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**Work Experience :** Worked as Engineer (1999-2001), Nagarjuna Fertilizer and Chemicals Ltd. India.

**Research area :** Reaction Kinetics, mass and heat transfer, Transport phenomena.

**Research Project (For M.Engg in NUS):** Sonochemical decomposition of organic compounds.

**Abstract-** The conventional treatment processes are not very effective to remove pollutants at low concentrations. A promising method is the sonochemical (chemical effects of ultrasound) degradation of organic compounds. Kinetic study was done for several organic compounds and the results were corroborated with the existing model. The process variables studied include initial concentration of the organics, dissolved gas, temperature of the system and the H<sub>2</sub>O<sub>2</sub> concentrations. A comparison was made between the two kinds of reactor based on their energy consumption. This work involves working with various analytical instruments such as GC-FID and LC-MSD.

**PUBLICATIONS:** (To Be Submitted)

1. Sonochemical Degradation of Organic Compounds: A Comparative Study
2. Decomposition of Organic Dye in the Water Using Ultrasound: Enhancement with UV/H<sub>2</sub>O<sub>2</sub>

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