

Sb (V) Kaempferol and Quercetin derivative complexes: synthesis, characterization and antileishmanial activities

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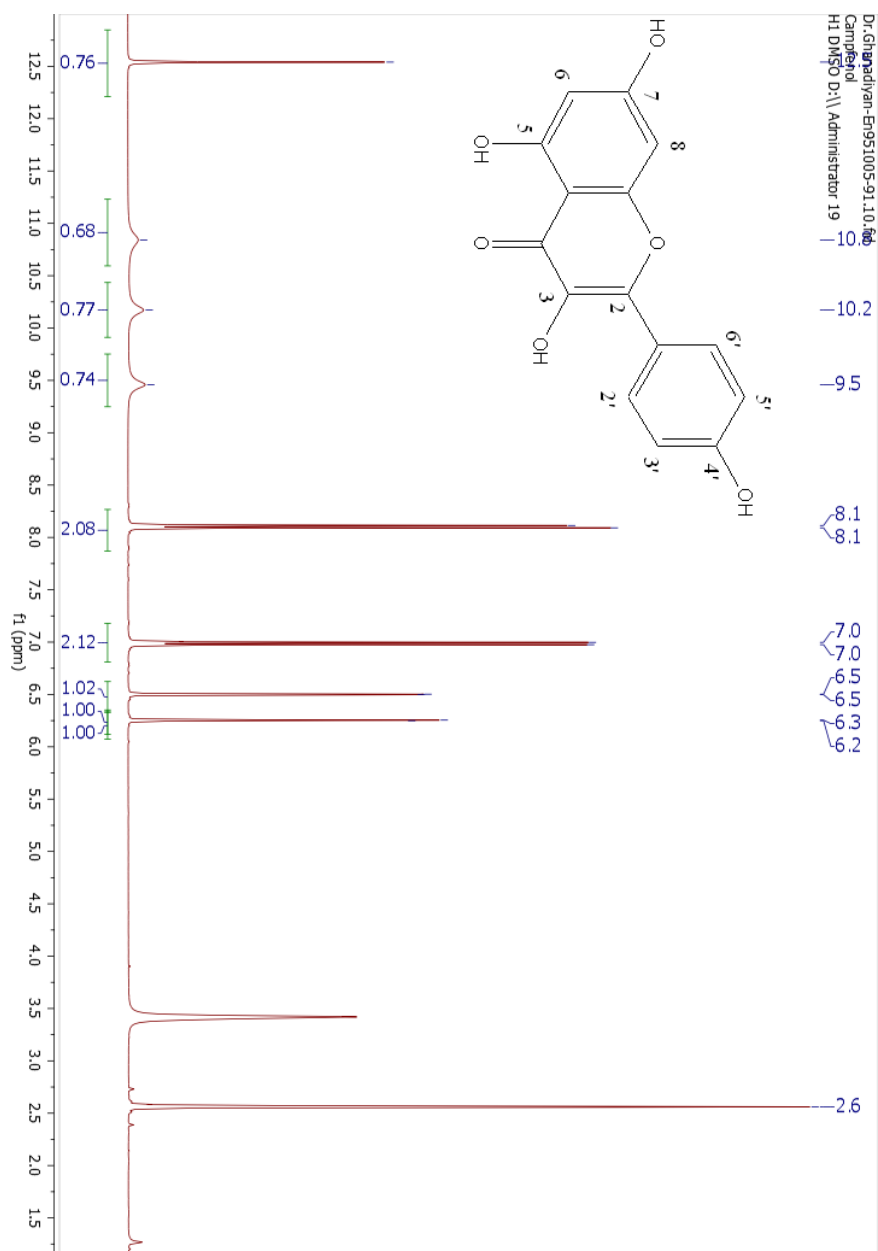


Figure 1s: ¹H-NMR spectrum of Kaempferol (1)

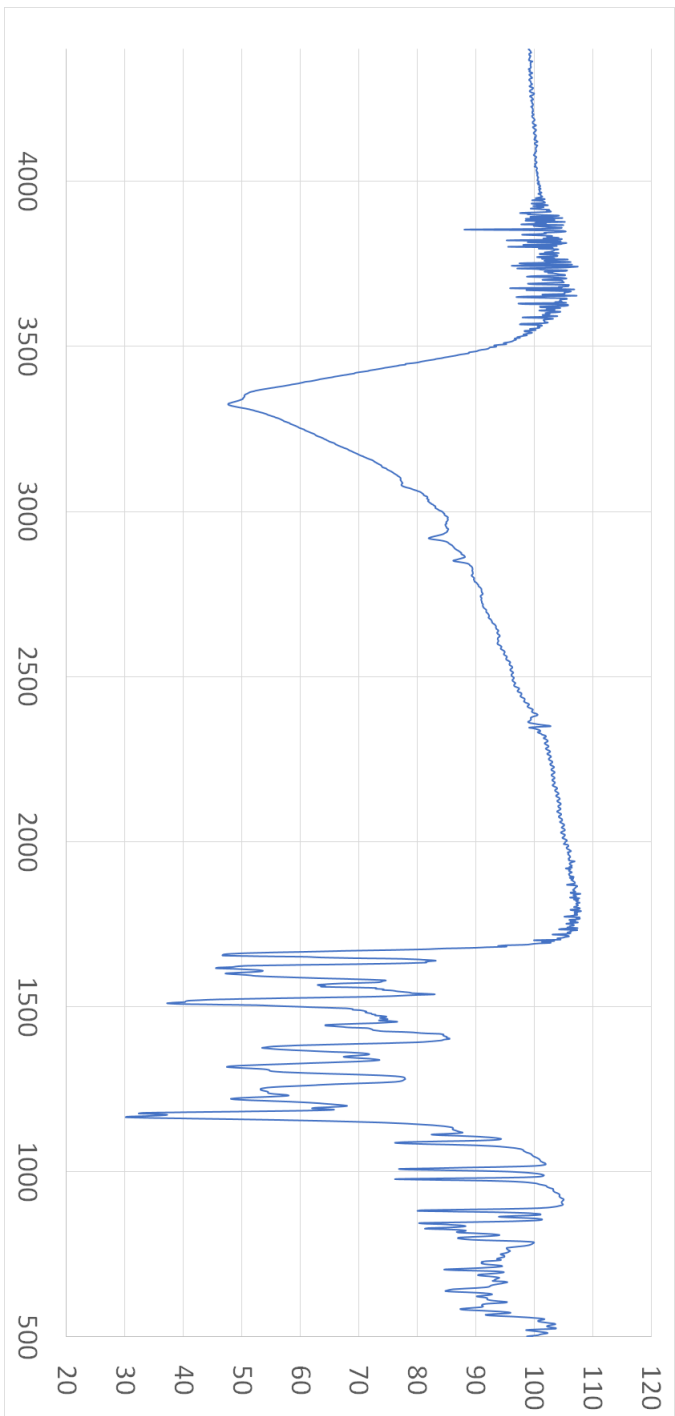


Figure 2s: IR spectrum of kaempferol (1)

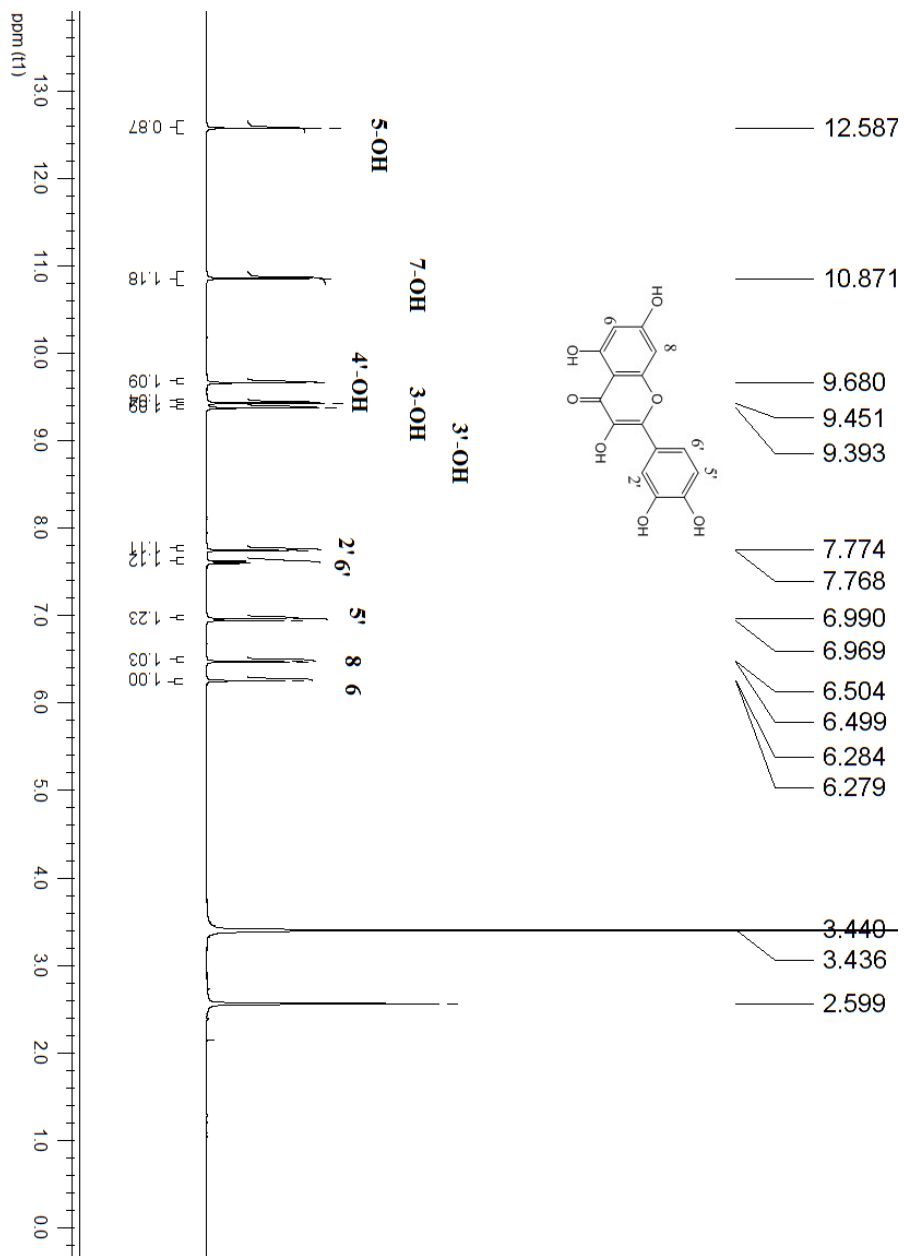


Figure 3s: ¹H-NMR spectrum of Quercetin (2)

