Supporting Information

Crosslinked acrylic polymers from aqueous phase of biomass pyrolysis oil and acrylated epoxidized soybean oil

Mehul Barde^{†,‡}, Katrina Avery^{†,‡}, Charles W. Edmunds[§], Nicole Labbé[§], Maria L. Auad^{†,‡}*

[†]212 Ross Hall, Department of Chemical Engineering, Auburn University, Auburn 36849, AL, United States of America.

[‡]Center for Polymers and Advanced Composites, Auburn University, Auburn 36849, AL, United States of America.

§ 2506 Jacob Drive, Center for Renewable Carbon, University of Tennessee, Knoxville 37996, TN, United States of America.

Total number of pages: 4

Total number of figures: 3

Total number of tables: 0

Contact No.: +1-334-844-5459

^{*} Corresponding author: auad@auburn.edu (Dr. Maria L. Auad)

³²⁰ Ross Hall, Department of Chemical Engineering,

Auburn University, Auburn 36849, AL, United States of America.

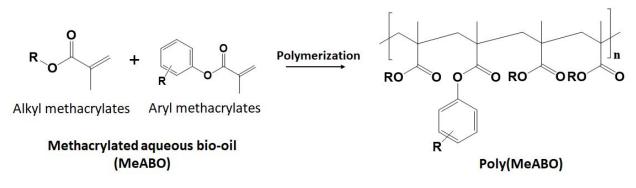


Figure S1: Polymerization of MeABO

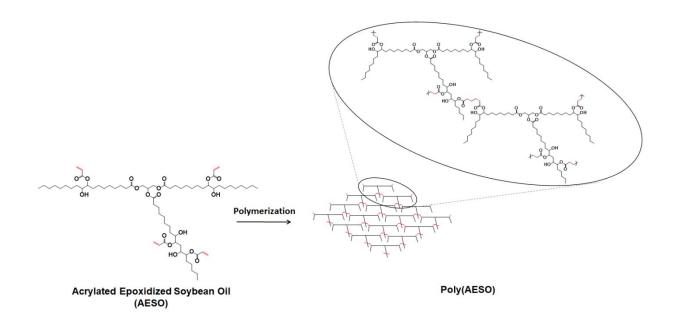


Figure S2: Polymerization of AESO

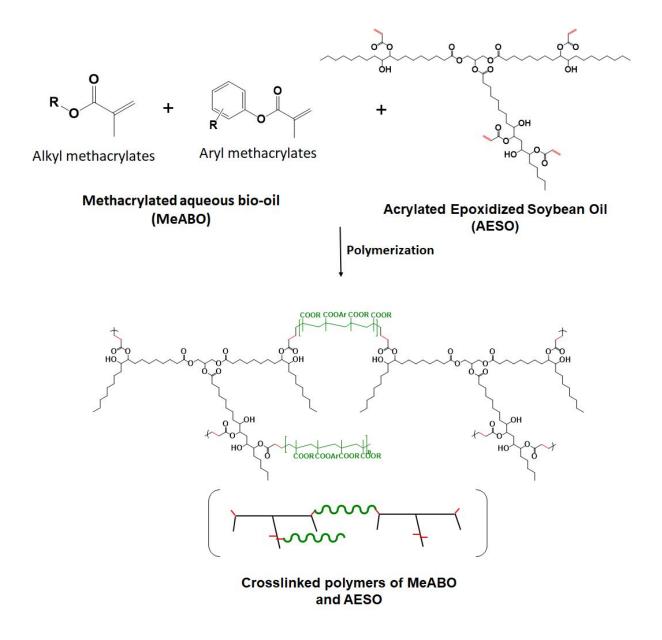


Figure S3: Polymerization of MeABO and AESO

R represents alkyl group; whereas Ar stands for aryl group. R can be any group contributed by the hydroxyl compounds present in the original bio-oil.

Figure S2 depicts a schematic of a crosslinked structure of poly(AESO) with crosslinking points between the molecular segments; and can be considered to be having higher crosslinking points than that of the polymer structure depicted in Figure S3.