

TOWARDS REACTIVATING THE ROLE OF COMPUTER AIDED ARCHITECTURAL ACOUSTICS DESIGN (CAAAD)

Ahmed Omar Mohamed Sayed Mostafa

Assist. Professor, College of Architectural and Planning

King Saud University, Riyadh, Saudi Arabia

ahmedoms@ksu.edu.sa

The accelerating and continuous development in the field of digital computer techniques and applications affects all aspects of our life including Architectural Acoustics. The Architect has to effectively benefit from these techniques and applications and integrate them into the design process to reach good acoustic solutions in all parts and types of his designs. This, in turn, requires the architect to be aware of acoustics' concepts and latest related computer techniques and to have suitable skills and abilities that could be effectively used from the very early stages of the design process.

This paper, through inductive and analytical techniques, will explore aspects of design activities related to room acoustics and sound control, computer techniques related to architectural acoustics, and possibilities of executing design activities with computer techniques. It aims to show the importance of integrating these aspects in reactivating the role of Computer Aided Architectural Acoustics Design (CAAAD).

The prospected objective will share an important role in developing design process efficiency, improving design product quality, increasing the architect knowledge related to this field and reinforcing communication between the architect and other design related parties during design process.