

The City needs soils, the City has soils – SUITMA research, advances in the past, and for the future

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The progress of world's urban areas growth is rapid. Similarly the demands on urban functionality develop very fast. With this future perspective it is of interest to understand what is the current trend of soil research and how did it develop in the last 35 years, from the foundation of the German Working Group Urban Soils in 1987, as nucleus of the IUSS WG SUITMA, founded 1998 in Montpellier, France and with its first Conference in Essen, Germany with the motto 'The City needs soils-the city has soils' until the 11th SUITMA Conference in Berlin, Germany.

The ten specific SUITMA Conferences before Berlin, in ten different countries representing all continents, besides Australia and Antarctic, and each 5 symposia on the World Congresses of Soil Science and EUROSOIL offer a good opportunity to check this.

The contribution will show the aims of the German WG Urban Soils in its first years and the objectives of presentations of the founding symposium of WG US/SUITMA at the 16th WCSS in Montpelier and of the following ten SUITMA Conferences. One-day and post-conference field tours to visit urban, industrial, traffic and mine soils were a regular part of SUITMA conferences.

The presentation shows the continuum of urban soil formation and classification research over all years. Similar constants include pollution, remediation and heritage objectives. Not so frequent but also constant were questions of urban soil hydrology. In the last ten years new upcoming themes were ecosystem services such as biodiversity, soil carbon, health aspects and food production with a number of additional aspects presented as well. In part they indicate new upcoming urban soil problems or regional urban demands and hazards.

In part urban governments and administration are involved in SUITMA research. Due to the Taxonomy of the European Commission one can expect that the city's interest in urban soil research will rise intensely. Similar, we have the interesting progress on capital markets, that the demand for environmental protection has got an additional effective backing by inclusion of ESG (Environmental, Social, Governance)-risks in the rating of credit status of enterprises. Thus urban soil research will become a target of economy.

By the diverse locations of performance of SUITMA Conferences and Soil Congresses over the world, a good overview of worldwide awareness of urban soils and their services is achieved, which types of soil information are available and which should be deepened and wait to be developed.