

Name of teacher:	Goran Volf
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Employed at: Since:	Faculty of Civil Engineering, University of Rijeka 15.11.2006.
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Academic rank: Since: In:	Associate Professor 23.12.2021. Hydraulic Engineering (Sanitary Engineering), Technical Sciences
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e-mail address, web page	<a href="mailto:goran.volf@uniri.hr">goran.volf@uniri.hr</a> , <a href="https://portal.uniri.hr/Portfelj/921">https://portal.uniri.hr/Portfelj/921</a>
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Knowledge of foreign languages:	English, Slovenian
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Qualifications	<ul style="list-style-type: none"> <li>- date of birth, nationality: 15.11.1982., Croatian</li> <li>- First degree obtained at: Faculty of Civil Engineering, University of Rijeka, graduated in 2006</li> <li>- Ph.D. degree obtained at: Faculty of Civil Engineering, University of Rijeka, PhD in 2012</li> <li>- additional education: Workshops, Training courses, Training programmes (Please see: <a href="https://portal.uniri.hr/Portfelj/921">https://portal.uniri.hr/Portfelj/921</a>)</li> <li>- previous employments: -</li> </ul>
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List of papers published in scientific journals	<p>[1] Sušanĳ Čule, Ivana; Ožanić, Nevenka; Volf, Goran; Karleuša, Barbara. <b>Artificial Neural Network (ANN) Water-Level Prediction Model as a Tool for the Sustainable Management of the Vrana Lake (Croatia) Water Supply System</b> // Sustainability, 17 (2025), 2; 722-19. doi: 10.3390/su17020722</p> <p>[2] Volf, Goran; Sušanĳ Čule, Ivana; Zorko, Sonja. <b>Influence of the physiochemical parameters on the occurrence of E. coli bacteria in a small and shallow reservoir</b> // Journal of water and health, 22 (2024), 11; 2206-2217. doi: 10.2166/wh.2024.394</p> <p>[3] Košuta, Mauro; Volf, Goran. <b>Comparison of Flow Calculations using the Population Load Coefficient Method and Population Distribution by Individual Sections of the Water Supply Network</b> // Zbornik radova (Građevinski fakultet Sveučilišta u Rijeci), 27 (2024), 11-24. doi: <a href="https://doi.org/10.32762/zr.27.1.1">https://doi.org/10.32762/zr.27.1.1</a></p> <p>[4] Volf, Goran; Žutinić, Petar; Gligora Udovič, Marija; Kulaš, Antonija; Mustafić, Perica. <b>Model of Chlorophyll-a for the Butoniga reservoir in Istria</b> // Hrvatske Vode, 31 (2023), 125; 207-216</p> <p>[5] Volf, Goran; Krbavčić, Morana; Sušanĳ Čule, Ivana; Zorko, Sonja. <b>Prediction models for manganese, iron and ammonium in raw water for a drinking water treatment plant Butoniga (Croatia)</b> // Engineering review (Technical Faculty University of Rijeka), 43 (2023), 3; 68-80. doi: 10.30765/er.2232</p> <p>[6] Volf, Goran; Žutinić, Petar; Gligora Udovič, Marija; Kulaš, Antonija; Mustafić, Perica. <b>Describing and simulating phytoplankton of a small and shallow reservoir using decision trees and rule-based models</b> // Environmental monitoring and assessment, 195 (2023), 4; 508, 20. doi: 10.1007/s10661-023-11060-9</p> <p>[7] Volf, Goran; Sušanĳ Čule, Ivana; Žic, Elvis; Zorko, Sonja. <b>Water Quality Index Prediction for Improvement of Treatment Processes on Drinking Water Treatment Plant</b> // Sustainability, 14 (2022), 18; 11481, 16. doi: 10.3390/su141811481</p> <p>[8] Kolar, Ines; Volf, Goran; Žic, Elvis. <b>Hydraulic analysis of different cross sections and channel covering types</b> // Zbornik radova (Građevinski fakultet Sveučilišta u Rijeci), 21 (2018), 1; 193-207. doi: 10.32762/zr.21.1.12</p> <p>[9] Volf, Goran; Atanasova, Nataša; Škerjanec, Mateja; Ožanić, Nevenka.</p>
