Chemia organiczna

KATEDRA CHEMII

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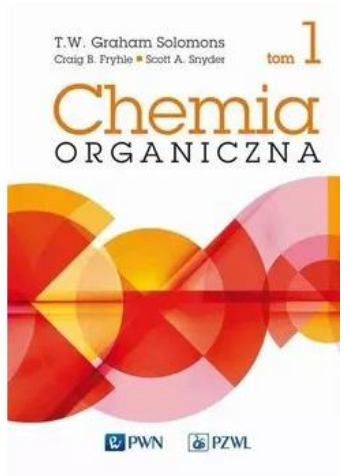
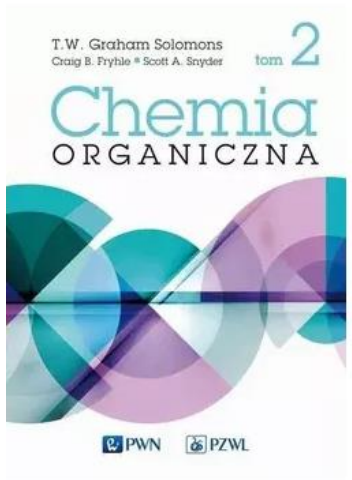
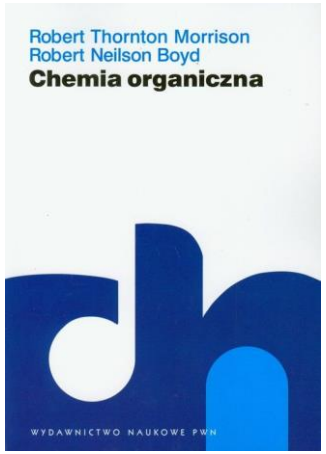
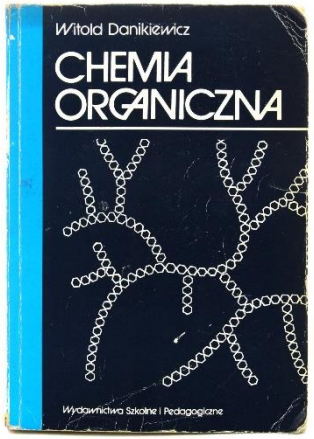
Literatura

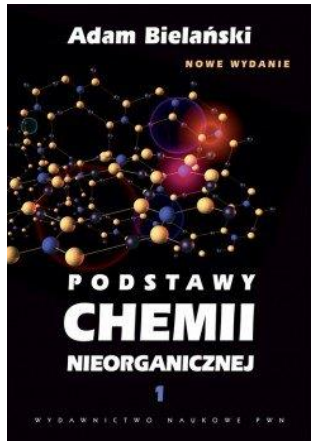
1. Chemia Organiczna: R. T. Morrison, R. N. Boyd;
2. Chemia Organiczna: T. W. Solomons
3. Chemia Organiczna: J. McMurray;
4. Chemia Organiczna: W. Danikiewicz – rep.;
5. Chemia organiczna. Krótki kurs: H. Hart;
6. Chemia Nieorganiczna: A. Bielański;
7. Chemia Fizyczna: P. Atkins;
8. Chemia Ogólna: L. Pajdowski ;
9. Mechanizmy reakcji w chemii organicznej: P. Mastalerz

