

Table S1 Relative $k(\text{NO}_3)$ rates for each compound relative to each other for each experiment.

Compound1	Compound2	Reference	$k_{\text{C1}}/k_{\text{R}}$	$k_{\text{C2}}/k_{\text{R}}$	$k_{\text{C1}}/k_{\text{C2}}$
2-methylfuran	-	2-carene	1.30	-	-
2-methylfuran	pyrrole	2-carene	1.15	3.84	0.30
2,5-dimethylfuran	2-methylfuran	2-carene	5.60	1.26	4.46
2,5-dimethylfuran	pyrrole	2-methylfuran	4.59	3.04	1.51
furan	furfural	cyclohexene	2.75	0.161	17.1
α -angelicalactone	furan	cyclohexene	5.41	2.46	2.2
2,5-dimethylfuran	2-methylfuran	TME	2.12	0.398	5.33
furfural	-	3-M-3-buten-1-ol	0.367	-	-
furan	α -angelicalactone	α -pinene	0.25	0.466	0.536
2-methylfuran	-	α -pinene	3.66	NA	NA
pyrrole	-	TME	1.16	-	-
2-methylfuran	-	TME	0.346	-	-
pyrrole	-	TME	1.25	-	-
furan	-	camphene	2.39	-	-
furfural	-	camphene	0.144	-	-

