

### Decomposition of discarded HFC-134a with steam

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HFCs has been considered as a eco-friendly refrigerants due to the absence of Cl which is the destruction material of the ozone layer. However, Global Warming Potential is high and HFCs has been regulated by Kyoto protocol and Bali Roadmap. HFC-134a has been used as refrigerants of air conditioner for the Korean vehicles. The automobile manufacturing has been one of the leading industries in Korea and the number of the end of life vehicles (ELVs) has been increased annually. The amount of refrigerants from a ELV is about 700g and it should be properly treated. In this study, thermal treatment of HFC-134a with steam has been performed in lab scale reactor and 5ton/d pilot plant for gasification melting system of the automobile shredder residue.