

Supplementary materials

Excess Enthalpies Analysis of Biofuel Components: Sunflower Oil - Alcohols Systems

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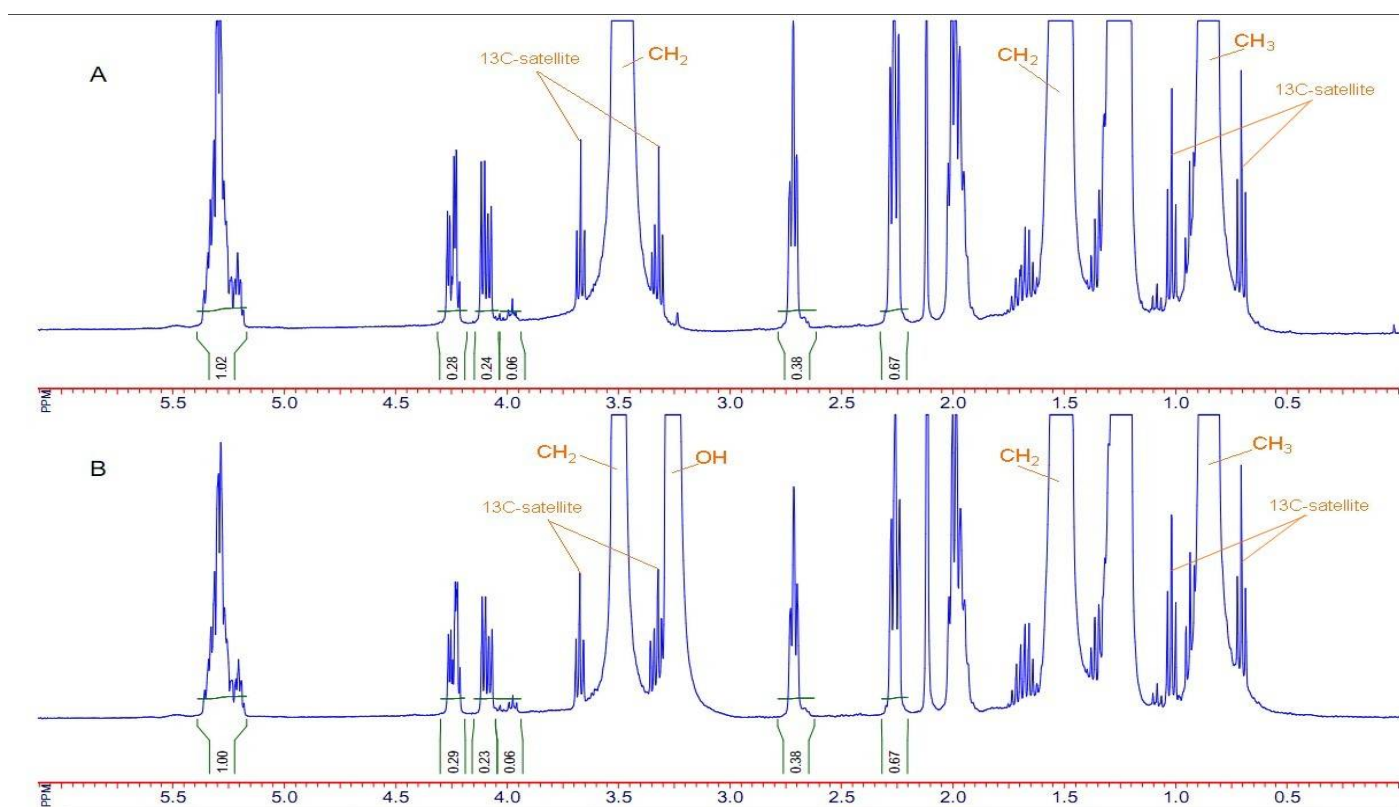


Figure S1. ^1H NMR spectra comparison of the sunflower oil – n-propanol solution before (B) and after (A) heating