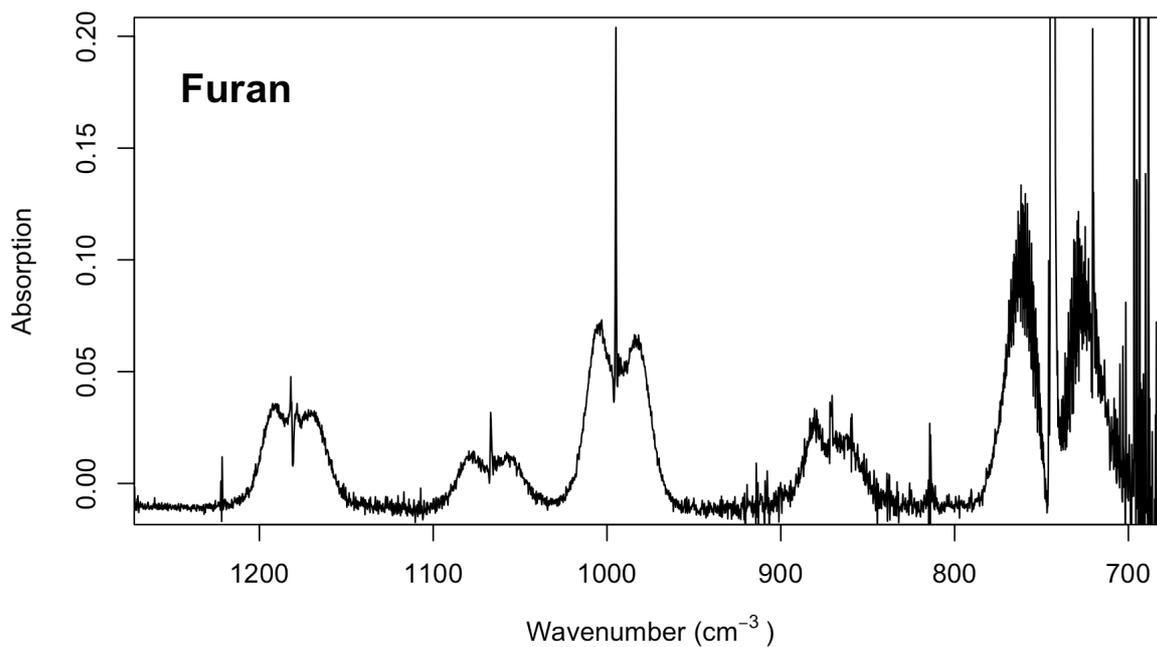


Figure S1 Reference spectrum of furan at a resolution of 0.25 cm⁻¹

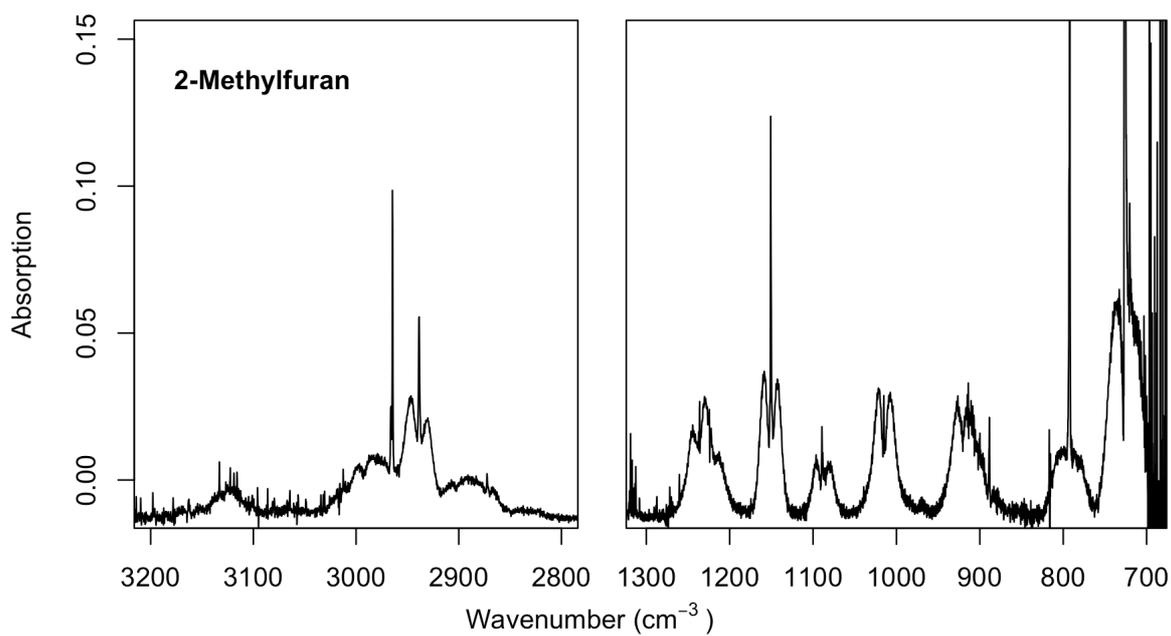


Figure S2 Reference spectrum of 2-methylfuran at a resolution of 0.25 cm⁻¹

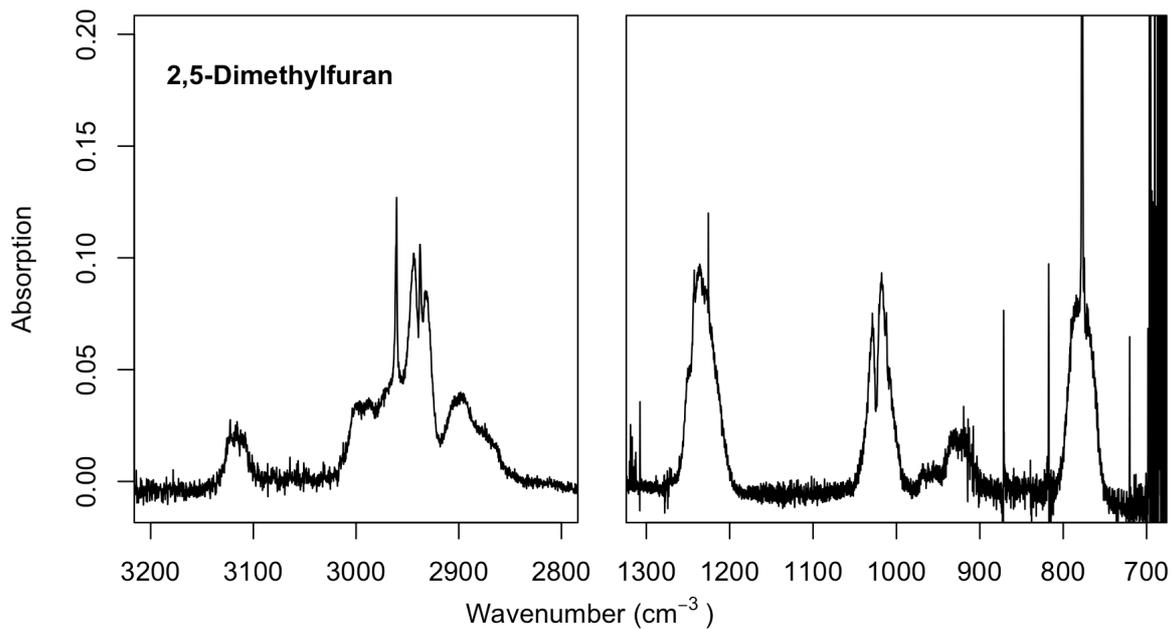


