



**Showcasing research from Professor De Bo's laboratory,
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Mechanochemical generation of aryne

Mechanical force is unique in promoting unusual reaction pathways and especially for the generation of reactive intermediates sometimes inaccessible to other forms of activation. The mechanochemical generation of reactive species could find application in synthetic and materials chemistry alike. However, the nature of these reactive intermediates has been mostly limited to radicals or carbenes. Here, we present a new mechanophore that generates a reactive aryne intermediate upon dissociation of a benzocyclobutene (BCB) core *via* a force-promoted retro[2+2]cycloaddition.

Carp in pond, pulling strong, broken bonds. Watercolour on cellulose paper by Qianqian Cheng.

As featured in:



See Qianqian Cheng and
Guillaume De Bo, *Chem. Sci.*,
2024, 15, 13181.