type of organization	CBGA 2014, Organizing Committee

Scientific papers within formal education

Papers published as an assistant

Paper title	Salihović, S. & Bešić (**Salkić), Z.: Mineral and chemical composition of limestone as a factor in their application**
Institution where the paper was prepared	III3 International Scientific and Professional Conference, Non-Metallic Inorganic Materials, Proceedings, pages 55-61.
Year and place	2000, Zenica
Short content	Mineral and chemical composition of limestone is important for assessing the possibilities of its application in various industries.
Comment	The paper was assessed as scientific by the Editorial Board of the scientific-professional conference
Paper title	**Salkić, Z.: Dolomites of the "Zovik" deposit (near Hadžići) and their usability**
Institution where the paper was prepared	Proceedings of the RGGF, ISSN 1512-7044, XXII/1, pages 141-143.
Year and place	2000, Tuzla
Short content	Chemical and mineralogical composition of the dolomites of the "Zovik" deposit was examined and it was determined where such dolomites can be used.
Comment	The paper was assessed as scientific by the Editorial Board of the RGGF Proceedings

Papers published as senior assista

Paper title	Stević, M., **Salkić, Z.,** Salihović, S. & Hamzabegović, A.: „**Geological and technical properties of marble from the locality "Dolovi-Begova brezovača" near Novi Travnik**
Institution where the paper was prepared	Proceedings of the RGGF, ISSN 1512-7044, XXIII, pages 135-138.
Year and place	2001, Tuzla
Short content	In October and November 2001, 4 boreholes up to 70 m were drilled, from which marble samples were taken, and the results of chemical, mineralogical-petrographic and physical-mechanical properties are presented in this paper. Due to its low compressive strength and extremely high degree of wear, the rock is considered very soft. Geological and technical properties of marble from the Dolovi-Begova brezovača site near Novi Travnik indicate the possibility of its application primarily in construction, as an architectural and building stone; then in medicine and chemical industry, etc.
Comment	The paper was assessed as scientific by the Editorial Board of the RGGF Proceedings
Paper title	**Salkić, Z.** & Salkić, M : **Mineralogical and petrographic characteristics of the roof layers marls of the Banovići coal basin**
Institution where the paper was prepared	IV International Scientific and Professional Conference, Non-metallic Inorganic Materials, Proceedings, pages 147-154.
Year and place	2002, Zenica
Short content	X-ray diffraction, differential thermal and thermogravimetric analysis, and polarization microscope tests have shown that calcite and quartz are the most abundant minerals in all samples. Among clay minerals, illite and kaolinite are the most abundant, followed by smectite, chlorite, and mixed-layer clay minerals. The diverse and variable mineralogical and petrographic composition of the roof marls of the Banovići coal basin is caused both by the influx of different materials and the complex dynamic

conditions of deposition.

Comment	The paper was assessed as scientific by the Editorial Board of the scientific-professional conference.
Paper title	**Salkić, Z**. & Salihović, S.: **Possibility of using roof layers marls of the Banovići coal basin for cement production**
Institution where the paper was prepared	IV International Scientific and Professional Conference, Non-metallic Inorganic Materials, Proceedings, pages 33-41.
Year and place	2002, Zenica
Short content	The assessment of the suitability of the roof layers marls of the Banovići coal basin for the production of Portland cement is based on the chemical composition of composite samples from the "Grivice" and "Čubrić" coal mines. Tests have determined that the roof marls from the above-mentioned open pits, according to the values of KZ, SM, AM, T and K, are on the borderline for quality clinker. They can be used for the production of quick-setting cement, as well as for the production of Portland cement with correction for the silicate component.
Comment	The paper was assessed as scientific by the Editorial Board of the scientific-professional conference.
Paper title	Salihović, S. & **Salkić, Z.** : **Tuffs of Bosnia and Herzegovina as raw materials in cement production**
Institution where the paper was prepared	IV International Scientific and Professional Conference, Non-metallic Inorganic Materials, Proceedings, pages 27-33.
Year and place	2002, Zenica
Short content	From an economic perspective, the most important tuffs in BiH are the tuffs of the Livno basin, which were previously used in the cement industry.
Comment	Rad je ocijenjen kao naučni od strane Uređivačkog odbora naučno-stručnog skupa
Paper title	Babajić, E., Salihović, S. & **Salkić, Z. : Decomposition of diabase at the quarry in Ribnica**
Institution where the paper was prepared	Proceedings of the RGGF, ISSN 1512-7044, XXVIII, Tuzla, pages 55-60.
Year and place	2005, Tuzla
Short content	The paper deals with the issue of diabase decomposition in a vertical profile at a quarry in Ribnica. Various analytical methods have been used to record decomposition processes in diabase, which were probably caused by exogenous alteration factors. Examined diabases do not contain chemically resistant minerals, their plagioclase and pyroxenes are altered into structurally weak clay minerals. The profile mainly contains secondary minerals.
Comment	The paper was assessed as scientific, reviewer: Dr.sc. Snežana Mićević, assistant professor
Paper title	Babajić, E., **Salkić, Z**. & Mićević, S. (2005): **Petrographic and petrochemical characteristics of rocks on the Dam Modrac profile.**
Institution where the paper was prepared	Proceedings of the RGGF, ISSN 1512-7044, XXVIII, Tuzla, pages 103-110.
Year and place	2005, Tuzla
Short content	On the territory of Bosnia and Herzegovina, ultramafic rocks, together with mafic and volcanogenic-sedimentary formations, have a significant distribution within the "Bosnian serpentine zone". The paper presents petrographic-petrochemical characteristics of rocks in Modrac based on classical field and laboratory methods. The results of chemical analysis indicate that lherzolites predominate with subordinate olivine gabbro. The mineral composition of lherzolites includes: olivine, ortho and clinopyroxenes, serpentine and spinels, while olivine gabbro contains an increased percentage of basic plagioclase and olivine.
Comment	The paper was assessed as scientific; reviewer: Dr.sc. Senaid Salihović, Assoc. prof.

Papers published as assistant professor

Paper title	**Salkić, Z.,** Lugović, B., Trubelja, F. & Salihović, S.: **Petrographic, geochemical and geotectonic characteristics of Tertiary volcanic rocks of central Bosnia.**
Institution where the paper was prepared	Proceedings of the First Conference of Geologists of Bosnia and Herzegovina, Association of Geologists of Bosnia and Herzegovina, ISBN 9958-9193-0-3; COBISS. BH-ID 14619910, pages 185-197.
Year and place	2006, Sarajevo
Short content	Volcanic rock samples from central Bosnia are mainly dacites, very rarely andesites, and are members of the high-potassium calc-alkaline series of rocks. Variations in major and trace elements indicate the high-potassium calc-alkaline character of the dacites and are consistent with the fractionation of phenocrysts of plagioclase, sanidine, biotite, rarely hornblende and rarely hypersthene. All analyzed dacites show an enrichment of LIL elements compared to HFS elements and have prominent negative Ta-Nb, P and Ti anomalies and positive U and Pb anomalies, which is characteristic of igneous rocks from subduction, collision and post-collision extension zones. Relative REE concentration curves show strong enrichment in light REE relative to heavy REE with (La/Yb)cn between 21.4 and 33.4. All rocks have a small negative Eu anomaly (Eu/Eu*=0.85-0.89) which proves that plagioclase fractionation did not play a very significant role in the genesis of dacites. The overall geochemical characteristics of dacites indicate that the subduction character of the mantle is inherited and enhanced through crustal contamination, and that the mantle in the Dinaric ophiolite zone has a different composition with a lower intensity of metasomatic enrichment during the subduction of Mesozoic oceanic lithosphere**.**
Comment	The paper was reviewed by the Organizing Committee of the 1st Conference of Geologists of Bosnia and Herzegovina with international participation**.**
Paper title	**Salkić, Z.,** Salihović, S., Babajić, E. & Babajić, A **Mineralogical and petrographic characteristics of dacites and andesites in the Maglaj area.**
Institution where the paper was prepared	Proceedings of the RGGF, ISSN 1512-7044, XXX, Tuzla, pages 25-39.
Year and place	2006, Tuzla
Short content	The main area of occurrence of Tertiary volcanic rocks in central Bosnia is in the Bosna River valley near Maglaj. In the Maglaj area, Tertiary volcanic rocks occur within ophiolites and genetically related sedimentary rocks. There are several smaller volcanic bodies that together cover an area of several km^2. Volcanic rocks around Maglaj show similar mineralogical-petrographic characteristics. They have massive structures and porphyry textures. It was found that dacites prevail over andesites. Based on the predominant content of colored minerals, the following varieties of rocks can be distinguished: biotite dacites, hornblende-biotite dacites and biotite andesites. The rocks mainly have a holocrystalline porphyry texture with phenocrysts of plagioclase, sanidine, quartz, biotite, subordinately amphibole and extremely rarely hypersthene. Apart from hypersthene, the same minerals as among the phenocrysts are present in the matrix, along with accessory apatite, zircon, rutile and magnetite.
Comment	The paper was assessed as scientific; reviewer: Ph.D. Amir Baraković, associate prof.
Paper title	Babajić, E., **Salkić, Z.,** Lugović, B. & Salihović, S.: **Geochemical geotectonic discrimination of tertiary volcanic rocks around Maglaj.**
Institution where the paper was prepared	Proceedings of the RGGF, ISSN 1512-7044, XXX, Tuzla, pages 39-50.
Year and title	2006, Tuzla
Short content	Postorogenic volcanic rocks of different Tertiary age are widespread in the Sava-Vardar zone of the Dinarides and in the southeastern part of the Pannonian Basin. South of the Sava-Vardar zone, in Bosnia and Herzegovina, Tertiary volcanic rocks occur in two geotectonically different areas: (1) in northeastern Bosnia, in the wider area of Srebrenica, and (2) on a smaller scale in central Bosnia, in the wider vicinity of Maglaj, Teslić and Nemila (Kolići). In central Bosnia (Maglaj area) Tertiary volcanic rocks occur within the rocks of the ophiolite complex and associated sedimentary rocks of the Dinaric ophiolite zone. Geochemical geotectonic discrimination of Tertiary volcanic rocks around Maglaj shows that they have characteristics common to volcanic rocks from volcanic arcs on the margins of continents

