Characterizing the Secondary Protein Structure of Black Widow Dragline Silk Using Solid-State NMR & X-ray Diffraction

Janelle E. Jenkins^a, Sujatha Sampath^{a,b}, Emily Butler^a, J<u>ihyunackie</u> Kim^a, Robert W. Henning^c, Gregory P. Holland^{a*}, Jeffery L. Yarger^{a*}

Supplemental Figure

^a Department of Chemistry and Biochemistry, Magnetic Resonance Research Center, Arizona State University, Tempe, Arizona 85287-1604, USA

^a Department of Physics, University of Wisconsin, Milwaukee, WI 53211

^a Center for Advanced Radiation Sources, The University of Chicago, Chicago, IL 60637.

^{*}jyarger@gmail.com and greg.holland@asu.edu

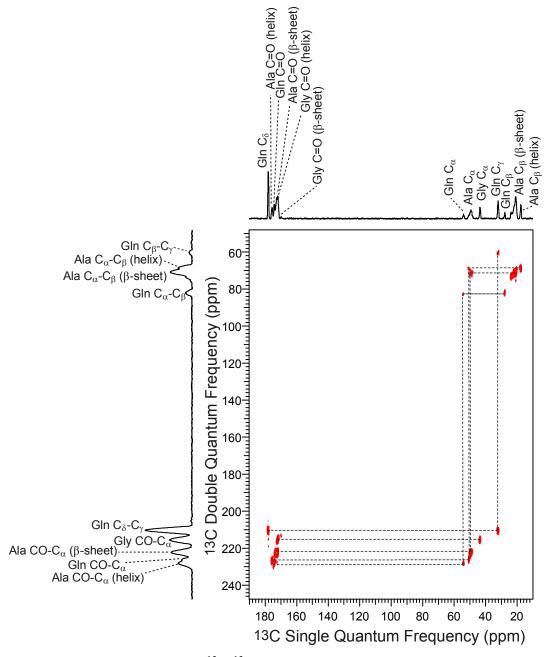


Figure S1. 2D directly polarized ^{13}C - ^{13}C through-bond DQ/SQ refocused INADEQUATE NMR spectrum of U- $^{13}\text{C}/^{15}\text{N}$ -alanine enriched *Latrodectus hesperus* major silk. Chemical shifts and linewidths were extracted from this experiment to use in fitting the U- $^{13}\text{C}/^{15}\text{N}$ -alanine enriched quantitative ^{13}C [^{1}H] DD-MAS data.