Erratum

to the article by M V Basilevsky, M V Vener

'Theoretical investigations of proton and hydrogen atom transfer in the condensed phase'

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The following text should be inserted at the end of Section III.1.b, page 17.

The HAT reactions in the H + H system and its isotope analogues make an exception. There are no high curvature regions on the canonical reaction path (RP) curves for these reactions and it is just this condition that is required in order to construct a curvilinear coordinate system using a RP curve as a frame. The variational TS theory in its conventional formulation is applicable to for such systems. Their computations proved to be successful even at low temperature.[1–4] On the other hand, special effort is needed for extending the variational approach to the HAT between heavy atomic or molecular fragments (the systems considered in Section II.3.b with a large curvature of the RP in the vicinity of the TS region). Here a significant modification of the theory is required that includes a search of tunneling trajectories avoiding the RP.[5–7]

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