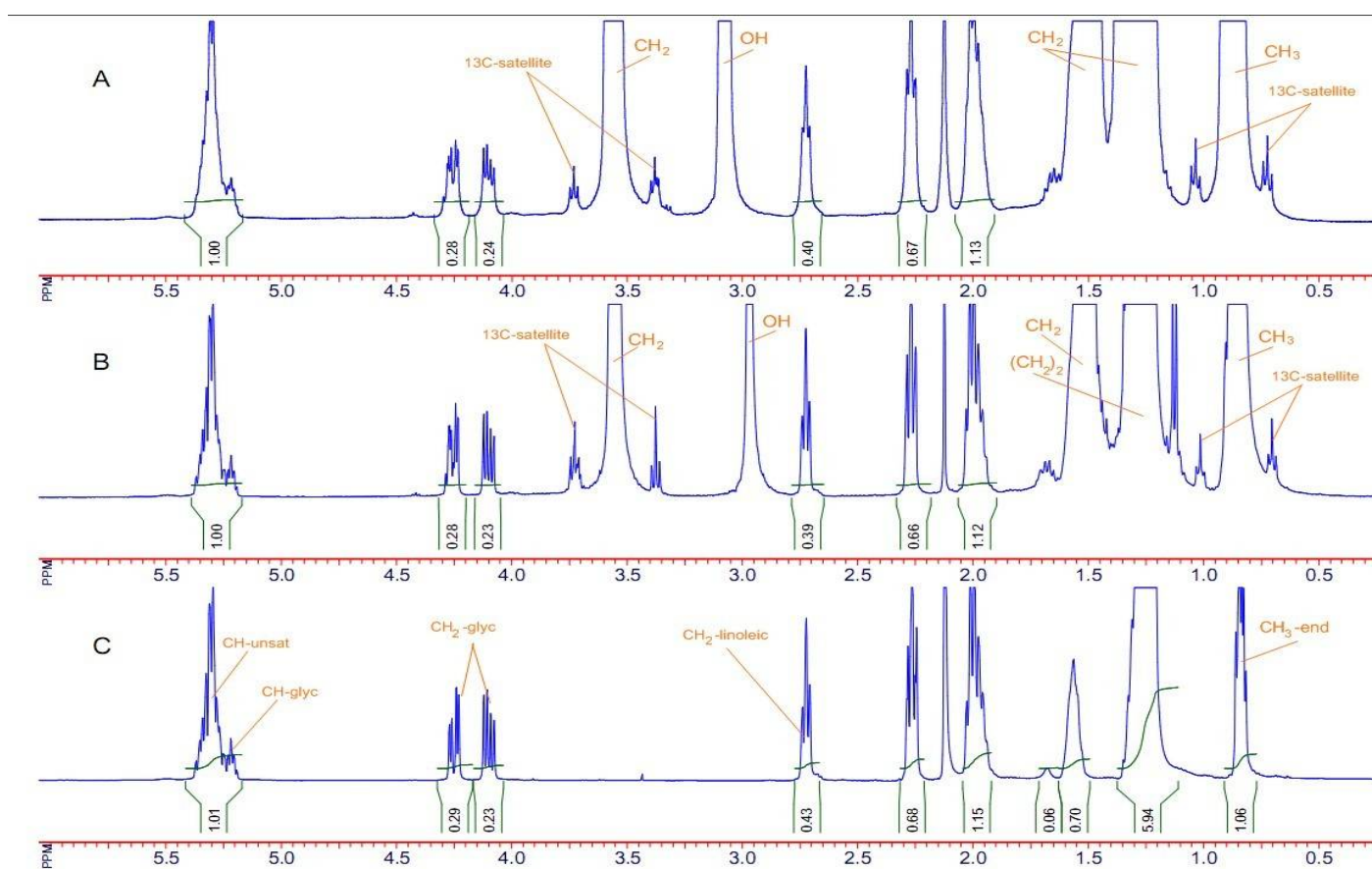


Figure S2. ^1H NMR spectra comparison of the pure sunflower oil (C) and sunflower oil – n-butanol (A), sunflower oil – n-pentanol (B) systems after heating

Display Report

Analysis Info

Analysis Name D:\Data\Work\2023\11\15\00-.d
Method 20230815_tune_high_neg.m
Sample Name BuOH
Comment

