

Design and development of kenaf fiber-reinforced polymer composite polytechnic chairs

ABSTRACT

This study is carried out for the design and development of a kenaf fiber-reinforced polymer composite for chairs used in polytechnic institution of higher learning. Development of the furniture industry in the field of education has been increasing recently. This is due to the gained attention in composite materials for implementations in the field such as medical, industries, sports, aerospace, , and education such as polytechnic furniture. A systematic approach of a total design process is utilised for a better undertaking towards achieving the best conceptual design for the Polytechnic Chairs. The best conceptual design of the composite polytechnic chair was then selected where the design utilises kenaf fiber-reinforced polymer composite which is also described in this paper. The usage of kenaf fiber-reinforced polymer composite helps in reducing global warming.

Keyword: Design and development; Kenaf fiber-reinforced polymer composite; Polytechnic chairs
