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Dissociative ionization cross sections for methyl halides by electron impact RAJEEV KUMAR, DJ College, Baraur, SATYENDRA PAL, MMH College, Ghaziabad — The revisited JK semiempirical formulation that requires the oscillator strength data as input has been employed to evaluate the partial and total ionization cross sections corresponding to the formation of various singly and doubly charged cations in electron dissociative ionization of methyl halides CH_3X(X= F, Cl, Br) in the incident energy range varying from the ionization threshold up to 1000 eV. The partial and the total cross sections are compared with the previously reported experimental and theoretical results leading to a reasonably good agreement. The ionization rate coefficients are calculated using the calculated partial and total ionization cross sections and Maxwell-Boltzmann energy distribution.

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