Abstract Submitted for the MAR17 Meeting of The American Physical Society

Control of Macromolecular Architectures for Renewable Polymers: Case Studies. CHUANBING TANG, Univ of South Carolina — The development of sustainable polymers from nature biomass is growing, but facing fierce competition from existing petrochemical-based counterparts. Controlling macromolecular architectures to maximize the properties of renewable polymers is a desirable approach to gain advantages. Given the complexity of biomass, there needs special consideration other than traditional design. In the presentation, I will talk about a few case studies on how macromolecular architectures could tune the properties of sustainable bioplastics and elastomers from renewable biomass such as resin acids (natural rosin) and plant oils.

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Date submitted: 10 Nov 2016 Electronic form version 1.4