(Andean type of subduction). Geochemical parameters of dacites and andesites around Maglaj show strong subduction characteristics, although the magmas were formed in a transpressional-transtensional tectonic regime at the beginning of the Oligocene, long after the end of active subduction. This discrepancy can be explained by the fact that the subduction character of the mantle is inherited and enhanced through crustal contamination, and that the mantle in the Dinaridic ophiolite zone has a different composition with a lower intensity of metasomatic enrichment during the subduction of the Mesozoic oceanic lithosphere.

Comment	The paper was assessed as scientific; reviewer: Ph.D. Zijad Ferhatbegović, assis.prof.
Paper title	**Salkić, Z**., Lugović, B. & Babajić, E.: **Geochemical characteristics of Oligocene volcanic rocks around Maglaj.**
Institution where the paper was prepared	Proceedings of the RGGF, ISSN 1512-7044, XXXI, Tuzla, pages 13-23.
Year and place	2007, Tuzla
Short content	In central Bosnia, numerous small volcanic and subvolcanic bodies occur within the rocks of the ophiolite complex and associated sedimentary rocks of the Dinaric ophiolite zone. Variations in major and trace elements in rocks from the Maglaj area indicate a high-potassium calc-alkaline character of dacite. The content of total FeO, TiO_2, MgO, CaO, Sr, Th, U, Hf, Ta, V, La, Y and Yb decreases, while the concentrations of K_2O, Na_2O, Rb, Ba and Cu increases with increasing SiO_2 content as an index of fractionation. Variations in the composition of the analyzed volcanic rocks are consistent with the fractionation of phenocrysts of plagioclase, sanidine, biotite and hornblende.kao indeksa frakcionacije All analyzed dacites show an enrichment of LIL elements compared to HFS elements and have prominent negative Ta-Nb, P and Ti anomalies and positive U and Pb anomalies, which is characteristic of igneous rocks from subduction, collision and post-collision extension zones. Relative REE concentration curves show a strong enrichment of light REEs over heavy REEs with (La/Yb)cn between 21.4 and 21.9. All rocks have a small negative Eu anomaly (Eu/Eu*=0.86-0.89), which proves that plagioclase fractionation did not play a very significant role in the genesis of dacite.
Comment	The paper was assessed as scientific; reviewer: Ph.D. Senaid Salihović, associate prof.
Paper title	Demir, V. & **Salkić, Z.: Calculation of structural-chemical formulas of ferromagnesian minerals (phenocrysts) of Tertiary volcanic rocks of Bosnia and Herzegovina**
Institution where the paper was prepared	Proceedings of the 1st Regional Congress of Geotechnical Faculty Students RGGF, Special Edition of Proceedings ISSN 1512-7044, XXXIV, Tuzla, pages 175-186.
Year and place	2007, Tuzla
Short content	Na osnovu preovladavajućih feromagnezijskih minerala utvrđeno je prisustvo različitih varijeteta dacita i andezita. In Bosnia and Herzegovina, Tertiary volcanic rocks occur in two geotectonically different areas: (1) in northeastern Bosnia, in the wider area of Srebrenica, and (2) to a lesser extent in central Bosnia, in the wider vicinity of Maglaj, Teslić and Nemila (Kolići). The rocks of both areas essentially show similar mineralogical-petrographic characteristics. The rocks have a holocrystalline to hypocrystalline porphyry textuture with phenocrysts of plagioclase, sanidine, quartz, biotite, hornblende, subordinate orthopyroxene and extremely rare clinopyroxene. Based on the predominant ferromagnesian minerals, the presence of different varieties of dacite and andesite was determined. Calculation of formulas of Fe-Mg minerals was done according to the calculation program ¨Peteraki¨ by Dr.sci. Hans-Peter Meyera (Mineralogical Institute in Heidelberg). The results of the examination of the chemical composition of minerals confirmed that among the ferromagnesian phenocrysts there are: biotite of variable composition [Al=1,13-1,34; Mg_{value}=39,0-61,7]; amphibole composition of chermakite, pargasite and ferro-edenite; ferrohypersthene ($W_{1,2\text{-}1,9}En_{40,3\text{-}49,3}Fs_{49,1\text{-}58,1}$) and hyperstene ($W_{0,9\text{-}2,5}En_{52,9\text{-}65,8}Fs_{31,7\text{-}46,2}$ and subordinate clinopyroxene of hedenbergite-diopside boundary composition ($W_{48,4}En_{27,1}Fs_{24,5}$).
Comment	The paper was reviewed by the Editorial Board of the RGGF Proceedings
Paper title	Babajić, E., **Salkić, Z.** & Salihović, S: **Diabase-dolerite rocks around Ribnica - geochemical affinity and classification**
Institution where the paper was prepared	Proceedings of the III BiH geologists' consultation with international participation; Association of Geologists of Bosnia and Herzegovina, ISSN 1840-4073, pages 477-489.
Year and place	2008, Neum
Short content	Geochemical character of the diabase-dolerite rocks of Ribnica indicates basalts, basalto-andesites