Figure S3 Reference spectrum of 2,5-Dimethylfuran at a resolution of 0.25 cm⁻¹

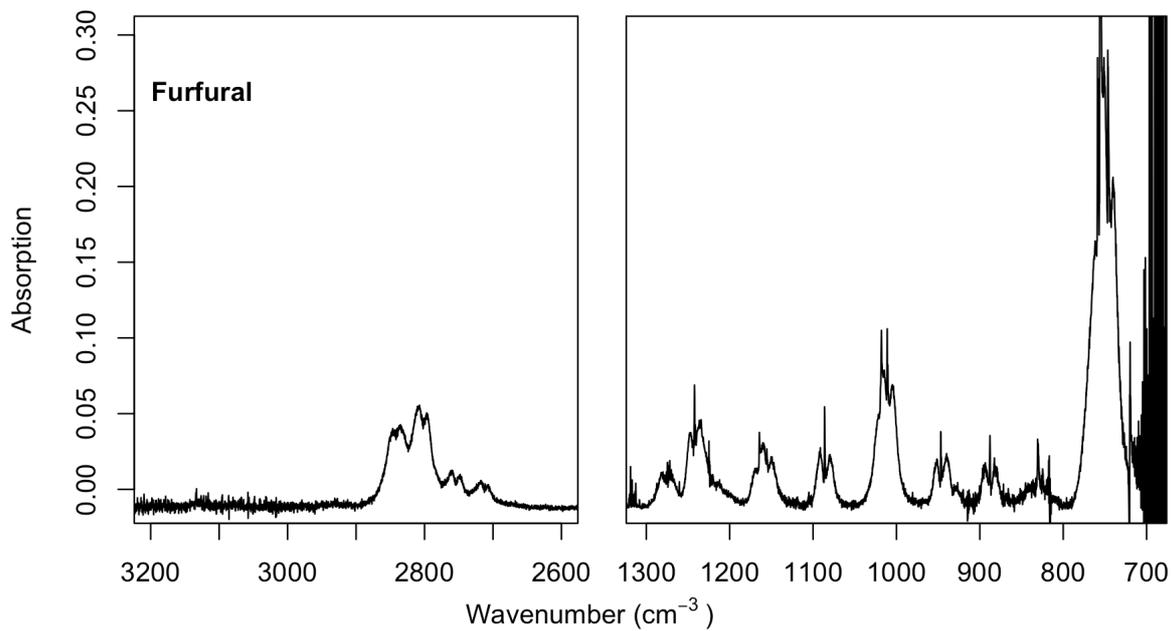


Figure S4 Reference spectrum of furfural at a resolution of 0.25 cm⁻¹

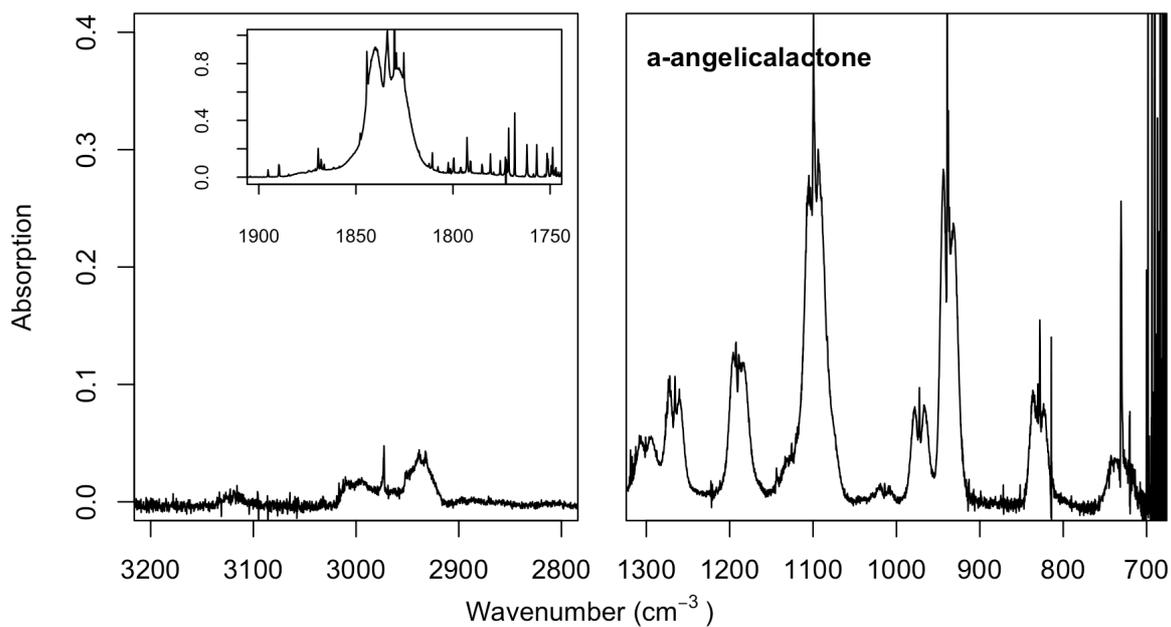