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	<p><b>Hybrid modeling approach for the northern Adriatic watershed management</b> // Science of the total environment, 635 (2018), C; 353-363 doi:10.1016/j.scitotenv.2018.04.094 [10] Volf, Goran; Žic, Elvis; Ožanić, Nevenka.</p> <p><b>Prediction of groundwater level fluctuations on grohovo landslide using rule based regression</b> // Engineering review, 38 (2018), 1; 51-61 [11] Volf, Goran; Atanasova, Nataša.</p> <p><b>Performance assessment of wastewater treatment plant with machine learning tools</b> // Zbornik radova Građevinskog fakulteta Sveučilišta u Rijeci, 19 (2016), 1; 25-36 [12] Volf, Goran; Atanasova, Nataša; Kompare, Boris; Precali, Robert; Ožanić, Nevenka.</p> <p><b>Study of the impact of TIN/PO4 ratio on mucilage formation in the northern Adriatic using regression trees</b> // Acta Adriatica, 56 (2015), 2; 207-222 [13] Volf, Goran; Kompare, Boris; Ožanić, Nevenka.</p> <p><b>Use of machine learning for determining phytoplankton dynamic on station RV001 in front of Rovinj (northern Adriatic)</b> // Engineering review : znanstveni časopis za nove tehnologije u strojarstvu, brodogradnji i elektrotehnici, 34 (2014), 181-187 [14] Volf, Goran; Atanasova, Nataša; Kompare, Boris; Ožanić, Nevenka.</p> <p><b>Modeling nutrient loads to the northern Adriatic</b> // Journal of hydrology, 504 (2013), 182-193 doi:10.1016/j.jhydrol.2013.09.044 [15] Volf, Goran; Kompare, Boris; Ožanić, Nevenka.</p> <p><b>Relating nutrient ratios to mucilage events in northern Adriatic</b> // Engineering review : znanstveni časopis za nove tehnologije u strojarstvu, brodogradnji i elektrotehnici, 33 (2013), 3; 193-202 [16] Volf, Goran; Atanasova, Nataša; Kompare, Boris; Precali, Robert; Ožanić, Nevenka.</p> <p><b>Descriptive and prediction models of phytoplankton dynamic in NA // Ecological modelling</b>, 222 (2011), 14; 2502-2511 doi:10.1016/j.ecolmodel.2011.02.013 [17] Wölfel, Helena; Volf, Goran; Rubinić, Josip.</p> <p><b>Model analysis of rainwater irrigation on Adriatic islands</b> // Zbornik radova Građevinskoga fakulteta Sveučilišta u Rijeci, 12 (2010), 1; 113-130 [18] Mijalić, Marin; Volf, Goran; Ožanić, Nevenka.</p> <p><b>Determination of runoff hydrogram using HEC-HMS application</b> // Zbornik radova Građevinskog fakulteta Sveučilišta u Rijeci, 12 (2009), 55-85 [19] Žic, Elvis; Volf, Goran; Obradović, Duško.</p> <p><b>Influence of oscillations of water masses in the water reservoir on the hydraulic losses in the gravitational and pressure water supply systems</b> // Zbornik radova Građevinskog fakulteta Sveučilišta u Rijeci, 12 (2009), 125-148 [20] Hinić, Višnja; Rubinić, Josip; Vučković, Ivan; Ružić, Igor; Gržetić, Ana; Volf, Goran; Ljubotina, M.; Kvas, Nena.</p> <p><b>Analysis of interrelation between water quality and hydrologic conditions on a small karst catchment area of sinking watercourse Truhovica</b> // Earth and Environmental Science, Volume 4, 2008 (2009), 012021; 1-8 doi:10.1088/1755-1307/4/1/012021</p>
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<p>List of publications which serve as a proof of teaching qualifications</p>	<p>[1] Sušanji Čule, Ivana; Ožanić, Nevenka; Volf, Goran; Karleuša, Barbara. <b>Artificial Neural Network (ANN) Water-Level Prediction Model as a Tool for the Sustainable Management of the Vrana Lake (Croatia) Water Supply System</b> // Sustainability, 17 (2025), 2; 722-19. doi: 10.3390/su17020722</p> <p>[2] Volf, Goran; Sušanji Čule, Ivana; Zorko, Sonja. <b>Influence of the physiochemical parameters on the occurrence of E. coli bacteria in a small and shallow reservoir</b> // Journal of water and health, 22 (2024), 11; 2206-2217. doi: 10.2166/wh.2024.394</p> <p>[3] Volf, Goran; Krajcar, David; Zorko, Sonja. <b>Energy consumption and idle energy compensation on drinking water treatment facility Butoniga</b> // Symposium proceedings of 18th International Symposium Water Management &amp; Hydraulic Engineering (WMHE 2024) / Červeňanská, Michaela; Šoltész, Andrej ; Baroková, Dana et al. (ur.). Bratislava: Slovak University of Technology in Bratislava, 2024. str. 308-316</p>
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- [4] Volf, Goran; Sušanĳ Čule, Ivana; Źic, Elvis; Zorko, Sonja.  
