Abstract

In this paper the authors have considered the molecule \( C_6 H_{12} \) (the cyclohexane) and then constructed the group of symmetries of \( C_6 H_{12} \) which is a group of order 4. Then they proved that the bounds of the order of symmetry group of Automorphisms of compact Riemann surfaces on which the symmetry group of \( C_6 H_{12} \) acts as a group of Automorphism is \( 4(g-1) \) where \( g \geq 2 \), the genus of the corresponding Riemann surface and the corresponding minimum genu \( g=2 \) and associated Fuchsian group has signature \( < 2,2,2,2,2 \> \).

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