

S-temp1075

The Science and Engineering for a Biobased Industry and Economy

Comments:

Multi State Project S-temp1075 builds on the accomplishments of previous Multi-State Projects S-1007 and S-1041 which have been quite successful in fostering scientific collaboration across multiple states focused on increasing the scope of economically-viable renewable energy. In fact, researchers associated with S-1041 have generated, on average each year, over 100 peer reviewed and other publications, have supervised over 35 MS or PhD thesis, and have published over 8 book chapters and books, either independently or in collaboration with other university experiment stations.

Great progress has made over the last five years in creating viable feedstock supply chains, deciphering between important and trivial pre and post-harvest parameters, integrating thermochemical energy production systems, and designing fermentable sugar streams. However, there still remain several knowledge gaps in understanding the environmental impact of these systems such that they are economical viable while minimizing their carbon footprint.

The 3 Objectives outlined in S-temp1075 are logically thought out and are each associated with several tasks designed to provide new technologies and the necessary data to support a biobased industry and economy. The principal and co-investigators have extensive experience in conducting research in this area, and are well suited to achieving these objectives in the proposal. The research plan and methods proposed appear appropriate, feasible and should yield interesting results.