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MSi2H2⁺ STRUCTURE (M: CR, MN AND W) THEORETICAL AND FT-IRC MASS SPECTROMETRY STUDY

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Progress has been made in the knowledge of the nature of the M-X bonding (M=Cr, Mn and W; X=C, Si...) both experimentally and theoretically. A Fourier transform ion cyclotron resonance mass spectrometry (FT-ICR MS) study of the gas phase reaction I of M⁺ with SiH₄ is reported here in order to give more insight on the structure of the MSi₂H₂⁺ ion



The structure of the MSi₂H₂⁺ ions are discussed in terms of CID result confronted to the theoretical calculation at the DFT level on the different structural geometries.

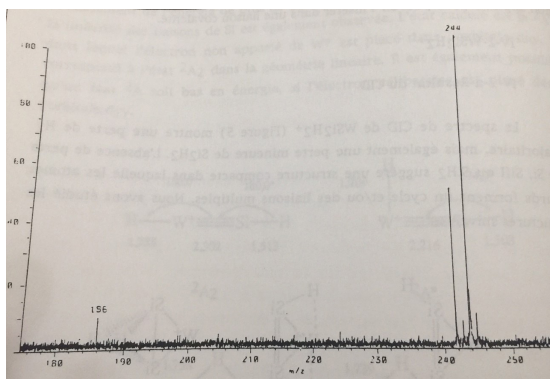
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Figure 1: WSi₂H₂⁺ CID spectra obtained with 17 eV collision energy