

# **Fe<sub>3</sub>O<sub>4</sub>@PEG-SO<sub>3</sub>H rod-like morphology along with the spherical nanoparticles: novel green nanocomposite design, preparation, characterization and catalytic application**

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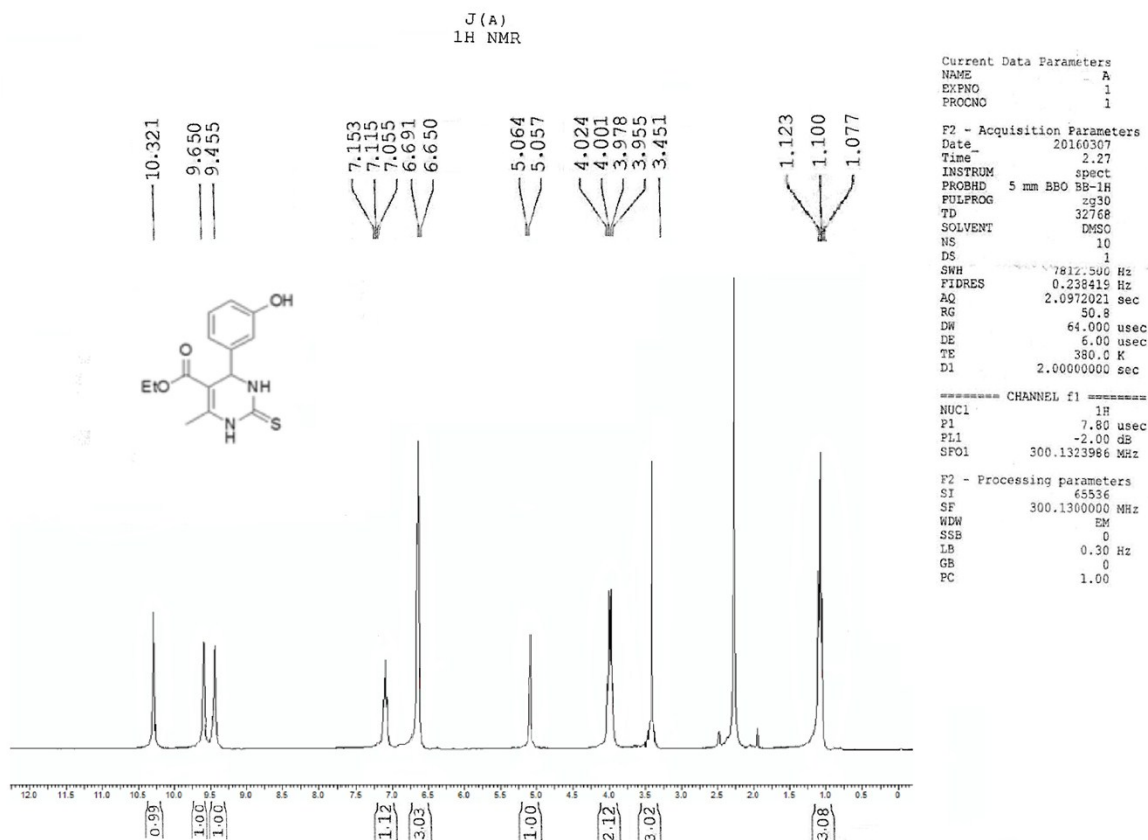