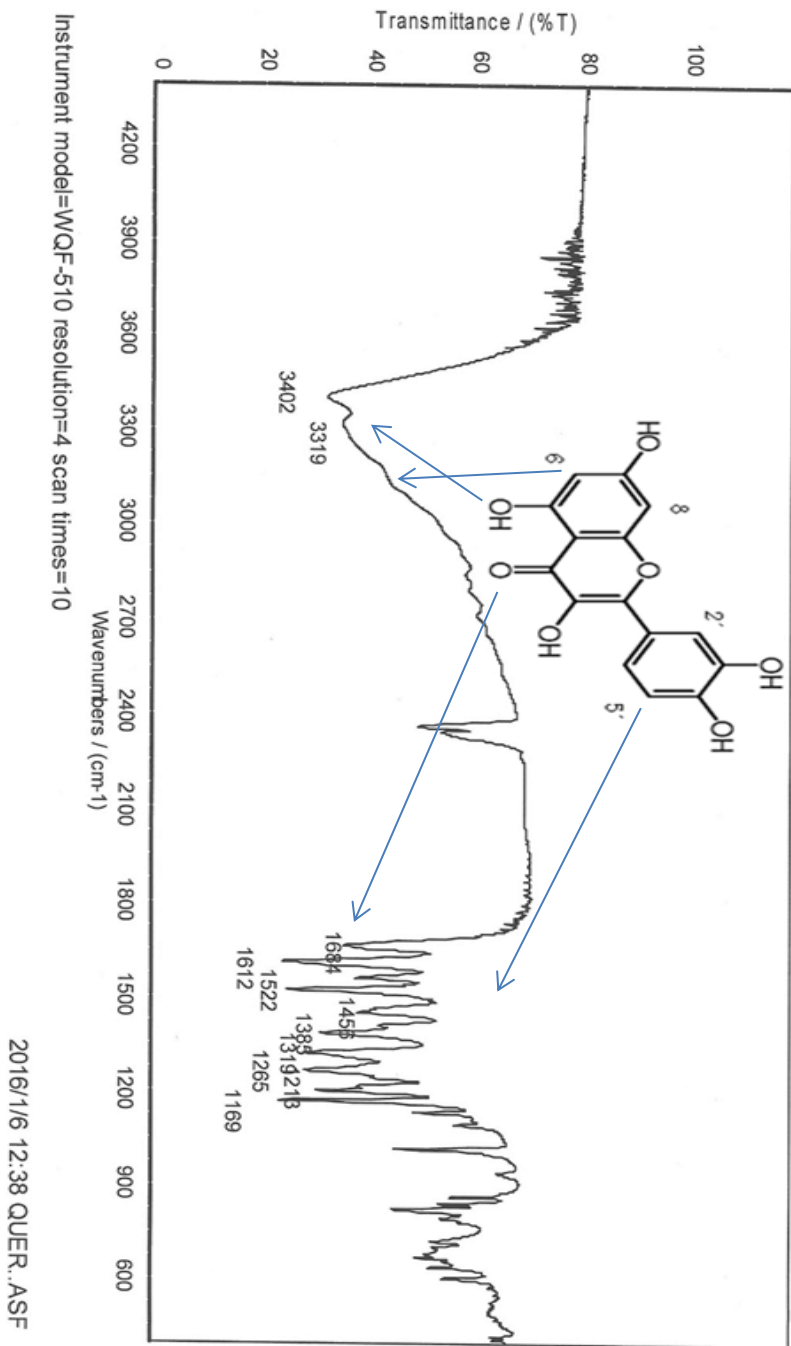


Figure 4s: IR spectrum of Quercetin (2)

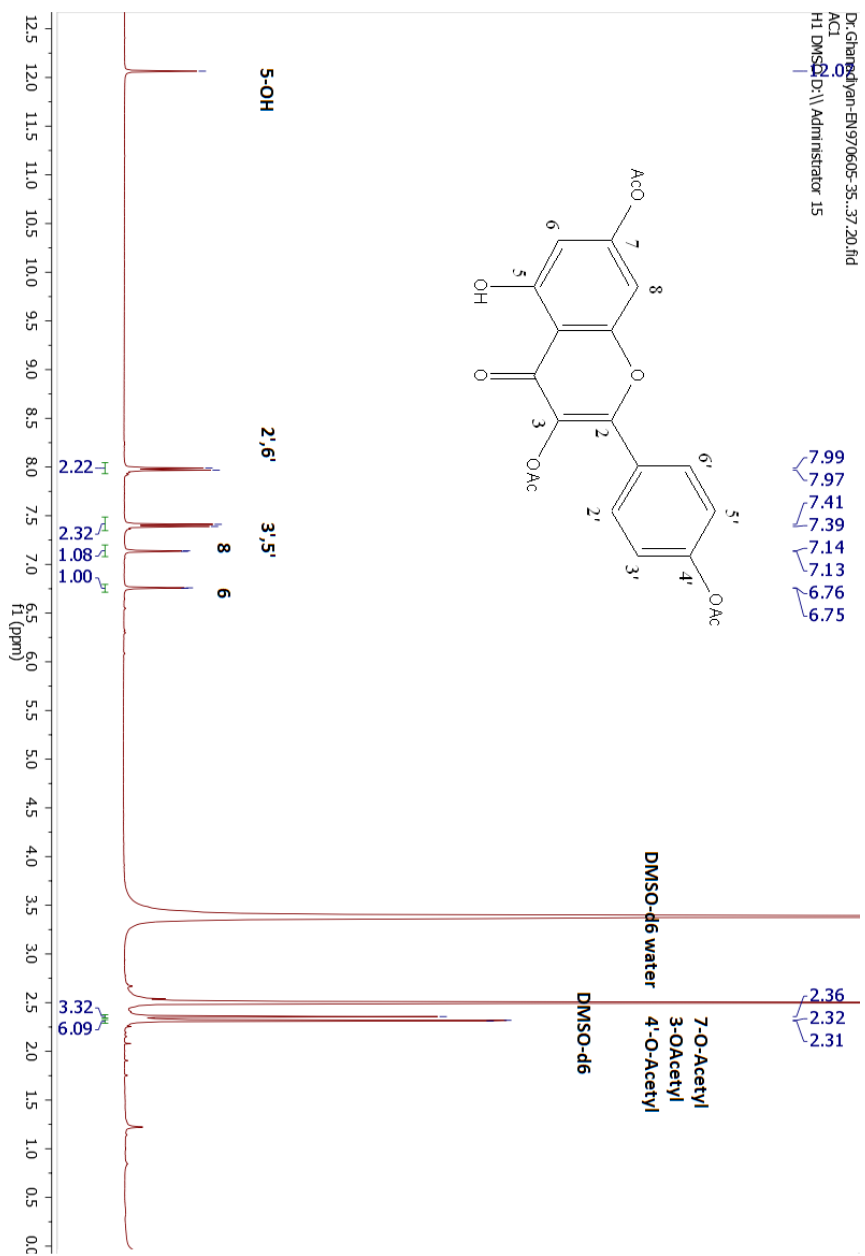


Figure 5s: $^1\text{H-NMR}$ of Kaempferol-3,7, 4'-triacetate (KTA, 3)

