

# Investigation on aromaticity in seven and eight membered rings derivatives

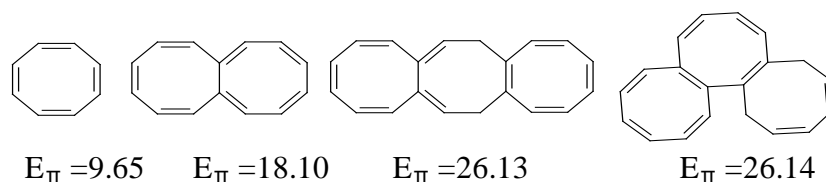
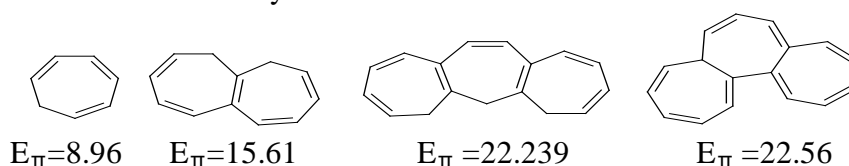
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The first fully conjugated carbocyclic compound to be recognized and described early in the nineteenth century was benzene. Huckel's rule has some theoretical shortcomings, but in general terms it works. It has had an enormous influence on organic chemistry and has inspired much work on organic compounds and was largely responsible for the work that has been undertaken on the synthesis and properties of annulenes.

In this paper the  $E_{\pi}$  amount of eight organic compounds as a character of aromaticity were calculated by HMO method. As it is indicated, the amount of aromaticity in [7] annulene is more than [8] annulene and as the number of the fused rings increase the amount of aromaticity decrease. But when the rings are fused in angular fashion the aromaticity is increased.



## References:

- Robert D. Kennedy, Douglas Lloyd, Hamishd Mc Nab, *J.Chem. Soc. Perkin Trans, 1*, **2002**, 1601-1621
- FrancisA. Carey, Richard J. Sundberg, *Advanced Organic Chemistry*, 4<sup>th</sup> Edition.