	and andesites in the TAS diagram. This diversity is conditioned by the alteration processes to which the rocks were subjected. The AFM diagram showed a differentiation sequence characteristic of an evolved clastic-alkaline series of rocks Based on the ratios of the main oxides (TiO_2, FeO, MgO) some elements (Sr, Co, Ni) to SiO_2 on Harker variation diagrams, it is concluded that crystal fractionation played a significant role in the genesis of these rocks. A certain scatter of data on some of the diagrams used is a consequence of the alteration processes that affected the rocks in question.
Comment	The paper was reviewed by the Organizing Committee of the III BiH geologists' consultation with international participation
Paper title	**Salkić, Z.,** Lugović, B. & Babajić, E: **Chemical classification and nomenclature of Tertiary volcanic rocks of northeastern Bosnia**
Institution where the paper was prepared	Proceedings of the III BiH geologists' consultation with international participation; Association of Geologists of Bosnia and Herzegovina, ISSN 1840-4073 pages 503-511.
Year and place	2008, Neum
Short content	Postorogenic volcanic rocks of different Tertiary age are widespread in the Sava-Vardar zone of the Dinarides and in the southeastern part of the Pannonian Basin. South of the Sava-Vardar zone, Tertiary volcanic rocks occur in northeastern Bosnia, in the wider area of Srebrenica within the Drina-Ivanjica complex. The rocks have a holocrystalline to hypocrystalline porphyry texture with phenocrysts of plagioclase, sanidine, quartz, biotite, hornblende, subordinate orthopyroxene and extremely rare clinopyroxene. Based on the predominant ferromagnesian minerals, the presence of different varieties of dacite and andesite was determined. Most of the analyzed rocks of northeastern Bosnia are high-potassium calc-alkaline dacites and andesites, except for the basaltic andesite of Dimnić, which belongs to the calc-alkaline series, and the trachyandesite of Crni Guber, which belongs to the shoshonitic series of rocks. The biggest difference between the classifications and nomenclatures based on the content of major elements (TAS-diagram and K_2O-SiO_2 diagram) and the classifications based on the content of immobile trace elements (SiO_2-Zr/TiO_2 and Zr/TiO_2-Nb/Y diagrams) is reflected in the separation of trachyandesites. On the Th/Yb-Ta/Yb and Ce/Yb-Ta/Yb diagrams, all analyzed samples fall into the field of the shoshonitic series of rocks
Comment	The paper was reviewed by the Organizing Committee of the III BiH geologists' consultation with international participation
Paper title	**Salkić, Z**., Lugović, B. & Babajić, E.: **Mineralogical-petrographic characteristics of Tertiary dacites in the vicinity of Teslić**
Institution where the paper was prepared	Proceedings, Bulletin of the Faculty of Mining, Geology and Civil Engineering, University of Tuzla; ISSN 1512-7044, Number XXXIII, pages 21-26.
Year and place	2009, Tuzla
Short content	Mineral composition and structural-textural characteristics of the Tertiary volcanic rocks in the vicinity of Teslić were determined by examinations in a polarizing microscope, as well as by X-ray examinations. The results of the aforementioned tests showed that the dacites around Teslić have similar mineralogical-petrographic characteristics According to the predominant content of ferromagnesian minerals, the rocks can be classified as biotite dacites. All analyzed rocks have a holocrystalline porphyry texture with phenocrysts of plagioclase, quartz, biotite and very rarely amphibole. The same minerals are also present in the matrix, together with sanidine and accessory minerals (apatite, zircon, rutile, magnetite and pyrite). Chemical analyzes of the main elements were performed using X-ray fluorescence analysis. From chemical analyzes using the CIPW method, a normative mineral composition was determined that approximately corresponds to the primary composition of the rocks. Based on the results of the tests, it was determined that the biotite dacites of Teslić show similar mineralogical and petrographic characteristics, as well as the genetically related volcanic rocks of other areas in central Bosnia.
Comment	The paper was reviewed as an original scientific paper, paper code G-3/09, by the Editorial Board of the Proceedings of the RGGF
Paper title	**Salkić, Z**., Lugović, B. & Babajić, E: **Geochemistry of high-potassium calcium-alkaline dacites around Teslić**
Institution where the paper was prepared	Proceedings, Bulletin of the Faculty of Mining, Geology and Civil Engineering, University of Tuzla;ISSN 1512-7044, Number XXXIII, pages 27-34.
Year and place	2009, Tuzla

Short content	Chemical analyzes of Oligocene dacites around Teslić for major elements, standard trace elements and rare earth elements were performed using sophisticated analytical tests. The obtained results are presented on Harker's variation diagrams, spider-diagrams and curves of relative concentrations of elements. Variations in major and trace elements indicate a high-potassium calc-alkaline character of the studied rocks and are consistent with the fractionation of biotite, plagioclase and sanidine phenocrysts. Dacites around Teslić show an enrichment of LIL elements compared to HFS elements and have prominent negative Ta-Nb, P and Ti anomalies and positive U and Pb anomalies, which is characteristic of igneous rocks from subduction, collision and post-collision extension zones. Relative REE concentration curves show a strong enrichment of light REEs over heavy REEs with (La/Yb)cn between 29.9 and 33.4. Analyzed rocks have a small negative Eu anomaly (Eu/Eu*=0.87-0.88), which shows that plagioclase fractionation did not play a very significant role in the genesis of dacite. Increased concentrations of Ba, Th, Ta, Nb, La, Sr and Hf in relation to the content of the same elements in the genetically related rocks of Maglaj and Kolić indicate the fact that the Teslić dacites probably represent a separate petrogenetic unit.
Comment	The paper was evaluated as an original scientific paper, paper code G-4/09, by the Editorial Board of the RGGF Proceedings
Paper title	**Salkić, Z**., Stević, M. & Hamzabegović, A.: **Engineering-geological characteristics and quality of quartzite from the "Gradac" deposit.**
Institution where the paper was prepared	Proceedings of the Faculty of Mining, Geology and Civil Engineering, University of Tuzla; special edition, ISSN 1512-7044, pages 113-125.
Year and place	2010, Tuzla
Short content	Gornji Vakuf area is located in the transition zone of the central Dinarides, which also includes the Central-Bosnian Paleozoic. The investigated area is very diverse and uneven in terms of geomorphology and morphogenetics, which results from the diversity of lithological and tectonic characteristics. In addition to quartzite, the geological structure of the deposit includes quartz sandstones, quartz-sericite schists, and to a lesser extent sericite-quartz schists and quartz porphyries. Massive, banked to layered quartzites in the Gradac I and III deposits belong to the third strength category with a strength coefficient ranging from 16-17 MPa. As a working environment, it provides uniform conditions in terms of stability in all directions and at all levels. Quartz-sericite schists can be classified as moderately strong rocks of category V with a strength coefficient of 7-8 MPa. In order to determine the quality of quartzite from the "Gradac" deposit, chemical, mineralogical-petrographic and physical-mechanical tests were performed on 90 samples. Based on the average SiO_2 content and harmful impurities, three quartzite qualities were distinguished at the studied site. Quartzites from this deposit have high SiO_2 content (93,66 do 98, 48 %) content and a small proportion of other components (Al_2O_3, Fe_2O_3, CaO and MgO), and fully meet all the necessary qualities for the production of silica and chamotte refractory products. Such quartzites can also be used in other industrial branches, such as: metal industry, construction, glass industry, and chemical industry.
Comment	The paper was assessed as scientific; reviewers: Dr.sc. Indira Sijerčić, assistant professor and Dr.sc. Senaid Salihović, full professor.

Papers published as associate professor

Paper title	**Salkić, Z**., Lugović, B., Salihović, S., Babajić, E. & Babajić, A.: **Mineralogical-petrographic and geochemical characteristics of the tertiary dacites of Kolići near Nemila..**
Institution where the paper was prepared	Proceedings of the IV Conference of Geologists of Bosnia and Herzegovina with International Participation; Association of Geologists of Bosnia and Herzegovina, ISSN 1840-4073, pages 45-57.
Year and place	2011, Sarajevo
Short content	Tertiary volcanic rocks in central Bosnia occur in the wider vicinity of Maglaj, Teslić, Nemila and Kolići, in the form of numerous smaller volcanic and subvolcanic intrusions through rocks of the Mesozoic ophiolite complex and genetically related sedimentary formations. The paper presents summarized results of mineralogical-petrographic and geochemical investigations of Tertiary dacites in the Kolić area, near Nemila. Dacites of Kolići have a holocrystalline-porphyry texture with phenocrysts of quartz, plagioclase, biotite and subordinate oxyhornblende. Based on the mineral composition, these rocks could be