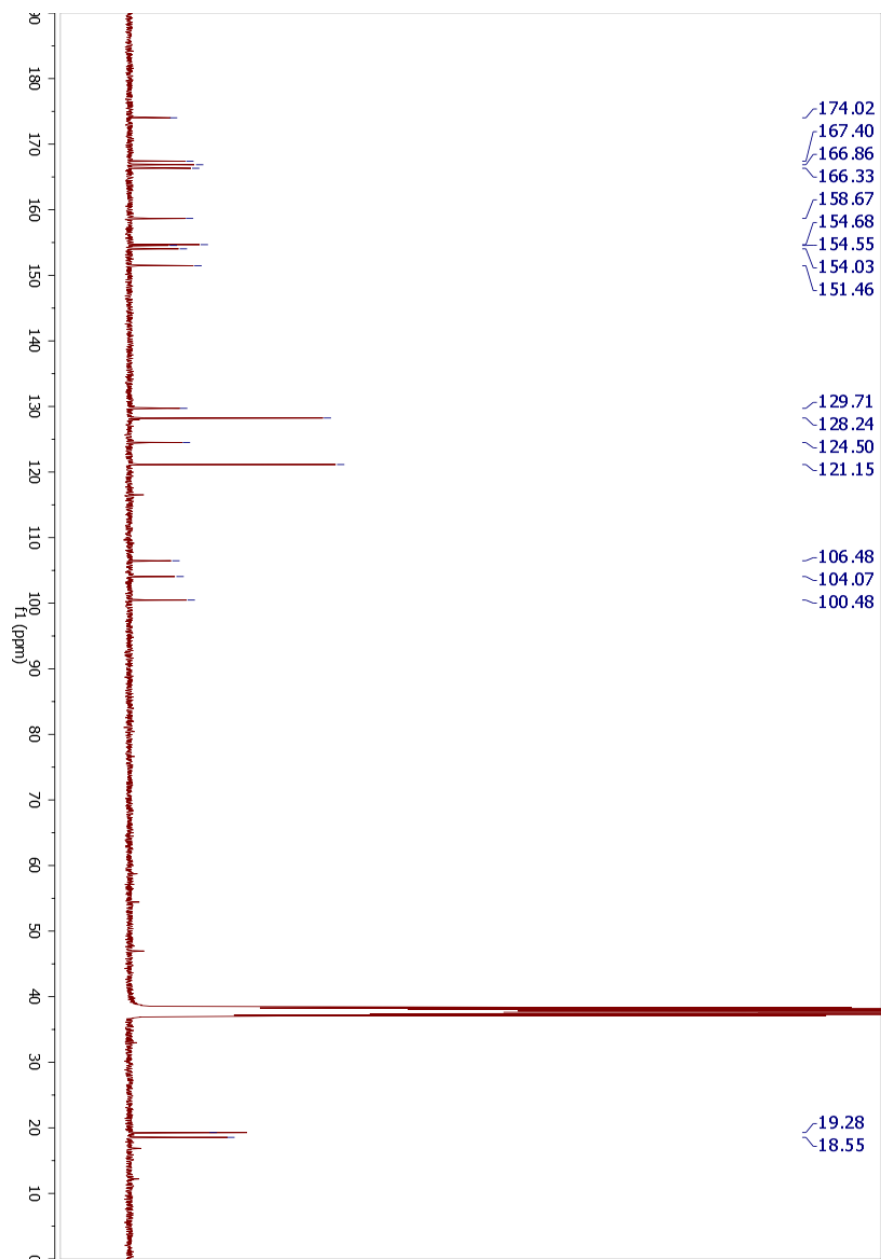


Figure 6s: ^{13}C -NMR spectrum of Kaempferol-3,7, 4'-triacetate (KTA, 3)

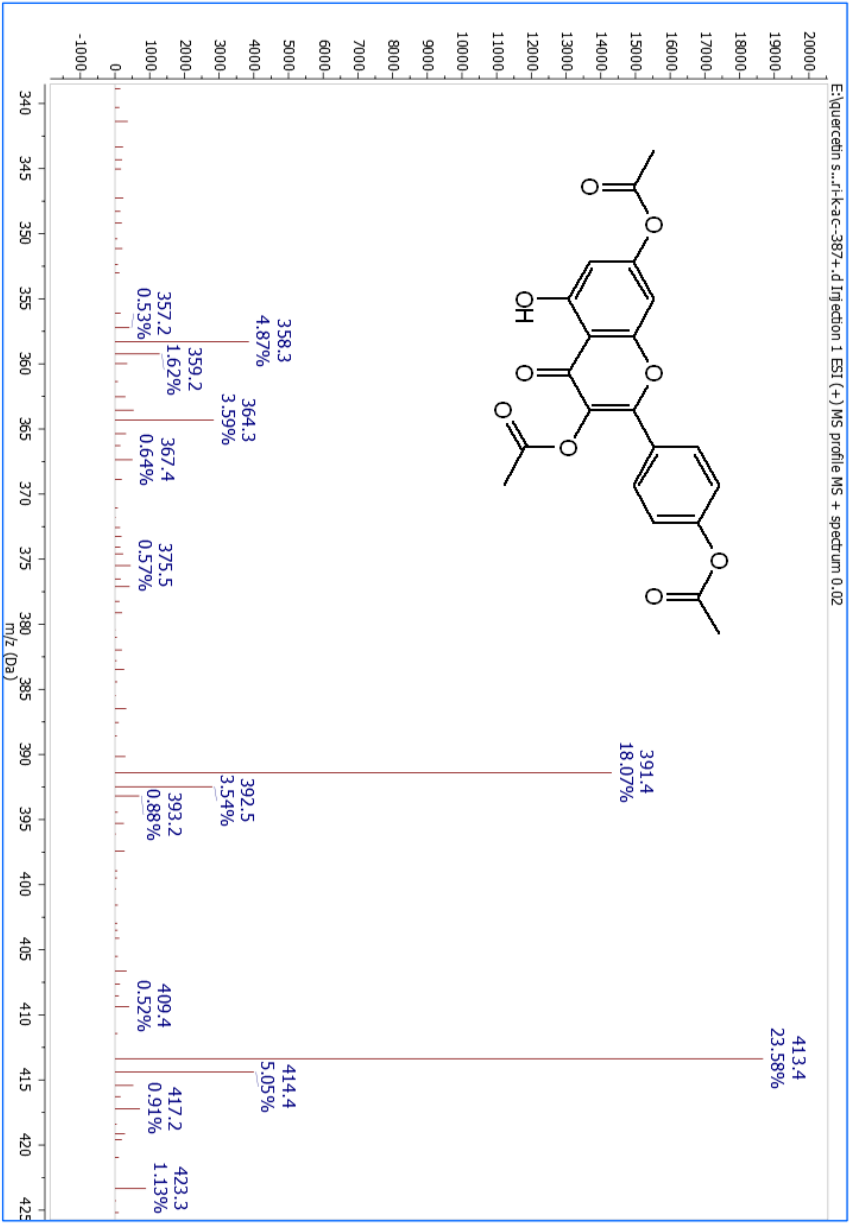


Figure 7s: Positive ESI mass spectrum of Kaempferol-3,7, 4'-triacetate (KTA, 3)

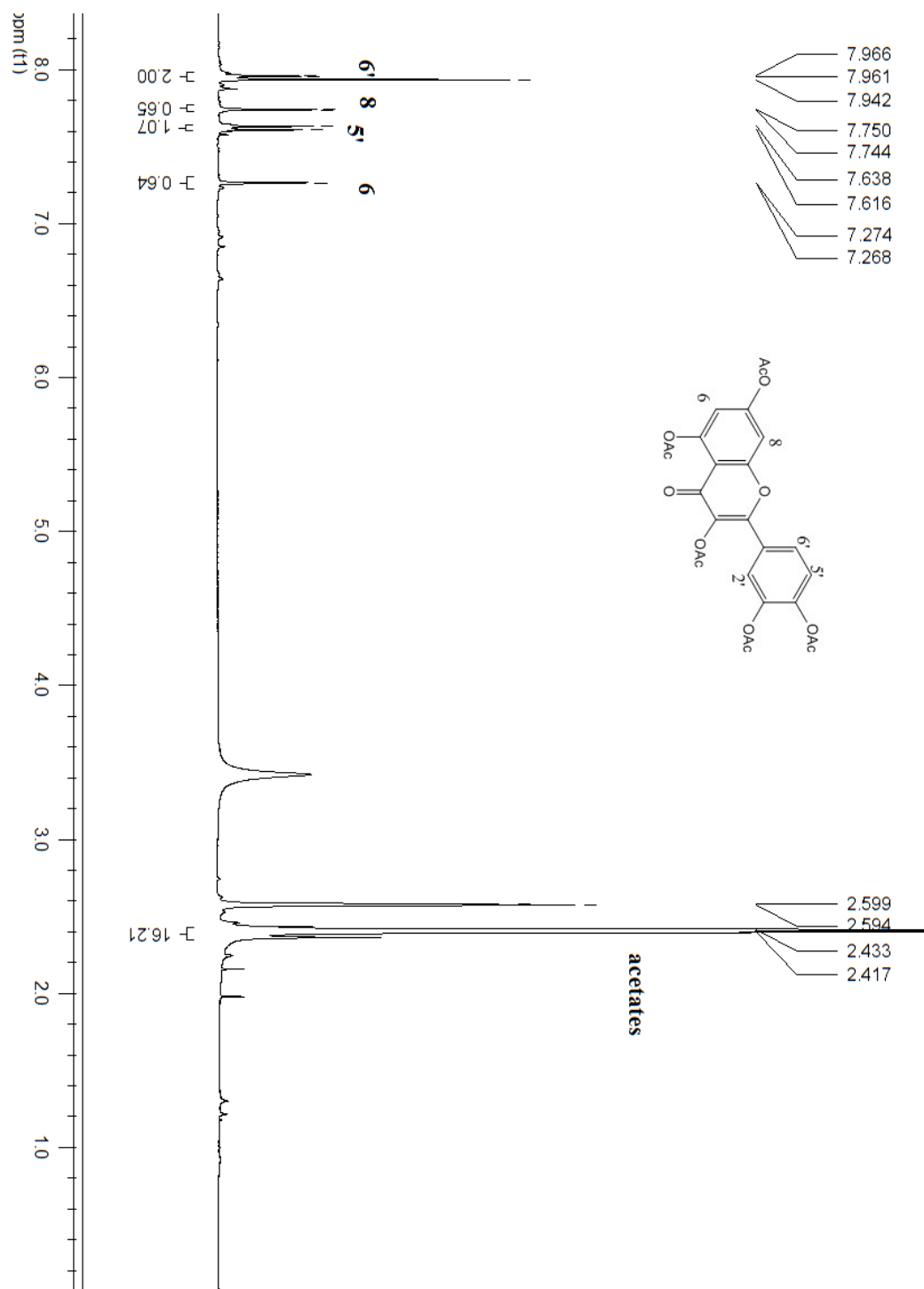


Figure 8s: ¹H-NMR spectrum of Quercetin 3,5,7,3',4'-pentaacetate (QPA, 5)