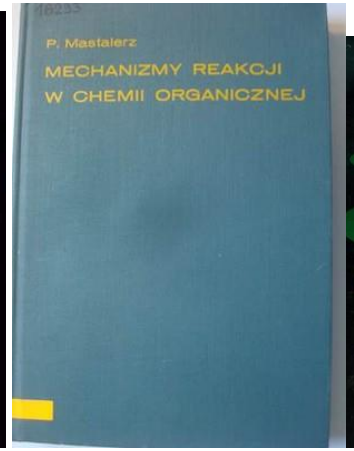


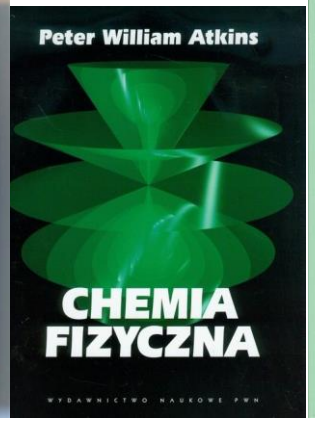




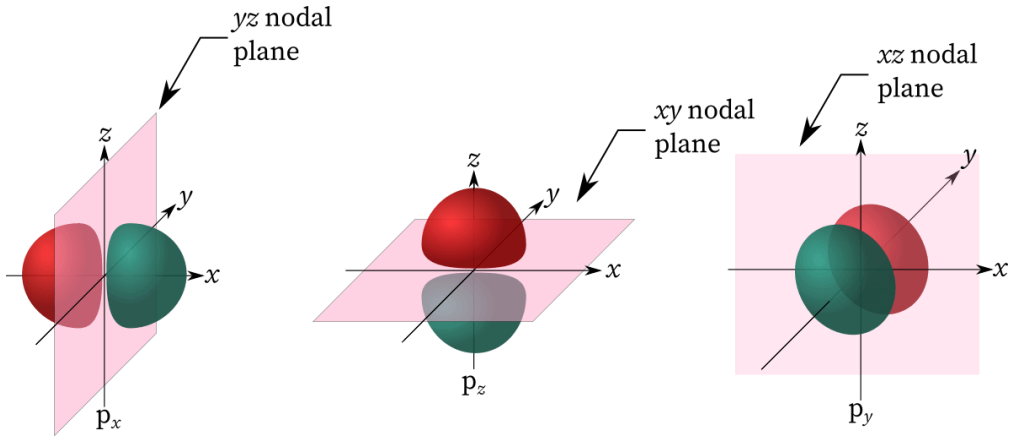


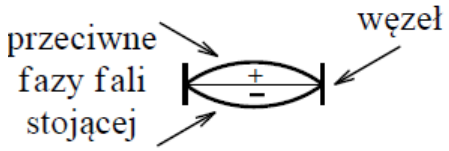




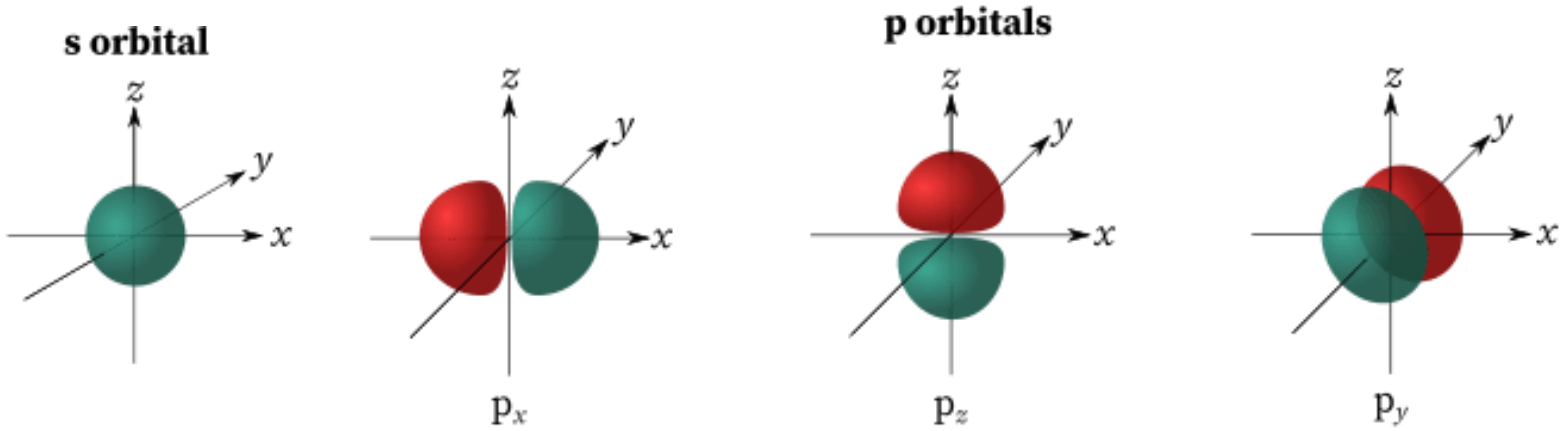


Wprowadzenie do teorii orbitali molekularnych