Acquisition Date 15-Nov-23 13:04:50

Operator BDAL@DE
Instrument / Ser# maXis 62

Acquisition Parameter

Source Type	ESI	Ion Polarity	Negative	Set Nebulizer	0.8 Bar
Focus	Not active			Set Dry Heater	180 °C
Scan Begin	50 m/z	Set Capillary	5500 V	Set Dry Gas	4.0 l/min
Scan End	3000 m/z	Set End Plate Offset	-500 V	Set Divert Valve	Source

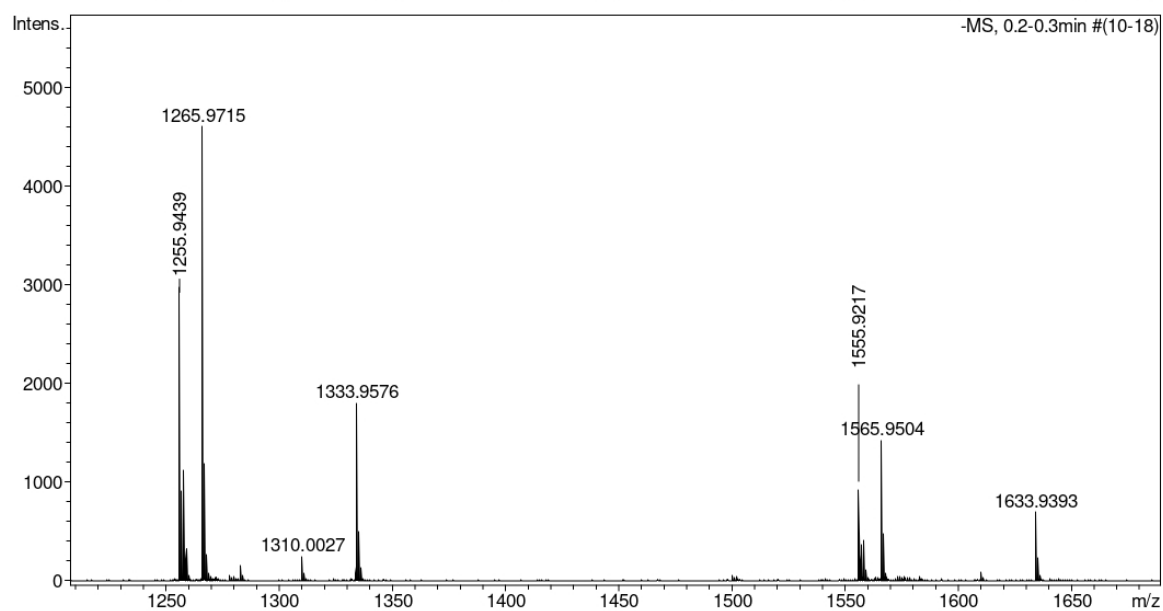
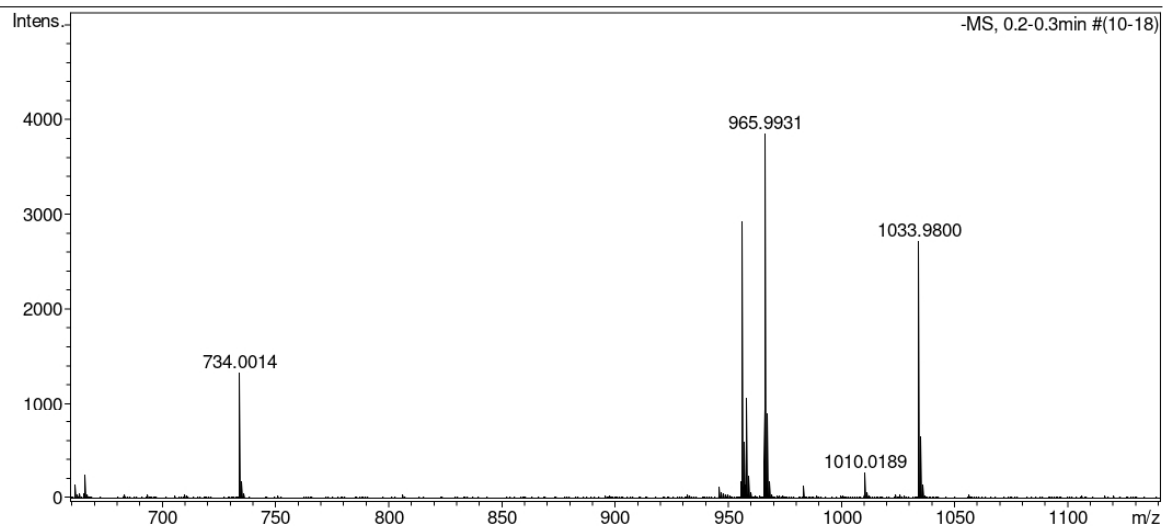


