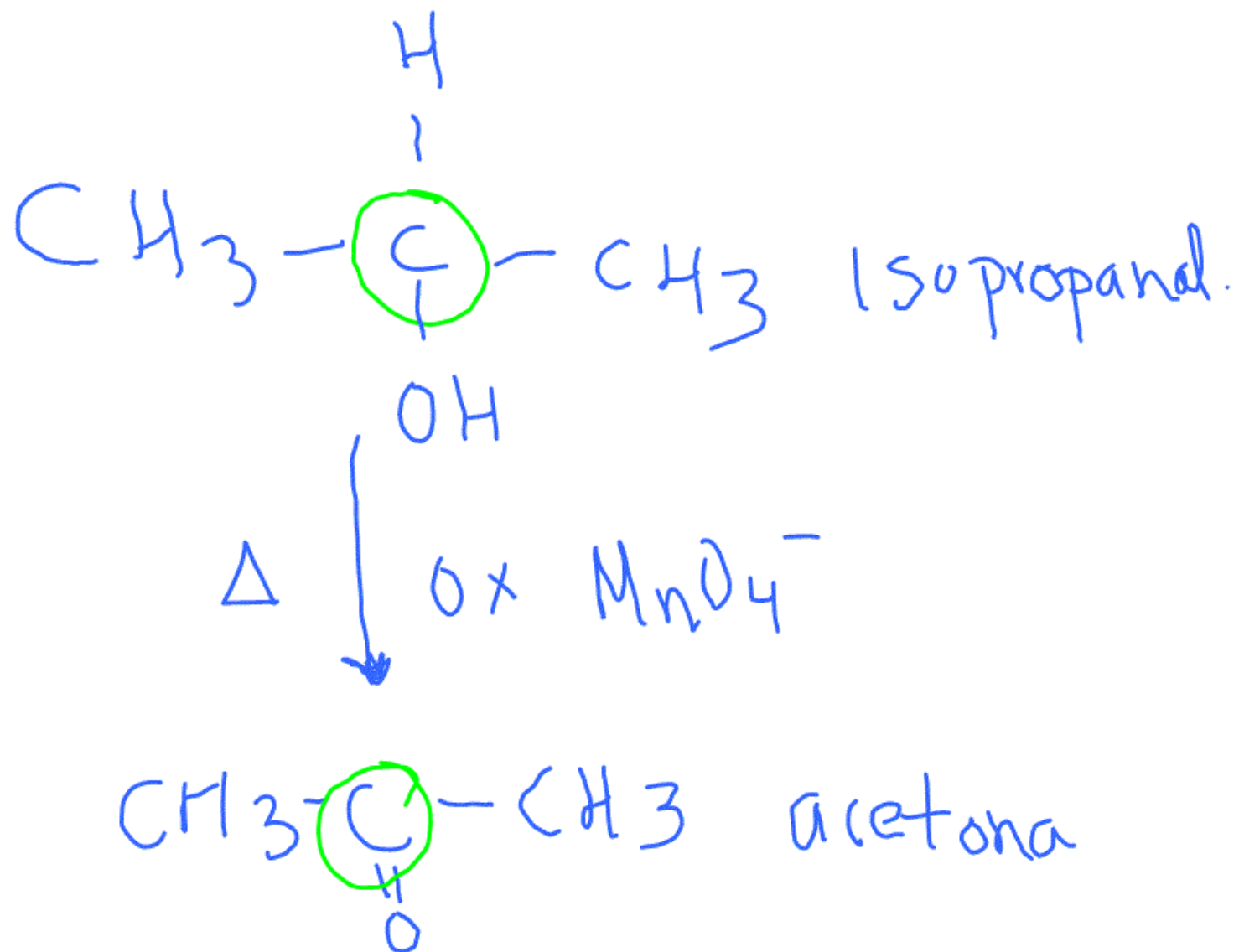
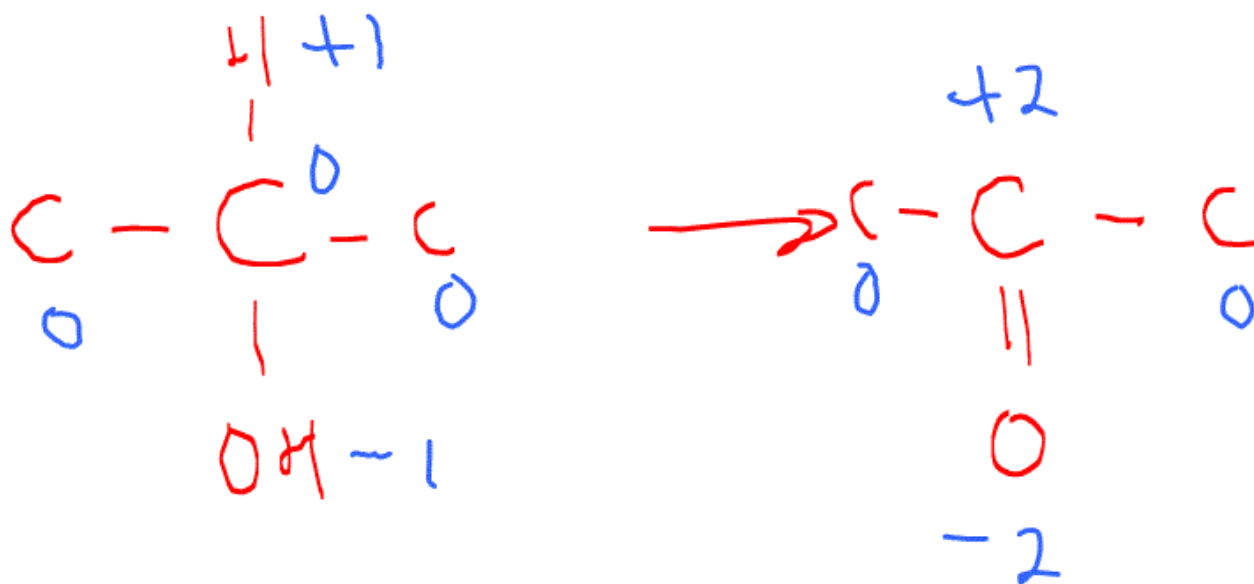