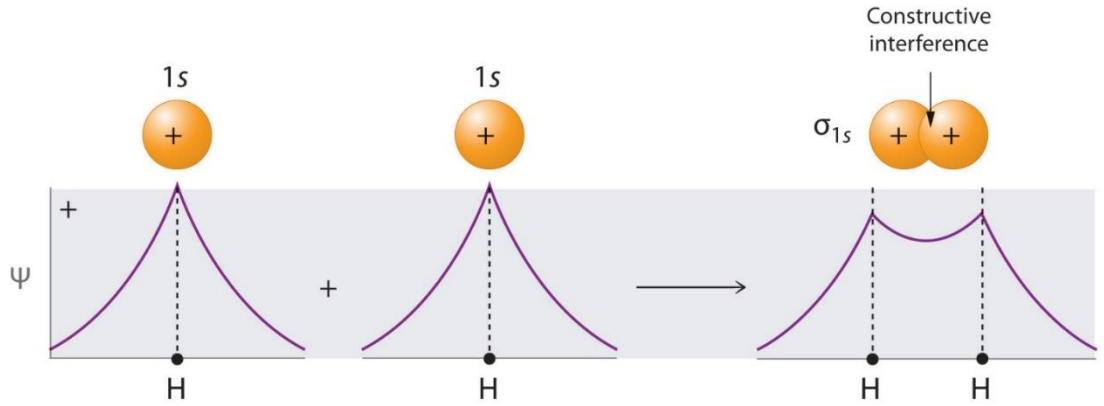




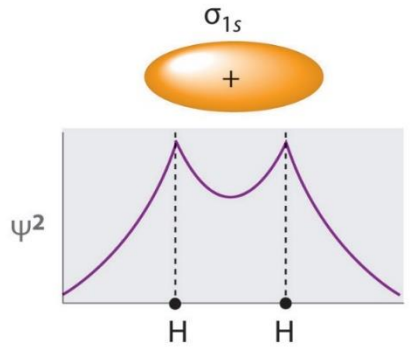
płaszczyzna węzłowa: przestrzeń o zerowym prawdopodobieństwie występowania elektronu



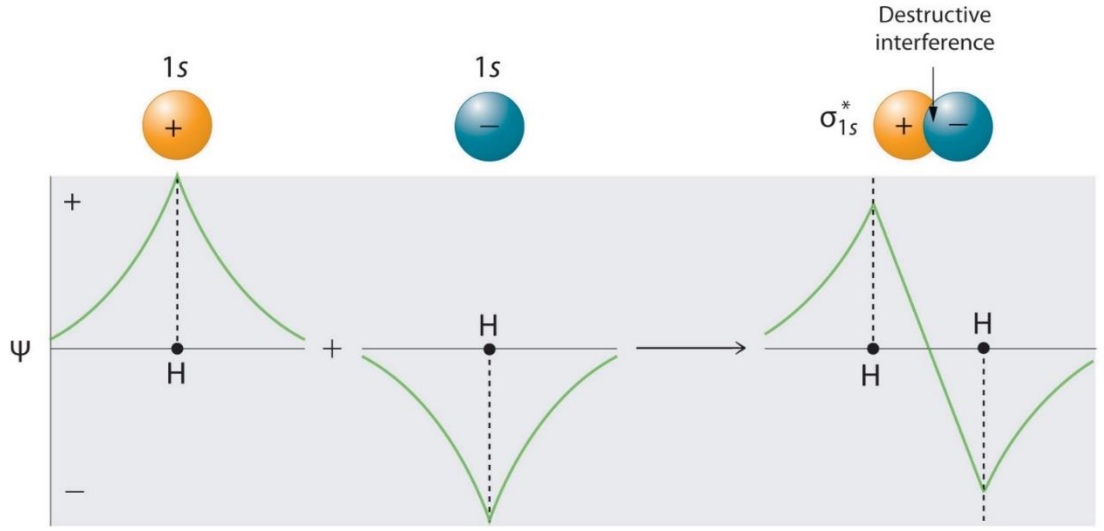
Wprowadzenie do teorii orbitali molekularnych