	classified as biotite dacites. According to the TAS diagram (Le Bas et al., 1992) and thei K_2O-SiO_2 dijagramu (Peccerillo & Taylor, 1976) the analyzed rocks are classified as high-potassium, calcium-alkaline dacites. Geochemical features, observed on spider diagrams and relative REE concentration curves, are characteristic of igneous arc rocks that generally form in subduction zones, collisions of continental plates, and are also found in zones of post-collisional extension in former, deeply eroded orogens. On the diagrams for geochemical geotectonic discrimination, the analyzed rocks are located in the field of rocks from volcanic arcs on the edges of continents (CAP). The examined rocks from around Kolić are very similar in their mineralogical-petrographic and geochemical characteristics to Oligocene volcanic rocks from the area of Teslić and Maglaj (central Bosnia), and can be correlated with genetically related rocks of northeastern Bosnia (Salkić, 2005).
Comment	The paper was reviewed by the Organizing Committee of the IV Conference of Geologists of Bosnia and Herzegovina with International Participation.
Paper title	Babajić, A., **Salkić, Z.** & Babajić, E.: **Content of rare earth elements in mafic rocks around Banovići**
Institution where the paper was prepared	Proceedings of the IV Conference of Geologists of Bosnia and Herzegovina with International Participation; Association of Geologists of Bosnia and Herzegovina ISSN 1840-4073 pages 58-65.
Year and place	2011, Sarajevo
Short content	Low-Ti rocks around Banovići have a higher degree of fractionation of rare earth elements (REE), in contrast to medium-Ti rocks and high-Ti rocks. In low-Ti rocks, there is a significant difference in the shape of the concentration curves, as well as in the REE concentration. The degree of fractionation of low-Ti rocks in the segment of medium (MREE) and heavy (HREE) rare earth elements is quite uniform. Medium-Ti rocks show variation in the concentration of light REE and medium REE, while in the heavy REE segment the concentrations are quite uniform. High-Ti rocks of Banovići area have the lowest degree of REE fractionation. The highest degree of fractionation is recorded for HREE, and the lower degree of fractionation is related to MREE and LREE. High-Ti rocks show the highest concentration levels, followed by medium-Ti and finally low-Ti rocks. Globally, the analyzed rocks (all three types) are enriched in MREE and HREE, and depleted in some LREE. The largest number of analyzed rocks shows positive Eu anomalies, which are most pronounced in low-Ti rocks. Such anomalies are explained by crystallization (i.e. accumulation of plagioclase in the magma chamber) where Eu was selectively incorporated into the crystal lattice of plagioclase. A certain number of analyzed rocks, more evolved ones, show negative Eu anomalies of very weak intensity. These anomalies are the result of the removal of plagioclase from the magmatic melt by fractional crystallization, which is a common phenomenon in mid-ocean ridge basalts.
Comment	The paper was reviewed by the Organizing Committee of the IV Conference of Geologists of Bosnia and Herzegovina with International Participation.
Paper title	Stević, M., Isaković, H., **Salkić, Z.** & Hamzabegović, A.: **Geological and physical-mechanical characteristics of Upper Triassic limestones of the Šarića Brdo – Liskovac deposit near Cazin.**
Institution where the paper was prepared	Proceedings of the IV Conference of Geologists of Bosnia and Herzegovina with International Participation; Association of Geologists of Bosnia and Herzegovina, ISSN 1840-4073 pages 94-100 .
Year and place	2011, Sarajevo
Short content	Limestone deposit "Šarića Brdo" - Liskovac is located approximately 5 km from the regional road Bihać - Trž. Raštela - Cazin in the settlement of Liskovac, Cazin municipality. The limestone is compact, gray to reddish-gray and dark-gray in color, intersected by numerous white veins made of coarse-grained calcite. Small cavities filled with calcite, as well as limonite coatings, occur in places. It has a massive structure and a cryptocrystalline to microcrystalline texture. Groundmass of this rock is made up of microcrystalline to cryptocrystalline calcite, in which scattered small oolites filled with fine-crystalline calcite are common and represent the beginning of the recrystallization of the groundmass. Most oolites have a concentric structure. In addition to calcite, the rock contains irregular to polygonal grains of the mineral dolomite (about 8%). Of the accessory minerals, it contains very little quartz, limonitized iron oxides and clay minerals. According to the results of physical-mechanical, chemical and mineralogical-petrographic tests of rocks from the treated deposit, the rock material can be successfully used as cladding stone for external and internal facades, for the construction of lower load-bearing buffer layers and as crushed stone for the construction of binding and wearing layers on roads of all categories, for the production of concrete accessories and the production of concrete mixtures of all brands, namely mb 10, 20, 30

	and 40. Stone from Liskovac is resistant to external atmospheric influences, so it can be used for the construction of external surfaces, landscaping, etc.
Komentar	The paper was reviewed by the Organizing Committee of the IV Conference of Geologists of Bosnia and Herzegovina with International Participation.
Naziv rada	Babajić A., Salkić Z. & Babajić E.: **Petrographic features and nomenclature of rocks on the Ribnica quarry near Banovići.**
Institution where the paper was prepared	Proceedings of the V Conference of Geologists of Bosnia and Herzegovina with International Participation; Association of Geologists of Bosnia and Herzegovina, ISSN 1840-4073 pages 147-159.
Year and place	2013, Sarajevo
Short content	Optical investigations in transmitted polarized light included 18 rock samples taken from the floors and from exploratory boreholes of the Ribnica quarry near Banovići. The results of the investigation defined two groups of rocks. The first group includes extrusive mafic rocks: diabases, dolerites, spilites and transitional rocks to gabbros – ophitic gabbros. Their mineral composition is very similar, with minor variations. All rocks from this group are more or less altered, although fresh samples were taken during field observations. The second group of rocks includes epiclastic sedimentary rocks, formed by the cementation of different fragments of mafic extrusive rocks, in which the cement is of the same mineral composition as the rock fragments.
Comment	The paper was reviewed by the Organizing Committee of the V Conference of Geologists of Bosnia and Herzegovina with International Participation.
Paper title	Babajić, E, Lugović, B., **Salkić, Z**. & Babajić, A.: **Geochemical characterization of mafic rocks of the Krivaja-Konjuh ophiolite complex.**
Instition were the paper was prepared	Proceedings of the V Conference of Geologists of Bosnia and Herzegovina with International Participation; Association of Geologists of Bosnia and Herzegovina, ISSN 1840-4073 pages 160-176
Year and place	2013, Sarajevo
Short content	Variation diagrams of the main elements in relation to Zr (as an index of differentiation) indicate two groups of rocks: intrusive rocks and their dykes are the first group, and extrusive rocks and their dykes, and spilites (pillow lavas) are the second group of rocks. The ratios of the main elements (CaO – Na_2O) revealed a low intensity of albitization. On the TAS diagrams, the rocks fall into the basalt and gabbro field. Rare boninite was also recorded, as well as spilites of "false" alkalinity. The mafic rocks of the Krivaja-Konjuh ophiolite complex (KKOK) belong to the subalkaline/tholeiitic rock series of the basalt hemism. The increase in iron content in the series from cumulate to extrusive rocks with a constant proportion of alkali is visible in the AFM diagram. The largest number of analyzed rocks belong to the high-Ti group, while a smaller number fall into low-Ti and very low-Ti rocks, which also indicates certain geotectonic environments. Ratio of TiO_2 – Al_2O_3 revealed two rock groups: low-Ti, high-Al group (intrusive rocks and their dykes), and medium-Ti and high-Ti, low-Al group (extrusive rocks and their equivalents).
Komentar	The paper was reviewed by the Organizing Committee of the V Conference of Geologists of Bosnia and Herzegovina with International Participation.
Naziv rada	**Salkić, Z**., Lugović, B., Babajić, E. & Babajić, A.: **Mineralogical-petrographic characteristics of Tertiary volcanic rocks around Srebrenica.**
Institution where the paper was prepared	Proceedings of the V Conference of Geologists of Bosnia and Herzegovina with International Participation; Association of Geologists of Bosnia and Herzegovina, ISSN 1840-4073 pages 194-211.
Year and place	2013, Sarajevo
Short content	The main Srebrenica volcanic body, composed of volcanic and pyroclastic rocks with smaller hypabyssal bodies, is located in northeastern Bosnia south of the Sava-Vardar zone, within the Drina-Ivanjic complex. The volcanic rocks around Srebrenica, Bratunac and Ljubovija are represented almost equally by felsic (dacites) and neutral rocks, among which andesites are dominant, along with basaltic andesites and trachyandesites. Macroscopically, the rocks are mostly light gray to dark gray in color, massive in structure, and have a clear porphyry texture. The rocks show a mostly holocrystalline, rarely hypocrystalline porphyry texture with phenocrysts of plagioclase, sanidine, quartz, biotite, amphibole, hypersthene, and, to a lesser extent, augite. Microcrystalline to cryptocrystalline matrix is composed mostly of leucocratic minerals: sanidine, plagioclase, and quartz, and in addition to them, biotite, hornblende, less frequently small crystals of hypersthene, extremely rarely augite, and accessory minerals (apatite,

zircon, rutile, magnetite, pyrite).
The basaltic andesite of Dimnići represents the earliest crystallized rock of this volcanic area, while the dacites are the youngest differentials of this series. Trachyandesites do not seem to fit into this series of rocks. Some altered andesites of Srebrenica contain enclaves of older, highly altered rocks, indicating multiphase eruptions. The reaction rim on many rounded quartz phenocrysts indicates the possibility of mixing of magmas during the formation of the Tertiary volcanic rocks of northeastern Bosnia. The mixing of magmas of different temperatures and chemical compositions is also indicated by the existence of zonal phenocrysts of plagioclase and amphibole.

