

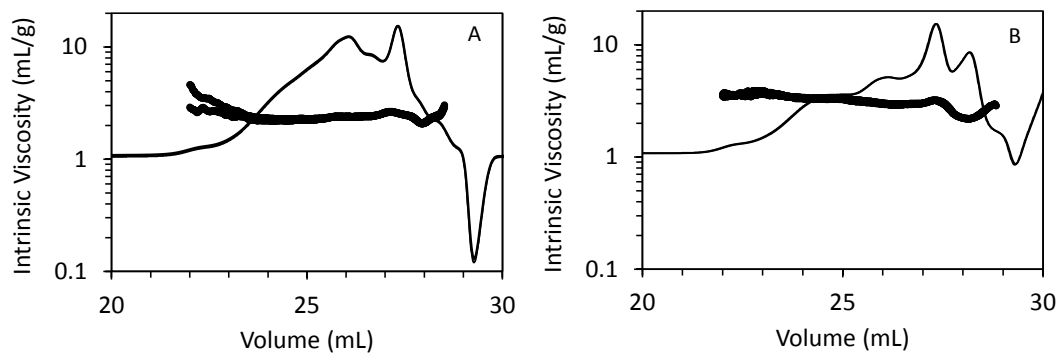
Supplementary Material for Molecular Weight Distribution of Raw and Catalytic Fast Pyrolysis

Oils: Comparison of Analytical Methodologies

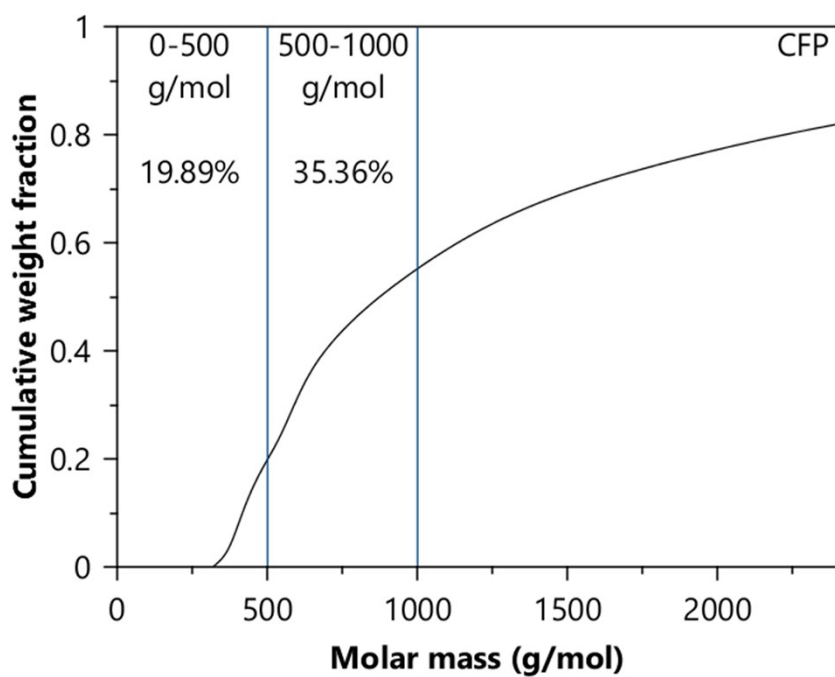
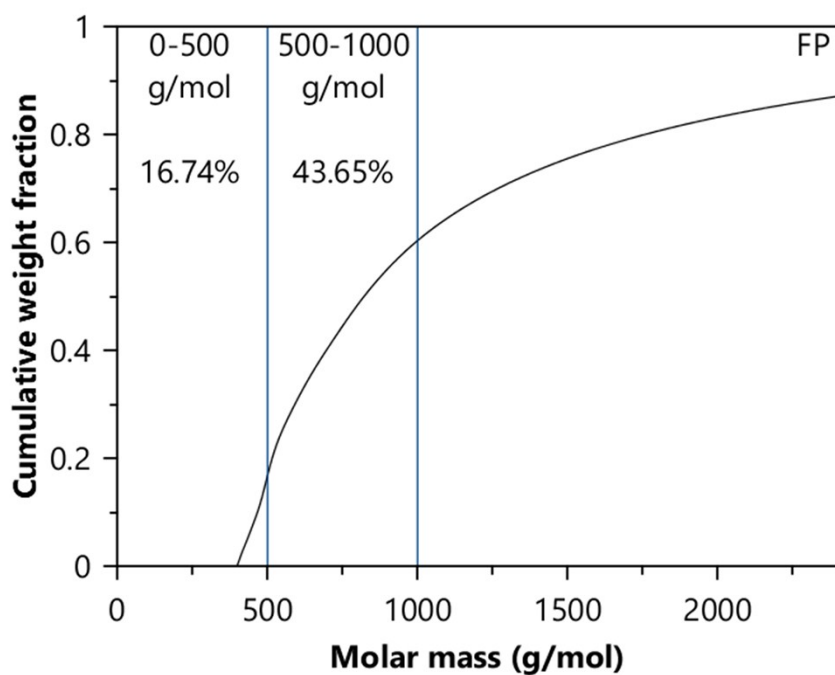
Harman-Ware et al.

Supplementary Table 1. GC/MS calibration standards and concentration ranges

Compound	Concentration (mg/mL)
Acetaldehyde	0.05 - 1.0
Benzene	0.05 - 1.0
n-octane	0.10 - 2.0
1-octene	0.05 - 1.0
cis-1,4-dimethyl-cyclohexane	0.10 - 2.0
Toluene	0.05 - 1.0
p-Xylene	0.10 - 2.0
n-decane	0.10 - 2.0
2-Cyclopentenone	0.05 - 1.0
Benzene, propyl-	0.05 - 1.0
Phenol	0.05 - 1.0
2,3- Benzofuran	0.05 - 1.0
Indene	0.05 - 1.0
o-Cresol	0.05 - 1.0
o-Methoxyphenol	0.05 - 1.0
Tetralin	0.10 - 2.0
Naphthalene	0.05 - 1.0
Phenanthrene	0.05 - 1.0



Supplemental Figure 1. Intrinsic viscosity,  $[\eta]$ , as a function of elution volume for FP and CFP oils with reference to differential RI-derived chromatograms.



Supplemental Figure 2. Weight-fraction distributions measured by GPC show a lower distribution of analytes >500 g/mol in CFP oil (B) relative to FP oil (A). Analytes in permeation

volume not accounted for, hence the fraction of low mass species is underestimated, particularly for CFP oil.