

appearance energy (appearance potential)

Refers to ionization of a molecule or atom by electron collision or photon absorption. In mass spectrometry it has often been reported as the voltage which corresponds to the minimum energy of the electrons in the ionizing beam necessary for the production of a given fragment ion. In photoionization it is the minimum energy of the quantum of light which produces ionization of the absorbing molecule.

Source:

PAC, 1990, 62, 2167 (*Glossary of atmospheric chemistry terms (Recommendations 1990)*) on page 2175

PAC, 1991, 63, 1541 (*Recommendations for nomenclature and symbolism for mass spectroscopy (including an appendix of terms used in vacuum technology)*). (*Recommendations 1991*) on page 1546