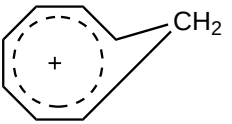
**homoaromatic**

Whereas in an *aromatic* molecule there is continuous overlap of p-orbitals over a cyclic array of atoms, in a homoaromatic molecule there is a formal discontinuity in this overlap resulting from the presence of a single $sp^3$ hybridized atom at one or several positions within the ring; p-orbital overlap apparently bridges these $sp^3$ centres, and features associated with aromaticity are manifest in the properties of the compound. Pronounced homoaromaticity is not normally associated with neutral molecules, but mainly with species bearing an electrical charge, e.g. the 'homotropylium' cation, $C_8H_9^+$:




In bis, tris, (etc.) homoaromatic species, two, three, (etc.) single $sp^3$ centres separately interrupt the π-electron system.

See also *homoconjugation (2)*.

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