INTERNAL ARS SCIENTISTS BREAKOUT SESSIONS

Break out group name Conversion and Coproducts - BIODIESEL

Facilitator

Recorder

• Identify problem areas (to a large extent non-overlapping and mutually exclusive) for Action Plan

New uses and quality (methanol, sodium) issues of glycerol
Improved cold flow properties
Stability: Oxidative, hydrolytic
Life cycle analysis
Conversion of alternative feedstocks for biodiesel
Compatibility with modern diesel fuels and engines: perf. and emissions
Perf. and emissions for off-road applications
Effect of minor constituents on performance and properties
Quality assurance; Analytical testing: ASTM level and field level (quick)
Better Catalysts – Biochemical, Chemical
Integrated Process Technologies
Process economics, scalability
Energy uses for intact glycerides
Identify teams and team leaders to write portions of the Action Plan
Haas, Wyatt, Foglia, Ashby, Solaiman, Marmer. Lead: Haas
Dunn, Knothe, Moser, Erhan. Lead: Dunn
Identify ARS locations involved
Wyndmoor, Peoria

Identify links to other ARS national programs
306
205
Animal nutrition (feeds)
Identify external partnerships
Natnl. Biodiesel Board
FPRF
ASA
Natnl. Renderers Assoc.
NREL/DOE
EPA
Academia
Defense, Interior
Private Sector
Engine Mfgrs.
International, local, state agencies
Other USDA, incl ERS
If time permits, identify research objectives