

section. In the two-dimensional case (cylindrical reactor with absorbing rod), however, the host atoms are smeared out into line filaments when the rod diameter tends to zero and, thus becoming one-dimensional, cannot have an arbitrarily large cross section (the cross sections actually vanish). Similarly, in three dimensions, a point absorber forces also the host atoms to become geometrical points. Thus, in two and three dimensions, the δ -function character of the absorbing volume overrides the assumption of the diverging cross sections, whereas in one dimension, it does not.

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Response to "Comment on 'Analysis of Cluster Geometries Using the DP1 Approximation of the J_{\pm} Technique'"

There seems to be confusion between my definition of the J_{\pm} technique and that of Mohanakrishnan.¹ In fact, what he calls the J_{\pm} technique is what I would call the interface current method. The main difference between the two techniques is that the J_{\pm} technique refers to a decomposition of a cell into isolated homogeneous zones, while the interface current method allows for a decomposition of the cell into heterogeneous zones. As a result, the computation of transmission probabilities is sufficient when the J_{\pm} technique is considered, while the interface current method generally requires additional collision and leakage probabilities. However, for a given cell, the number of transmission probabilities required by the J_{\pm} technique is generally much larger than that required by the interface current method. Since the purpose of my paper² was to discuss the use of the J_{\pm} method, I did not think that a complete literature review of the interface current method was needed.

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