Comment	The paper was reviewed by the Organizing Committee of the V Conference of Geologists of Bosnia and Herzegovina with International Participation.
Paper title	**Salkić, Z.,** Đurić, N., Skopljak, F., Babajić, E., Pobrić, V., Golić, E. & Babajić, A. **"Geochemistry of Oligocene Post-collisional Volcanic rocks in North Dinarides in Bosnia and Herzegovina"**
Institution where the paper was prepared	Proceedings. XX Congres CBGA 2014 in Tirana; ISSN 0254-5276, ISSN 2306-9600. page 231.
Year and place	2014, Tirana
Short content	Tertiary volcanic rocks of the central (Maglaj, Teslić and Kolići) and northeast Bosnia (broad area of Srebrenica) belong to a volcanic formation of Oligocene shoshonitic and high-potassium calc-alkaline rocks. Examined rocks from both areas show similar mineralogy, and petrographic and geochemical characteristics. The rocks have holocrystalline to hypocrystalline porphyritic texture with phenocrysts of plagioclase, sanidine, biotite, quartz, hypersthene, hornblende and augite with variable composition and percentages. Volcanic rocks of central Bosnia are high-K calc-alkaline dacites and subordinate andesites, while rocks of the Northeast Bosnia form the differentiation series of basaltic andesite-andesite-dacite. Relatively increased content of incompatible elements in volcanic rocks of central Bosnia indicate that they are more evolved. The variations of most elements with respect to SiO_2 are consistent with the observed mineral fractionation, while the ratios of some diagnostic elements cannot be explained by crystal fractionation from a primary magma generated in the metasomatized mantle wedge. These ratios correspond to ascending magmas that continue to fractionate, and that in the meantime undergone changes in the composition with different levels of contamination and assimilation of continental crustal rocks (AFC processes). The reaction rims on phenocrysts of quartz (resorption textures) and reversed zoning in plagioclase and amphibole phenocrysts is indicatory of magma mixing of varying degrees of fractionation and their incomplete homogenization. The studied rocks represented in spider diagrams show enrichment of LIL elements relative to HFS elements and have prominent Ta-Nb, P and Ti negative anomalies, and positive U and Pb anomalies. Chondrite-normalized REE patterns show strong enrichment in light REE relative to heavy REE with $(La/Yb)_n$ ratio between 15.3 and 33.4. These geochemical characteristics are typical for subduction related high-K volcanic rocks and volcanic rocks generated in post collisional zones. Geochemical and geotectonic analyses of the rocks show that the rocks have common characteristics of volcanic rocks from volcanic arcs on the margins of continents (Andean type of subduction). The differences in composition of Oligocene volcanic rocks in central and northeast Bosnia arise from different compositions of sub-continental mantle, amount of partial melt and intensity of assimilation of the crustal rocks or thickness of the crust.
Comment	The abstract of the paper was reviewed by the International Scientific Committee and it was proposed to write a full paper.
Paper title	Babajić E., **Salkić Z.,** Babajić A., Stević M. & Jovović M.: **Qualitative characteristics of bauxite „Oštrelj" near Bosanska Krupa.**
Institution where the paper was prepared	Proceedings of the Technical Institute in Bijeljina; VI-No.10. DOI: 10.7251. Archives for Technical Sciences, pages 1-8.
Year and place	2014, Bijeljina
Short content	Qualitative characteristics of bauxite deposit „Oštrelj" are defined through extensive laboratory testing of chemical and mineralogical-petrographic composition, and geomechanical characteristics. Chemical composition has shown that it is a relative poor bauxite with low Al/Si module (2,28). Low values of Al/Si module are result of lower Al_2O_3 concentration (48 %), and higher SiO_2 concentration (21 %), what these bauxites define as high silicic or »acidic«. Identified are increased concentrations of larger number of analyzed trace elements (B, Co, Cr, Li, Mn, Ni, Sn, V, Zn) comparing to the medium content in the Earth's crust. Mineralogical composition, structure and texture are uniform. Holders of Al mineralization are bemite and diaspor (to a lesser extent) as crypto-crystalline phases of rock matrix. Lower Cretaceous age (K_1) of roof layers over bauxite deposit is paleontologicaly documented, while in the bauxite any fossils are not registrated. Values of geomechanical paramers of layers under and over bauxite is uniform. In bauxite value of compressive strength is

	increased, which is equivalent to chemical and mineralogical composition, and structural and textural characteristics of tested bauxite samples.
Comment	The paper was reviewed by the Editorial Board of the Archives of Technical Sciences.
Paper title	**Salkić Z.,** Babajić E., Babajić A., Pobrić V. & Bešić A.: **Petrogenesis of Maglaj volcanics, Central Bosnia.**
Institution were the paper was prepared	Proceedings of the Technical Institute in Bijeljina; VI-No.11. DOI: 10.7251. Archives for Technical Sciences str. 7-15.
Year and place	2014, Bijeljina
Short content	In the Bosnia and Herzegovina, Tertiary volcanic rocks occur within two geotectonically different areas: (1) in the northeastern Bosnia, the wider area of Srebrenica and, (2) to a lesser extent in central Bosna, the wider areas of Maglaj, Teslić and Nemila (Kolići). According to ascendent Fe-Mg minerals the analysed rocks can be determinated as: hornblende-biotite dacite, biotite dacite and biotite andesite. The major and trace element variations in the rocks surrounding Maglaj indicate their high-K calc-alkaline character, and are consistent with fractionation of the observed phenocryst assemblages (plagioclase, sanidine, biotite and hornblende). Certain scatter in some graphs cannot be explained by simple crystal fractionation from a common parent magma. More likely, such variations are effected by variable contribution and assimilation of continental crust within the magmas generated into the mantle. The presence of reverse zoned plagioclase phenocrysts as well as a resorbed rim enclosed the coexisting quartz phenocrysts can be interpreted by mixing of magmas with different temperatures and composition. All analysed rocks show enrichment of the LILE over the HFSE and have a significant negative Ta-Nb, P and Ti anomalies, and positive U and Pb anomalies, which are characteristics of subduction-related volcanic rocks generated in (post) collisional zones. Chondrite-normalized REE patterns exibit enrichment on the LREE over the HREE with $(La/Yb)_{cn}$ ranging from 21.4 to 21.9. All analysed rocks have a small negative Eu anomalies (Eu/Eu^{*}=0.86-0.89) which suggests that plagioklase fractionation played minor role in genesis of the dacites. High values LILE/HFSE ratios in K/Ti (6.6 to 11.9), K/Zr (124-169), K/Nb (1598-2692) and Ba/Nb (44-65) and negative anomalies of Ti and Nb in the volcanic rocks surrounding Maglaj can be considered as the result of complex processes in the magmatic system that was originally derived from mantle wedge.
Comment	The paper was reviewed by the Editorial Board of the Archives of Technical Sciences.
Paper title	Sijerčić, I., Dervišević, R., Isaković, H. & **Salkić, Z.: Rainfall-triggered landslides case study: Gradačac Municipality, Bosnia and Herzegovina.**
Institution were the paper was prepared	15th International Multidisciplinary Scientific Geoconference SGEM 2015, Science and Technologies in Geology, Exploration and Mining Conference Proceedings, Volume II, str. 595-602.
Year and place	2015, Albena, Bulgaria
Short content	Natural hazards, such as landslides and floods, caused by climate change have been recently more frequent in Bosnia and Herzegovina and the countries in the region. During the past two decades, at different time intervals, seasonal anomalies in temperatures and heavy rainfall have been recorded that go beyond the average value recorded in the past 120 years. In each subsequent period of increased rainfall the number of landslides increased as well, triggering the occurrence of new landslides and the reactivation of the old ones. Gradačac Municipality is a municipality in the north of Tuzla Canton (BiH) with a serious landslide hazard. Most urban and rural settlements in the municipality are situated on gentle to steep slopes susceptible to the occurrence of landslides. By 2014 over 400 landslides which accounted for more than 10% of the municipality territory were recorded in Gradačac Municipality, and in 2014 alone 368 landslides were registered that caused more severe economic losses to private and public property, psychological trauma in the population and the enormous damages that exceed the capabilities of the municipality and the wider community. In order to mitigate the landslide hazard in local communities, it is important to develop a strategy for planning and management both at local and national level, which requires significant financial resources.
Comment	The paper was reviewed by the International Scientific Council of SGEM.
Paper title	**Salkić, Z.** & Salihović, S.**: Correlation of modal and normative mineral composition of Tertiary volcanic rocks of Bosnia and Herzegovina.**
Institution were the paper was prepared	Proceedings of the I Congress of Geologists in Bosnia and Herzegovina with international participation; Association of Geologists of Bosnia and Herzegovina, ISSN 1840-4073.
Year and place	2015, Tuzla
Short content	Tertiary volcanic rocks of the wider Srebrenica area in northeastern Bosnia form a basaltic andesite-

andesite-dacite differentiation series, while the volcanic rocks of Kolići, Maglaj and Teslić, in central Bosnia, are mainly dacites and less frequently andesites. The rocks of both volcanic areas show similar mineralogical and petrographic characteristics. The rock texture is holocrystalline to hypocrystalline porphyritic with phenocrysts of plagioclase, sanidine, biotite and quartz with variable proportions. Some rocks from the Srebrenica area also contain hypersthene and amphibole, and to a lesser extent clinopyroxene.

Normative mineral composition of Tertiary volcanic rocks of Bosnia and Herzegovina, calculated by the CIPW method, includes quartz, albite, anorthite, orthoclase, corundum, diopside, hypersthene, ilmenite, magnetite and apatite and approximately corresponds to the modal composition. The rocks are characterized by a large amount of salic minerals; in central Bosnia 82.9-90.0 % and in northeastern Bosnia 68.6-89.9 %, and a relatively small amount of femic minerals (10.2-31.4 %).