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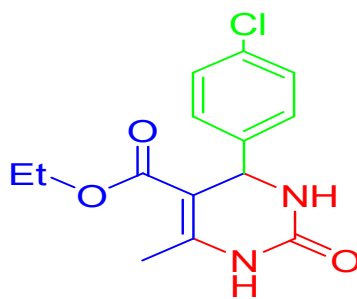
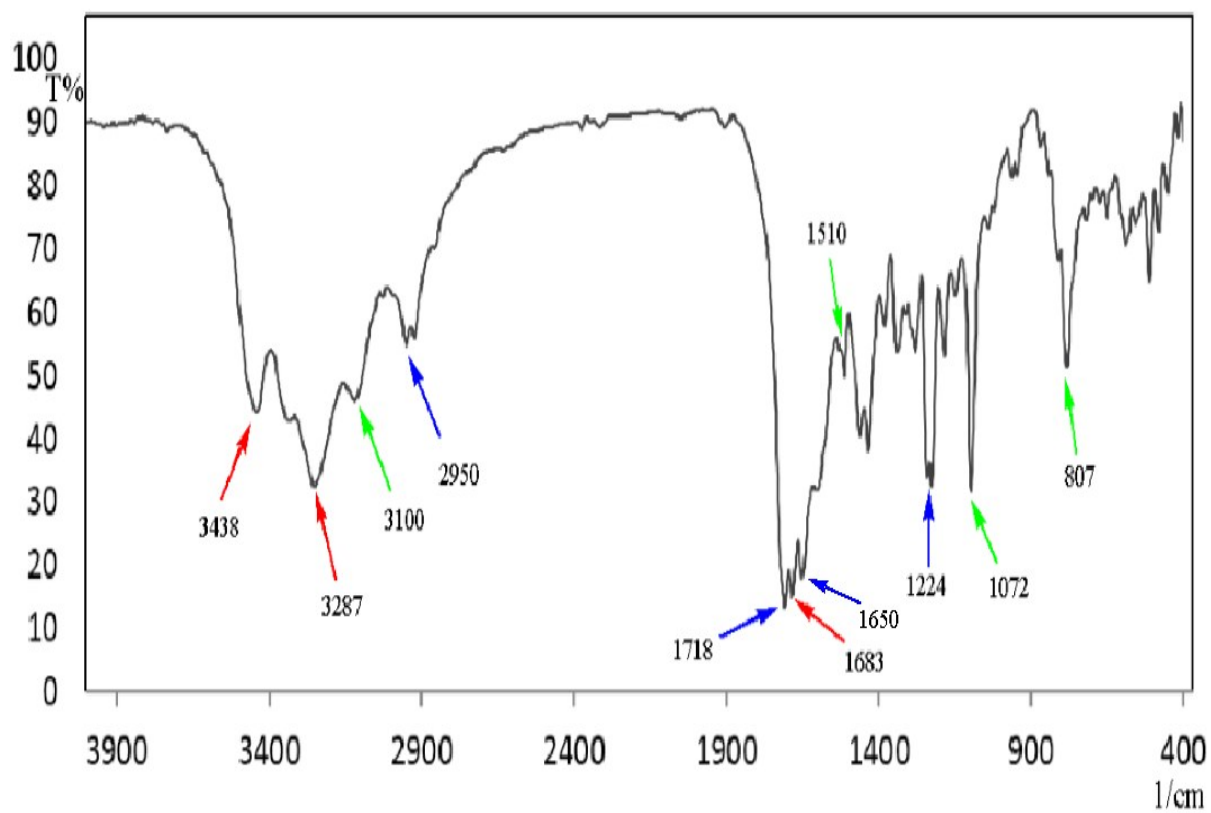
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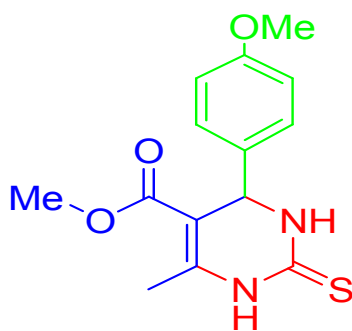
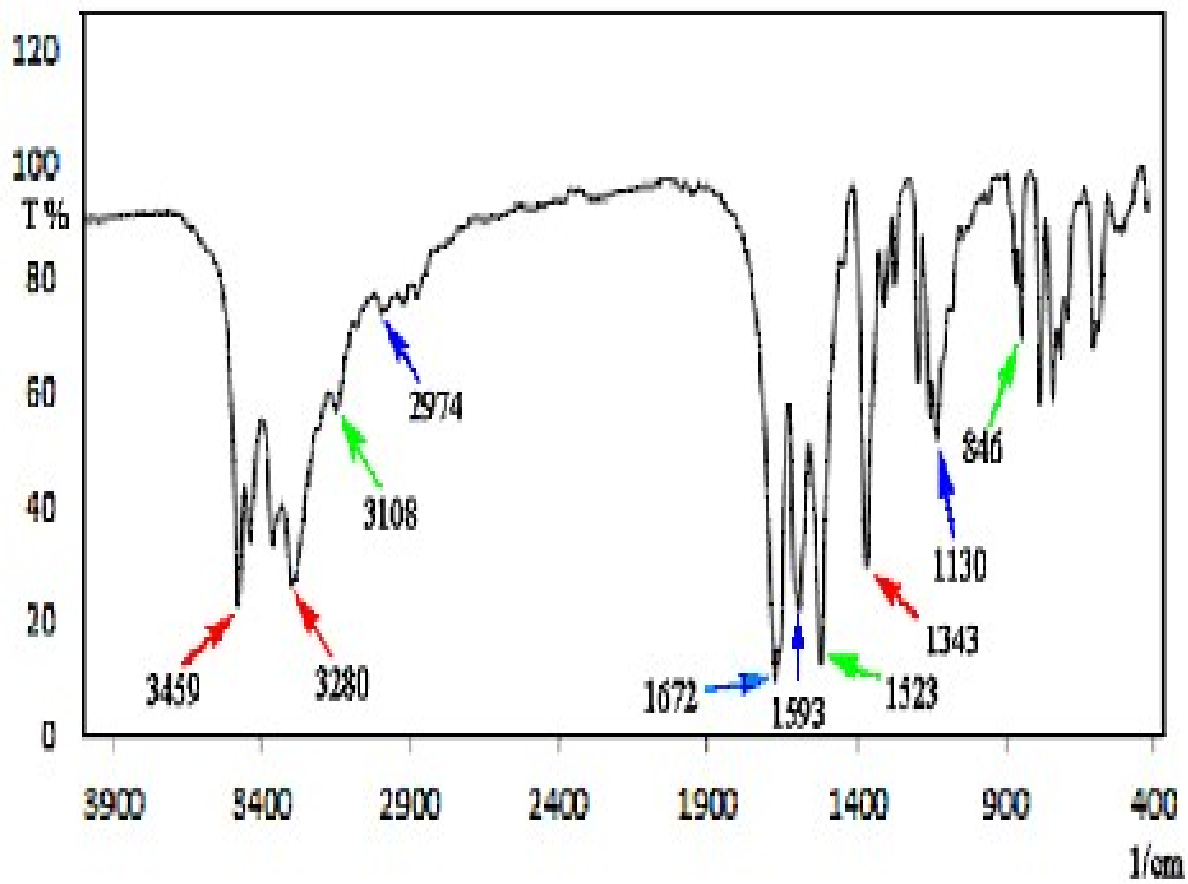
## **<sup>1</sup>H NMR of the product 4j:**



### FT-IR of 4a



FT-IR of **4b**



### FT-IR of 4j

