Name of teacher:	Elvis Žic

Employed at: **Since:**	Faculty of Civil Engineering, University of Rijeka 10/01/2002

Title: **Since:** **In:**	Assistant Professor 06/01/2016 (inaugural lecture were done 05/30/2016) Scientific area: technical sciences, scientific field: construction, scientific branch: Fluid mechanics

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Qualifications	**- date of birth, nationality:** 11/21/1977 , Croatian **- First degree obtained at:** Faculty of Civil Engineering, University of Rijeka **- Master degre obtained at:** Faculty of Civil Engineering, Architecture and Geodesy, University of Split **- Ph.D. degree obtained at:** Faculty of Civil Engineering, University of Rijeka **- additional education:** 1. 07/15 – 09/01/2000 (as a student, IAESTE Organization), Oviedo, Gijon (Spain) AUTORIDAD PORTUARIA DE GIJON, Research Institute of the sea and coastline, design objects on the sea, marina and breakwater 2. 06/14 – 06/18/2010, Aussois, France Summer school entitled "Nonsmooth Mechanics: Modeling and Simulation" 3. 09/01 – 12/01/2010, Glasgow, (Faculty of Civil Engineering, University of Glasgow) Numerical modeling of the mudflow and debris flow propagation, Finite Element Method (FEM), Discrete Element Method (DEM). 4. 09/01 – 09/14/2013, Salerno, International LARAM Summer School (Landslide Risk Assessment and Mitigation), (Faculty of Civil Engineering, University of Salerno, Italy) Mitigation and risk assessment of the consequences of landslides and debris flows, numerical modeling of debris flow and mudflow propagation and occurrence of lahar phenomena. 5. 01/15 – 02/27/2013, Kyoto, Uji, Disaster Prevention Research Institute - DPRI, Kyoto University Numerical modeling of debris flow and mudflow propagation, development physical models of debris flow propagation. **- previous employments:** /

List of papers published in scientific journals	1. Travaš, V., Gal, E., Lučin, I., Žic, E. *Digital twin for a real-time leakage detection and localization in pressurized piping systems*, Journal of Hydroinformatics, jh2025304, in the publication phase (paper accepted) 2. Kevorkijan, L., Žic, E., Lešnik, L., Biluš, I., *Settling of Mesoplastics in an Open-Channel Flow, E*nergies (Basel), 15 (2022), 23; 8786, 14. doi: 10.3390/en15238786 3. Volf, G., Sušanj Čule, I., Žic, E., Zorko, S., *Water Quality Index Prediction for Improvement of Treatment Processes on Drinking Water Treatment Plant, S*ustainability, 14 (2022), 18; 11481, 16. doi: 10.3390/su141811481 4. Žic, E., Černeka, P., Biluš, I., *Hydrodynamic Analysis of the Fluid Flow Around a Symmetric Hydrofoil*, Fluid Dynamics, 56 (2021), 4; 460-472. doi: 10.1134/S0015462821040133 5. Žic, E., Banko, P., Lešnik, L., *Hydraulic analysis of gate valve using Computational Fluid Dynamics (CFD),* Sci. Rev. Eng. Env. Sci. (2020), 29 (3), pp. 275-288, doi: 10.22630/PNIKS.2020.29.3.23 6. Žic, E., Černeka, P, Biluš, I., *Hydrodynamic Analysis of Fluid Obstruction Around Different Geometric Bodies,* International Journal for Engineering Modelling, 33 (2020), 1-2; pp. 59-77, doi:10.31534/engmod.2020.1-2.ri.05m 7. Volf, G., Žic, E., Ožanić, N., *Prediction of groundwater level fluctuations on Grohovo landslide using rule based regression,* Engineering review, 38 (2018), 1; pp. 51-61 8. Žic, E., Arbanas, Ž., Bićanić, N., Ožanić, N., *A model of mudflow propagation downstream from the Grohovo landslide near the city of Rijeka (Croatia)*, Natural hazards and earth system sciences. 15 (2015), 1; pp. 293-313

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Žic, E., Ožanić, N., *Methods for Roughness Factor Determine in River Bed*, Proceedings of the Faculty of Civil Engineering, University of Rijeka, 11 (2008), pp. 81-101 14. Benac, Č., Ružić, I., Žic, E., *The vulnerability of coasts in the Kvarner area*, Journal of Maritime Studies, 44 (2007), pp. 201-214 15. Žic, E., Golja, G., *Experimental determination of hydraulic jump characteristics behind a wide sill spillway*, Proceedings (Faculty of Civil Engineering, University of Rijeka), 27 (2024), 1; 157-173. doi: 10.32762/zr.27.1.10 16. Petrović, M., Žic, E., *Experimental determination of capillarity of certain liquids*, Proceedings (Faculty of Civil Engineering, University of Rijeka), XXVI (2023), 65-81. doi: https://doi.org/10.32762/zr.26.1.4 17. Volf, G., Sušanj Čule, I., Žic, E., Zorko, S., *Prediction of Water Quality Index for Processes Improvement on Drinking Water Treatment Plant* , 17th International Symposium on Water Management and Hydraulic Engineering: WMHE 2022. 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List of publications which serve as a proof of teaching qualifications	1. Travaš, V., Gal, E., Lučin, I., Žic, E. *Digital twin for a real-time leakage detection and localization in pressurized piping systems*, Journal of Hydroinformatics, jh2025304, in the publication phase (paper accepted) 2. Kevorkijan, L., Žic, E., Lešnik, L., Biluš, I., *Settling of Mesoplastics in an Open-Channel Flow, E*nergies (Basel), 15 (2022), 23; 8786, 14. doi: 10.3390/en15238786 3. Volf, G., Sušanj Čule, I., Žic, E., Zorko, S., *Water Quality Index Prediction for Improvement of Treatment Processes on Drinking Water Treatment Plant, S*ustainability, 14 (2022), 18; 11481, 16. doi: 10.3390/su141811481 4. Žic, E., Černeka, P., Biluš, I., *Hydrodynamic Analysis of the Fluid Flow Around a Symmetric Hydrofoil*, Fluid Dynamics, 56 (2021), 4; 460-472. doi: 10.1134/S0015462821040133 5. Žic, E., Banko, P., Lešnik, L., *Hydraulic analysis of gate valve using Computational Fluid Dynamics (CFD),* Sci. Rev. Eng. Env. 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Leader of the following research projects	/

Participant in the following research projects	1. The Scientific basis for the development of irrigation in the Republic of Croatia (project leader Professor Nevenka Ožanić) 2. Hydrology of sensitive water resources in karst (project leader Professor Nevenka Ožanić) 3. Risk Identification and Land-Use Planning for Disaster Mitigation of Landslides and Floods in Croatia (project leader Professor Nevenka Ožanić) 4. Hydrology of water resources and risk identification of flooding and mudflows in the karst area (project leader Professor Nevenka Ožanić)

Supervision of PhD theses	/

Examination of PhD theses	2