

# Andrej Šmuc

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## Raziskovalno delo

Moje osnovno področje raziskovalnega delovanja sta sedimentologija in geomorfologija. Ukvarjam se predvsem z dinamiko fluvialnih in gravitacijskih tokov, recentno jezersko in morsko sedimentacijo ter vplivanjem geološke sestave na geomorfološke procese. Velik del mojega delovanja je vezan na terensko delo, ki me vodi od naših najvišjih gora pa vse do Tržaškega zaliva. Pomemben del mojih raziskav pa je vezan tudi na aplikativno sedimentologijo, s katero pomagam razreševati pomembna vprašanja drugih ved (recimo izvor mozaičnih kock rimskih mozaiikov, rekonstrukcija paleoklime v zadnjih 10 000 letih, ipd.). Zaradi ljubezni do vina se ukvarjam tudi z raziskavami terroirja. Ob raziskovalnem delu občasno izvajam aplikativne raziskave za komercialne naročnike. Tvorno sodelujem tudi pri popularizaciji geologije in znanosti v širši javnosti s poljudnoznanstvenimi članki, predavanji in intervjuji. Sem tudi član strokovnega sveta Geoparka Idrija, ki je del UNESCOve mreže geoparkov ter član strokovnega sveta Notranjskega Regijskega Parka.

## Pedagoško delo

Prvostopenjski študij geologije:

Sedimentna petrologija

Geomorfologija

Geologija Slovenije

Geologija kvartarja

Magistrski študij geologije in geofizike:

Analiza sedimentacijskih okolij

Antropogena in recentna sedimentacijska okolja

Doktorski študij:

Sedimentni bazeni in sedimentna okolja

Geologija naravnih nesreč

## Pomembne objave

NOVAK, Ana, **ŠMUC, Andrej**, POGLAJEN, Sašo, VRABEC, Marko. Linking the high-resolution acoustic and sedimentary facies of a transgressed Late Quaternary alluvial plain (Gulf of Trieste, northern Adriatic). *Marine geology*, 2020, vol. 419, str. 1-20.

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NOVAK, Ana, **ŠMUC, Andrej**, POGLAJEN, Sašo, CELARC, Bogomir, VRABEC, Marko. Sound velocity in a thin shallowly submerged terrestrial-marine Quaternary succession (Northern Adriatic Sea). *Water*, 2020, vol. 12, iss. 2, 1-19 str.

FERK, Mateja, LIPAR, Matej, **ŠMUC, Andrej**, DRYSDALE, Russell N., ZHAO, Jian. Chronology of heterogeneous deposits in the side entrance of Postojna Cave, Slovenia. *Acta geographica Slovenica*, 2019, 59, št. 1, str. 103-116.

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MENCIN GALE, Eva, JAMŠEK RUPNIK, Petra, TRAJANOVA, Mirka, BAVEC, Miloš, ANSELMETTI, Flavio S., **ŠMUC, Andrej**. Morphostratigraphy and provenance of Plio-Pleistocene terraces in the south-eastern Alpine foreland : the Mislinja and Upper Savinja valleys, northern Slovenia. *Journal of quaternary science*, 2019, str. 1-7,

IVANČIČ, Kristina, TRAJANOVA, Mirka, ČORIĆ, Stjepan, ROŽIČ, Boštjan, **ŠMUC, Andrej**. Miocene paleogeography and biostratigraphy of the Slovenj Gradec Basin : a marine corridor between the Mediterranean and Central Paratethys. *Geologica Carpathica : international geological journal*, 2018, vol. 69, no. 6, str. 528-544,

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MURI, Gregor, ČERMELJ, Branko, JAČIMOVIĆ, Radojko, RAVNIKAR, Tina, **ŠMUC, Andrej**, TURŠIČ, Janja, VREČA, Polona. Factors that contributed to recent eutrophication of two Slovenian mountain lakes. *Journal of paleolimnology*, 2018, vol. 59, no. 4, str. 411-426

