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Components of Energy....and QM

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Dear Igor,

I am afraid my response to your paper will disappoint you. I simply have no idea how to APPLY quantum ideas to our problem because the masses and dissipation are so large that there are no quantum effects in the ordinary sense of the words that survive into the biological domain. The quantum effects are there in the chemistry of course, but not otherwise.

I have been trying to formulate precisely why I am so confused about your SEPARATE identification of energy terms like the 'self energy' in your equation (3).

I do not know if this self energy is an INPUT or an OUTPUT of the problem.

What do I mean by "the problem"?

*I mean the partial differential equations and boundary conditions that specify the entire system INCLUDING ALL THE PERMANENT CHARGES and all the rules that generate induced charges.

I do not know if the self energy is an additional input to the problem BEYOND THAT INCLUDED IN THE SPECIFICATION OF THE PROBLEM I CALL * in the above indented paragraph. This would be an input.

OR is it a component of the solution to the problem specified by *. This would be an output.

If it is a component of the OUTPUT, then the overall solution is not changed by the choice of the component, although of course the size of the leftover (the part that is not the self energy) would change a lot.

If it is a component of the input, the the problem with the self energy is different from the problem without self energy. In this case, the original problem (*), differs very substantially from the problem with self energy, enough so that in my opinion, one of them is likely to be wrong.

Please tell.
Are these components like self energy inputs or outputs?

As ever
Bob

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