**Prediction of E. coli bacteria on drinking water treatment facility Butoniga** // Symposium proceedings of 18th International Symposium Water Management & Hydraulic Engineering (WMHE 2024) / Červeňanská, Michaela ; Šoltész, Andrej ; Baroková, Dana et al. (ur.). Bratislava: Slovak University of Technology in Bratislava, 2024. str. 299-307
- [5] Volf, Goran; Źutinić, Petar; Gligora Udović, Marija; Kulaš, Antonija; Mustafić, Perica.  
**Model of Chlorophyll-a for the Butoniga reservoir in Istria** // Hrvatske Vode, 31 (2023), 125; 207-216
- [6] Volf, Goran; Krbavčić, Morana; Sušanĳ Čule, Ivana; Zorko, Sonja.  
**Prediction models for manganese, iron and ammonium in raw water for a drinking water treatment plant Butoniga (Croatia)** // Engineering review (Technical Faculty University of Rijeka), 43 (2023), 3; 68-80. doi: 10.30765/er.2232
- [7] Volf, Goran; Zorko, Sonja; Sušanĳ Čule, Ivana.  
**Use of Machine Learning in Processes Optimization for Drinking Water Treatment Plant Butoniga (Istria, Croatia)** // Collection of papers presented at the 16th Edition of the International Conference on Durability of Building Materials and Components, Beijing, China, October, 10-13, 2023 (DBMC 2023) / Kefei, Li; Fang, Dongping (ur.). Peking: China-CEE Institute, 2023, 126, 8
- [8] Volf, Goran; Źutinić, Petar; Gligora Udović, Marija; Kulaš, Antonija; Mustafić, Perica.  
**Describing and simulating phytoplankton of a small and shallow reservoir using decision trees and rule-based models** // Environmental monitoring and assessment, 195 (2023), 4; 508, 20. doi: 10.1007/s10661-023-11060-9
- [9] Sušanĳ Čule, Ivana; Volf, Goran; OŹanić, Nevenka; RuŹić, Igor.  
**Hydrometric and Water Quality Properties of the Medulin Pond (Republic of Croatia)** // 17th International Symposium on Water Management and Hydraulic Engineering. Gdańsk: Gdańsk University of Technology Publishing House, 2022. str. 205-213
- [10] Volf, Goran; Sušanĳ Čule, Ivana; Źic, Elvis; Zorko, Sonja.  
**Water Quality Index Prediction for Improvement of Treatment Processes on Drinking Water Treatment Plant** // Sustainability, 14 (2022), 18; 11481, 16. doi: 10.3390/su141811481
- [11] Volf, Goran.  
**Use of Machine Learning in the Function of Sustainability of Wastewater Treatment Plants** // Current Topics and Trends on Durability of Building Materials and Components: Proceedings of the 15th International Conference on Durability of Building Materials and Components, DBMC 2020 / Serrat, Carles (ur.). Barcelona: International Center for Numerical Methods in Engineering (CIMNE), 2020, 144, 8. doi: 10.23967/dbmc.2020.144
- [12] Volf, Goran.  
