



Curriculum Vitae - Timotej Verbovšek

Personal data:

- Timotej Verbovšek
1976, Ljubljana
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Education:

- 2003: BSc, University of Ljubljana, Faculty of Natural Sciences and Engineering, Department of Geology (*Well yields in Slovenia - group of dolomite aquifers*)
- 2008: PhD, University of Ljubljana, Faculty of Natural Sciences and Engineering, Department of Geology (*Influences of transmissive structures on flow and transport in karstic and fractured aquifers*)

Academic titles:

- 2004–2008: assistant
2008–2013: assistant professor (docent)
- 2013–2021: associate professor
- 2021–present: full professor

Employment:

- 2003–2008: Young researcher
- 2008–present: Assistant and associate professor at University of Ljubljana, Faculty of Natural Sciences and Engineering, Department of Geology

Research and interest fields:

- Engineering geology, GIS, Hydrogeochemistry, Karst (fractured aquifers), Fractals.

Languages spoken:

- Active: Slovenian (native), English, Croatian, Serbian
- Functional: Spanish, Italian, German

Pedagogical activity:

- Geology program (BSc degree, UL NTF): *GIS in geology, Engineering geology*
- Geology program (MSc degree, UL NTF): *Applied Engineering geology, Computer methods in geology, Hydrogeochemistry, Geology of Karst 2, Geomorphometry*
- Geology program (PhD degree, UL NTF & UL FG): *Fractal and selected computer methods in geology, Karstic processes and features, Engineering geology investigations of slope processes*

Past and active research projects (leader):

- 2010–2012: Leader of the Slovenian Research Agency Z1-3670 postdoc project *Hydrogeochemistry and evolution of groundwater in karstic and fractured aquifers*, <http://www.sicris.si/search/prj.aspx?lang=eng&id=6723>
- 2016–present: Leader of the research project IPL-216 “Diversity and hydrogeology of mass movements in the Vipava valley, SW Slovenia”, <http://iplhq.org/category/iplhq/ipl-ongoing-project/>
- 2017: Leader of the project PKP 25-20-2 (Po kreativni poti) – Rock fall risk in the bay of St. Cross, Strunjan - Ogroženost obale zaradi padanja kamenja v zalivu Sv. Križa v Strunjanu, <https://sites.google.com/view/cliffall>
- 2018: Leader of the project PKP (Po kreativni poti) – Awareness of residents of municipality Kamnik of landslide endangerment - Osveščanje prebivalcev občine Kamnik o pojavih plazanja <https://sites.google.com/view/kamplaz>
- 2020: Leader of the project ŠIPK (Študentski inovativni projekti za družbeno korist) – Upgrading geological contents in the Strunjan Landscape Park with virtual (VR) and augmented reality (AR) technologies - Nadgradnja geoloških vsebin v Krajinskem parku Strunjan s tehnologijama navidezne in obogatene resničnosti, <https://sites.google.com/view/geo-vr-ar>
- 2020–2023: Leader of the Slovenian Research Agency basic research project *Erosional processes on coastal flysch cliffs and their risk assessment*; <https://www.ntf.uni-lj.si/og/en/about-department/research/research-projects/arrs-project-erosional-processes-on-coastal-flysch-cliffs-and-their-risk-assessment/>

Past and active research projects (participant):

- 2009–2012: Participant in EU SEE project *CC-WaterS (Climate Change and Impact on Water Supply - Podnebne spremembe in vpliv na oskrbo s pitno vodo)*, <http://www.ccwaters.eu/>
- 2009–2012: Participant in Slovenian Research Agency L2-2337 research project *Vpliv strukture na varnost odkopavanja debelih slojev premoga - dejavniki tveganja in njihovo obvladovanje*, <http://www.sicris.si/search/prj.aspx?lang=eng&id=6540>
- 2012–2014: Participant in EU SEE project *CC-WARE (Mitigating Vulnerability of Water Resources under Climate Change - Blaženje ranljivost vodnih virov zaradi podnebnih sprememb)*, <http://www.ccware.eu/>
- 2013–2016: Participant in IPA ADRIATIC project *DRINKADRIA (Networking for Drinking Water Supply in Adriatic Region - Mreženje za oskrbo s pitno vodo na območju Jadrana)*, <http://www.drinkadria.eu/>
- 2013–2016: Participant in Slovenian Research Agency L1-3670 research project *Evaluating geological sequestration of CO₂ in low rank coals; Velenje basin, Slovenia as a natural analogue*, <http://www.sicris.si/search/prj.aspx?lang=eng&id=8695>
- 2016–2019: Participant in EU InterReg project *PROLINE “Efficient Practices of Land Use Management Integrating Water Resources Protection and Non-structural Flood Mitigation Experiences”*, <http://www.interreg-central.eu/Content.Node/PROLINE-CE.html>
- 2016–2019: Participant in EU H2020 project UNEXMIN “Underwater explorer for flooded mines”, <http://www.unexmin.eu/>
- 2019: Participant in the project PKP (Po kreativni poti) – Podajanje geoloških vsebin v osnovnih in srednjih šolah preko interaktivnih učnih listov <http://www.edugeo.si>
- 2020–: Participant in EU H2020 project Robominers “Resilient Bio-inspired Modular Robotic Miners”, <https://robominers.eu/>

Memberships in scientific and professional associations:

