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Center for Renewable Carbon
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Center for Renewable Carbon

Conference Room

2506 Jacob Drive

UT Institute of Agriculture

Research activities on bioenergy and biomaterials in the AIST Biomass Technology Research Center

ABSTRACT

In our research and development activities, innovative biofuel production technologies from various biomass feedstocks, focusing on woody biomass with the highest CO₂ fixation capability, are being developed. The following topics are focus areas for AIST, and will be described in the presentation:

- 1) Development of highly efficient ethanol production technology from lignocellulosic biomass by the combination of non-sulfuric acid pretreatment with enzymatic saccharification,
- 2) Development of technology to produce BTL-FT diesel fuel by designing a BTL (Biomass-to-Liquid) total process consisting of gasification, hot gas cleaning, FT (Fischer-Tropsch) synthesis, hydro-cracking, and isomerization,
- 3) Development of an economical and environmental assessment of the system by simulating the biomass-to-liquid fuel production process, and
- 4) Construction of a biomass utilization system in Asia and all over the world by promoting the Asian Biomass Project.

We assume that cost-benefit practical biomass conversion processes that contribute to the construction of the true sustainable society will be developed by fulfilling such research and developments



Contact Amanda Silk at 865.946.1130 for more information.