Figure S3. Mass-spectrum of the oil under study obtained by ESI-MS

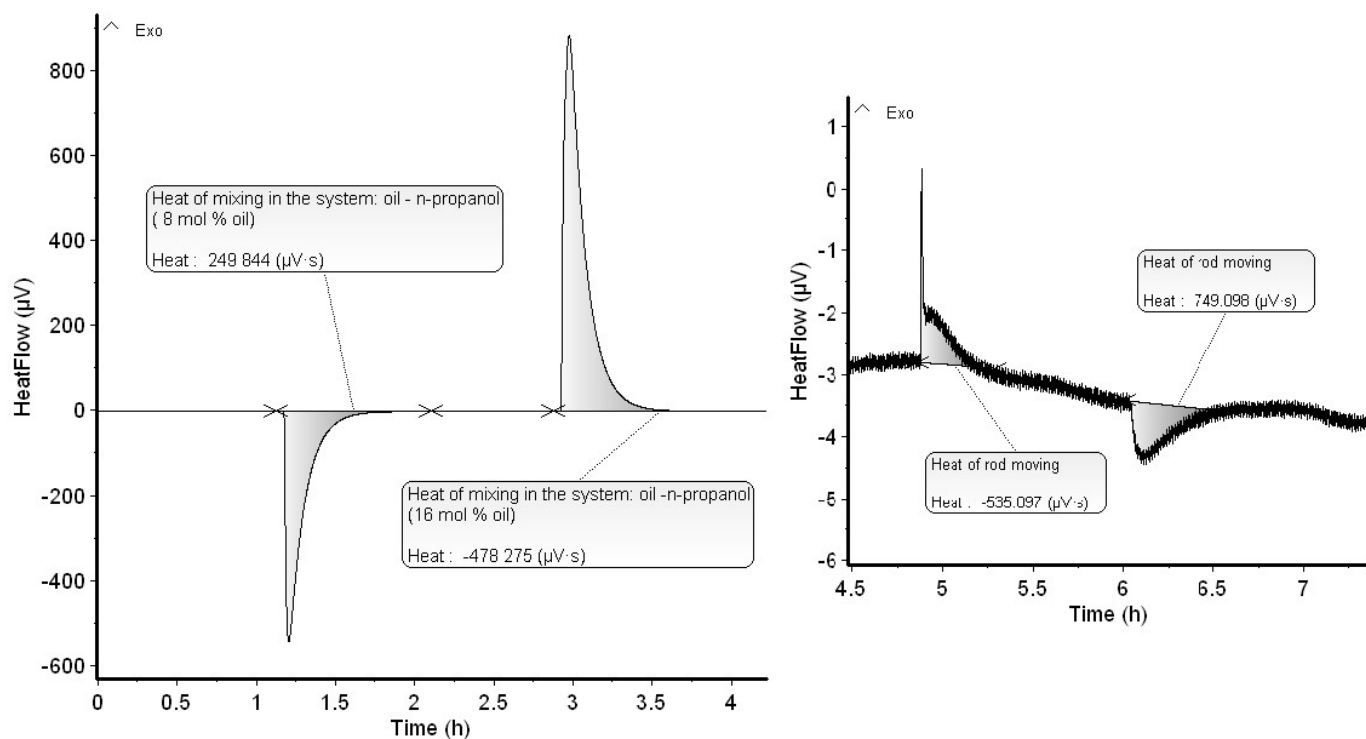


Figure S4. Example of a signal obtained on a C80 calorimeter and its processing in the Calisto program (sunflower oil – n-propanol system)