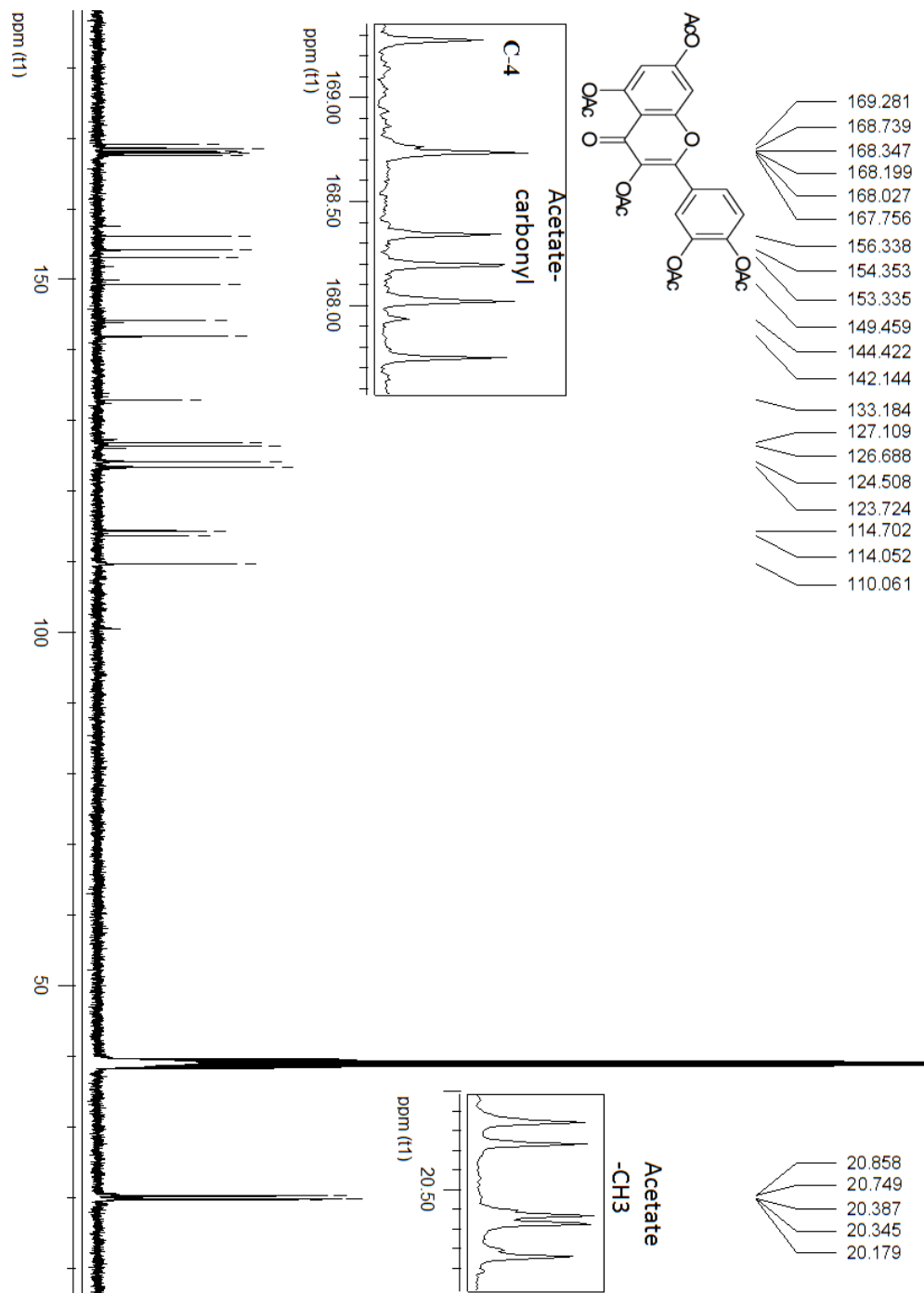


Figure 9s: ¹³C-NMR spectrum of Quercetin 3,5,7,3',4'-pentaacetate (QPA, 5)

:Spectrum>

Retention Time:0.667(Scan#:81)
Max Peak:337 Base Peak:535.10(2645444)
Spectrum:Averaged 0.492-1.208(60-146)
Background:Averaged 0.075-0.376(10-46) Polarity:Pos Segment1 - Event1

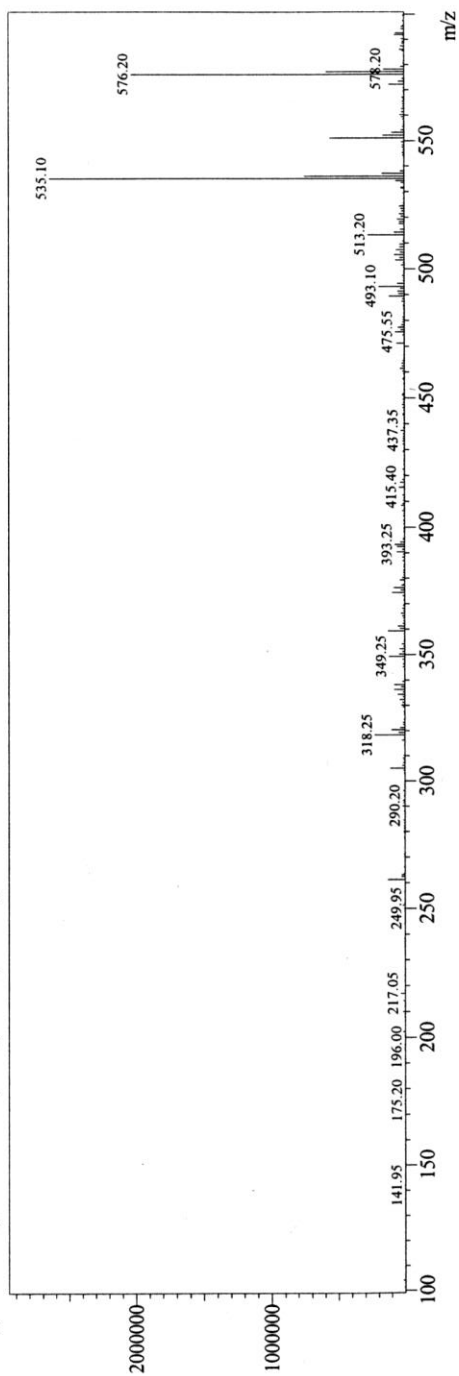


Figure 10s: Positive ESI mass spectrum of Quercetin 3,5,7,3',4'-pentaacetate (m/z): 535 [M+Na]

