

Title: **A numerical study of the arc-roof and the one-sided roof enclosures based on the entropy generation minimization**

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This paper presents results from the application of the minimum entropy generation principle to two different shapes of green house. The authors used the artificial compressibility technique introduced by Chorin to solve steady state, 2-D, Navier-Stokes equations. Two shapes were considered, arched roof and one side roof.

Several boundary conditions were analyzed by the authors and the conclusion obtained can be summarized as follows: In both cases, the total entropy generation decreases with the aspect ratio and increases with the ambient temperature. Under equal conditions, the one-sided roof enclosure has the minimum entropy generation of both shapes