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Green Synthesis of Neem-Based Nanoparticles for Sustainable Applications

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Abstract: An environmentally friendly and sustainable process is the green synthesis of neem plant nanoparticles. Because neem plant extracts contain a lot of bioactive components, they are used as capping and reducing agents. In the process, neem components are removed and mixed with metal precursor solutions. Under carefully regulated conditions, metal ions are reduced and nanoparticles are produced. These unique neem-synthesized nanoparticles are utilized in agriculture, medicine, environmental remediation, and catalysis. Because of its cost, environmental friendliness, and scalability, the green synthesis approach reduces the usage of hazardous chemicals. This could lead to advancements in green nanotechnology.

Keywords: Neem plant, environmentally friendly, synthesized nanoparticles



