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Title of the conference:

Is π -Single Bonding (C- π -C) Possible? A Challenge in Organic Chemistry

Short abstract:

Chemical bonding systems determine the nature of molecules. In organic chemistry, there are two bonding types for carbon-carbon connections: σ -bonding and π -bonding. In this presentation, several aspects of studies in the last two decades addressing a naive question "Is π -single bonding (C- π -C) possible?" will be presented: (1) features of π -single bonded species; (2) molecular design for π -single bonding; (3) generation and detection of singlet diradicaloids with a π -single bonding character; (4) future prospects of π -single bonded species.