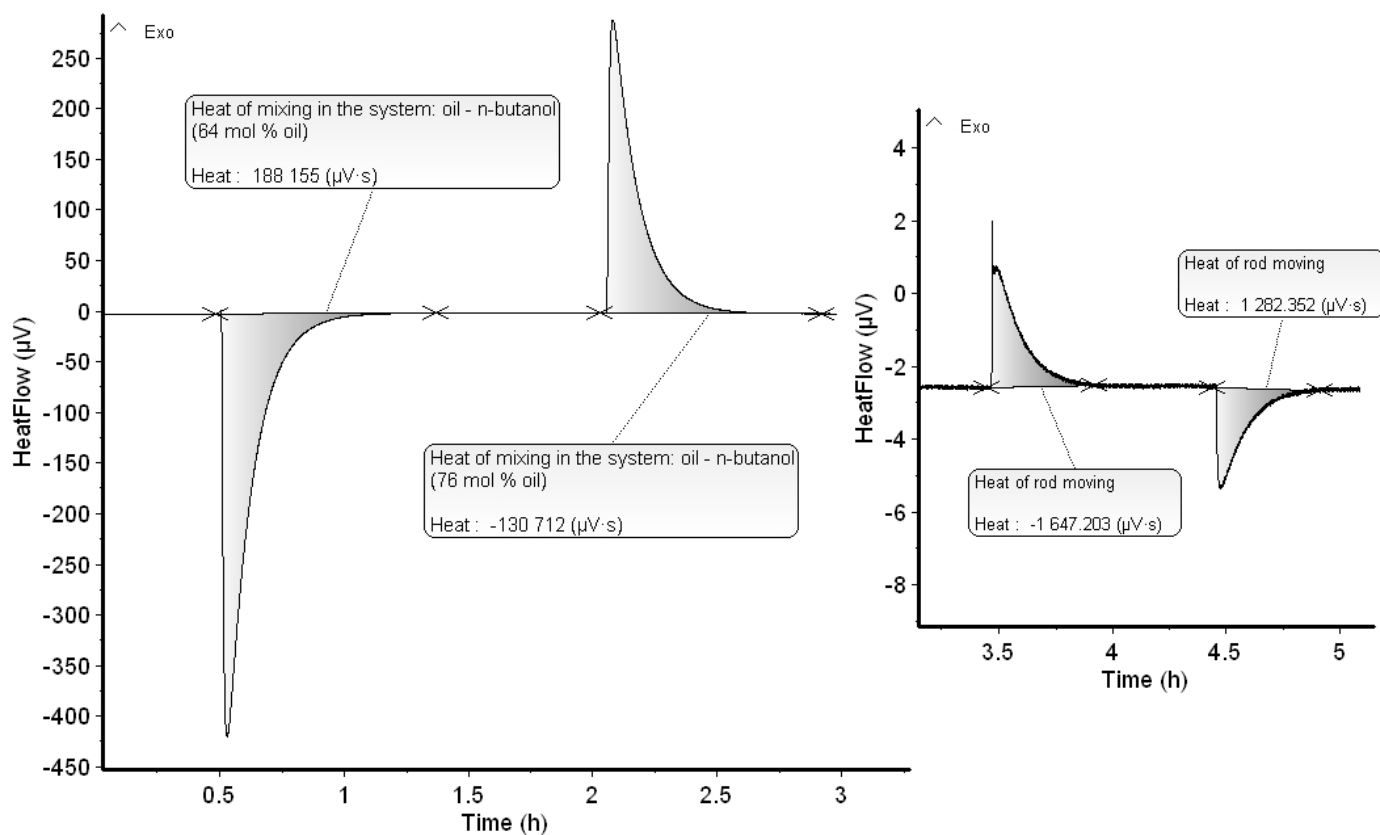


Figure S5. Example of a signal obtained on a C80 calorimeter and its processing in the Calisto program (sunflower oil – n-butanol system)

