



## Spectral and Thermal Behaviour of Copper Carboxylates

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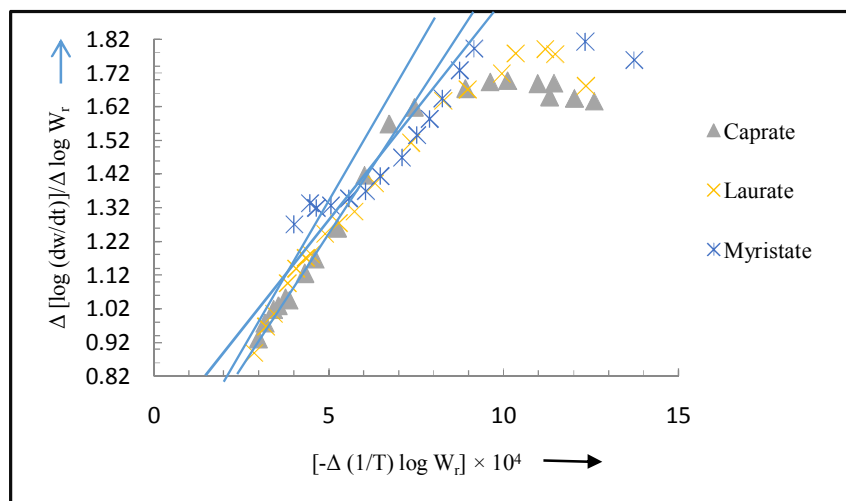
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### ABSTRACT

Copper carboxylates of fatty acids (capric, lauric and myristic) have been prepared by direct metathesis. The IR spectra of the carboxylates were characterized by two asymmetric and two symmetric vibration of carboxylic group and results reveals that the fatty acids exist dimeric structure through intermolecular Hydrogen bonding and copper carboxylates are ionic in nature. The double layer structure with long spacing confirmed by X-ray diffraction reaction decomposition reaction has been found kinetically zero order with energy of activation for copper lies in the range from 2.15 to 17.15 kcal.mol<sup>-1</sup>.

### Graphical Abstract



Freeman Carroll's type plot

**Keywords:** Copper carboxylates, IR, Powder diffraction and Thermal decomposition.