

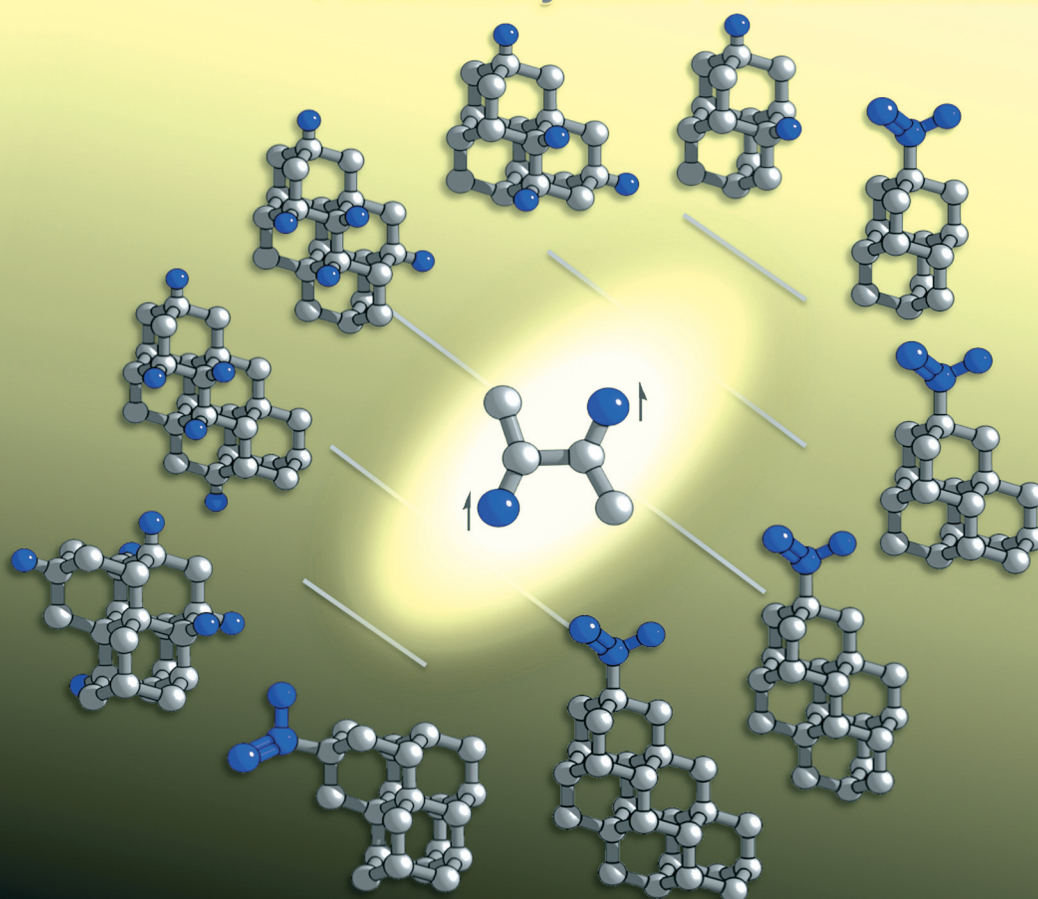


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Photoacetylation of Diamondoids



Cover Picture

Andrey A. Fokin, Peter R. Schreiner et al.
Photoacetylation of Diamondoids: Selectivities and Mechanism

Microreviews

Andreas Grauer and Burkhard König
Peptidomimetics

V. Haridas
From Peptides to Non-Peptide Alpha-Helix Inducers and Mimetics

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ChemPubSoc
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A union formed by chemical societies in Europe (ChemPubSoc Europe) has taken the significant step into the future by merging their traditional journals, to form two leading chemistry journals, the *European Journal of Inorganic Chemistry* and the *European Journal of Organic Chemistry*. Three further members of ChemPubSoc Europe (Austria, Czech Republic and Sweden) are Associates of the two journals.

COVER PICTURE

The cover picture shows the photochemical generation of triplet diacetyl (butadione, center) and its highly selective C–H bond-activation reactions in the functionalizations of tertiary C–H bonds. Despite several similarly reactive tertiary C–H bonds and a multitude of secondary C–H bonds with similar or even smaller bond dissociation energies (blue hydrogen atoms on structures on the left), this reagent shows remarkable selectivity for the apical positions of diamondoids owing to its high sensitivity to steric hindrance. This gives the respective apical acetyl diamondoids (blue groups on the right) in high yields. Deuterium kinetic isotope effects and accompanying computational studies shed light on the rate-determining C–H bond-activation step. Details are discussed in the article by A. A. Fokin, P. R. Schreiner et al. on p. 5153ff.