Clear differences are observed between the volcanic rocks of central Bosnia and NE Bosnia: (1) dacites of central Bosnia do not contain normative diopside, and contain normative hypersthene to a relatively lesser extent; (2) volcanic rocks of northeastern Bosnia contain less normative K-feldspar and quartz and have a relatively higher content of normative plagioclase; (3) normative plagioclase in volcanic rocks of the wider Srebrenica area shows a compositional range from oligoclase to labradore (An_{24-60}), while plagioclases in the rocks of central Bosnia are mainly andesine (An_{29-41}).

In conclusion, according to the normative mineral composition, the volcanic rocks of central Bosnia belong to felsic rocks (dacites), rarely neutral ones (andesites). Volcanic rocks in the vicinity of Srebrenica, Bratunac and Ljubovija are represented almost equally by felsic (dacite) and neutral rocks, among which the dominant andesites can be singled out along with basaltic andesites and trachyandesites.

Comment: The paper was reviewed by the Organizing Committee of the 1st Congress of Geologists in BiH with international participation.

Selected publications and presentations

Publication name: **Tuzla Mineralogical and petrographic characteristics of the roof marls of the Banovići coal basin and the possibility of application in the cement industry**, master's thesis, Public Institution National/University Library, Tuzla

Author: Zehra Salkić

Publisher, year and place: RGGF, University of Tuzla, 2001

Short content: The subject of the master's thesis is the roof marl of the PK "Grivice" located in the northeastern part of the central Banovići basin and the "Čubrić" surface mine located in the southern part of the same basin.

X-ray examinations, differential-thermal and thermo-gravimetric analysis, as well as examinations in a polarizing microscope revealed that calcite and quartz are the most abundant minerals in all samples. Among clay minerals illite and kaolinite are the most abundant, followed by smectite, chlorite and mixed-layer clay minerals.

According to the ratio of carbonate and clay components, the following rock varieties can be distinguished: limestone, marly limestone, calcareous marl, marl and clayey marl. The diverse and variable mineralogical and petrographic composition of the roof marls of the Banovići coal basin is determined both by the influx of different materials and by complex dynamic depositional conditions.

The assessment of roof marls of the Banovići coal basin suitability for the production of Portland cement is based on the chemical composition of composite samples from the "Grivice" and "Čubrić" coal mines.

Tests have determined that the roof marls from the above-mentioned open pits, according to the values of KZ, SM, AM, T and K, are on the borderline for quality clinker. They can be used for the production of fast-setting cement, as well as for the production of Portland cement with correction for the silicate component. Specifically, in the cement industry in Lukavac, instead of slag and ash, clayey marls from PK “Grivice” could be used as a “low” component, whose chemical composition is closest to the chemical composition of FSL slag

Comment:

Publication name: **Petrology and geochemistry of Tertiary volcanic rocks in Bosnia and Herzegovina**, doctoral dissertation, UDC: 552.323:551(498.6), Public Library of the Republic of Bosnia and Herzegovina, Tuzla

Author: Zehra Salkić

Publisher, year and place: RGGF, University of Tuzla, 2005

Short content	Tertiary volcanic rocks of central (Kolići, Maglaj and Teslić) and northeastern Bosnia (wider surroundings of Srebrenica) belong to the volcanic formation of shoshonitic and high-potassium calc-alkaline rocks of Oligocene age, isolated within the Tertiary formations of igneous rocks that were successively formed between 55 and 29 Ma, related to the geodynamics of the collision of the African and Eurasian plates in the segment of the Dinaric orogen. The examined rocks from both areas show similar mineralogical-petrographic and geochemical characteristics. The rocks have a holocrystalline to hypocrystalline porphyry texture with phenocrysts of plagioclase, sanidine, biotite and quartz with variable composition and proportion. The volcanic rocks of central Bosnia are high-potassium calc-alkaline dacites and subordinately andesites, and according to the TAS and i K_2O-SiO_2 classification diagrams, they do not belong to the shoshonite series of rocks. The volcanic rocks of northeastern Bosnia form a differentiation series of basaltic andesite-andesite-dacite and belong to the high-potassium calcium-alkaline series of rocks. The relatively increased content of incompatible elements in the volcanic rocks of central Bosnia indicate their greater evolution. Variations of most elements versus SiO_2 are consistent with the fractionation of the observed minerals, while the ratios of some diagnostic elements cannot be explained solely by crystal fractionation of the primary magma generated in the metasomatized mantle wedge. Such ratios correspond to ascending magmas that continue fractionation and which in the meantime have experienced a change in composition with varying intensity of contamination and assimilation of rocks of the continental crust (AFC processes). The mixing of magmas of different degrees of fractionation and their incomplete homogenization is indicated by the reaction edge on the quartz phenocrysts, reverse zoning of plagioclase and amphibole phenocrysts. Geochemical geotectonic discrimination of the rocks shows that they have characteristics common to volcanic rocks from volcanic arcs on the edges of continents (Andean subduction type). Differences in the composition of Oligocene volcanic rocks in central and northeastern Bosnia arise from the different composition of the subcontinental mantle, the volume of partial melts and the intensity of assimilation of crustal rocks, i.e. the thickness of the crust. The outer mantle in central Bosnia, i.e. the Dinaric ophiolite zone, has a lower intensity of metasomatic enrichment, while the thickness of the crust is greater than in northeastern Bosnia.
Comment	
Publication name	**Application of geochemical data**, university textbook, 550.84(075.8), ISBN 978-9958-894-06-0, COBISS.BH-ID 18239790, CIP-National and University Library of BiH, Sarajevo
Author	Zehra Salkić
Publisher, year and place	RGGF, University of Tuzla, 2010, Tuzla
Short content	The textbook contains four chapters, 268 pages of text, 126 images, 31 tables and 349 references. Each of the four chapters is elaborated in detail through several subchapters that bring this subject closer to the reader. *The first chapter*, "Introductory Notes on Geochemical Data", defines the basic concepts of geochemical data, briefly explains the basic geological processes that affect the chemical composition of igneous, sedimentary and metamorphic rocks. A brief overview of the analytical methods that are widely used today to obtain geochemical data, their accuracy and precision, errors in quantitative analysis, as well as criteria for selecting a suitable analytical method is given. *In the second chapter* "Application of the main elements in geochemistry and other disciplines" various possibilities of application of the main elements in geochemistry and other disciplines are presented: 1) for the classification of rocks, 2) for the construction of variation diagrams and 3) as a means of comparison with the experimentally determined composition of rocks, whose formation conditions are known. *The third chapter*, "Application of Trace Elements in Geochemistry and Other Disciplines," discusses trace elements and how they can be used to obtain information about geological processes. The first part of this chapter presents some theories about the distribution of trace elements and explains the physical laws of the application of trace elements in modeling. The second part presents different methods of data presentation and interpretation and evaluates their relative values for identifying geochemical processes and testing hypotheses. The elements of rare earths and their significance in examining the genesis of rock masses and for clarifying petrological processes are specially treated. *The fourth chapter*, "Discrimination of tectonic environments using geochemical data," explains how the chemistry of major and trace elements can be used to determine the original tectonic environment in which some igneous and sedimentary rocks were formed.
Comment	Reviewer Dr.sc. Izet Kubat, Prof. Emeritus: "The university textbook "Application of Geochemical Data" fully meets the requirements of scientific and educational literature for the course "Application

of Geochemical Data".
The textbook material is systematically presented and is acceptable for students of the Geology Department of the Faculty of Mining, Geology and Civil Engineering, University of Tuzla, who are taking the course "Application of Geochemical Data" and the course "Geochemistry" in the third year of study.
" This textbook can also be useful as a handbook for geochemists, petrologists, mineralogists, geologists, chemists and physicists, and other interested parties interested in this issue, including students of natural sciences and other faculties where geological subjects are studied, as well as postgraduate students."

