

# Dr. K. Sivagami M.E., Ph.D.,

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**Research Experience:** 15 years

**Patents**: 4 Granted: 02 Applied: 02

## **Research Focus:**

- i) Resource recovery from solid and hazardous waste using thermo-chemical conversion processes.
- ii) Water, wastewater, sludge and solid waste treatment.
- 1. Developed Decentralized Plastic Pyrolysis Unit to convert single use plastic to fuel oil (500 kg/day plant capacity) using Engineering India Limited funding of Rs.100 Lakhs in IIT Madras (2019 2024).
- 2. Developed "Oil recovery from petroleum sludge using microwave pyrolysis" (5 kg/batch capacity) using DST, MHRD and BPCL funding . (2017 2020).
- 3. Working on biochar based slow release fertilizer applications.

#### Technology Licensed: NA

Interested Industry member kindly connect through: Email Id: icc-industryacademia@iccmail.in

## **Technologies (Proof of Concept- POC): TRL level:** NA

## <u>Technologies under development:</u>

- Decentralized plastic pyrolysis plant (TRL-6)
- Biochar based slow-release fertilizers (TRL-4)
- Resource Recovery from soiled sanitary napkins (TRL-3)

#### **Targeted Industries:**

- Plastic and packaging waste generating industries.
- Bio-fertilizers industries and Agri companies.
- Waste management companies.

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