**Use of machine learning in modelinig aquatic ecosystems** // 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. 381-390
- [13] Volf, Goran; Krvavica, Nino; Dragičević, Nevena; Źic, Elvis.  
**Northern adriatic watershed management regarding the state of the marine ecosystem** // HIDROLOGIJA U SLUŹBI ZAŠTITE I KORIŠTENJA VODA, TE SMANJIVANJA POPLAVNIH RIZIKA – SUVREMENI TRENDOVI I PRISTUPI. Rijeka: MIODIO, 2018. str. 123-132
- [14] Volf, Goran; Atanasova, Nataša; Škerjanec, Mateja; OŹanić, Nevenka.  
**Hybrid modeling approach for the northern Adriatic watershed management** // Science of the total environment, 635 (2018), C; 353-363 doi:10.1016/j.scitotenv.2018.04.094
- [15] Volf, Goran; Źic, Elvis; OŹanić, Nevenka.  
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- [17] Volf, Goran; Atanasova, Nataša; Kompore, Boris; Precali, Robert; OŹanić, Nevenka.  
**Study of the impact of TIN/PO4 ratio on mucilage formation in the northern Adriatic using regression trees** // Acta Adriatica, 56 (2015), 2; 207-222

- [18] Volf, Goran; Kompare, Boris; Ožanić, Nevenka.  
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- [19] Volf, Goran; Atanasova, Nataša; Kompare, Boris; Ožanić, Nevenka.  
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- [20] Volf, Goran; Kompare, Boris; Ožanić, Nevenka.  
**Relating nutrient ratios to mucilage events in northern Adriatic** // Engineering review : znanstveni časopis za nove tehnologije u strojarstvu, brodogradnji i elektrotehnici, 33 (2013), 3; 193202
- [21] Volf, Goran; Atanasova, Nataša; Kompare, Boris; Precali, Robert; Ožanić, Nevenka.  
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- [23] Hinić, Višnja; Rubinić, Josip; Vučković, Ivan; Ružić, Igor; Gržetić, Ana; Volf, Goran; Ljubotina, M.; Kvas, Nena.  
**Analysis of interrelation between water quality and hydrologic conditions on a small karst catchment area of sinking watercourse Trbuhovica** // Earth and Environmental Science, Volume 4, 2008 (2009), 012021; 1-8 doi:10.1088/1755-1307/4/1/012021
- [24] Nemarnik, Rino; Volf, Goran; Karleuša, Barbara.  
**Estimation of pollutant load in drinking water protected areas of springs Sv. Ivan, Bulaž and Gradole** // e-GFOS, 13 (2016), 39-49 doi:10.13167/2016.13.5
- [25] Volf, Goran; Atanasova, Nataša.  
**Modelling Wastewater Treatment Plant with Active Sludge using ASM1 model** // Zbornik radova Građevinskog fakulteta Sveučilišta u Rijeci, 18 (2015), 69-80
- [26] Volf, Goran; Ožanić, Nevenka; Petrović, Igor.  
**GIS calculation of basic physical parameters of Trbuhovica and Mlake watershed catchment area and maximum flow discharge** // Zbornik radova Građevinskog fakulteta Sveučilišta u Rijeci, 16 (2013), 1; 95-111
- [27] Horvat, Bojana; Karleuša, Barbara; Volf, Goran; Ožanić, Nevenka; Kisić, Ivica.  
**Geospatial Analysis of Hydrological Response to Forest Fires in Small Mediterranean Catchments** // International Journal of Geological and Environmental Engineering Rim, Italija, 2020. str. 1-2
- [28] Volf, Goran; Atanasova, Nataša; Kompare, Boris; Precali, Robert; Ožanić, Nevenka.  
**Assessing the impacts of nutrient sources to the trophic state of the northern Adriatic** // Eco Summit Montpellier, Fransucka, 2016.
- [29] Volf, Goran; Atanasova, Nataša; Kompare, Boris; Ožanić, Nevenka.  
**Assessing the proper wastewater treatment level according to marine ecosystem status** // ECSA 53: Estuaries and Coastal Areas in Times of Intense Change Shangai, China, 2013.
- [30] Volf, Goran; Atanasova, Nataša; Kompare, Boris; Ožanić, Nevenka.  
