Name of teacher:	Nino Krvavica

Employed at: **Since:**	Faculty of Civil Engineering in Rijeka 1 July 2011

Academic rank: **Since:** **In:**	Associate Professor 1 February 2024 Civil Engineering, Hydrotechnics

e-mail address, web page	nino.krvavica@uniri.hr, https://portal.uniri.hr/portfelj/1129

Knowledge of foreign languages	english

Qualifications	**- date of birth, nationality: 25 Dec 1982, Croatian** **- First degree obtained at: Faculty of Civil Engineering in Rijeka** **- Ph.D. degree obtained at: Faculty of Civil Engineering in Rijeka** **- additional education:** **- previous employments: Institut IGH (2008-2011)**

List of papers published in scientific journals	1. Krvavica, Nino; Gržić, Marta Marija; Innocenti, Silvia; Matte, Pascal Impact of storm surge and power peaking on tidal-fluvial processes in microtidal Neretva River estuary // Estuarine, coastal and shelf science, 318 (2025), 109227, 16. doi: 10.1016/j.ecss.2025.109227 2. Tadić, Andrea; Krvavica, Nino; Benac, Čedomir; Ružić, Igor Coastal vulnerability index for the indented coastline of Primorje-Gorski Kotar County, Croatia // Regional studies in marine science, 80 (2024), 103862-103877. doi: 10.1016/j.rsma.2024.103862 3. Mihel, Anna Maria; Krvavica, Nino; Lerga, Jonatan Regression-based machine learning approaches for estimating discharge from water levels in microtidal rivers // Journal of hydrology, 646 (2024), 132276, 132276. doi: 10.1016/j.jhydrol.2024.132276 4. Mihel, Anna Maria; Lerga, Jonatan; Krvavica, Nino Estimating water levels and discharges in tidal rivers and estuaries: Review of machine learning approaches // Environmental modelling & software, 176 (2024), 106033, 17. doi: 10.1016/j.envsoft.2024.106033 5. Marić, Ivan; Peer, Monika; Čipak, Anita; Kobaš, Kristian; Šiljeg, Ante; Krvavica, Nino Integrated coastal vulnerability index for coastal flooding: A case study of the Croatian coast // Environmental and sustainability indicators, 24 (2024), 100514, 15. doi: 10.1016/j.indic.2024.100514 6. Horvat, Bojana; Krvavica, Nino Disaggregation of the Copernicus Land Use/Land Cover (LULC) and Population Density Data to Fit Mesoscale Flood Risk Assessment Requirements in Partially Urbanized Catchments in Croatia // Land (Basel), 12 (2023), 11; 2014, 22. doi: 10.3390/land12112014 7. Krvavica, Nino ; Šiljeg, Ante ; Horvat, Bojana ; Panđa, Lovre Pluvial Flash Flood Hazard and Risk Mapping in Croatia: Case Study in the Gospić Catchment // Sustainability, 15 (2023), 2; 1197, 26. doi: 10.3390/su15021197 8. Šiljeg, Ante; Panđa, Lovre; Marinović, Rajko; Krvavica, Nino; Domazetović, Fran; Jurišić, Mladen; Radočaj, Dorijan

