THEME 1: Feedstocks, processing and safety
14 academic staff

Feedstocks
Forestry and reclaimed wood, Agricultural residues, Energy crops, algae, wet resources, wastes

Pre-processing
Combustion
Fundamentals, Deposition, Fouling, bed agglomeration, Corrosion, Emissions, Modelling,

Gasification
Fundamentals, 3rd Generation Transport fuels, Modelling, Reforming, anaerobic digestion

Liquefaction routes
Catalytic Pyrolysis, Upgrading of pyrolysis oils, Hydrothermal processing, microwaves

Gasification
Combustion
Fundamentals, Deposition, Fouling, bed agglomeration, Corrosion, Emissions, Modelling,

Gasification
Fundamentals, 3rd Generation Transport fuels, Modelling, Reforming, anaerobic digestion

Liquefaction routes
Catalytic Pyrolysis, Upgrading of pyrolysis oils, Hydrothermal processing, microwaves

Utilisation
Furnaces, Boilers, Stoves, Engines, Turbines, Reactors, Fuel Cells, virtual power plant

Emissions
Particulates, Aerosols, Soot, VOC, PAH, Waste water, Metal release, Negative CO₂ (Bio-CCS) with UKCCS

Bio-products, Materials and Co-products
Materials, soil conditioners, chemicals, bio-products, ash utilisation, nutrient recovery, process integration.

Biochemical routes
Chemical conversion, Fermentation, Bio diesel production.

Partnerships and collaboration with Industrial Partners, and key research institutes and activities (Please refer to Table 3)

THEME 2: Conversion
11 academic staff

THEME 3 Products, Utilisation and Impact
22 academic staff

Hazard & Safety
Self-heating, Spontaneous combustion, dust, microbes explosions, ignition risks of dust layers, off-gases.

Sustainability, LCA, policy, Socioeconomics, techno-economics, regulation, standards, competition for feedstocks between processes/products, biomass supply chain innovation.

THEME 4: Sustainability and Whole Systems. 14 academic staff