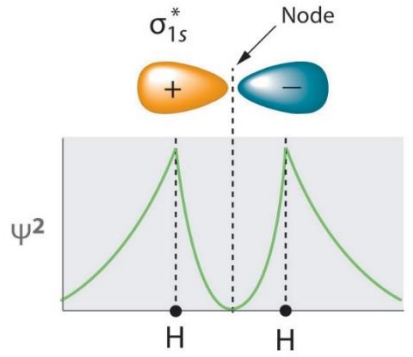
(a) Wave functions combined for σ_{1s}



(b) Bonding probability density

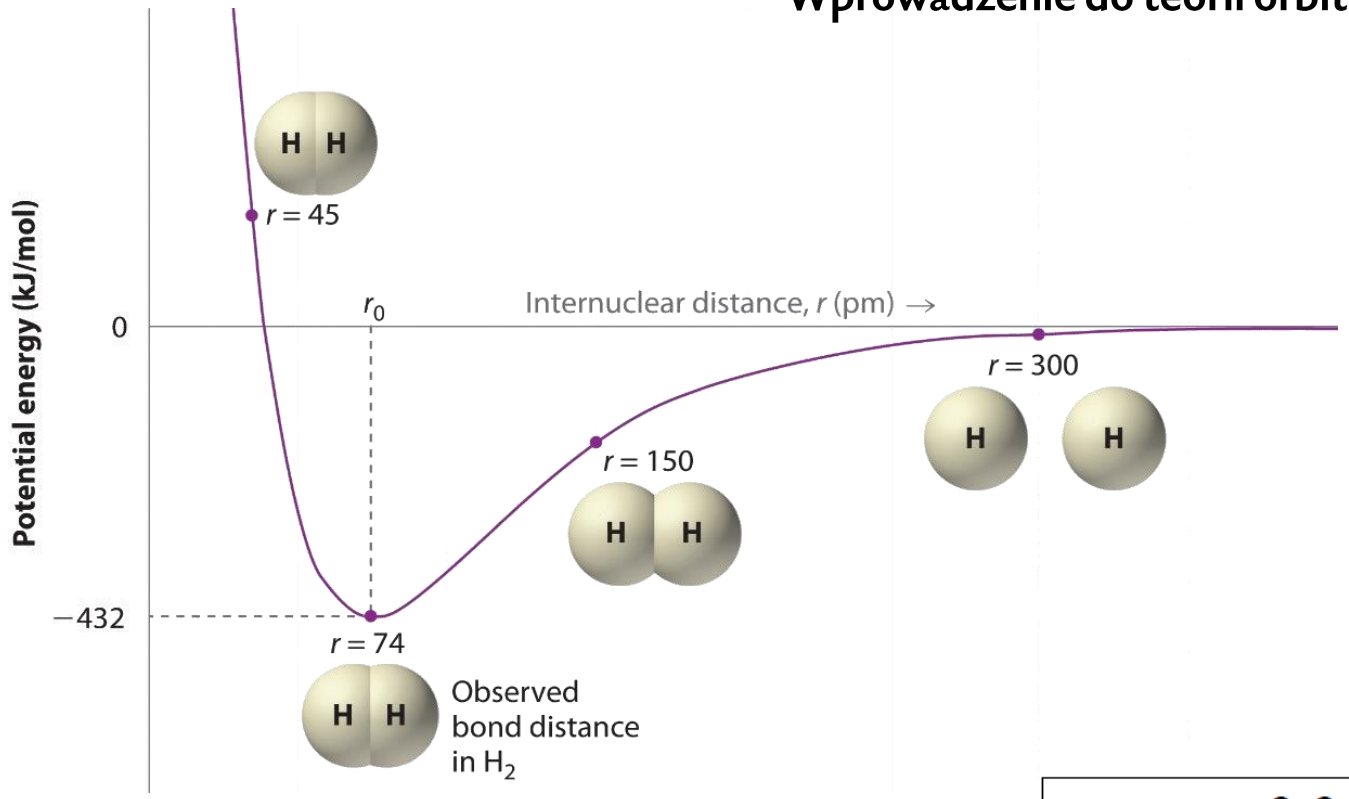


(c) Wave functions combined for σ^*_{1s}

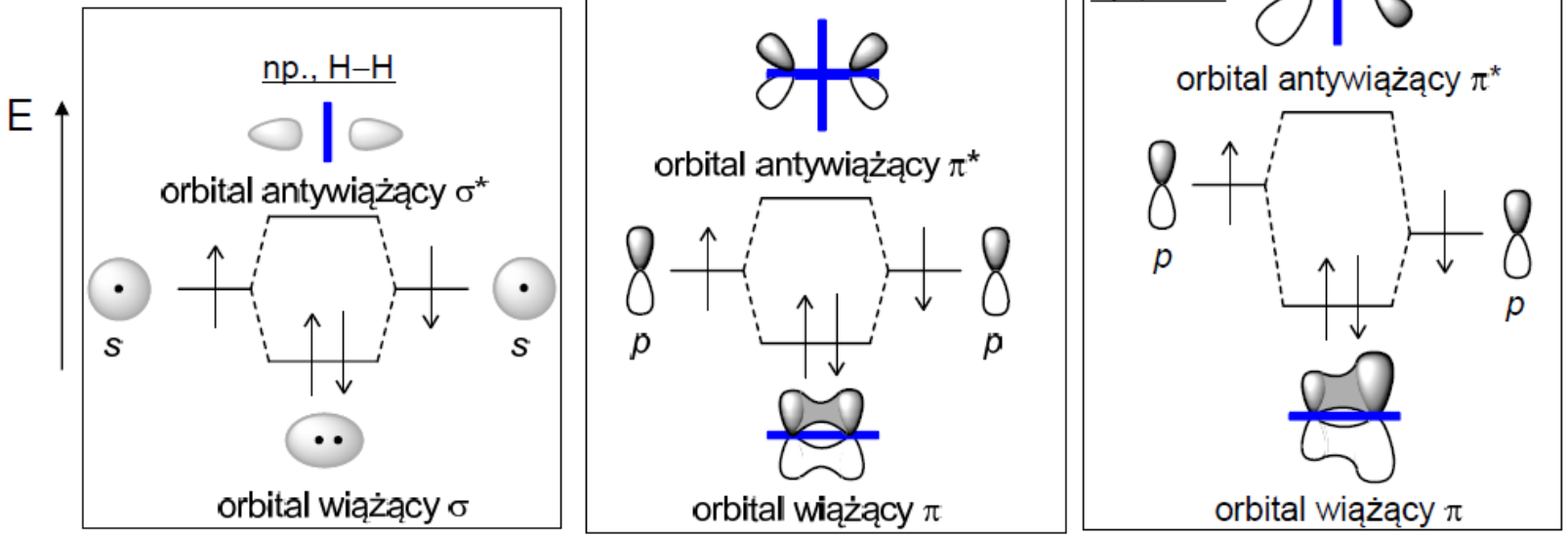


(d) Antibonding probability density

Wprowadzenie do teorii orbitali molekularnych

