

Name of teacher:	Barbara Karleuša
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Employed at: Since:	Faculty of Civil Engineering in Rijeka 02.07.1997.
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Academic rank: Since: In:	Full professor, permanent 19.07.2022. Technical sciences, civil engineering, water management and hydraulic engineering
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e-mail address, web page	barbara.karleusa@uniri.hr ; https://portal.uniri.hr/Portfolio/1383
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Knowledge of foreign languages:	English, italian
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Qualifications	- date of birth, nationality: 02.05.1973., Croatian and Italian - First degree obtained at: Faculty of Civil Engineering in Rijeka - Ph.D. degree obtained at: Faculty of Civil Engineering in Zagreb - additional education: - - previous employments: -
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List of papers published in scientific journals	- Sušanĳ Čule, Ivana; Ožanić, Nevenka; Volf, Goran; Karleuša, Barbara: <i>Artificial Neural Network (ANN) Water-Level Prediction Model as a Tool for the Sustainable Management of the Vrana Lake (Croatia) Water Supply System</i> // Sustainability, 17 (2025), 2; 722-19. doi: 10.3390/su17020722 - Horvat, Bojana; Karleuša, Barbara: <i>Conceptual Model for Integrated Meso-Scale Fire Risk Assessment in the Coastal Catchments in Croatia</i> // Remote sensing, 16 (2024), 12; 2118-33. doi: 10.3390/rs16122118 - Ćosić-Flajsig, Gorana; Karleuša, Barbara; Vučković, Ivan: <i>Unaprjeđenje monitoringa kakvoće površinskih voda u ruralnim zaštićenim područjima</i> // Hrvatske Vode, 32 (2024), 129; 199-210 - Ćosić-Flajsig, Gorana ; Karleuša, Barbara ; Vučković, Ivan ; Glavan, Matjaž: <i>Significance of Hydromorphological and Sediment Analysis in River Basin Water Quality Management</i> // Environmental sciences proceedings, 21 (2022), 1; 14, 9. doi: 10.3390/environsciproc2022021014 - Ćosić-Flajsig, Gorana; Karleuša, Barbara; Glavan, Matjaž: <i>Integrated Water Quality Management Model for the Rural Transboundary River Basin—A Case Study of the Sutla/Sotla River</i> // Water, 13 (2021), 18; 2569, 27. doi: 10.3390/w13182569 - Ištoka Otković, Irena; Karleuša, Barbara; Deluka- Tibljaš, Aleksandra; Šurdonja, Sanja; Marušić, Mario: <i>Combining Traffic Microsimulation Modeling and Multi-Criteria Analysis for Sustainable Spatial- Traffic Planning</i> // Land (Basel), 10 (2021), 7; 666, 26. doi: 10.3390/land10070666 - Ćosić-Flajsig, Gorana; Vučković, Ivan; Karleuša, Barbara: <i>An Innovative Holistic Approach to an E-flow Assessment Model</i> // Civil engineering journal, 6 (2020), 11; 2188-2202. doi: 10.28991/cej-2020-03091611 - Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka; Kisić, Ivica: <i>Effect of Source-Varying Input Data on Erosion Potential Model Performance</i> // Geocarto International, 34 (2019), 10; 1109-1122. doi: 10.1080/10106049.2018.1474273
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	- Karleuša, Barbara; Hajdinger, Andreja; Tadić, Lidija: <i>The application of multi-criteria analysis methods for the determination of priorities in the implementation of irrigation plans</i> // Water, 11 (2019), 3; 501, 20. doi: 10.3390/w11030501 - Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka: <i>Different Approaches to Estimation of Drainage Density and Their Effect on the Erosion Potential Method</i> // Water, 11 (2019), 3; 593, 14. doi: 10.3390/w11030593 - Sušan, Ivana; Ožanić, Nevenka; Karleuša, Barbara: <i>Metodologija za implementaciju hidrološkog modela otjecanja na malim slivovima</i> // Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 70 (2018), 4; 325-335. doi: 10.14256/JCE.2163.2017 - Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka: <i>Modification of erosion potential method using climate and land cover parameters</i> // Geomatics Natural Hazards & Risk, 9 (2018), 1; 1085-1105. doi: 10.1080/19475705.2018.1496483 - Karleuša, Barbara ; Rubinić, Josip ; Radišić, Maja ; Krvavica, Nino: <i>Analysis of Climate Change Impact on Water Supply