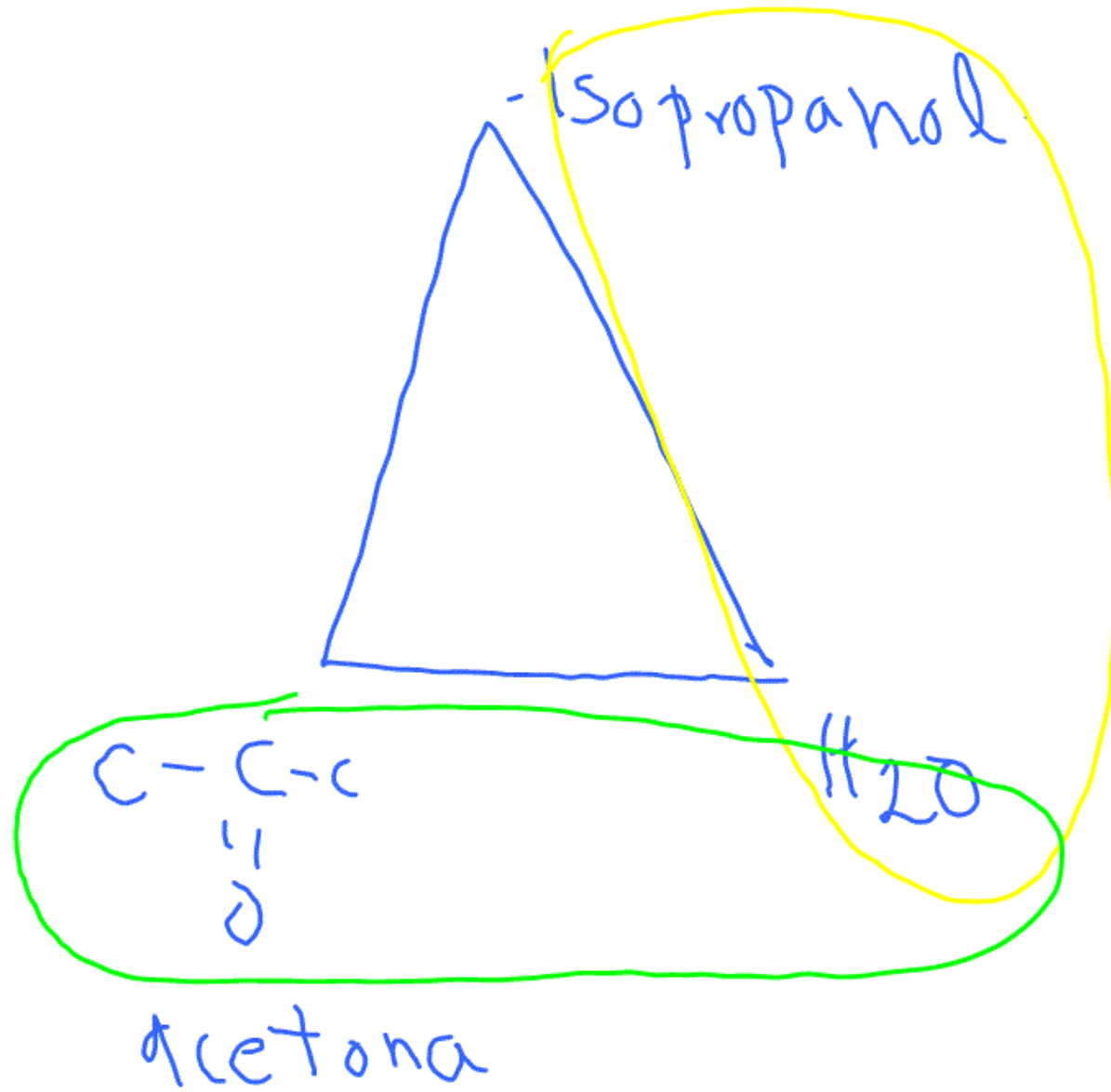
Clase 28 28 Marzo 2022

Título de la nota

28/03/2022







Calculation of vapor-liquid equilibrium (VLE) and drawing of phase diagrams

Select compounds