	Infiltration Efficiency Index for GIS Analysis Using Very-High-Spatial-Resolution Data // Sustainability, XV (2023), 21; 1, 28. doi: https://doi.org/10.3390/su152115563 9. Lončar, Goran ; Krvavica, Nino ; Šepić, Jadranka ; Bekić, Damir ; Gašparović, Mateo ; Kulić, Tin Potencijal primjene javno dostupnih baza podataka u svrhu procjene opasnosti od poplava mora u priobalnim gradovima Republike Hrvatske // Hrvatske Vode, 30 (2022), 121; 185-200 10. Tadić, Andrea ; Ružić, Igor ; Krvavica, Nino ; Ilić, Suzana Post-Nourishment Changes of an Artificial Gravel Pocket Beach Using UAV Imagery // Journal of marine science and engineering, 10 (2022), 3; 358, 24. doi: 10.3390/jmse10030358 11. Krvavica, Nino ; Gotovac, Hrvoje ; Lončar, Goran Salt-wedge dynamics in microtidal Neretva River estuary // Regional studies in marine science, 43 (2021), 101713, 15. doi: 10.1016/j.rsma.2021.101713 12. Karleuša, Barbara ; Krvavica, Nino ; Ružić, Igor Selection of appropriate coastal protection structure using AHP method // Environmental sciences proceedings, 2 (2020), 1; 4, 10. doi: 10.3390/environsciproc2020002004 13. Krvavica, Nino Re-evaluating efficiency of first-order numerical schemes for two-layer shallow water systems by considering different eigenvalue solutions // Advances in water resources, 137 (2020), 103508, 13. doi: 10.1016/j.advwatres.2020.103508 14. Krvavica, Nino ; Ružić, Igor Assessment of sea-level rise impacts on salt-wedge intrusion in idealized and Neretva River Estuary // Estuarine, coastal and shelf science, 234 (2020), 106638, 13. doi: 10.1016/j.ecss.2020.106638 15. Krvavica, Nino ; Peroli, Gabrijel ; Ružić, Igor ; Ožanić, Nevenka Time-dependent numerical model for simulating internal oscillations in a sea organ // Ocean engineering, 205 (2020), 107336, 11. doi: 10.1016/j.oceaneng.2020.107336 16. Krvavica, Nino ; Rubinić, Josip Evaluation of Design Storms and Critical Rainfall Durations for Flood Prediction in Partially Urbanized Catchments // Water, 12 (2020), 7; 2044, 20. doi: 10.3390/w12072044 17. Ružić, Igor ; Dugonjić Jovančević, Sanja ; Benac, Čedomir ; Krvavica, Nino Assessment of the Coastal Vulnerability Index in an Area of Complex Geological Conditions on the Krk Island, Northeast Adriatic Sea // Geosciences, 9 (2019), 5; 1-17. doi: 10.3390/geosciences9050219 18. Ružić, Igor ; Benac, Čedomir ; Ilić, Suzana ; Krvavica, Nino ; Rubinić, Josip Geomorfološke promjene minijaturnog žala na kršu // Hrvatske Vode, 26 (2018), 103; 27-34 19. Krvavica, Nino ; Kožar, Ivica ; Ožanić, Nevenka The relevance of turbulent mixing in estuarine numerical models for two-layer shallow water flow // Coupled Systems Mechanics, 7 (2018), 1; 95-109. doi: 10.12989/csm.2018.7.1.095 20. Krvavica, Nino ; Ružić, Igor ; Ožanić, Nevenka New Approach to Flap-Type Wavemaker Equation with Wave Breaking Limit // Coastal engineering journal, 60 (2018), 1; 69-78. doi: 10.1080/21664250.2018.1436242 21. Krvavica, Nino ; Jaredić, Krešimir ; Rubinić, Josip Metodologija definiranja mjerodavne oborine za dimenzioniranje infiltracijskih sustava // Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 70 (2018), 8; 657-669. doi: 10.14256/JCE.2317.2018 22. Krvavica, Nino ; Tuhtan, Miran ; Jelenić, Gordan