in Northern Istria (Croatia)</i> // Tehnički vjesnik = Technical gazette, 25 (2018), Supplement 2; 366-374. doi: 10.17559/TV-20170809140304 - Kanakoudis, Vasilis; Papadopoulou, Anastasia; Tsitsifli, Stavroula; Čencur Curk, Barbara; Karleuša, Barbara; Matić, Branislava; Altran, Enrico; Banovec, Primož: <i>Policy recommendation for drinking water supply cross-border networking in the Adriatic region</i> // Journal of water supply: research and technology. AQUA, 66 (2017), 7; 489-508. doi: 10.2166/aqua.2017.079 - Kanakoudis, Vasilis; Tsitsifli, Stavroula; Papadopoulou, Anastasia; Cencur Curk, Barbara; Karleuša, Barbara: <i>Water resources vulnerability assessment in the Adriatic Sea region: the case of Corfu Island</i> // Environmental science and pollution research, 24 (2017), 25; 20173-20186. doi: 10.1007/s11356-017-9732-8 - Čosić Flajsig, Gorana; Karleuša, Barbara; Vučković, Ivan; Glavan, Matjaž: <i>Analysis of the eutrophication factors in the Sutla river basin</i> // Acta hydrologica Slovaca, 18 (2017), 2; 290-300 - Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka: <i>Erosion Potential Method (Gavrilović Method) Sensitivity Analysis</i> // Soil and Water Research, 12 (2017), 1; 51-59. doi: 10.17221/27/2016-SWR - Čosić Flajsig, Gorana; Belaj, Miljenko; Karleuša, Barbara: <i>Combined approach to surface water management / Upravljanje površinskim vodama primjenom kombiniranog pristupa</i> // Građevinar: časopis Hrvatskog saveza građevinskih inženjera, 8 (2017), 617-631. doi: 10.14256/JCE.2063.2017 - Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka: <i>A review of the Gavrilović method (Erosion Potential Method) application / Pregled primjene Gavrilovićeve metode (metoda potencijala erozije)</i> // Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 68 (2016), 9; 715-725. doi: 10.14256/JCE.1602.2016 - Karleuša, Barbara; Ožanić, Nevenka; Deluka-Tibljaš, Aleksandra: <i>Improving decision making in defining priorities for implementation of irrigation plans using AHP methodology</i> // Tehnički vjesnik = Technical gazette, 21 (2014), 3; 673-680 - Dragičević, Nevena; Karleuša, Barbara; Ožanić, Nevenka: <i>Upravljanje bujičnim slivovima i zaštita od bujičnih poplava</i> // Zbornik radova (Građevinski fakultet Sveučilišta u Rijeci), Knjiga XVII (2014), 69-91. doi: Upravljanje bujičnim slivovima i zaštita od bujičnih poplava - Deluka-Tibljaš, Aleksandra; Karleuša, Barbara; Dragičević, Nevena: <i>Pregled primjene metoda višekriterijske analize pri donošenju odluka o prometnoj infrastrukturi / Review of multicriteria-analysis methods application in decision</i>
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	<i>making about transport infrastructure</i> // Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 65 (2013), 7; 619-631. doi: 10.14256/JCE.850.2013 - Dragičević, Nevena; Karleuša, Barbara; Lalić, Morana; Krpan, Ljudevit; Skala, Zoran: <i>Gospodarenje vodama u cilju osiguranja samoodrživosti otoka</i> // Zbornik radova (Građevinski fakultet Sveučilišta u Rijeci), XV (2012), 99-123 - Deluka-Tibljaš, Aleksandra; Karleuša, Barbara; Benac, Čedomir: <i>AHP methodology application in garage-parking facility location selection</i> // Promet, 23 (2011), 4; 303-313 - Karleuša, Barbara; Beraković, Boris; Rajčić, Vlatka: <i>Ekspertni sustav za ocjenu uspješnosti planiranja u gospodarenju vodama</i> // Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 62 (2010), 1; 1-11 - Karleuša, Barbara; Arbanas, Željko; Rubinić, Josip: <i>Sedimentacijski procesi u akvatorijima luka smještenih na ušćima rijeka</i> // Pomorski zbornik, 46 (2010), 39-50 - Dragičević, Nevena; Karleuša, Barbara; Klobučar, Nives; Cuculić, Zlatan; Sergio, Davor: <i>Pregled novih tehnologija i materijala u kućnim hidroinstalacijama</i> // Zbornik radova (Građevinski fakultet Sveučilišta u Rijeci), 12 (2009), 11-34 - Karleuša, Barbara; Žic, Elvis; Prpić, Silvija: <i>Stanje i mogućnosti zbrinjavanja otpadnih voda malih naselja u Hrvatskoj</i> // Zbornik radova (Građevinski fakultet Sveučilišta u Rijeci), 11 (2008), 55-79 - Tadić, Lidija; Ožanić, Nevenka; Tadić, Zdenko; Karleuša, Barbara; Đuroković, Zoran: <i>Razlike u pristupima izradi planova navodnjavanja u području kontinentalnog i priobalnog dijela Hrvatske</i> // Hrvatske Vode, 15 (2007), 60; 201-212 - Poletan Jugović, Tanja; Baričević, Hrvoje; Karleuša, Barbara: <i>Multicriteria optimisation of the paneuropean corridor Vb competitiveness</i> // Promet, 18 (2006), 3; 189-195-x - Benac, Čedomir; Rubinić, Josip; Karleuša, Barbara; Jardas, Branka; Oštrić, Maja: <i>Changes of Hydrogeological Conditions Provoked by Construction in the Coastal Zone of Rijeka</i> // RMZ - materials and geoenvironment, 50 (2003), 1; 21-24 - Karleuša, Barbara; Beraković, Boris; Ožanić, Nevenka: <i>Primjena ELECTRE TRI metode na izbor varijante navodnjavanja</i> // Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 57 (2005), 1; 21-28
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List of publications which serve as a proof of teaching qualifications	In addition to papers related to water management and the application of modern approaches, methods and tools published in scientific and research journals (list given above), here is the list of publications from conferences that are related to the above topic that serve as proof teaching qualifications: - Ćosić-Flajsig, Gorana; Karleuša, Barbara; Glavan, Matjaž: <i>Green infrastructure and agro-environmental measures for water quality management at the river basin scale</i> // 12th World Congress of EWRA2023: Managing Water-Energy-Land-Food under Climatic, Environmental and Social Instability - Proceedings / Loukas, Athanasios; Vangelis, Harris; Tigkas, Dimitris et al. (ur.). Thessaloniki, Greece: European Water Resources Association-EWRA, 2023, 331-332 - Matić, Branislava B.; Karleuša, Barbara: <i>Retain for resilience: Natural water retention measures contribution to hydro-meteorological hazards risk reduction at the river basin level</i> // 12th World Congress of EWRA 2023: Managing Water-Energy-Land-Food under Climatic, Environmental and Social Instability - Proceedings / Loukas, Athanasios; Vangelis, Harris; Tigkas, Dimitris et al. (ur.). Thessaloniki, Greece: EWRA, 2023. str. 83-84
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	- Čosić-Flajsig, Gorana; Karleuša, Barbara; Glavan, Matjaž: <i>Cjelovito upravljanje kakvoćom voda ruralnoga riječnog sliva</i> // 8. hrvatska konferencija o vodama: Hrvatske vode u proizvodnji hrane i energije: zbornik radova / Biondić, Danko; Holjević, Danko; Vizner, Marija (ur.). Zagreb: Hrvatske vode, 2023. str. 1077-1085 - Šperac, Marija; Karleuša, Barbara; Bilić, Marta Marija: <i>Primjena AHP metode na odabir uređaja za pročišćavanje otpadnih voda</i> // 8. hrvatska konferencija o vodama „Hrvatske vode u proizvodnji hrane i energije“: zbornik radova / Biondić, Danko; Holjević, Danko; Vizner, Marija (ur.). Zagreb: Hrvatske vode, 2023. str. 871-878 - Čosić-Flajsig, Gorana ; Karleuša, Barbara: Vučković, Ivan: <i>Analiza značaja upravljanja sedimentom na primjeru rijeke Suttle</i> // Okrugli stol s međunarodnim sudjelovanjem, Nanos u vodnim sustavima – stanje i trendovi. Varaždin: MIODIO d.o.o. Rijeka, 2020. str. 37-48 - Čosić - Flajsig, Gorana; Glavan, Matjaž; Karleuša, Barbara: <i>Integrated water quality management model for rural cross-border river basin: The Sotla/Sutla river</i> // SWAT 2019: book of abstracts. Beč: Texas Agrilife Research, 2019. str. 76-76 - Čosić-Flajsig, Gorana ; Vučković, Ivan ; Karleuša, Barbara: <i>Usluge ekosustava u integralnom upravljanju vodama</i> // Hrvatske vode u zaštiti okoliša i prirode : zbornik radova 7. hrvatske konferencije o vodama / Biondić, Danilo; Holjević, Danko; Vizner, Marija (ur.). Zagreb: Hrvatske vode, 2019. str. 1177-1186 - Cibilić, Alan ; Barbalić, Darko ; Rubinić, Josip ; Karleuša, Barbara ; Krvavica, Nino: <i>Upravljanje rizicima od poplava uslijed jakih oborina - projekt RAINMAN</i> // Hrvatske vode u zaštiti okoliša i prirode : zbornik radova 7. hrvatske konferencije o vodama / Biondić, Danilo; Holjević, Danko; Vizner, Marija (ur.). Zagreb: Hrvatske vode, 2019. str. 85-91 - Karleuša, Barbara ; Hajdinger, Andreja ; Tadić, Lidija: <i>Use of multicriteria analysis method