Publication name: **Tertiary volcanism in Bosnia and Herzegovina**, university textbook (scientific monograph), 552.313.(497.6)(075.8), ISBN 978-9958-894-26-8, COBISS.BH-ID 22229254, CIP-Catalogization in Publication National and University Library of Bosnia and Herzegovina, Sarajevo

Authori: Zehra Salkić

Publisher, year and place: RGGF, University of Tuzla, 2015, Tuzla

Short content: *The introduction* provides a review of older geological and petrographic literature. In general, it can be concluded that, due to the presence of polymetallic zinc-lead deposits, the Tertiary volcanic rocks of the Srebrenica metallogenetic region are significantly better investigated than the genetically related volcanic rocks of central Bosnia. In the *chapter "Basic geological and geotectonic characteristics of the wider area"*, the position and significance of the Tertiary volcanic rocks of central and northeastern Bosnia in the Dinarides are determined. Tertiary volcanic rocks are very widespread within the Dinarides, and are mostly represented in the Sava-Vardar suture zone (SVZ). Together with the spatially associated rocks of the Alpine granitoid formations, they mark the relics of the ancient magmatic arc (subduction zone) of the Dinaric part of the Tethys, or the later active continental margin (collision zone).
The third chapter, entitled "Local Geological Characteristics", describes in detail the geological characteristics of the surroundings of Teslić, Maglaj, Nemila (central Bosnia) and Srebrenica (northeastern Bosnia). The volcanic rocks of Srebrenica and central Bosnia are located in the northern segment of the central Dinarides.
In the fourth chapter, "Petrography and mineral composition of Tertiary volcanic rocks of BiH", the mineralogical-petrographic characteristics of the rocks are described in detail. The examined rocks from both areas show similar mineralogical-petrographic characteristics. The rocks have a holocrystalline to hypocrystalline porphyry texure with phenocrysts of plagioclase, sanidine, biotite and quartz with variable composition and proportion.
In the fifth chapter "Chemical composition of minerals of Tertiary volcanic rocks of Bosnia and Herzegovina", the results of the examination of the chemical composition of minerals using the method of electron microanalysis are presented and interpreted. The results of the examination of the chemical composition of minerals confirmed that among the ferromagnesian phenocrysts are: biotite of variable composition; amphibole of the composition of chermakite, pargasite and ferro-edenite; ferrohypersthene and hypersthene and subordinate clinopyroxene of the hedenbergite-diopside borderline composition.
In the sixth chapter "Geochemistry of Tertiary Volcanic Rocks of Bosnia and Herzegovina", based on the results of chemical analyses of rocks for major and trace elements, a classification and nomenclature of Tertiary volcanic rocks of Bosnia and Herzegovina was carried out. The volcanic rocks of central Bosnia are high-potassium calcium-alkaline dacites and, to a lesser extent, andesites, while the volcanic rocks of northeastern Bosnia form a differentiation series of basaltic andesite-andesite-dacite and belong to the high-potassium calcium-alkaline series of rocks.
The seventh chapter "Geotectonic Classification of Tertiary Volcanic Rocks of BiH" provides a geochemical geotectonic discrimination of rocks that shows that they have characteristics common to volcanic rocks from volcanic arcs on the edges of continents (Andean subduction type).
In the eighth chapter, entitled "Petrogenesis of Tertiary Volcanic Rocks of Bosnia and Herzegovina", based on all the results in the previous chapters, certain conclusions about the genesis of the rocks are drawn. The differences in the composition of Oligocene volcanic rocks in central and northeastern Bosnia arise from the different composition of the subcontinental mantle, the volume of partial melts and the intensity of assimilation of crustal rocks, i.e. the thickness of the crust. The outer mantle in central Bosnia, i.e. the Dinaric ophiolite zone, has a lower intensity of metasomatic enrichment, while the thickness of the crust is greater than in northeastern Bosnia.

Comment: Reviewer Senaid Salihović, full professor: Manuscript "Tertiary Volcanism in Bosnia and Herzegovina" authored by Ph.D. Zehre Salkić, associate professor at the Faculty of Mining, Geology and Civil Engineering of the University of Tuzla, provides a comprehensive overview of geochemistry, petrology and petrogenesis of Tertiary volcanic rocks in Bosnia and Herzegovina and in an acceptable way allows students an easier way to learn complex teaching material in the field of

petrology and geochemistry.The content of this scientific monograph has a synthetic character predominantly based on correctly used literary data and acquired experience, because it is obvious that the author of the manuscript has a good command of the issues she has dealt with and that she has many years of teaching experience.
Given that the reviewed work represents a type of scientific book that comprehensively and independently, methodologically adequately addresses a specific topic from the domain of petrology and geochemistry, and which, in addition to general criteria, contains a certain number of self-citations, I propose that the reviewed manuscript be published as a scientific monograph as part of the edition "Manualia universitatis studiorum Tuzlaensis".

Selected projects and presentations

Name	**Project of detailed geological investigations of dacites at the localities "Jandrošac", "Jelovac" and "Poljice" near Maglaj**
Authors	Salihović, S. & Salkić, Z.
Publisher, year and place	RGGF, Tuzla, 1997
Short content	Complex researches on dacite from the sites "Jandrošac", "Jelovac" and "Poljice" near Maglaj were carried out for the needs of the construction industry.
Comment	Project related to applied research
Name	**Elaborate on classification, categorization and calculation of limestone reserves of the "Orlova klisura" deposit near Srebrenik.**
Authors	Salihović, S. & Salkić, Z.
Publisher, year and place	RGGF, Tuzla, 1997
Short content	All necessary technical documentation has been completed for the purposes of exploiting construction stone from the "Orlova klisura" site.
Comment	Elaborate related to applied research
Name	**Project of detailed geological research of limestone at the "Hrastić" deposit near Stupari.**
Authors	Salihović, S. & Salkić, Z.
Publisher, year and place	RGGF, Tuzla, 1998
Short content	Complex limestone researches were carried out at the "Hrastić" deposit near Stupar, for the needs of the construction industry.
Comment	Project related to applied research
Name	**Project of detailed geological researches of limestone at the "Hrdar kosa" deposit near Stupari.**
Authors	Salihović, S. & Salkić, Z.
Publisher, year and place	RGGF, Tuzla, 1998
Short content	Complex limestone researches were conducted at the "Hrdar kosa" deposit near Stupari, for the needs of the construction industry.
Comment	Project related to applied research
Name	**Elaborate on classification, categorization and calculation of limestone reserves in the "Stupari" deposit near Kladanj.**
Authors	Salihović, S., Salkić, Z. & Babajić, E.
Publisher, year and place	RGGF, Tuzla, 1999
Short content	All necessary technical documentation has been completed for the purposes of exploitation of construction stone in the "Stupari" deposit near Kladanj.
Comment	Elaborate related to applied research
Name	**Study on the classification, categorization and calculation of limestone reserves at the "Hrastić" deposit near Stupari**
Authors	Salihović, S. & Salkić, Z.

Publisher, year and place	RGGF, Tuzla, 2000
Short content	All necessary technical documentation has been completed for the needs of exploitation of construction stone at the "Hrastić" deposit near Stupar.
Comment	Elaborate related to applied research

Name	**Elaborate on classification, categorization and calculation of brown coal reserves in the Banovići basin.**
Authors	Salihović, S., Salkić, Z., Žunić, N. & Redžepović, R.
Publisher, year and place	RGGF, Tuzla, 2000.
Short content	Project documentation has been prepared according to current standards for the needs of brown coal exploitation in the Banovići basin.
Comment	Elaborate related to applied research

Name	**Project of detailed geological research of limestone at the "Liskovac-Osoje" site, Cazin municipality**
Authors	Bencun, A., Stević, M., **Salkić, Z.,** Sabit, Z. and others
Publisher, year and place	"GEA" d.o.o. Tuzla, Society for Engineering, Design and Geological Research , November 2007.,Tuzla
Short content	Urađena je sva potrebna tehnička dokumentacija za potrebe eksploatacije krečnjaka na lokalitetu "Liskovac-Osoje", općina Cazin
Comment	Project related to applied research

Name	**Elaborate on classification, categorization and calculation of brick clay reserves of the deposit "Rapailo" near Rakovica; municipality of Ilidža; situation as of 12/31/2007..**
Authors	Bencun, A., Stević, M., **Salkić, Z.,** Sabit, Z. and others
Publisher, year and place	"GEA" d.o.o. Tuzla, Society for Engineering, Design and Geological Research , April 2008.,Tuzla
Short content	Project documentation has been prepared according to current standards for the exploitation of brick clays from the "Rapailo" deposit near Rakovica
Comment	Elaborate related to applied research

Name	**Project of detailed geological research of quartz sands at the site "Klašnice-Lovrino brdo", Sanski Most municipality**
Authors	Bencun, A., Stević, M., **Salkić, Z.,** Sabit, Z. and others
Publisher, year and place	"GEA" d.o.o. Society for Engineering, Design and Geological Research , August 2009.,Tuzla
Short content	Project documentation has been prepared according to current standards for the exploitation of quartz sand at the "Klašnice-Lovrino brdo" site, Sanski Most municipality.
Comment	Project related to applied research