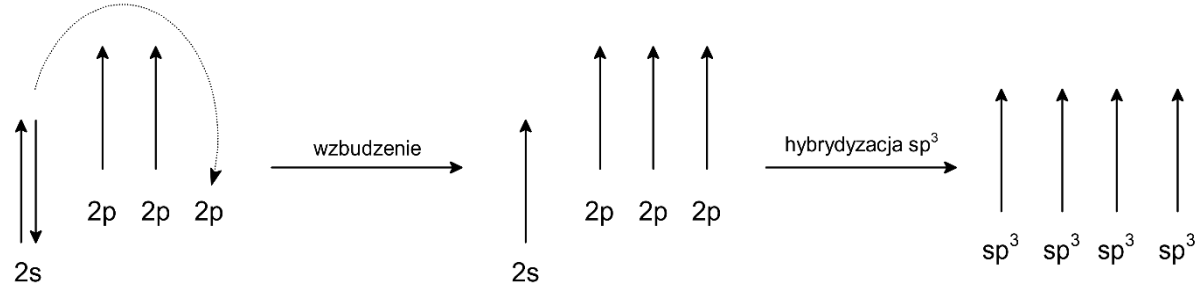


- Pojedyncze wiązanie s;
- Cylindrycznie symetryczne;
- Energia wiązania: 436 kJ/mol;
- Długość wiązania 74 pm;



Wprowadzenie do teorii orbitali molekularnych

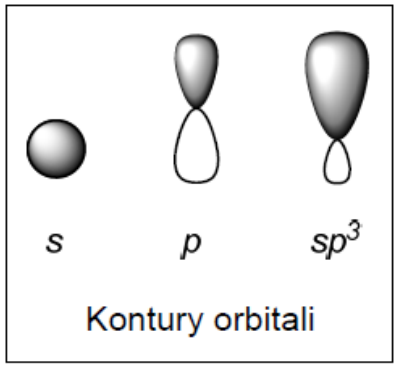
przeniesienie elektrony na niezajęty orbital