Component 1:	water	✗
Component 2:	isopropanol	✗
Add component		
Swap components		

Select type of phase diagram

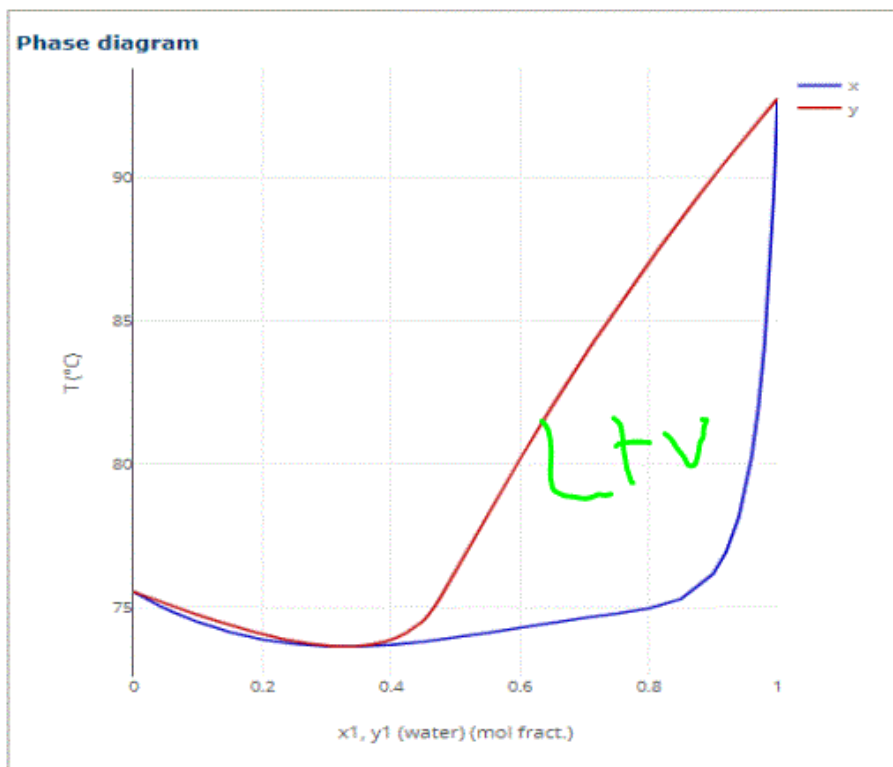
Type of VLE-diagram

Isobaric

Bubble/dewpoint (x,y-T)

