



UNIVERSITÄT  
ZU KÖLN

## INORGANIC CHEMISTRY COLLOQUIUM

# Waste To Energy Through Gasification of Municipal Solid Waste

The burgeoning problem of municipal waste generation along with its disposal problem has urged the development of sustainable waste management practices such as waste-to-energy conversion. Refuse-derived fuel (RDF) represents the combustible fraction of municipal solid waste such as plastics, paper, textiles, and organics and is used for renewable energy generation. RDF utilization through gasification is considered a cleaner, promising, and efficient route, and is the focus of this work. This presentation will address these challenges of RDF gasification and finally demonstrate a proof of concept for the feasible plastic content in RDF for downdraft gasification applications.



Prof. Rao leads the Plasma Lab group at CST-IISc (India), which explores translational research in the areas of plasma-activated water for medicine and agricultural application, municipal solid waste to energy, and cold plasma hydrocarbon reforming.

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**17:15 HSII, Dept. Chemistry**

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