

attractive potential-energy surface

A *potential-energy surface* for a process $A + B \rightarrow C$ in which the initial descent of the system into the product valley is associated with a substantial decrease in the A–B distance and with little separation between the products A–B and C. In terms of a *potential-energy profile*, the energy barrier occurs in the early stage of the reaction path.

Attractive surfaces are also called early-downhill surfaces, and the barrier in such a surface is called a Type-I barrier.

1996, 68, 153