ABSTRACT

Through this dissertation, an understanding of the relationship of the environment, with man and buildings with technological intervention, is to be attained. The first motivation to focus on the tripartite relationship, is that of increasing energy consumption. Circumstances for change in attitudes towards buildings and their envelopes, are traced from pre-energy crisis years, to those immediately after, up till today. Views to the future are also offered.

The second motivation stems from the concern for the quality of the interiors, as directly affected by the building envelope. A change in sensibilities is prime to the new directions embarked upon via the application of technology.

The analogy of the building envelope with human skin is also looked into for clues to developing an effective interface.

Glass as a building material offers both opportunities and limitations. A degree of ‘intelligence’ applied through technology to the building envelope can reduce energy consumption (by supplementing lighting, and reducing air-conditioning costs) in the extended time frame.

A study of existing glass technologies aims to find new directions for the evolution of building facades of the future.