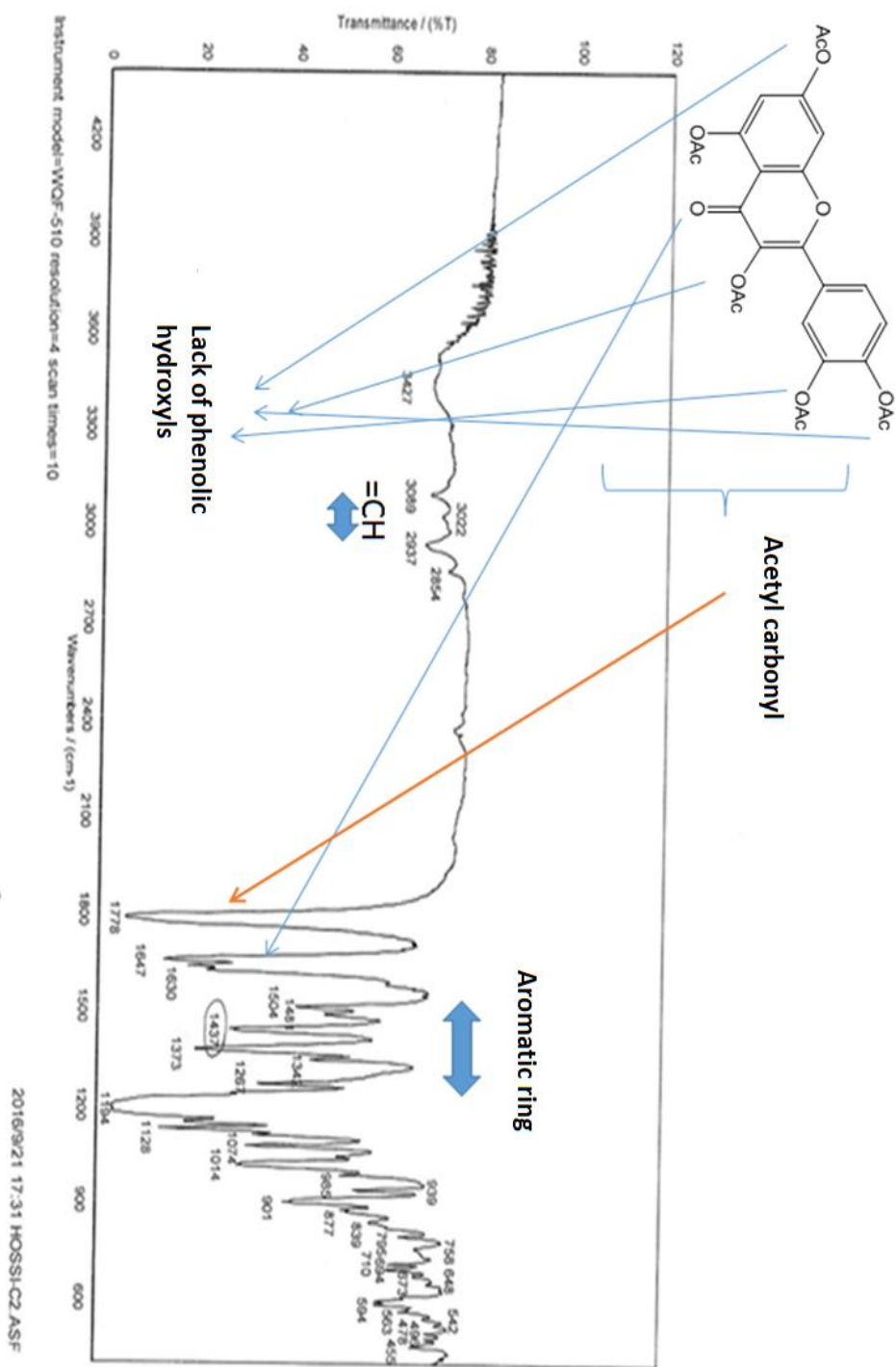


Figure 11s: IR spectrum of Quercetin 3,5,7-3',4'-pentaacetate (QPA, 5)

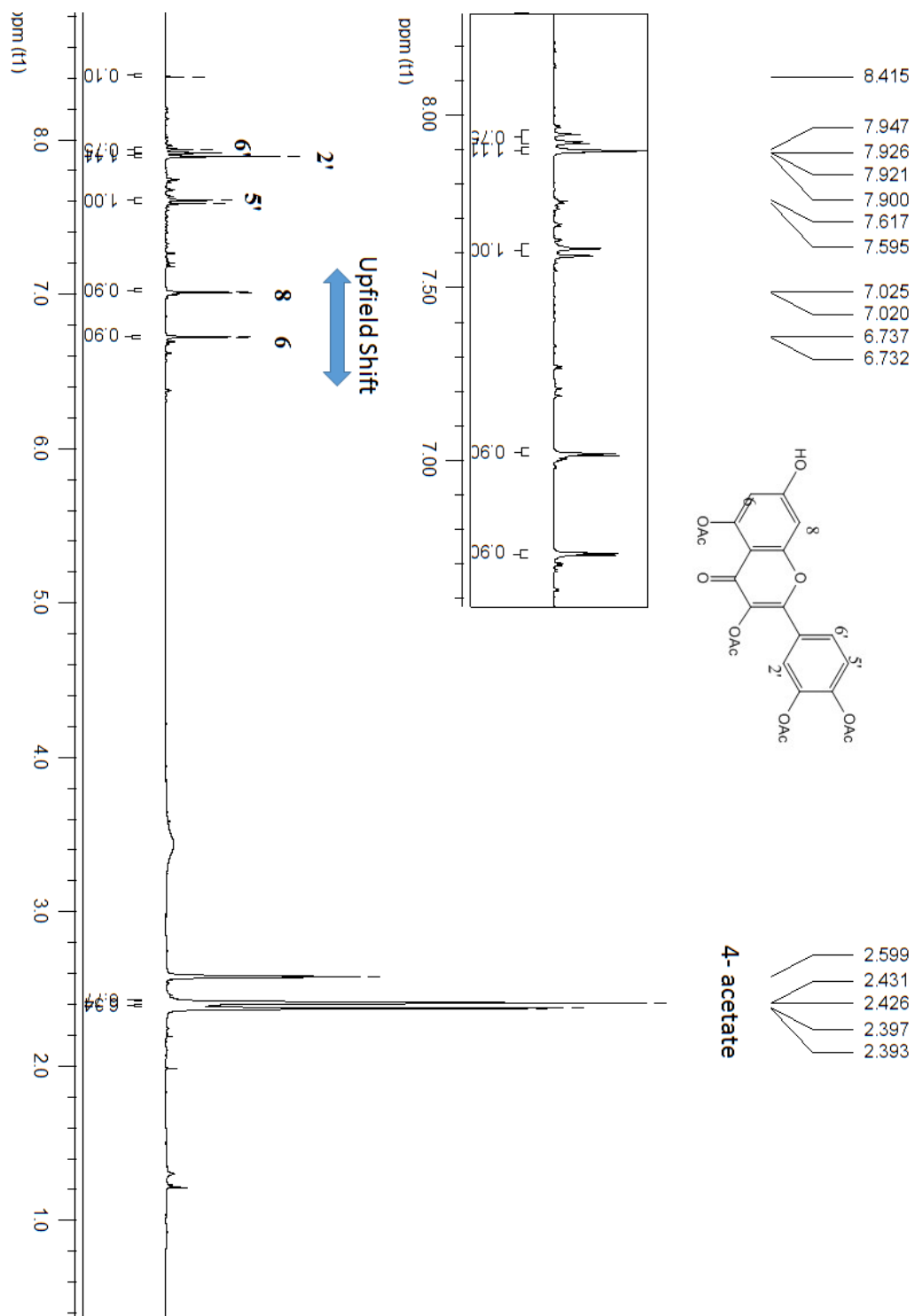


Figure 12s: ¹H-NMR spectrum of Quercetin 3,5,3',4'-tetraacetate (QTA, 6)

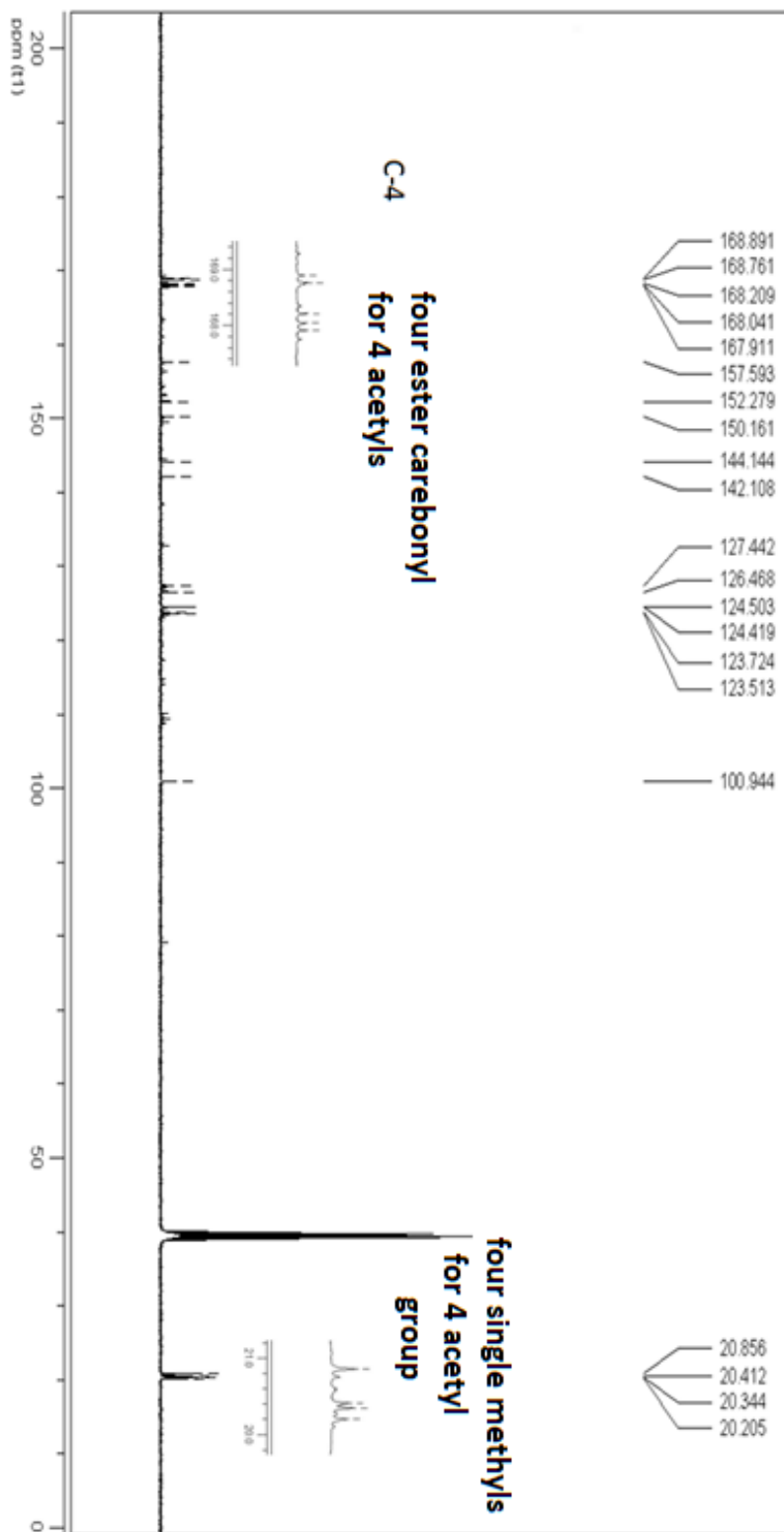


Figure 13s: ^{13}C -NMR spectrum of Quercetin 3,5, 3',4'-tetraacetate (QTA, 6)

