

Electrifying and (en)lightening aryl diazoesters

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Aryl diazoesters are an interesting class of reagent in organic synthesis that are converted into carbenes and metal carbenoids under light and metal catalysts under thermal conditions. These carbene/carbenoids are then utilised in numerous organic transformations including, insertion, cycloaddition, cyclopropane formation etc. We have demonstrated that under photochemical and electro-photochemical condition aryl diazo esters are converted to carbenes and radical anions respectively and are harnessed in numerous ways to generate interesting heterocyclic scaffolds. Our presentation will be a vignette of this research.

[1] *Cell Reps. Phys. Sci.* **2024**, 10.1016/j.xcrp.2024.101944

[2] *Chem. Sci.* **2023**, 14, 6216-6225.

[3] *Angew. Chem. Int. Ed.* **2023**, 62, e202308916.

[4] *Green Chem.* **2022**, 24, 3001-3008.

[5] *Green Chem.* **2021**, 23, 8533-8544.