	Analytical implementation of Roe solver for two-layer shallow water equations with accurate treatment for loss of hyperbolicity // Advances in water resources, 122 (2018), C; 187-205. doi: 10.1016/j.advwatres.2018.10.017 23. Karleuša, Barbara ; Rubinić, Josip ; Radišić, Maja ; Krvavica, Nino Analysis of Climate Change Impact on Water Supply in Northern Istria (Croatia) // Tehnički vjesnik = Technical gazette, 25 (2018), Supplement 2; 366-374. doi: 10.17559/TV-20170809140304 24. Krvavica, Nino ; Kožar, Ivica ; Travaš, Vanja ; Ožanić, Nevenka Numerical modelling of two-layer shallow water flow in microtidal salt-wedge estuaries : Finite volume solver and field validation // Journal of hydrology and hydromechanics, 65 (2017), 1; 49-59. doi: 10.1515/johh-2016-0039 25. Krvavica, Nino ; Travaš, Vanja ; Ožanić, Nevenka Salt-Wedge Response to Variable River Flow and Sea-Level Rise in the Microtidal Rječina River Estuary, Croatia // Journal of coastal research, 33 (2017), 4; 802-814. doi: 10.2112/JCOASTRES-D-16-00053.1 26. Krvavica, Nino ; Travaš, Vanja ; Ožanić, Nevenka A field study of interfacial friction and entrainment in a microtidal salt-wedge estuary // Environmental fluid mechanics, 16 (2016), 6; 1223-1246. doi: 10.1007/s10652-016-9480-1 27. Krvavica, Nino ; Travaš, Vanja A comparison of method of characteristics and Preissmann scheme for flood propagation modeling with 1D Saint-Venant equations // Acta hydrotechnica, 27 (2015), 46; 1-12 28. Travaš, Vanja ; Krvavica, Nino ; Radman, Ivana Numerical analysis of hysteresis in rating curves for open channel flow // International journal for engineering modelling, 25 (2012), 1-4; 1-6 29. Krvavica, Nino ; Mujaković, Nermina Rješavanje problema gibanja vodnih valova uslijed poremećaja na površini // Zbornik radova (Građevinski fakultet Sveučilišta u Rijeci), XIV (2011), 11-29 30. Krvavica, Nino ; Ravlić, Nenad Nekonzervativni pristup projektiranju gatova na izloženoj lokaciji // Zbornik radova (Građevinski fakultet Sveučilišta u Rijeci), XII (2009), 35-54

List of publications which serve as a proof of teaching qualifications	All above

Leader of the following research projects	**2024–2029**: *Bridging Science and Society for Climate Solutions (GAIA COFUND)*, Horizon Europe, MSCA COFUND, EUR 1,432,800, partner (institutional lead). **2024–2025**: Project leader of *Compound Flooding in Coastal Rivers under Present and Future Climate*, funded under the project line "UNIRI Projects of Experienced Researchers 2023" by the University of Rijeka. **2023–2027**: Project leader of *Compound Flooding in Coastal Croatia under Present and Future Climate (4SEAFLOOD)*, funded by the Croatian Science Foundation (IP-2022-10-7598). **2020–2022**: Project leader of *Flow Assessment in Highly Stratified Coastal Rivers* (UNIRI-ZIP-1500-1-20), funded under the ZIP UNIRI project line of the University of Rijeka. **2018–2019**: Leader of the initial support grant by the University of Rijeka *Sea–River Interaction in the Context of Climate Change*.

Participant in the following research projects	**2019–2023**: Researcher on the scientific project *Sustainable Beach Construction – Building New and Increasing Capacity of Existing Beaches (BEACHEX)*, funded by the Croatian Science Foundation (HRZZ). **2019–2023**: Researcher on the scientific project *Hydrology of Water Resources and Identification of Flood and Debris Flow Hazards in Karst Areas*, funded by the University of Rijeka. **2014–2018**: Researcher on the scientific project and support by the University of Rijeka *Hydrology of Water Resources and Identification of Flood and Debris Flow Hazards in Karst Areas*. **2013–2016**: Researcher on the international project *Networking for Drinking Water Supply in the Adriatic Region – DRINKADRIA*, co-funded by IPA Adriatic Cross-Border Cooperation. **2011–2014**: Researcher on the scientific project *Hydrology of Sensitive Water Resources in Karst*, funded by the Ministry of Science, Education and Sports of the Republic of Croatia. **2011–2014**: Member of the working group for floods and debris flows in the bilateral Japanese–Croatian scientific project *Risk Identification and Land-Use Planning for Disaster Mitigation of Landslides and Floods in Croatia*, funded by the Ministry of Science, Education and Sports of the Republic of Croatia and JICA.

Supervision of PhD theses	5

Examination of PhD theses	1