Copy of a printed diagram referenced as "Carbon atoms 'prepared' for binding in the ethylene molecule"

Contributors

Fuller, Watson, 1935-

Publication/Creation

November 1963

Persistent URL

https://wellcomecollection.org/works/zw89kaum

License and attribution

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

trigonally, and the overlapping orbitals A_1 and B_1 are paired: A_2, A_3, B_2, and B_3 are paired with four overlapping hydrogens.

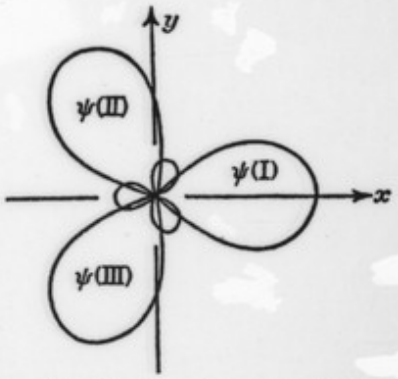


FIG. 8.4. The three trigonal sp^2-hybrids.

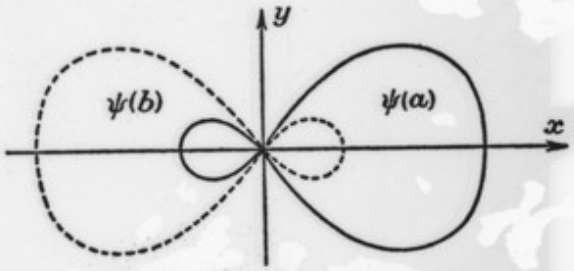
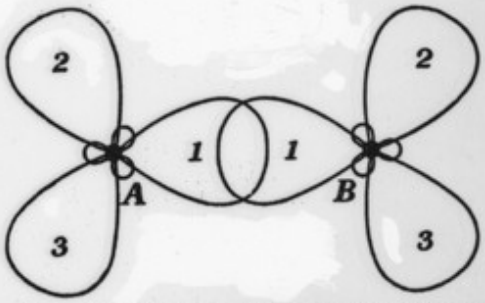


FIG. 8.5. The two digonal sp-hybrids.



The carbon atoms 'prepared' for binding in the ethylene molecule $CH_2{=}CH_2$. The π orbitals on A and B are not shown to avoid confusion. They are directed perpendicularly to the plane of the paper.

This gives six σ-bonds, and there remain the two unmixed p_z a.o.'s of A and B. These must be paired to form a π-bond, as in Fig.