IVANČIČ, Kristina, TRAJANOVA, Mirka, SKABERNE, Dragomir, **ŠMUC, Andrej**. Provenance of the Miocene Slovenj Gradec Basin sedimentary fill, Western Central Paratethys. *Sedimentary geology*, 2018, vol. 375, str. 256-267

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**ŠMUC, Andrej**, DOLENEC, Matej, KIKELJ, Martina L., LUX, Judita, PFLAUM, Miran, ŠEME, Blaž, ŽUPANEK, Bernarda, GALE, Luka, DOLENEC, Sabina. Variety of black and white limestone tesserae used in ancient mosaics in Slovenia. *Archaeometry*, 2017, vol. 59, iss. 2, str. 205-221

NOVAK, Ana, **ŠMUC, Andrej**, POGLAJEN, Sašo, VRABEC, Marko. Submerged and buried Pleistocene river channels in the Gulf of Trieste (Northern Adriatic Sea) : geomorphic, stratigraphic and tectonic inferences. *Geomorphology : an international journal of pure and applied geomorphology*, 2017, vol. 286, str. 110-120

JAMŠEK RUPNIK, Petra, ČUŠ, Franc, **ŠMUC, Andrej**. Geomorphology and wine : the case of Malvasia in the Vipava valley. *Acta geographica Slovenica*, 2016, 56, št. 1, str. 7-23

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MILETIĆ, Snježana, DOLENEC, Sabina, LUX, Judita, **ŠMUC, Andrej**, ZUPANČIČ, Nina. Provenance analysis of Roman stone artefacts from sedimentary rocks from the archaeological site near Mošnje, NW. *Geologija*, 2016, 59, št. 1, str. 35-53

OZIS, Leni, **ŠMUC, Andrej**. Lehnjakasti kapniki v spodmolih v slovenski Istri. *Geografski vestnik : časopis za geografijo in sorodne vede*, 2015, 87, [št.] 2, str. 9-22,

**ŠMUC, Andrej**, JANECKA, Karolina, LEMPA, Michał, KACZKA, Ryszard J. The spatio-temporal dynamics of the Ciprnik complex landslide, Tamar valley, Julian Alps, Slovenia. *Studia Geomorphologica Carpatho-Balcanica*, 2015, vol. 49, str. 35-54.

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ROŽIČ, Boštjan, VENTURI, Federico, **ŠMUC, Andrej**. Ammonites from Mt Kobla (Julian Alps, NW Slovenia) and their significance for precise dating of Pliensbachian tectono-sedimentary event. *RMZ – Materials and geoenvironment : periodical for mining, metallurgy and geology*, 2014, vol. 61, no. 2/3, str. 191-201.


MURI, Gregor, ČERMELJ, Branko, JAČIMOVIĆ, Radojko, SKABERNE, Dragomir, **ŠMUC, Andrej**, BURNIK ŠTURM, Martina, TURŠIČ, Janja, VREČA, Polona. Consequences of anthropogenic activity for two remote alpine lakes in NW Slovenia as tracked by sediment geochemistry. *Journal of paleolimnology*, 2013, vol. 50, no. 4, str. 457-470.


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### Mentorstva doktorskim študentom

2012 – Gale Luka, Biostratigrafija in sedimentologija norijsko-retijskih plasti zahodnega Slovenskega bazena, Južne Alpe, Slovenija

2012 – Kristina Ivančič, Nastanek in razvoj Slovenjegraškega bazena ter njegov današnja pomen

2015 – Mencin Eva, Pliocene to Quaternary sedimentary evolution of intermountain basins at the junction of Southern Alps, Dinarides and Pannonian Basin

2015 – Ana Novak, Holocenska transgresija in tektonska aktivnost v sedimentnem zapisu Tržaškega zaliva

2018 – Andrej Novak, Holocenski sedimentacijski procesi na aluvialnih pahljačah v dolini Planice



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