

## **OPTIMIZED ARCHITECTURAL DESIGN AS AN ANSWER FOR SOCIAL CHALLENGES**

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### **Abstract**

Architects had to deal with totally different commissions during their professional career. As the world is changing around us, the architectural approach should also be changed. The paper wants to introduce different case studies where architects really had to do research in design to be able to plan the optimized solution for a commission. The Marcel Breuer Doctoral School of the University of Pécs worked on different commissions in the last years. The planning of the Szentágotthai Research Centre was a special task. During the architectural design process main aim was to plan a building that can serve the need for architectural research regarding efficiency of renewable energy sources. The RATI plus energy factory is the first industrial building in Hungary designed by energy-design methodology. These two examples are representing the architectural approach where architects had to design buildings with an emphasis on energy-conscious aspects. Doctoral students and professors designed together social houses in the town of Gilvánfa. The houses had to be designed in a way that local people should be able to build their houses by their own hands. So the architects had to design comfortable homes with the easiest possible building structure and of course with local materials. The György-settlement is a segregated area in Pécs, mainly inhabited by poor gypsy people. There was a program launched last year for the integration of the area. The team working on the project consisted not only of architects, but sociologists, urban planners and experts of the gypsy culture were also cooperating. In this case the architectural design was influenced mainly by the social aspects. This research was supported by the European Union and the State of Hungary, co-financed by the European Social Fund in the framework of TÁMOP 4.2.4. A/2-11-1-2012-0001 'National Excellence Program.

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