- IAH / SKIAH (International Association of Hydrogeologists / Slovenian Chapter of IAH)
- IAEG (International Association for Engineering Geology and the Environment)
- SGD (Slovenian Geological Society)
- SloGed (Slovenian Geotechnical Society)

Editorial membership:

- 2016–present: Member of the Editorial Board of Journal *Landslides*, <http://link.springer.com/journal/10346>

Attended professional courses with certificates:

- 26.–30.05.2007: PHREEQC modeling course (Amsterdam, instructor: dr. Tony Appelo)
- 12.–15.09.2013: Course *Solute and Reactive Transport Modeling* (Perth, instructors: dr. Chunmiao Zheng, dr. Vincent Post and dr. Henning Prommer)

Presented international courses and lectures:

- 11.–13.5.2009: Short course entitled *Fractal analysis of flow in fractured and karstic aquifers*, presented at the Eötvös Loránd University, Department of Applied & Environmental Geology, Budapest.
- 16.–18.5.2012: Invited lecture entitled *Application of fractals in geology with examples from hydrogeology, geomorphology and sedimentology.*, presented at the Pedagogical University in Krakow, Poland.
- 2.10.2012: Invited lecture entitled *Slovenian karst – geography and geology*, presented at the Pedagogical University in Krakow, Poland.
- 10.–13.09.2014: Invited lecture entitled *Karstic aquifers of Slovenia - hydrogeology and geochemistry.* presented at the Università di Napoli Federico II, Dipartimento di Scienze della Terra, Naples, Italy.
- 19.6.2015 Lecture entitled *Hydrogeochemistry of dolomite aquifers in Slovenia*, Croatian Geological Survey (HGI-CGS), Zagreb, Croatia
- 3.7.2015 Lecture entitled *Use of fractals in geology, with examples from geomorphology and hydrogeology*, Croatian Geological Survey (HGI-CGS), Zagreb, Croatia
- 3.5.2017 Lecture entitled *Groundwater geochemistry - case study of dolomite aquifers in Slovenia*, Mendel and Masaryk University in Brno, Czech republic
- 10.5.2017 Lecture entitled *Groundwater geochemistry - case study of Velenje coal basin, NE Slovenia*, Mendel and Masaryk University in Brno, Czech republic
- 20.5.2017 Lecture entitled *Lidar and GIS in karst geomorphology*, Mendel and Masaryk University in Brno, Czech republic
- 2017: Lecture entitled *Lidar DEM-based terrain roughness analysis for landslide characterization*, Summer School “Natural disasters” 21th May to 10th June, Ljubljana, <http://www.let-group.com/summerschool.html>
- 19.4.2018: Invited lecture entitled *Use of fractals in dolomite rocks for determining the relationship between fractures and water flow*, Budapest University of Technology and Economics, Hungary

Leadership activity:

- 2009–2012: Leader of the postdoc project *Hydrogeochemistry and evolution of groundwaters in karstic and fractured aquifers*
- 2010–present: mentor and co-mentor of 42 finished diplomas (BSc and MSc) on the subject of engineering geology and hydrogeochemistry
- 2010–present: mentor of scientific master degree study in the field of geology (in progress)
- 2011–present: mentor of two young researchers (doctoral program) in the field of geology (in progress)
- 2008–2013: Secretary of Slovenian Committee of International Association of Hydrogeologists (Slovenian IAH Chapter)
- 2010–2014: President of the Slovenian Geological Society
- 2010–2015: Head of the Chair of Applied Geology at the Department of Geology, Faculty of Natural Sciences and Engineering
- 2012 and 2014: Mentor of two diploma awarded for best GIS diplomas at the University level
- 2014: Main organizer of the 4th Slovenian Geological Congress, 8–10th October 2014, Ankaran, Slovenia
- 2015: Mentor of diploma awarded with Prešeren student award (faculty level)
- 2016–present: Leader of the research project IPL-216 *Diversity and hydrogeology of mass movements in the Vipava valley*, SW Slovenia
- 2016–present: Representative of the Faculty of Natural Sciences and Engineering as a member in the International Consortium on Landslides (ICL)
- 2017: Organization of the 4th World Landslide Forum (WLF4), 29th May – 2nd June 2017, Ljubljana, Slovenia and post-forum WLF4 field trip guide, 3-5th June 2017, <https://www.wlf4.org/>
- 2017: Organization of the 3rd Regional Symposium on Landslides in the Adriatic-Balkan Region (3rd ReSyLAB, 11th– 13th October 2017, Ljubljana, Slovenia and field trip guide, <http://www.geo-zs.si/ReSyLAB2017/>
- 2019: Scientific committee of the 4th Regional Symposium on Landslides in the Adriatic-Balkan Region (4th ReSyLAB, 23th– 25th October 2019, Sarajevo, Bosnia and Herzegovina, <http://geotehnika.ba/ReSyLAB & GEO-EXPO 2019.html>
- 2019–present: mentor of the young researcher Galena Jordanova, thesis' work field: landslides and remote sensing

Licenses and certifications:

- 1998: Boat leader's license of competency (Ministry of transport and communications)
- 2015: License of competence for VHF GMDSS station (Ministry of transport and communications)
- 2019: Tourist guide license (Tourism and Hospitality Chamber of Slovenia)
- 2021: Remote UAS pilot A1/A3 and A2 certificates at Civil Aviation Agency (CAA).
- 2021: Chartered engineer competence (Slovenian Chamber of Engineers)

Ljubljana, 27th December 2021

prof. dr. Timotej Verbovšek

