

Prizes for young researchers



The prize-winners from the left Per-Mikael Sällström, Johan Linton, Åsa Hanæus and Erica Johansson

The prizes in the 1996 round of the competition "Young Building Researchers" have been awarded. The first prize goes to Johan Linton of the department of Mathematics, Chalmers University of Technology, who has combined mathematics and architecture in his work.

"Young Building Researchers" is an annual competition jointly arranged by the Swedish Council for Building Research and the Swedish Board of Housing, Building and Planning. It is addressed to students at universities who enter their master's dissertation in the competition.

The mathematics of architecture

The first prize of SEK 50,000 was awarded to *Johan Linton*, Department of Applied Physics/Mathematics at CTH, for his work with the poetic title "The mathematics of architecture".

The work deals with the association between mathematics and architecture, a subject which has interested and engaged prominent architects and architectural theorists for a long time. The principal theme of the work is a description and analysis of Le Corbusier's relationship with mathematics.

Le Corbusier's interest in mathematics was not based on a knowledge of mathematical theory, shows Johan Linton. For instance, Le Corbusier made use of the mathematical principle "the right angle" in artistic design without mastering the mathematical theory underlying this principle.

"There is a difference between the ability to use ideas in a meaningful way in creative design and their being scientifically correct or generally valid", writes the author.

"A very well performed work" is the verdict of the jury.

Second prize to Luleå

A second prize of SEK 30,000 was awarded to *Åsa Hanæus* and *Erica Johansson*, at the Department of Environmental Planning and Design, Luleå university of technology for their work "Sewerage system with urine separation facility".

This work consists of three parts: A survey and evaluation of major urine-separating sewerage systems in Sweden, follow-up and evaluation of the urine-separating sewerage in Luleå, and laboratory experiments on the storage of urine under different conditions. The evaluation is based, inter alia, on questionnaire surveys in which the views of occupants were obtained.

The citation of the jury reads: "... The work makes a substantial contribution to the knowledge base

regarding urine separation techniques. The conclusions of the authors and their proposals for improvements should be very important in making future systems better qualified to meet the requirements for sewerage systems of long term sustainability".

Third prize

A third prize of SEK 20,000 was awarded to *Pehr-Mikael Sällström*, Department of Architecture/Theoretical and Applied Aesthetics, Lund Institute of Technology, for his work "Place for sound effects".

The dissertation is divided into a summary of the state of knowledge, an investigation of existing acoustic environments, with Lund Cathedral as an example, and preparation of acoustic sketch designs. These sketches show how, by erecting a number of wave-shaped screens outside the cathedral, an interesting acoustic environment can be created for visitors. ■

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Questions regarding the competition "Young Building Researchers" can be addressed to **Bengt H. Ohlsson**, chairman of the competition jury and departmental director at the Swedish Council for Building Research, tel +46 8 617 73 78 fax: +46 8 653 74 62, e-mail: bengt.ohlsson@bfr.se