

BIOFUELS GROUP - LEITAT

BIOMASS CHARACTERIZATION AND ENERGETIC STUDIES

Summary

LEITAT works for companies developing tasks involved in:

- Physico-chemical analysis of biomass and their ashes, and energy content analysis.
- Determination of sugars, cellulose, hemicelluloses and lignin in biomass.
- Feasibility and economic analysis of Bioenergy chain , considering biomass waste harvesting/collection, transport, energy generation (CHP, power, heat) and ash disposal.
- Studies of natural drying for transport optimization.
- Feasibility analysis of gasification, pyrolysis and combustion technologies for biomass valorization.
- Dispersion modeling of gases/pollutants emitted by a biomass conversion/ incineration plant.
- Application of biodiesel standard methods: treated oils/biomass
- A pyrolyser is currently available to manage wastes and evaluate their components (solid, liquid and gaseous products).

Applications

Biomass wastes of forestry, agricultural, industrial and urban origin and energy crops are suitable for energy and chemical valorization. The following technologies and applications could be of the interest of several companies:

- Biomass combustion: domestic/industrial boilers, district heating fueled with agro industry and forestry wastes; co-firing.
- Biomass/coal gasification: IGCC for power generation.
- Biomass pyrolysis: Biodiesel production from oil, and charcoal for biochar and activated carbon production.
- Extraction of chemicals from biomass and final energy valorization from wastes.

Patent application number

Non patented results

Priority date

References

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