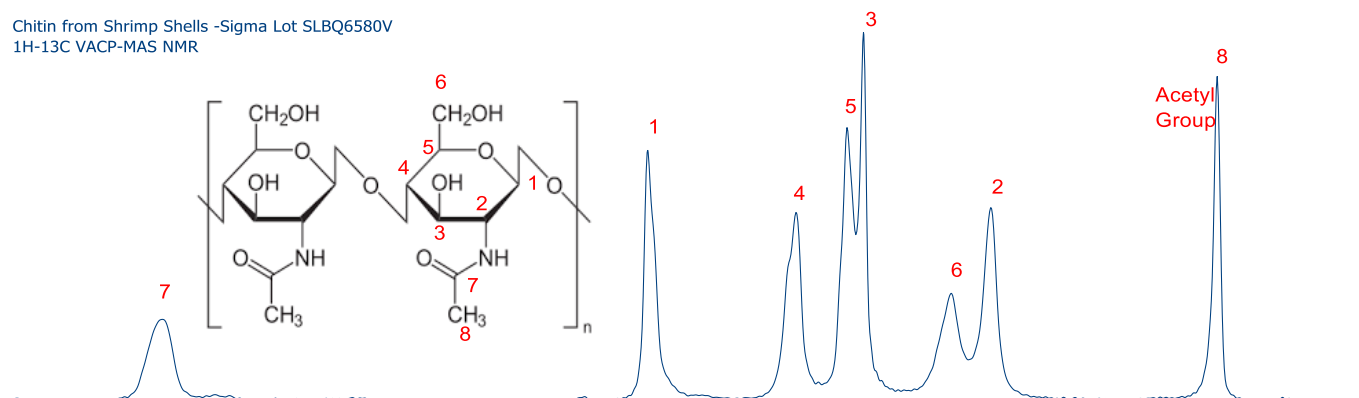
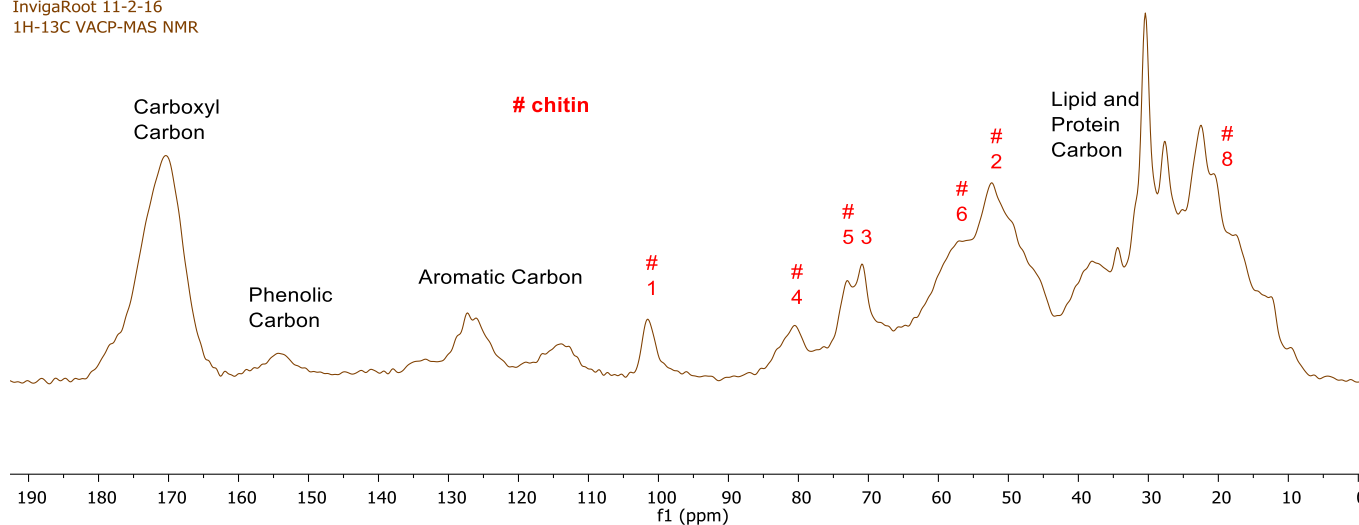


Date: December 7, 2016
 To: Elliot Mermel
 Re: Quantitative Analysis of Chitin in InvigaRoot

Chitin from Shrimp Shells -Sigma Lot SLBQ6580V
 1H-13C VACP-MAS NMR



InvigaRoot 11-2-16
 1H-13C VACP-MAS NMR



Above is a comparative plot of the ¹³C NMR results obtained on the InvigaRoot product compared to pure chitin (from shrimp shells). The proprietary quantitative analysis was performed by solid-state ¹³C NMR and each peak in the spectral fingerprints of the two materials represents carbons in different chemical environments. The chitin in the InvigaRoot product is indicated on the plot.

Quantitative Result: The InvigaRoot product is 8.2 wt% chitin. Error estimated to be +/- 0.1 wt%

John C. Edwards

John C. Edwards, Ph.D., Owner – Analytical NMR and Consulting Services