

Tematica cursurilor susținute de dr. Dorin Boldor, Associate Prof. LSU, bursier Fulbright

Overview of mass and energy balance
Organic chemistry- basic functional groups
Carbohydrates
Ligno-cellulosic
Starches
Oils and fats
Resource base
Production of feedstock and properties(PHA ,PHB)
Oil production from algae
Post harvest treatment (drying, size reduction, densification, storage)
Logistics and transport
Products (butanol, hydrogen production, jet fuels)
Combustion
Anaerobic digestion
Thermo chemical Processes: Gasification, Pyrolysis, Liquefaction
Pretreatment, fermentation of sugar and starches
Ethanol combustion
Lipid extraction and fermentation
Biochemical conversion
Transesterification (acid, base, enzymatic catalyst)
Oil extraction
Jet fuel production (cracking)
Environmental impact
Economics
Specialty chemical production
Marketing policies, politics; global impact: economic and political