



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2015_BJAST_16778
Title of the Manuscript:	Simulation and Comparison of the performance of refrigerant fluids in single stage vapor compression refrigeration system
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	In this paper, Hydrocarbons, R134a and ammonia are used to replace refrigerants 12 and 22. The simulation and comparison reflected in this paper is similar to the papers published in the past 15-20 years. (Refer: Devotta and Gopichand (1992), Comparative assessment of HFC 134a and some refrigerants as alternatives to CFC 12, International Journal of Refrigeration, Vol.15, No.2, pp.112-118 and you can refer many such papers). Refrigerant 12 has already phased out for many years. In fact, refrigerants with hydrocarbons and R134a are widely commercially available. There are companies selling HC mixture refrigerants for the complete range of Refrigeration and Air-conditioning applications. Refrigerators working with hydrocarbons and R134a are available in the market. The results presented are according to the trends seen earlier for HC mixtures by many investigations.	Thanks for your comments, but the result from the present study validate the fact that ammonia can be used to replace R12 and R22 provided all necessary safety precautions are observed, thus improve the thermal system efficiency and could help to solve problems regarding environmental issues since its impact on environment in terms of ODP and GWP is null