Pressure

0.77 bar



VLE data table

[Export table](#) [Hide table](#)

Temperature	x ₁	y ₁
°C	mol fract.	
75.5306	0	0
75.5263	0.001	0.00155034
75.5306	0	0
75.5263	0.001	0.00155034
75.5132	0.002	0.00309603
75.5002	0.003	0.00463706
75.4872	0.004	0.00617347
75.4614	0.006	0.00923248
75.4358	0.008	0.0122732
75.4104	0.01	0.0152957
75.2867	0.02	0.0301398
75.1684	0.03	0.0445479
75.0553	0.04	0.0585351
74.8443	0.06	0.0853027
74.6529	0.08	0.110549

Calculation of vapor-liquid equilibrium (VLE) and drawing of phase diagrams

Select compounds

Component 1:	water	✗
Component 2:	acetone	✗
Add component		
Swap components		

Select type of phase diagram

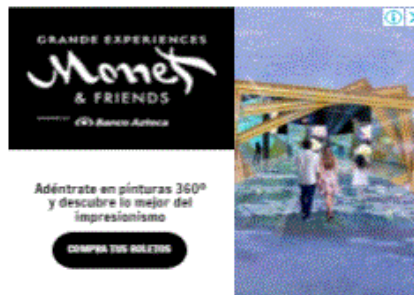
Type of VLE-diagram

Isobaric

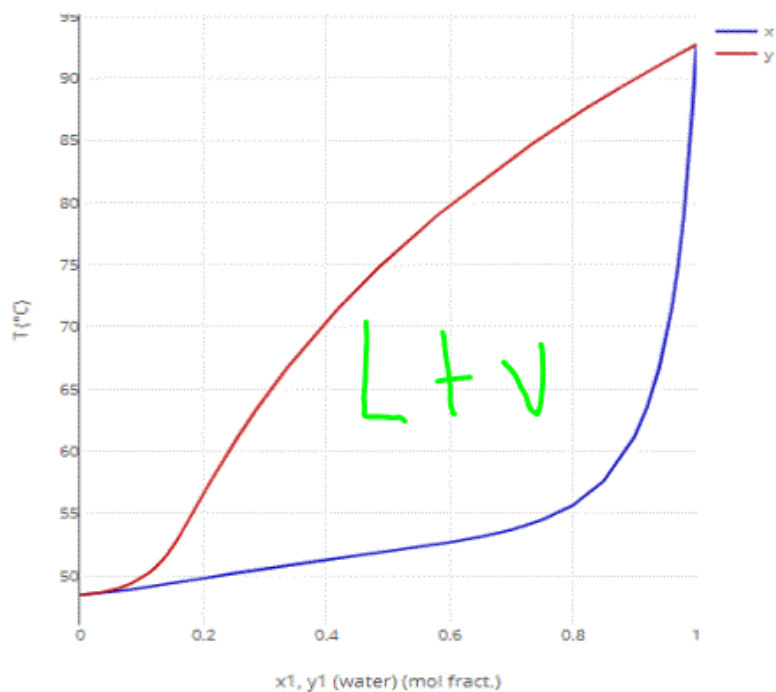
Bubble/dewpoint (x,y-T)

Pressure

0.77 bar



Phase diagram



VLE data table

Export table Hide table

Temperature	x ₁	y ₁
°C	mol fract.	
48.4556	0	0
48.4682	0.001	0.00090721
48.4556	0	0
48.4682	0.001	0.00090721
48.4708	0.002	0.00180708
48.4735	0.003	0.0026997
48.4763	0.004	0.00358514
48.4822	0.006	0.00533482
48.4885	0.008	0.00705677
48.4951	0.01	0.00875159
48.5326	0.02	0.0168392
48.5771	0.03	0.024332
48.6275	0.04	0.0312901
48.7428	0.06	0.0438065
48.873	0.08	0.0547377