**Modelling of nutrient loading for northern Adriatic** // EGU 2011 Conference Vienna, Austria, 2011.
- [31] Volf, Goran; Atanasova, Nataša; Kompare, Boris; Precali, Robert; Ožanić, Nevenka.  
**Assessing eutrophication problems in northern Adriatic** // ISEM 2009 Conference Laval University, Quebec City, PQ, Canada, 2009.
- [32] Volf, Goran .  
**Assessment of Proper Wastewater Treatment Level according to Marine Ecosystem State (Određivanje odgovarajućeg stupnja pročišćavanja otpadnih voda s obzirom na stanje morskog ekosustava)**, 2012., PhD Thesis, Faculty for Civil Engineering, Rijeka

<b>Leader of the following research projects</b>	[1] Scientific - Research Project of University of Rijeka and Ministry of Science, Education and Youth „ <b>Decision support system for improvement and management of treatment processes on drinking water treatment plant Butoniga</b> “ (ZIP-UNIRI-1500-3-22), (Project manager Assoc. prof. Goran Volf from Faculty of Civil Engineering, University of Rijeka).
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<b>Participant in the following research projects</b>	<p>[1] Scientific - Research Project of MSES RC „<b>Scientific Bases for Irrigation in Republic of Croatia</b>“ (Project manager Prof. Nevenka Ožanić from Faculty of Civil Engineering, University of Rijeka, Coordinator Faculty of Civil Engineering).</p> <p>[2] Scientific - Research Project of MSES RC „<b>Hydrology of Sensitive Water Resources in Karst</b>“ (Project manager Prof. Nevenka Ožanić from Faculty of Civil Engineering, University of Rijeka, Coordinator Faculty of Civil Engineering).</p> <p>[3] INTERREG III A Project “<b>KEEP WATERS CLEAN: Monitoring of Water Status – monitoring hydrological conditions on Prezid area</b>” (Project manager PhD. Josip Rubinić from Faculty of Civil Engineering, University of Rijeka).</p> <p>[4] Croatian-Japanese collaboration Project „<b>Risk identification and land use planning for disaster mitigation of landslides and floods in Croatia</b>“ (Project manager Prof. Nevenka Ožanić from Faculty of Civil Engineering, University of Rijeka).</p> <p>[5] EU Regional Development Fund infrastructure project “<b>Research infrastructure for Campus-based laboratories at University of Rijeka</b>” (Project manager Prof. Nevenka Ožanić from Faculty of Civil Engineering, University of Rijeka).</p> <p>[6] IPA ADRIATIC Project “<b>DRINKADRIA: Networking for Safe Drinking Water Supply in Adriatic Region</b>” (Project manager Prof. Barbara Karleuša from Faculty of Civil Engineering, University of Rijeka).</p> <p>[7] Scientific - Research project of UNIRI and MSES RC “<b>Hydrology of water resources and identification of flood and mudflow risks in the karst area</b>” (Project manager Prof. Nevenka Ožanić from Faculty of Civil Engineering, University of Rijeka).</p> <p>[8] Scientific - Research project of of UNIRI and MSES RC “<b>Interaction between sea and rivers in the context of climate change</b>” (Project manager: Assis. prof. Nino Krvavica from the Faculty of Civil Engineering, University of Rijeka).</p> <p>[9] Scientific - Research project of of UNIRI and MSES RC “<b>Sustainable river basin management through the implementation of innovative methodologies, approaches and tools</b>” (Project manager Prof. Barbara Karleuša from Faculty of Civil Engineering, University of Rijeka).</p> <p>[10] CSF project „<b>Influence of Summer Fire on Soil and Water Quality</b>“ (Project manager Prof. Ivica Kisić from Faculty of Agriculture, University of Zagreb).</p> <p>[11] INTERREG Italy – Croatia Scientific - Research project “<b>Climate RESiliEnt COastal planning in Adriatic - CRESCO Adria</b>” (Project manager: Assoc. prof. Iva Mrak from the Faculty of Civil Engineering, University of Rijeka).</p>
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<b>Supervision of PhD theses</b>	-
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<b>Examination of PhD theses</b>	2
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