<Spectrum>

Retention Time:0.625(Scan#:76)
Max Peak:378 Base Peak:493.10(1648380)
Spectrum:Averaged 0.433-1.100(53-133)
Background:Averaged 0.083-0.344(11-42) Polarity:Pos Segment1 - Event1

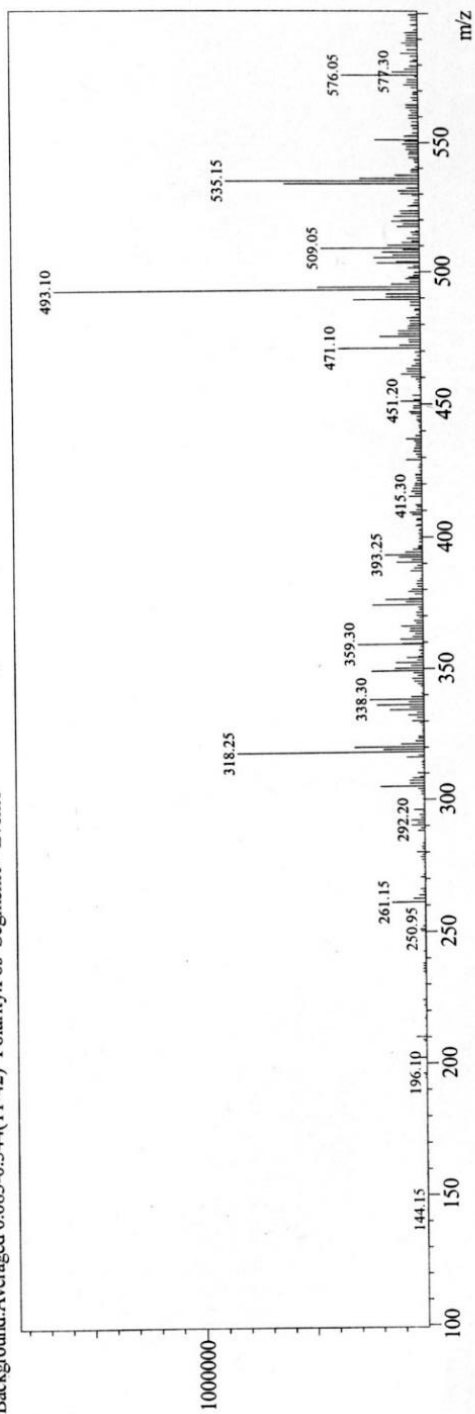


Figure 14s: Positive ESI mass spectrum of Quercetin 3,5,3',4'-tetraacetate (m/z): 493 [M+Na]

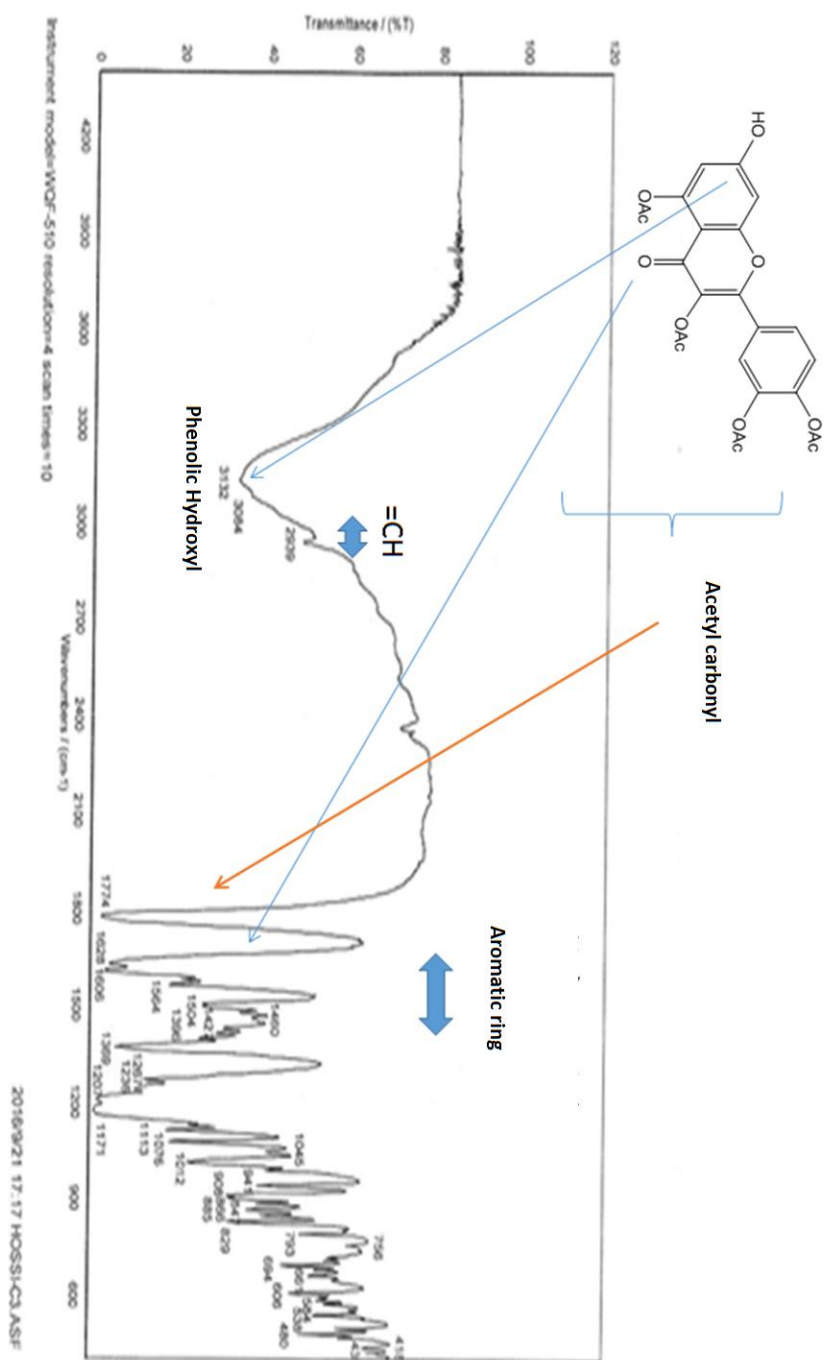


Figure 15s: IR spectrum of Quercetin 3,5, 3',4'-tetraacetate (QTA, 6)

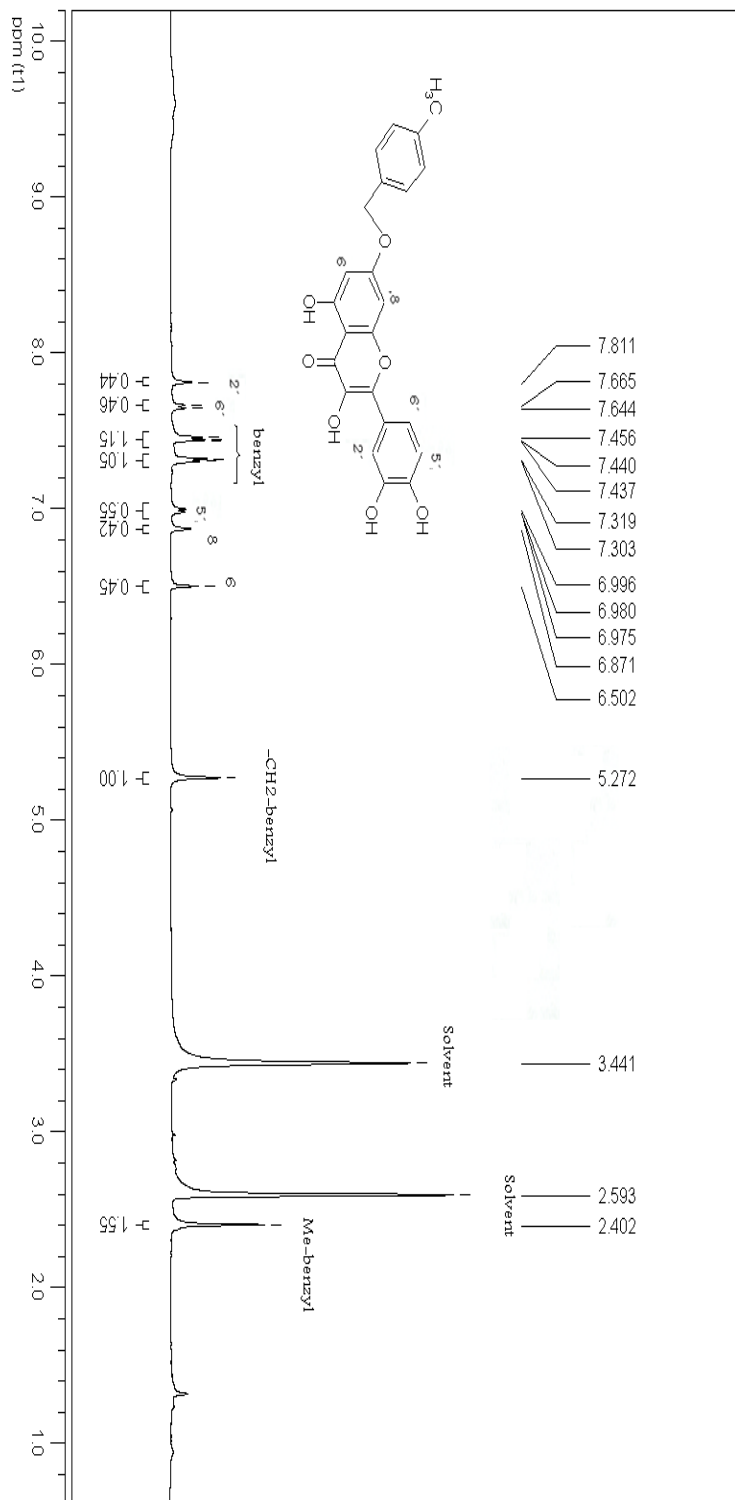


Figure 16s: ¹H-NMR spectrum of 7-O-Paramethylbenzyl quercetin (QPMB, 7)