Calculation of vapor-liquid equilibrium (VLE) and drawing of phase diagrams

Select compounds

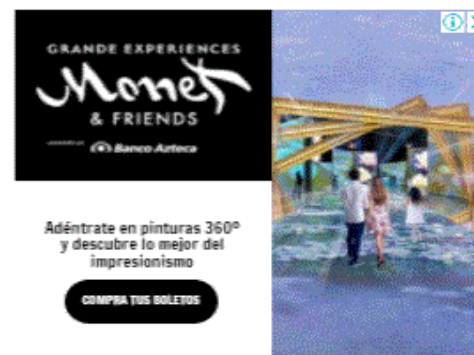
Component 1: Component 2:

Select type of phase diagram

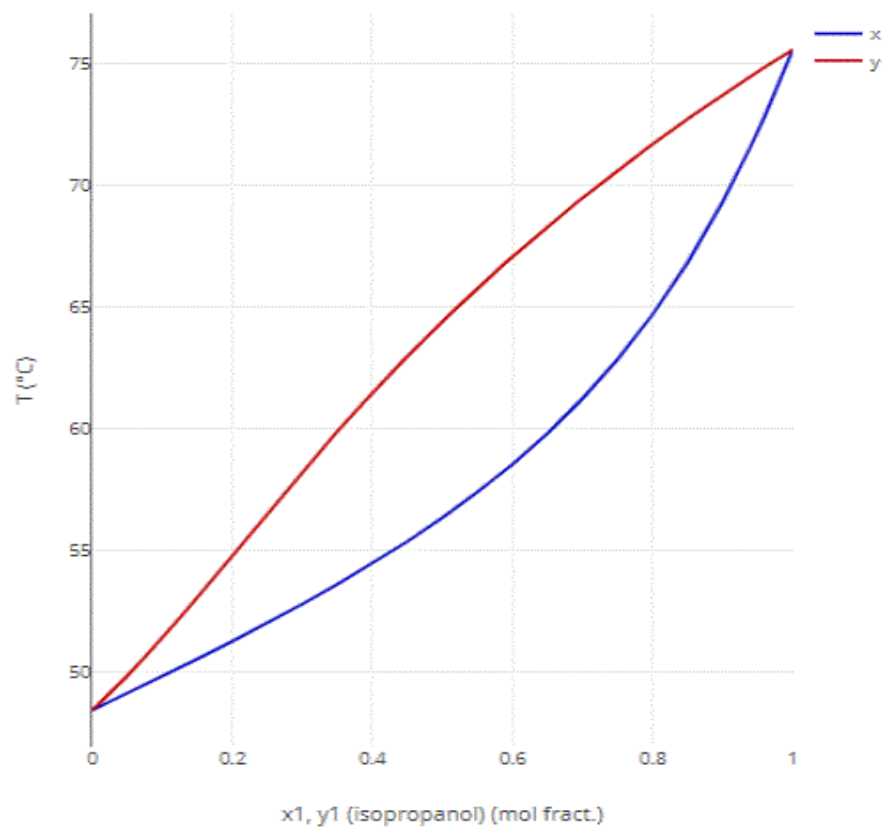
Type of VLE-diagram

 Isobaric Bubble/dewpoint (x,y-T)

Pressure

 bar

Phase diagram



VLE data table

Temperature	x ₁	y ₁
°C	mol fract.	
48.4556	0	0
48.4739	0.001	0.00051262
48.4556	0	0
48.4739	0.001	0.00051262
48.4874	0.002	0.00102474
48.5009	0.003	0.00153638
48.5144	0.004	0.00204752
48.5414	0.006	0.00306834
48.5685	0.008	0.00408724
48.5955	0.01	0.00510423
48.7312	0.02	0.0101613
48.8673	0.03	0.0151738
49.004	0.04	0.0201442
49.2789	0.06	0.0299688
49.5561	0.08	0.0396542

Raoult $p_{total} = p^{\circ}_A x_A + p^{\circ}_B x_B$

Dalton $p_{total} = p_{total} y_A + p_{total} y_B$