A new approach for Boranes and 2D- and 3D-Boron allotropes starting from $C_3H_3^+$

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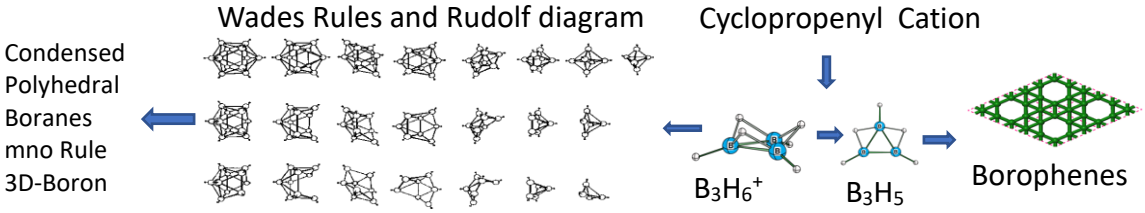
The unusual stability and aromaticity of $B_{12}H_{12}^{-2}$ and other polyhedral boranes invariably brought in structural comparison with benzene. Wades Rules for closo-, nido- and arachno-boranes, and Rudolf diagram form the basis of structural chemistry of boron. The relationship to 3D-boron is achieved by mno Rule. However the recurring pattern in boron is three-membered ring. We present here how three membered rings form the basis of the structural chemistry of boranes, and, how these relate boranes to 2D and 3D boron allotropes.



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