

# **A Study of Laminated Composite Materials Using ACLAP Computer Program**

*Syahrul Fithry Senin  
Ayurahani Che Lah*

## **ABSTRACT**

*This study is focused on the analysis of the composite materials by using the developed computer program, Automatic Composite Laminated Analysis Program (ACLAP), in FORTRAN language. The purposes of this study are to determine the capability and the accuracy of the program for solving the analysis that related with the laminate materials. This study also can provide an understanding of the underlying principles and techniques associated with the stress analysis and strength predictions of composite material structures. There are six examples that are going to be analyzing by using the FORTRAN program, each of the examples has their own problem statement. The FORTRAN results from the examples will be compared with the theory calculation. At the end of this study a user friendly computer program is produced with the intention to assist the lecturer for teaching or learning purpose.*