

Table S1 Operational sequence of the SI setup for in-line chemical fractionation of woody biofuels

Step	Valve port	Reagent	Operation	Flow rate (mL min ⁻¹)	Volume (μL)
1	1	air	Aspirate into holding coil	3.0	100
Start Loop#1					
2	2	H ₂ O	Aspirate into holding coil	21.0	4900
3	5	H ₂ O	Dispense through SFC reactor	2.5	4900
Repeat 24 loops					
End Loop#1					
Start Loop#2					
4	3	NH ₄ OAc	Aspirate into holding coil	21.0	4900
5	5	NH ₄ COAc	Dispense through SFC reactor	2.5	4900
Repeat 24 loops					
End Loop#2					
Start Loop#3					
6	2	H ₂ O	Aspirate into holding coil	21.0	4900
7	5	H ₂ O	Dispense through SFC reactor	2.5	4900
Repeat 6 loops					
End Loop#3					
Start Loop#4					
8	6	HCl	Aspirate into holding coil	21.0	4900
9	5	HCl	Dispense through SFC reactor	2.5	4900
Repeat 24 loops					
End Loop#4					
Start Loop#5					
10	2	H ₂ O	Aspirate into holding coil	21.0	4900
11	5	H ₂ O	Dispense through SFC reactor	2.5	4900
Repeat 6 loops					
End Loop#5					

Note: P1 and P2 are continuously operating peristaltic pumps