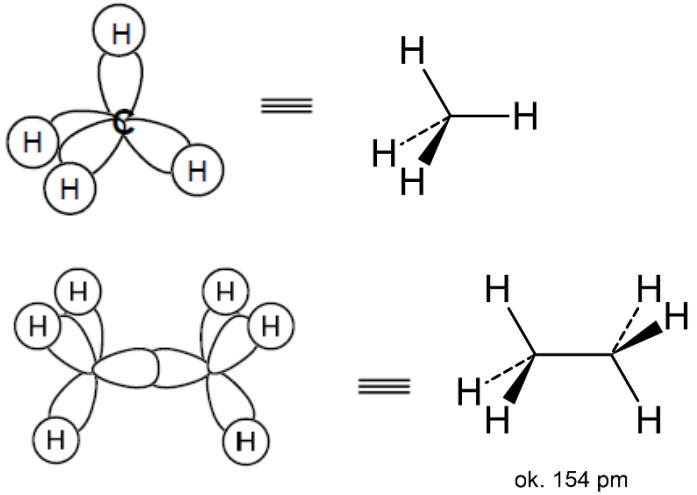


stan podstawowy atomu węgla

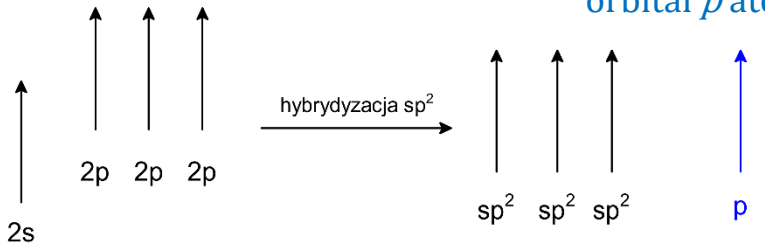
stan wzbudzony atomu węgla

orbitale zhybrydyzowane sp^3





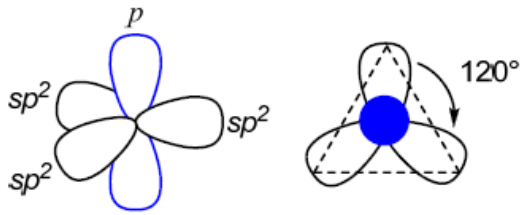
Wprowadzenie do teorii orbitali molekularnych