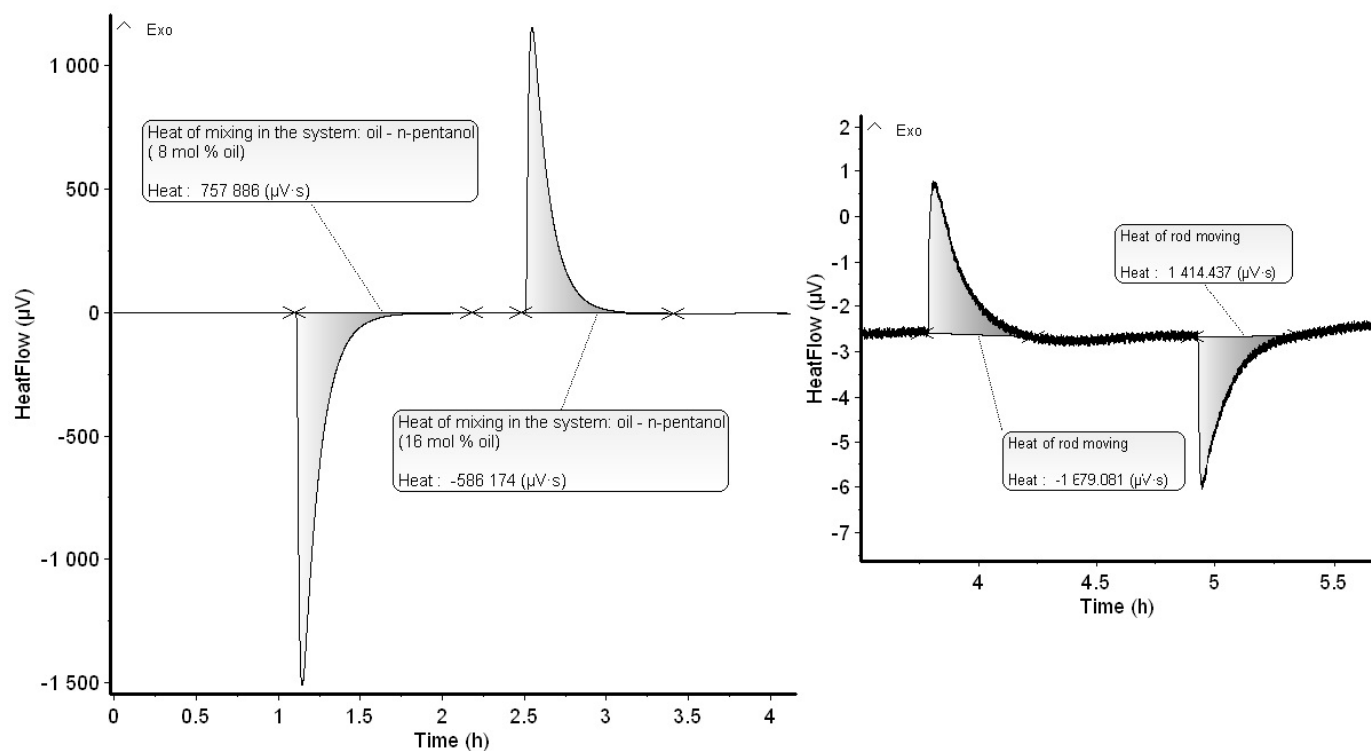


Figure S6. Example of a signal obtained on a C80 calorimeter and its processing in the Calisto program (sunflower oil – n-pentanol system)

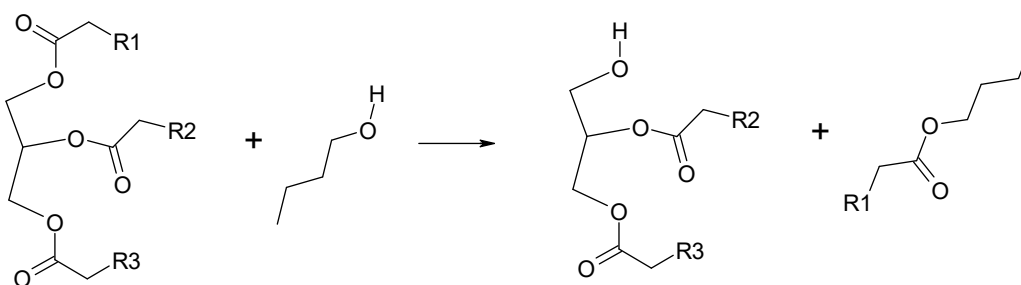


Figure S7. Transesterification reaction of triglyceride with alcohols