What is Claimed:

1. A system for conversion of organic polymeric material to hydrocarbonaceous materials, comprising:

a thermal cracking train,

the thermal cracking train configured to effect molecular cracking of a polymeric material fed to the thermal cracking train so as to give rise to a thermal cracking product of the polymeric material;

a condensing train,

the condensing train configured to receive a thermal cracking product from the thermal cracking train and condense at least a portion of the thermal cracking product to give rise to a pyrolysis oil product from the thermal cracking product;,

the condensing train comprising at least a first condenser,

the first condenser configured to receive the thermal cracking product from the thermal cracking train and output a bottoms that comprises a first liquid, the first liquid comprising (i) solid material and (ii) a pyrolysis oil constituent; and

a separating train,

the separating train configured to receive from the condensing train a first liquid comprising a solid material and the pyrolysis oil product,

the separating train being configured to separate at least some of the solid material from the first liquid so as to give rise to a purified pyrolysis oil output product,

the system configured to output a product stream that comprises the purified pyrolysis oil output product,

wherein the first condenser effects contact between (1) a recycled portion of the bottoms of the first condenser that is recycled to the first condenser and (2) thermal cracking feed received by the first condenser from the thermal cracking train.

2. The system of claim 1, wherein the thermal cracking train is configured to expose the polymeric material to a plurality of temperature zones.

3. The system of claim 1, wherein the thermal cracking train is configured to devolatilize a char derived from cracking of the polymeric material.