stan wzbudzony atomu węgla

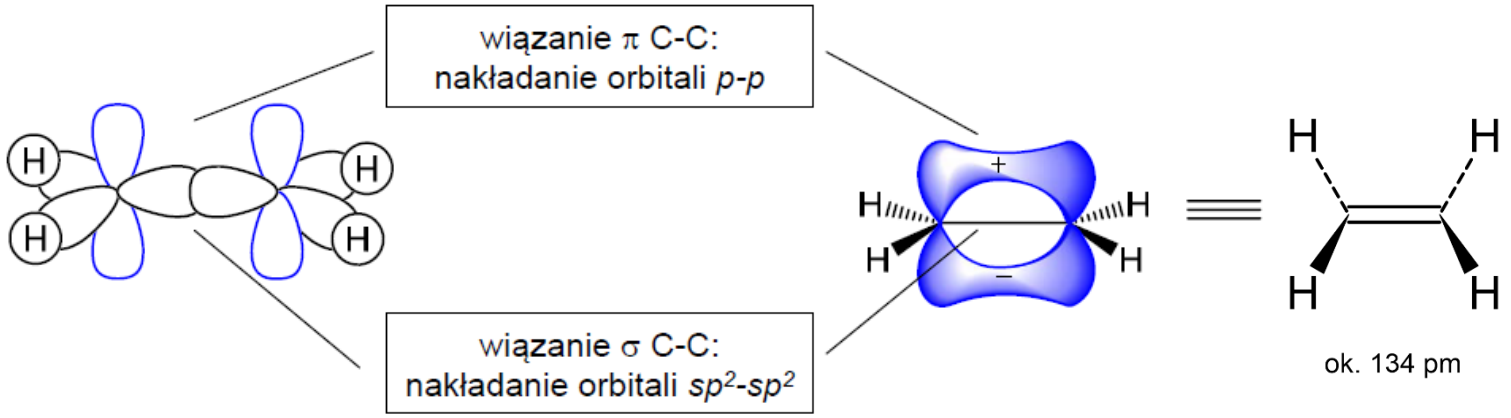
orbitale zhybrydyzowane sp^2

niezhybrydyzowany orbital *p* atomu węgla



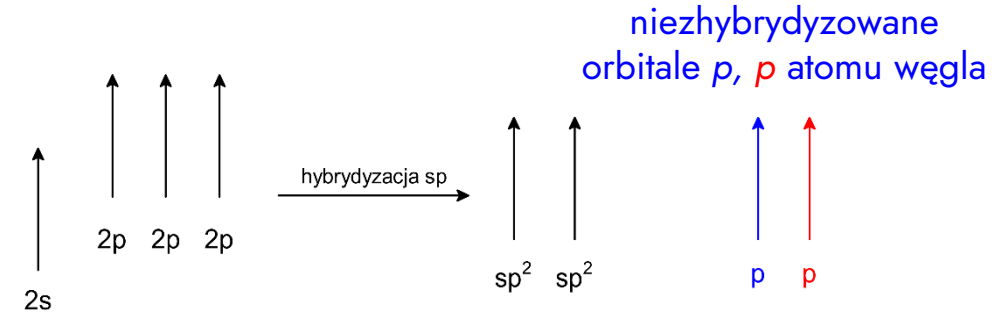
widok z boku

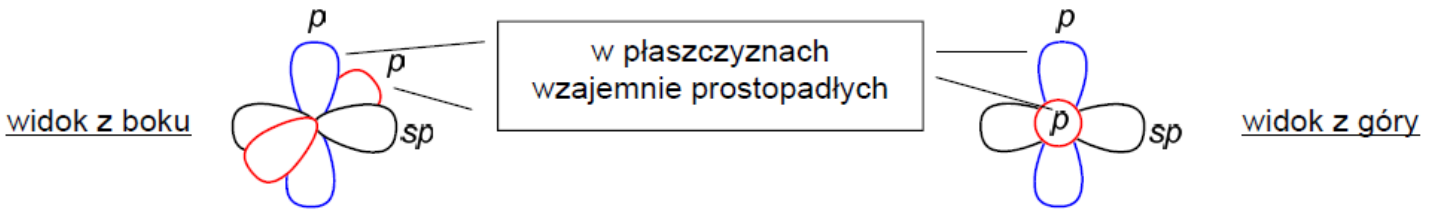
widok z góry

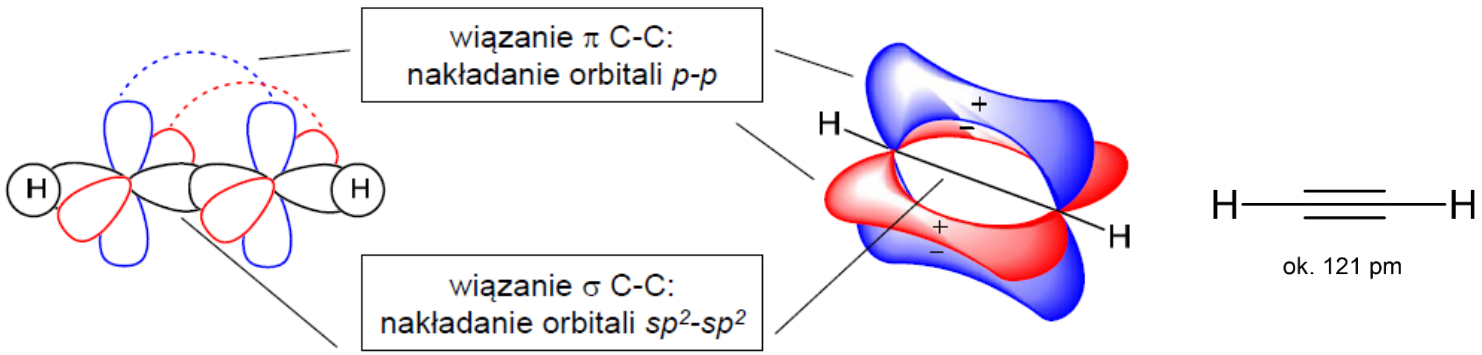


ok. 134 pm

Wprowadzenie do teorii orbitali molekularnych







Karbokationy, karborodniki i karboaniony