Today's cities are faced with the dilemma of how to respond most effectively to growing urbanization and their commitment to sustainable urban development, which is related to the implementation of environmentally friendly policies or the fulfillment of the United Nations' sustainable development goals. One of the main challenges is the issue of regeneration and renewal of urban buildings, which are abandoned or contaminated, are no longer used and whose re-use requires prior intervention. These are the so-called brownfields, which are painful places in modern cities, but at the same time they are potential development sites and opportunities for a new revitalization of urban areas. For developers, brownfields regeneration is an attractive investment in potential commercial space or residential housing, which is also beneficial for local residents, and regeneration therefore represents a so-called win-win situation.

The emergence of brownfields is related to the social and economic changes of the 1990s. Production from industrial sites has shifted or stopped completely, and as a result, the number of unused and neglected technical buildings has increased. An example of a heavily industrial city in the 19th and 20th centuries is Brno, with its predominant textile, armaments, engineering and chemical industries, in which the Tertiary and Quaternary sectors of the economy began to develop with the fall of the Iron Curtain. New industrial zones on the outskirts of the city gradually replaced the traditional industrial areas in the center. In this way, a zone of brownfields of the former industrial activity was created, stretching along the Svitava River, which was an important source of water for the factories of the textile or chemical industry in Brno. Today, the so-called Svitava Industrial Zone counts dozens of abandoned factories and buildings that call for restoration.

The presented research project of the dissertation "Revitalization of brownfields in urban environment" includes the realization of socio-cultural, economic and environmental analyses of the researched area of the Svitava industrial zone. Obtaining a comprehensive overview of the characteristics of the Svitava zone will contribute to the analysis of the perception of regeneration and the identification of the development opportunities of the area and the persistent barriers to regeneration. The analyses will include a comparison and evaluation of case studies of examples of good practice in the revitalisation of industrial brownfields in other selected cities in the Czech Republic and abroad.