

# Review of: "A Description of the Melting of Ice With the Modified Clapeyron–Clausius Equation"

Paramita Deb

Potential competing interests: No potential competing interests to declare.

## **Reviewer's Report**

Article Type: Regular Article

Article Title: A Description of the Melting of Ice With the Modified Clapeyron–Clausius Equation

Author: Igor Stepanov

Reviewer's recommendation: Not recommended for publication

Review:

The author stated a modified Clapeyron-Clausius equation to describe the melting of ice successfully if the compressibility of water and ice is considered. However, the work primarily discusses the number of previous works, and there are no new findings in the recent work.

The introduction is very brief. The author should explain the Clapeyron-Clausius equation in more detail. Also, there should be a more detailed review of previous works.

The explanations regarding the equations are not sufficient. The author has not given any indices to the equations. All the equations described by the author are already studied by other papers. There is no new contribution by the author as far as the theory is concerned.

The results and conclusion are insufficient. There should be proper plots supporting the claims by the author. There is no proper explanation regarding the conflict about the thermal expansion coefficients and compressibilities of ice and water. The paper lacks the broader implications of the modified equations for ice and water.

Although the work tries to address the problem regarding phase transition, it cannot be recommended for publication in the current format.