

## Synthesis of a green magnetic nanocatalyst through the functionalization of 2,4,6-trichloro-1,3,5-triazine and boric acid.

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In contemporary times, the fabrication of green nanocatalysts has garnered considerable interest among numerous scholars [1]. The synthesis and investigation of Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub>@APTES@TCT magnetic nanoparticles have been previously documented [2]. This study involves the synthesis of a nano catalyst that is both environmentally friendly and green. The synthesis process involves functionalizing 2,4,6-trichloro-1,3,5-triazine and boric acid on magnetic nanoparticles that are coated with silica and APTES. The synthesis of 4-chlorobenzylidene malononitrile involved the utilization of a novel catalyst. This catalyst was employed due to its significance in the field of organic compounds. The characterization of this catalyst was conducted using FT-IR and NMR analyses. The magnetically recoverable nanocatalyst exhibited the ability to be reused multiple times without experiencing a substantial decline in its catalytic activity.

**Keywords:** Green Catalysts, Nanocatalysts, magnetic nanoparticles, recovered.

### References

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