Review of: "Analysis method of binary concentration-inhomogeneous systems"

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Potential competing interests: No potential competing interests to declare.

Review on the paper entitled “Analysis method of binary concentration inhomogeneous systems”

The article is well written except of a few grammatical errors that can be corrected by the author. The method of calculation of the heat capacity using data of polymerization mass upon temperature. It is important to notice that the temperature range includes the Tg. In this region the system has two phases and one must account for the heterogeneity of the system, that is included to the proposed method. This leads to the solution of Fredholm integral of 1st kind. It should better the author to describe a little better the application of this technique in order the reader to understand better the approach. The Fredholm equation of 1st order has the form

$$g(t) = \int_a^b K(t,s)f(s)ds,$$

and the problem is, given the continuous kernel function K(t,s) and the function g, to find the function f. Please explain the details of this approach to our problem. If I understand well from eqn (2) of the paper,

$$K(t,s) = C(x,T)$$

and

$$g(s) = M(x)$$

. If the author provides an example of calculations then the method should be better understandable by the readers. We may consider the system MMA polymerized to PMMA. Please gives the details. In Fig 1 we can write the two different Tg temperatures.

The reviewer proposes the paper to be published after the author takes in the accounts the written remarks.