SUMMARY OF DOCTORAL THESIS

mgr inż arch. Agnieszki Czachowska

title: ***Deepened Public Participation in the Systemic Shaping of Blue-Green Urban Infrastructure***

Supervisor: dr hab. inż. arch. Michał Stangel, prof. Politechniki Śląskiej

This dissertation, titled ‘Deepened Public Participation in the Systemic Shaping of Blue-Green Urban Infrastructure’, addresses the implementation of solutions fostering greenery and water retention in cities, created through residents' participatory efforts to respond and adapt to climate change in their immediate environment. The thesis's main objective is to develop solutions that facilitate the application of deepened participatory techniques in implementing blue-green infrastructure (BGI) in cities in response to climate challenges. In addition, the thesis examines techniques and activities that allow the deepened public participation processes to be carried out effectively.

The first part of the thesis analyses the available primary literature, starting with theoretical foundations, followed by international and national documents and materials related to the practical application of the solutions discussed. An explanation of the concepts, activities, processes and strategies relevant to the participatory shaping of BGI in cities follows this.

With this context, selected cases of implementation at the scale of the metropolis, the city, the district and the area around an educational facility are analysed. The experiences gained during the implementation of the Common Space (Wspólna Przestrzeń) project are described. The author of the dissertation took part in all the described projects. The knowledge and experiences gathered formed a solid foundation for the formulation of the implementation section of the dissertation and the conclusions.

The implementation section of the dissertation consists of two implementations: the first one is a scenario for a workshop on systemic implementation of blue-green infrastructure solutions in the city - a seminar for urban professionals; the second one is an adaptation template - a tool for analysing and creating spaces adapted to climate change.

The research and analysis carried out confirm the main thesis that public participation can be a tool to introduce sustainable solutions for blue-green infrastructure in municipalities.

The solutions developed during the participatory process are more socially acceptable and at the same time more responsive to the challenges of the climate crisis. It is also a process that facilitates the systemic implementation of BGI and improves local people's knowledge of ongoing climate change adaptation activities and strengthens their sense of social identity and integration.

In conclusion, directions for further research in the areas of the use of soft skills and computer technology in social participation processes are indicated.