Figure S5 Reference spectrum of α -angelicalactone at a resolution of 0.25 cm⁻¹

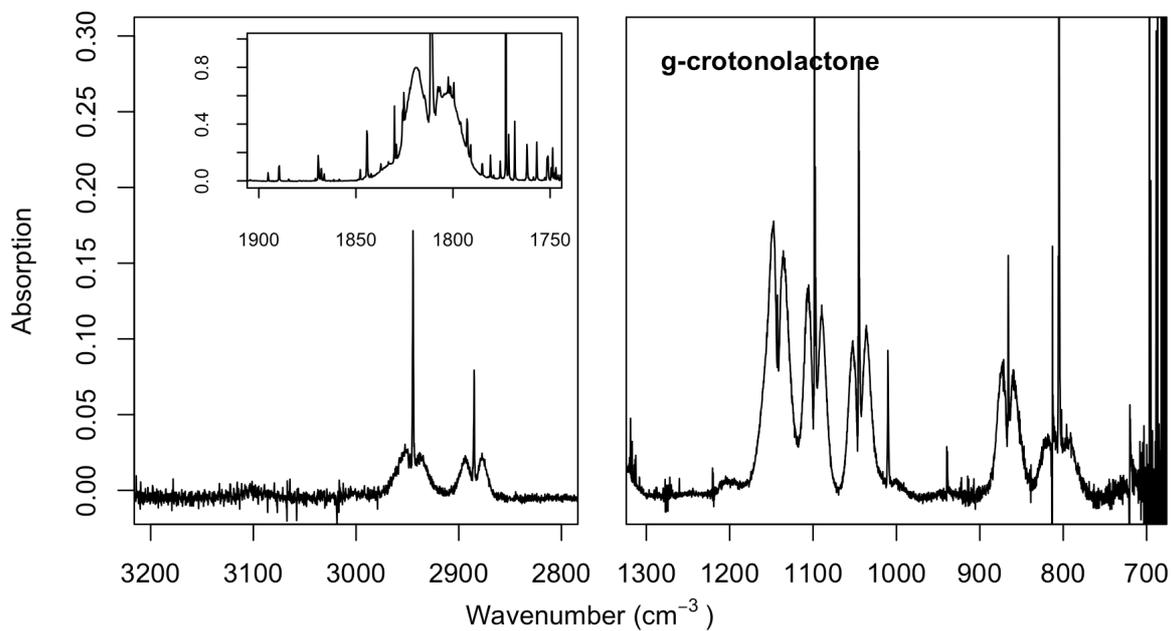


Figure S6 Reference spectrum of γ -crotonolactone at a resolution of 0.25 cm⁻¹

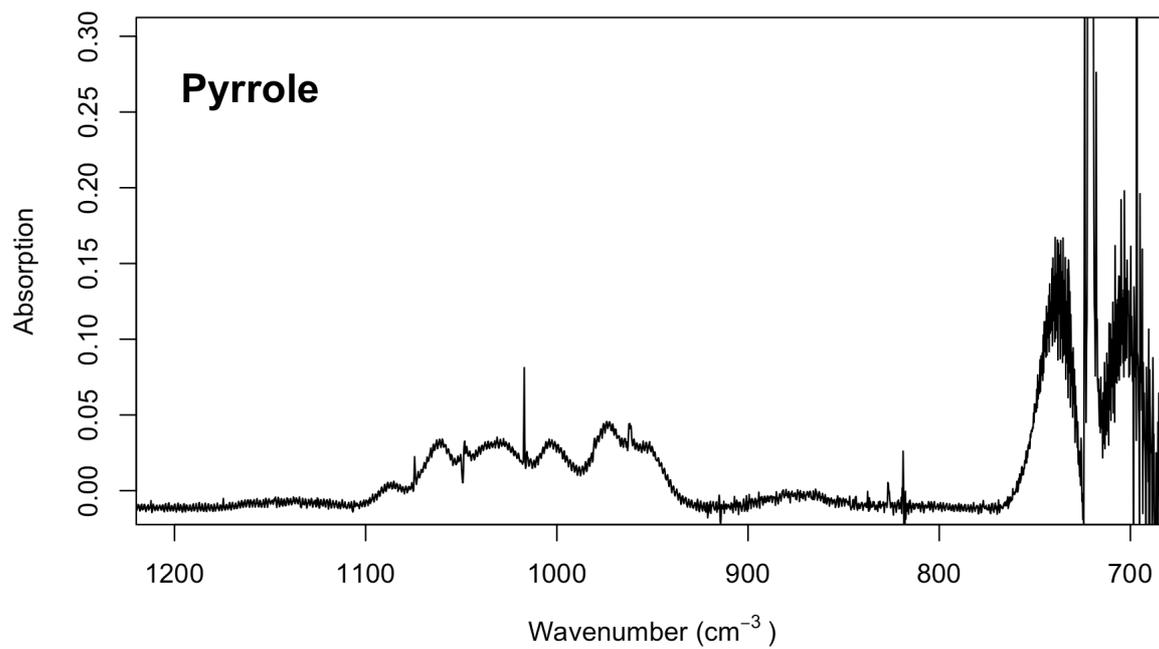


Figure S7 Reference spectrum of pyrrole at a resolution of 0.25 cm⁻¹