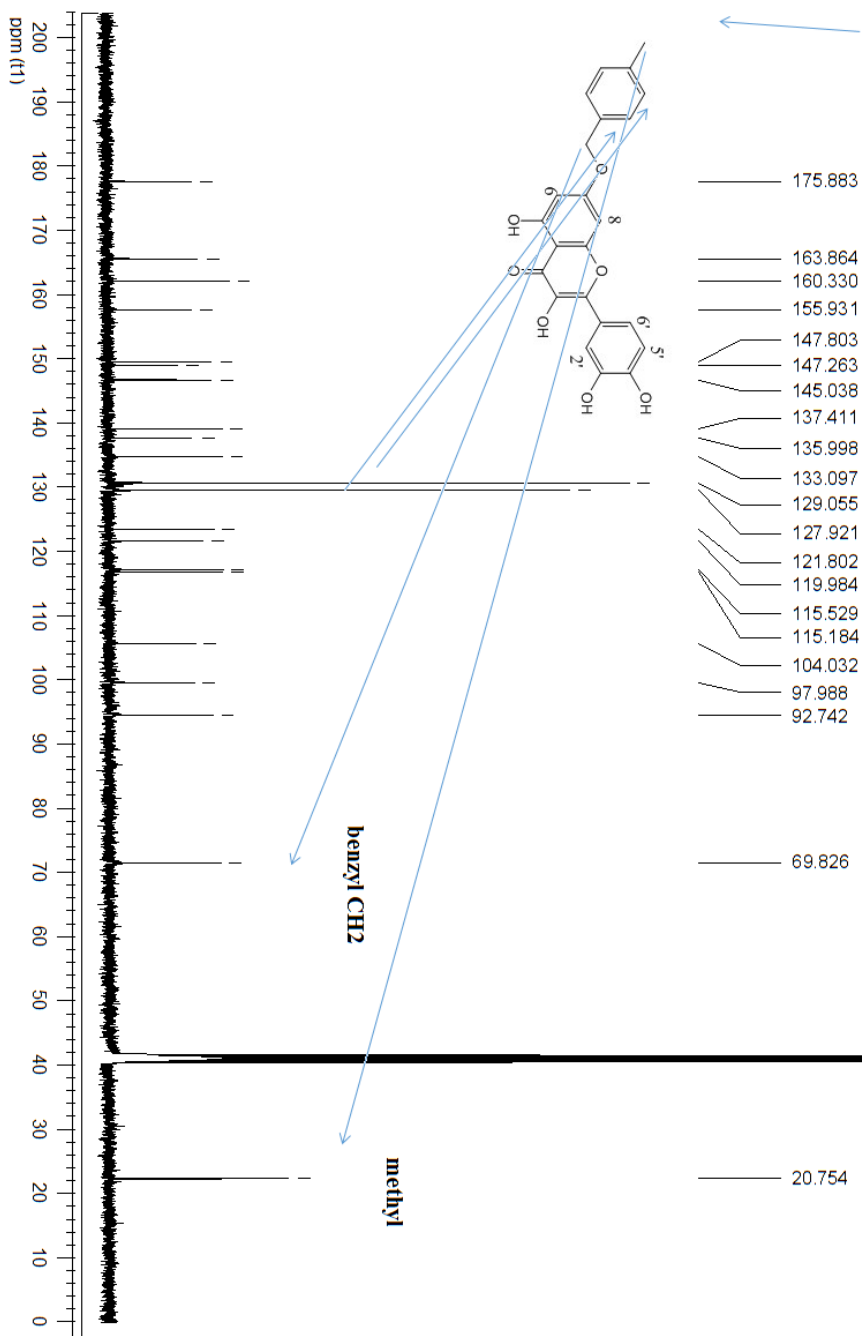


Figure 17s: ¹³C-NMR spectrum of 7-O-Paramethylbenzyl quercetin (QPMB, 7)

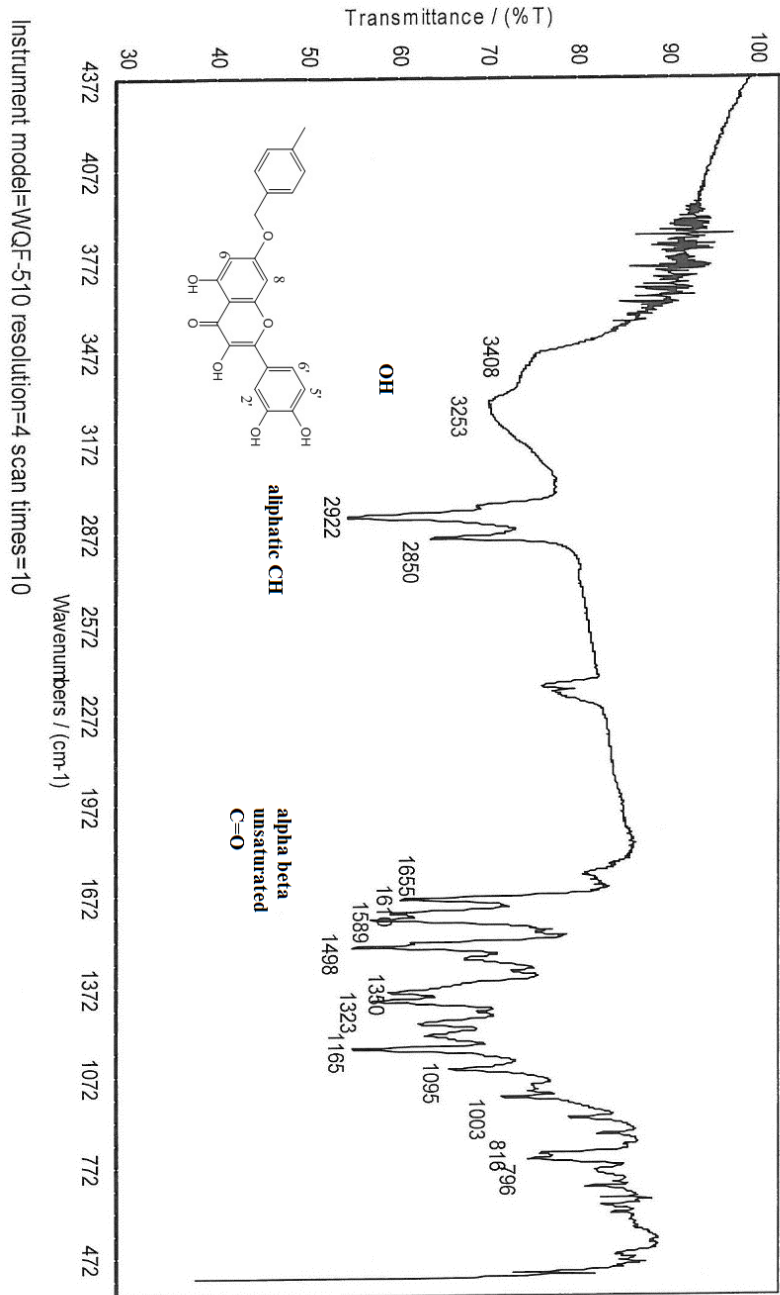


Figure 18s: IR spectrum of 7-O-Paramethylbenzyl quercetin (QPMB, 7)

