

The facade design idea generation support system by evolutionary computing.

***Hiroki Matsuda¹, Kazutoshi Tsutsumi²**

^{1,2}College of Systems Engineering and Science, Shibaura Institute of Technology, Japan.

*Corresponding author: me13076@shibaura-it.ac.jp

The person's way of thinking has a limit. There is a possibility that the better design pattern exists outside of their own ideas.

In recent years, complicated structural analysis became possible by performance improvement of computer. The free structure forms which are not constrained by columns and girders became possible.

The purpose of this study is the construction of the idea support system and the proposal of a new design, which facade is structure of the building itself, for the design that is not ordinary structure composed with columns and girders.

The system is constructed by evolutionary computing technique and design creation method.

The various designs were obtained by changing the parameter. This system is efficient because a similar design for the target can be obtained.

Keywords: Facade design, Idea generation support system, Evolutionary computing, IDES, FEM