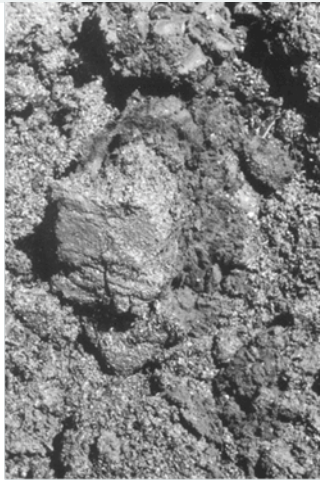
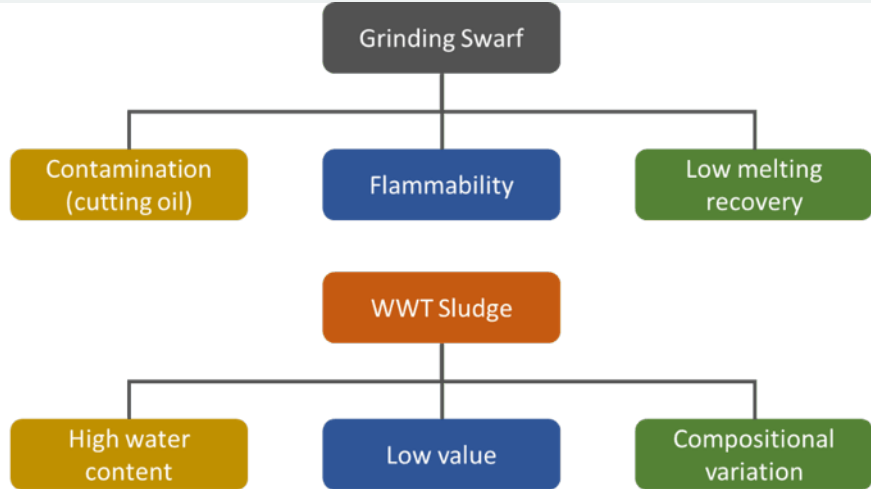


# Waste Water Treatment Sludge & High Value Grinding Swarf Recycling

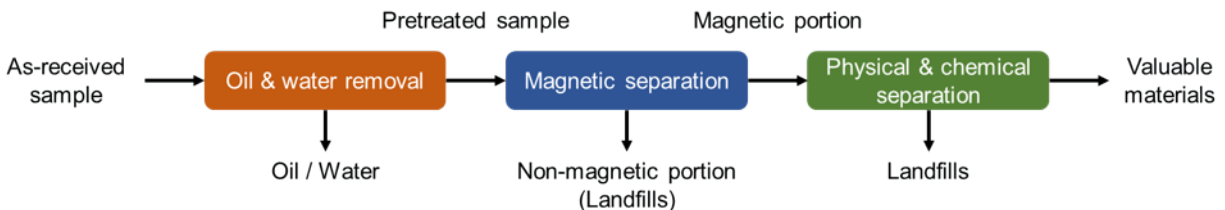


Ferrous Grinding Swarf (GM)



This project focused on the reuse of grinding swarf and wastewater treatment sludge as high-value materials after dewatering and oil removal processes.

Research Plan:



- Literature review on current practices
- Characterization of grinding swarf and wastewater treatment sludge samples
- Evaluation of dewatering and oil removal processes
- Separation of valuable materials from the pretreated samples
- Optimization of the selected recycling process
- Economic viability analysis

## Waste Water Treatment Sludge Recycling

- Materials will vary depending on the industry and type of manufacturing location.
- Dewatered sludge in a conventional drying bed still contains a huge amount of water.

## Grinding Swarf Recycling

- Materials will vary depending on the industry and type of manufacturing location.
- Machining fluids and low melting recoveries diminish the value of grinding swarf recycling.
- Swarf coated with cutting oil could be highly flammable.

## RESEARCHERS

M. Jung, B. Mishra