

## The Anthropocene Surge - evolution, expansion and depth of Vienna's urban environment

### Abstract

The term Anthropocene symbolizes the rising anthropogenic influence on the Earth System. The project aims at looking at the growth of anthropogenic influence, the Anthropocene Surge, in the urban environments of Vienna and its surroundings by applying classifications of anthropogenic sediments, evaluating geometry and topography of the archaeosphere, developing GIS-based 3D models and the evolution in time of different anthropogenic layers, geochemical methods to characterize the Anthropocene, historical maps, and the translation to Arts. The main methods are sedimentology and geochemistry, i.e. trace metal enrichment of urban anthropogenic strata, using dating archeological artefacts and stratigraphic methods; GIS-based mapping of anthropogenic strata, its 3D-distribution in time using existing data bases; archaeology contributes to the data base and excavation data, providing sites for sampling, and dating of different layers. An essay film will accompany the research and digitization process of Vienna's multilayered underground which aims to re-frame natural and human induced shaping-forces causing social and geological environments to materialize in forms. Recording the scientific flow of material from strata to data, Vienna's Anthropocene Surge in locomotion gets paralleled by analyzing an advancing Anthropocene Gaze, which will build the ground to compile an intertwined narrative of urban environmental systems and translating pure science to society.

Scientific disciplines:

105112 - Historical geology (60%) | 604001 - Applied arts (25%) | 601003 - Archaeology (15%)

Keywords:

Anthropocene, geochemistry, anthropogenic strata, 3D-model, film

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Further links about the involved persons and regarding the project you can find at

[https://archiv.wwtf.at/programmes/environmental\\_system/ESR17-040](https://archiv.wwtf.at/programmes/environmental_system/ESR17-040)