Name	**Project of detailed geological investigations of limestone at the "Bubovo brdo" site near Čapljina**
Authors	Isaković, H., Stević, M., **Salkić, Z**., Dervišević, R., Sabit, Z., Softić, E. & Galešić, A.
Publisher, year and place	RGGF, University of Tuzla, September 2009., Tuzla
Short content	Complex limestone researches were caried out at the "Bubovo brdo" site near Čapljina, for the needs of the construction industry.
Comment	Project related to applied research

Name	**Elaborate on classification, categorization and calculation of dolomite reserves (as a technical and building stone) of the "Duboki Do" deposit near Rakovica; Ilidža municipality (Status as of 31.11.2009)**

Authors	Bencun, A., Stević, M., **Salkić, Z.,** Sabit, Z. and others
Publisher, year and place	"GEA" d.o.o. Tuzla, Society for Engineering, Design and Geological Research, December 2009.,Tuzla
Short content	Complex researches werw carried out on dolomite reserves (as a technical and construction stone) of the "Duboki Do" deposit near Rakovica, Ilidža municipality, for the needs of the construction industry.
Comment	Elaborate related to applied research

Name	**Elaborate on the classification, categorization and calculation of reserves of technical and construction limestone of the "Gradina" deposit; Srebrenik municipality (Status as of 30.06.2010)**
Authors	Bencun, A., Stević, M., **Salkić, Z.,** Sabit, Z. and others
Publisher, year and place	"GEA" d.o.o. Tuzla, Society for Engineering, Design and Geological Research, June 2010.,Tuzla
Short content	Complex limestone researches were conducted at the "Gradina" deposit in the Srebrenik municipality, for the needs of the construction industry.
Comment	Elaborate related to applied research

Name	**Project of detailed geological research of dolomite at the "Hatića njive" site near Cazin**
Authors	Isaković, H., Stević, M., **Salkić, Z**. and others
Publisher, year and place	RGGF, University of Tuzla, September 2010., Tuzla
Short content	Complex researches of dolomite reserves (as a technical-building stone) were carried out at the site of "Hatića njiva" near Cazin, for the needs of the construction industry.
Comment	Project related to applied research

Name	**Project of detailed geological research of limestone at the "Šarića brdo" site near Cazin**
Authors	Isaković, H., Stević, M., **Salkić, Z**. and others
Publisher, year and place	RGGF, University of Tuzla, September 2010.,Tuzla
Short content	All necessary technical documentation has been completed for the purposes of limestone exploitation at the "Šarića brdo" site near Cazin.
Comment	Project related to applied research

Recognitions and awards

Name	
Institution	
Occation (reason)	
Short description	
Comment	

Membership in professional associations

Name of the society / association	**Association of Geologists of Bosnia and Herzegovina**, Sarajevo
Short description of society / association	Association of Geologists was founded on 24.06.2004. at Muška Voda near Kladanj when 62 geologists from Bosnia and Herzegovina attended. The Association organizes conferences to promote the profession and expertise, exchange ideas, technologies, necessary critical thinking and establish standards. So far, it has organized 3 conferences: The First Conference in 2004 at Muška Voda near Kladanj, the Second Conference in 2006 in Teslić and the Third Conference in 2008 in Neum. Papers were presented at the conferences and Proceedings were printed. Since 2004, the

	Association of Geologists of BiH has been the 166th member of the International Union of Geological Sciences (IUGS), and since 2014 it has been a member of the Carpatho-Balkan Association of Geologists (CBGA).
Association address / web reference	Ilidža, Ustanička 11 E-mail: udruzenje.geologa.bih@gmail.com
Position in the association	**Member of the Management Board in 2013/2014**
Name of the society / association	**National Committee of the Carpatho-Balkan Geological Association for BiH (CBGA).**
Short description of society / association	National Committee of the Carpatho-Balkan Association of Geologists for BiH was formed in 2013 with the task of including the Association of Geologists of BiH in the CBGA. The Association of Geologists of BiH was admitted to the CBGA in 2013 and has been a member of the CBGA Council since then. For the first time, the National Committee of the CBGA for BiH attended the XX Congress of the CBGA on behalf of the Association of Geologists of BiH in 2014.
Association address / web reference	Submission@cbga2014.org
Position in the association	President
Comment	
Name of the society / associety	**Geotechnical Society of Bosnia and Herzegovina**, Tuzla
Short description of society / association	The society was founded at the Faculty of Mining, Geology and Civil Engineering in Tuzla in 2008. It deals with the improvement of geotechnics, organizes professional seminars, publishes professional literature, and cooperates with state and other organizations and professional associations abroad.
Association address / web reference	Univerzitetska 2, Tuzla; geotehnika@untz.ba
Position in the association	Member
Comment	

Participation in the educational process

As an assistant / senior assistant	Geochemistry, Metallogeny, Special petrography, Special mineralogy, Optics of petrogenic minerals, Optics of ore minerals, Mineralogy and petrography, Minerals of Bosnia and Herzegovina, Mineralogy, Crystallography with mineralogy University of Tuzla, undergraduate study, 1996-2006 University of Zenica, undergraduate study, 1999-2005
As an assistant professor	Geochemistry, Metallogeny, Petrology of igneous and metamorphic rocks, Sedimentology, Isotopic geochemistry in the examination of rocks and minerals, Application of geochemical data, Methods of examination of rocks and minerals (postgraduate study), Petrology of rocks of Bosnia and Herzegovina (postgraduate study). University of Tuzla, undergraduate and postgraduate studies, 2006-present.
As an associate professor	Basic geology, mineralogy and petrography, Basics of geology and petrology, Geochemistry, Applied geochemistry, Geochemistry of hydrocarbons, Metallogeny, Petrology of rocks of BiH (postgraduate study). University of Tuzla, undergraduate and postgraduate studies, 2011-present.
As a full professor	
Other	

Mentorships in the preparation of Master's and Doctoral theses

Master theses

1. Babajić Alisa: Correlation of structural-textural and geochemical characteristics of diabases in the Banovići area; Faculty of Mining, Geology and Civil Engineering in Tuzla, October 2010.
2. Prelić,Marko: Petrological and geochemical characteristics of carbonate rocks on the open pit mine "Stupari;" Faculty of Mining, Geology and Civil Engineering in Tuzla, March 2025.

Doctoral dissertations

Research projects and studies

Finished projects

1) Trubelja, F., Lugović,B., Salihović, S., Burgath, K.P., Narchig, V. & **Salkić, Z.: „Petrology, geochemistry and geotectonic position of igneous rocks of Bosnia and Herzegovina"**. **International project (Project collaborator)**. Funded by the Academy of Sciences and Arts, Sarajevo, 2001-2004.

2) **Salkić, Z.,** Lugović, B., Babajić, E., Šegvić,B. & Babajić, A.: **"Tectonomagmatic characteristics of the Krivaja-Konjuški and surrounding northwestern ophiolite complexes". International project (project leader).** Financed by the Federal Ministry of Science and Culture; amount 26,900 KM, Sarajevo, 2007-2009.

3) Lugović, B., Slovenec, D., Miletić, D., Šegvić, B., Altherr, R., **Salkić, Z**. & Babajić, E.: **"Tectonomagmatic correlation of fragmented oceanic lithosphere in the Dinarides" (Project collaborator).** Funded by the Ministry of Science, Education and Sports. Zagreb, 2008-2011.

Ongoing projects

Planned projects (expected, in preparation)

Personal skills and competencies

Native language: **Bosanian**

Other languages

	Understanding		Speaking		Writting
	Listening	Reading	Interaction	Speaking	
English language	C1	C1	B2	B2	C1
Russian language	C1	C2	B2	B2	C1

Scientific, professional and social competencies

Competencies for leading scientific research and teaching in higher education: Participation and management of domestic and international scientific research projects and experience in the teaching process in higher education.

Competencies for participation in scientific research projects: Participation in applied research and participation and management of domestic and international scientific research projects.

Scientific and research interest (occupation) and current training: Natural geological disciplines.

Application of optical and chemical testing methods as well as application of geochemical data in the research of rocks and minerals and solving various geological processes, examination of tectonomagmatic features of the Krivaja-Konjuški and surrounding northwestern ophiolite complexes.

Planned professional development: Application of optical testing methods, geochemical data and isotopic geochemistry in the research of rocks and minerals in BiH.

Social skills and competencies

Organizational slills and competencies: Team work with older and younger colleagues and students.

Techical skills and competencie: Preparation of thin sections for optical research; work with binocular, polarizing and ore microscopes

	to identify rocks and minerals; ability to collect, present and interpret mineralogical-petrographic and geochemical data.
Computer skills and competencies	Windows, *Office* (Word, Excel, Power Point), *Corel, professional software.*
Artistic skills and competences	Playing the defo, folklore.

Other information

Documentation attachments	All documentation on previous education and training, formal education, as well as work experience and career progression is located in the personal file at the University of Tuzla.