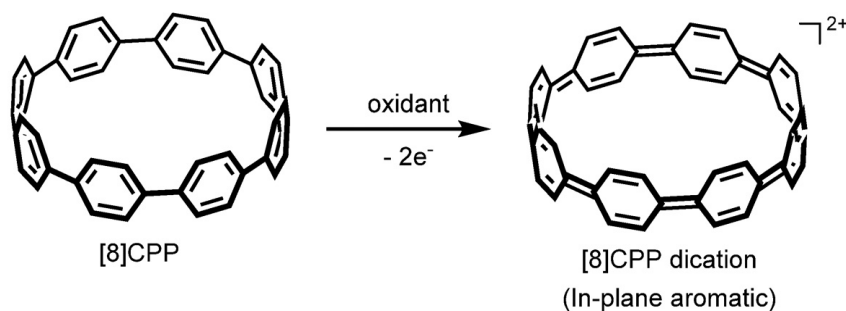


SYNTHESIS AND PROPERTIES OF NOVEL CYCLIC π -CONJUGATED MOLECULES

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Cyclic π -conjugated molecules have attracted significant attention due to their unique molecular structures, distinct properties, and potential application in materials science and technology. In particular, cycloparaphenylenes (CPPs), which possess the simplest cyclic structural unit of armchair carbon nanotubes have received considerable attention because of their availability by bottom-up organic synthesis.^[1] In this presentation, I will report on our endeavor for synthesizing novel cyclic π -conjugated molecules^[2] and their physical properties, in particular, generation and properties of the oxidized form of CPPs and their derivatives (Scheme 1).^[3]



Scheme 1. Generation of [8]CPP dication from [8]CPP

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