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## Green Synthesis of carbon Quantum dots

Carbon Quantum Dots (CQDs) have several applications due to their exceptional optical, chemical, and electrical properties. These materials are non-toxic and biocompatible, ideal for biological and medical applications like medication delivery, tissue engineering, and fluorescent bioimaging. As a result, we synthesized CQDs, utilizing the green synthesis technique with the Aegle Marmelos fruit as a carbon source. The synthesis method takes environmental factors into account, producing CQDs with desirable properties such as increased water solubility, low toxicity, and high stability. We examined the UV-visible absorption and luminescence spectra to understand the quality of the quantum dots better. Here, we look at the antioxidant and electrochemical characteristics in further detail.

Keywords: Carbon Quantum Dots (CQDs); Green synthesis; Optical Properties; Anti oxidation.

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