DEXi to define priorities in implementation of irrigation plans</i> // e-Proceeding of the 3rd EWAS International Conference "Insights on the Water-Energy-Food Nexus" 27-30.06.2018. Lefkada Island, Greece. Volos: University of Thessaly, 2018. str. 764-773 - Karleuša, Barbara ; Matić, Branislava: <i>Legislative framework for drinking water (re)sources monitoring in the Adriatic region</i> // 10th World Congress on Water Resources and Environment "Panta Rhei" Proceedings. Atena: EWRA, 2017. str. 2043-2049 - Karleuša, Barbara; Dragičević, Nevena: <i>Primjena višekriterijske analize u planiranju i upravljanju akumulacijama</i> // Upravljanje jezerima i akumulacijama u Hrvatskoj. Rijeka: Hrvatsko društvo za zaštitu voda, 2017. str. 137-143 - Karleuša, Barbara ; Rubinić, Josip ; Radman, Ivana ; Volf, Goran ; Krvavica, Nino: <i>Cross-Border Water Resources Management in Present Conditions and for Future Scenarios</i> // International Symposium Cross-border drinking water management : proceedings. Rijeka, 2016. str. 59-90 - Kanakoudis, V. ; Papadopoulou, A. ; Tsitsifli, S. ; Altran, E.; Cencur Curk, B.; Karleuša, B.; Matic, B., Banovec, P.: <i>Drinkadria Project: from an idea to policy recommendation – A common approach development, towards water resources management and supply, across Adriatic Sea countries</i> // Proceedings of 9th World Congress, EWRA 2015 "Water Resources Management in a Changing World: Challenges and Opportunities". 2015 - Čosić-Flajsig, Gorana; Karleuša, Barbara: <i>Inovativni pristup upravljanja kakvoćom voda ruralnih slivova</i> // Zbornik radova 6. hrvatske konferencije o vodama: Hrvatske vode na investicijskom valu. Opatija: Hrvatske vode, 2015. str. 259-268
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Leader of the following research projects	- Since 2024. leader of UNIRI scientific project <i>Implementing innovative methodologies, technologies and tools to ensure sustainable water management</i> (uniri-iskusni-tehnic-23-67) - 2019.–2024. leader of UNIRI scientific project <i>Implementation of innovative methodologies, approaches and tools for sustainable river basin management</i> (UNIRI-TEHNIC-18-129), - 2018.-2022. leader on Faculty of Civil Engineering in Rijeka of ERASMUS+ project SWARM - 2013.-2018. leader of UNIRI scientific project <i>Development of new methodologies in water and soil management in karst, sensitive and protected areas</i> (13.05.1.3.08) - 2013.-2016. leader on Faculty of Civil Engineering in Rijeka of research project DRINKADRIA, leader of one WP, IPA Adriatic CBC 2007–2013
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Participant in the following research projects	- since 2024. UNIRI scientific project <i>Hydrology of water resources and risk identification of consequences of climate changes in karst areas</i> (uniri-iskusni-tehnic-23-74) - 2024.-2026. INTERREG project CRESCO - 2024.-2025. ZIP-UNIRI-1500-2-22 scientific project <i>Development of the methodology for the condition evaluation, protection and revitalization on small urban water resources</i> - 2019.–2024., UNIRI scientific project <i>Hydrology of water resources and identification of flood and mudflow risks in karst areas</i> (UNIRI-TEHNIC-18-54) - 2018.-2022., HRZZ project <i>Impact of open fires on the quality of soil and water</i> - 2018.-2019. as external collaborator to INTERREG Central Europe project RAINMAN - 2009.-2014. bilateral research Croatian-Japanese scientific project <i>Risk Identification and Land-Use Planning for Disaster, Mitigation of Landslides and Floods in Croatia</i>, SATREPS, Japan Agency for Science and Technology-JST i Japan International Cooperation Agency-JICA, MZOS RH - 2007.-2014. scientific project <i>Hydrology of sensitive water resources in karst areas</i> (114-0982709-2549), MZOŠ RH - 1997.-2006. scientific project <i>Scientific foundations for irrigation in Croatia</i> (br. 114003), MZTI RH
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Supervision of PhD theses	3
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Examination of PhD theses	7
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