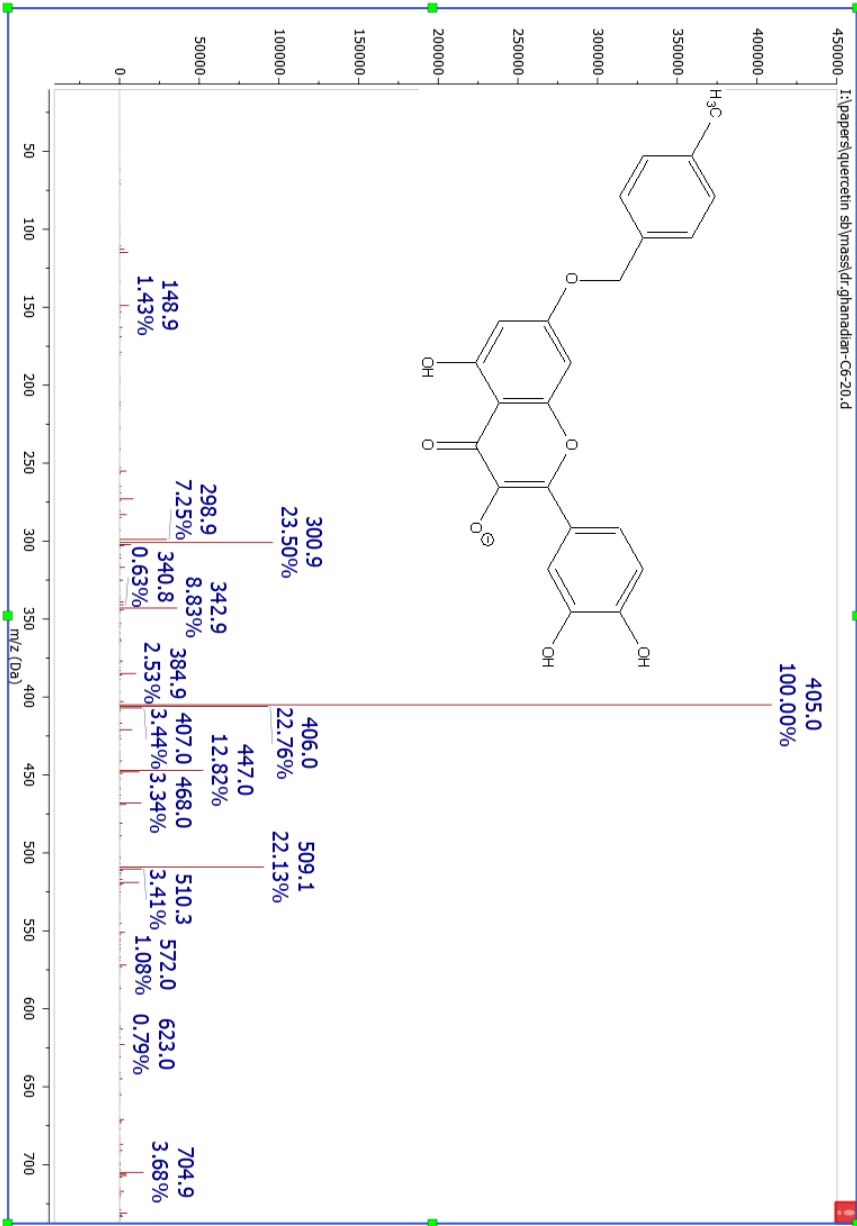


Figure 19s: Negative ESI mass spectrum of 7-O-Paramethylbenzyl quercetin (QPMB, 7) (m/z): 405 [M-H]⁻

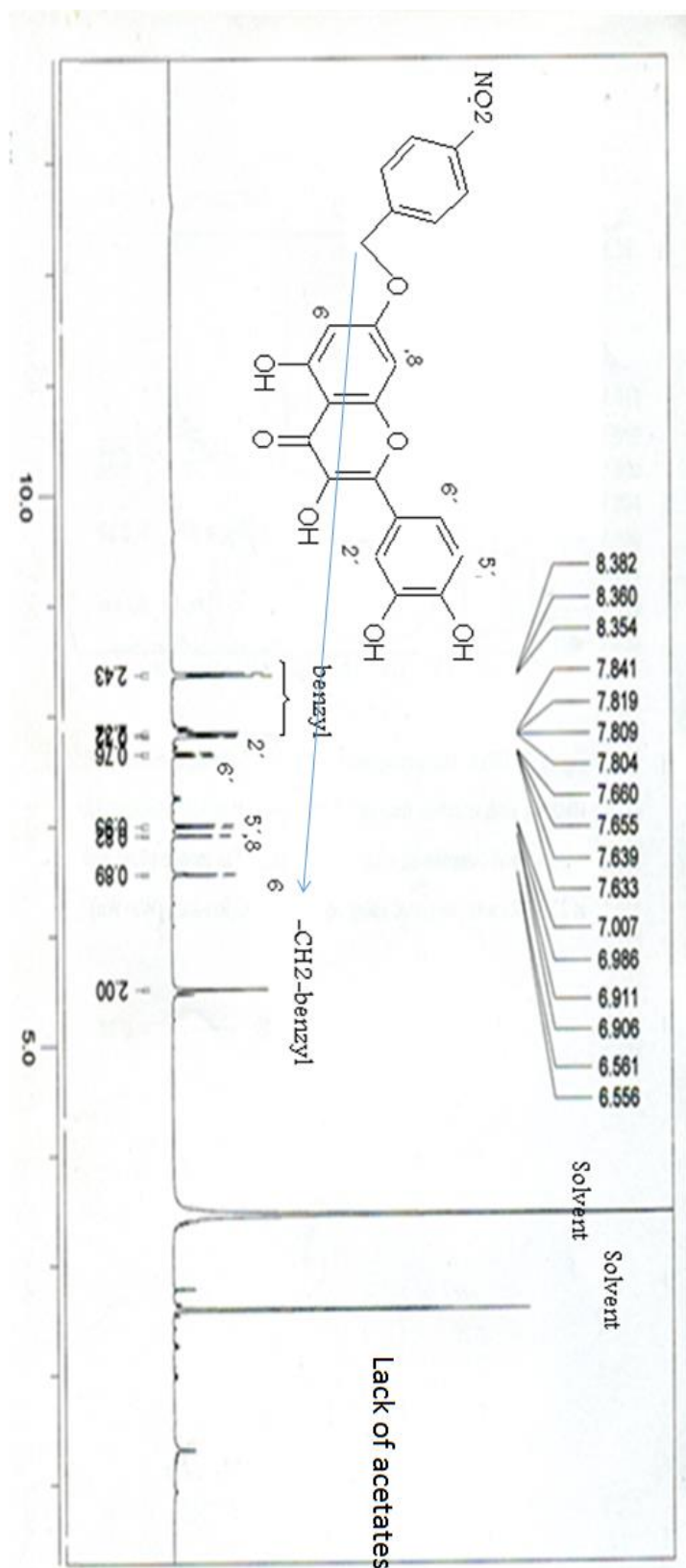


Figure 20s: ¹H-NMR spectrum of 7-O-Paranitrobenzyl quercetin (QPNB, 8)

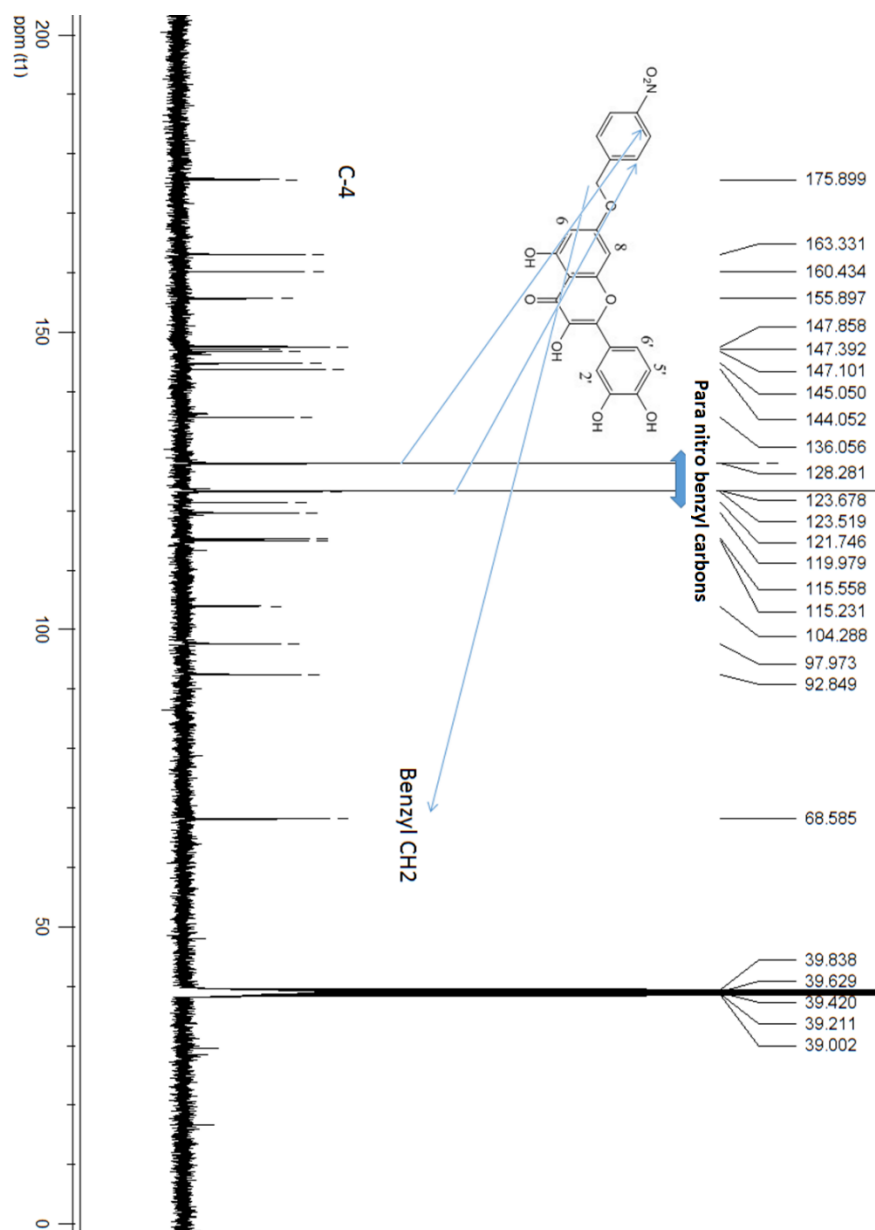


Figure 21s: ^{13}C -NMR spectrum of 7-O-Paranitrobenzyl quercetin (QPNB, 8)

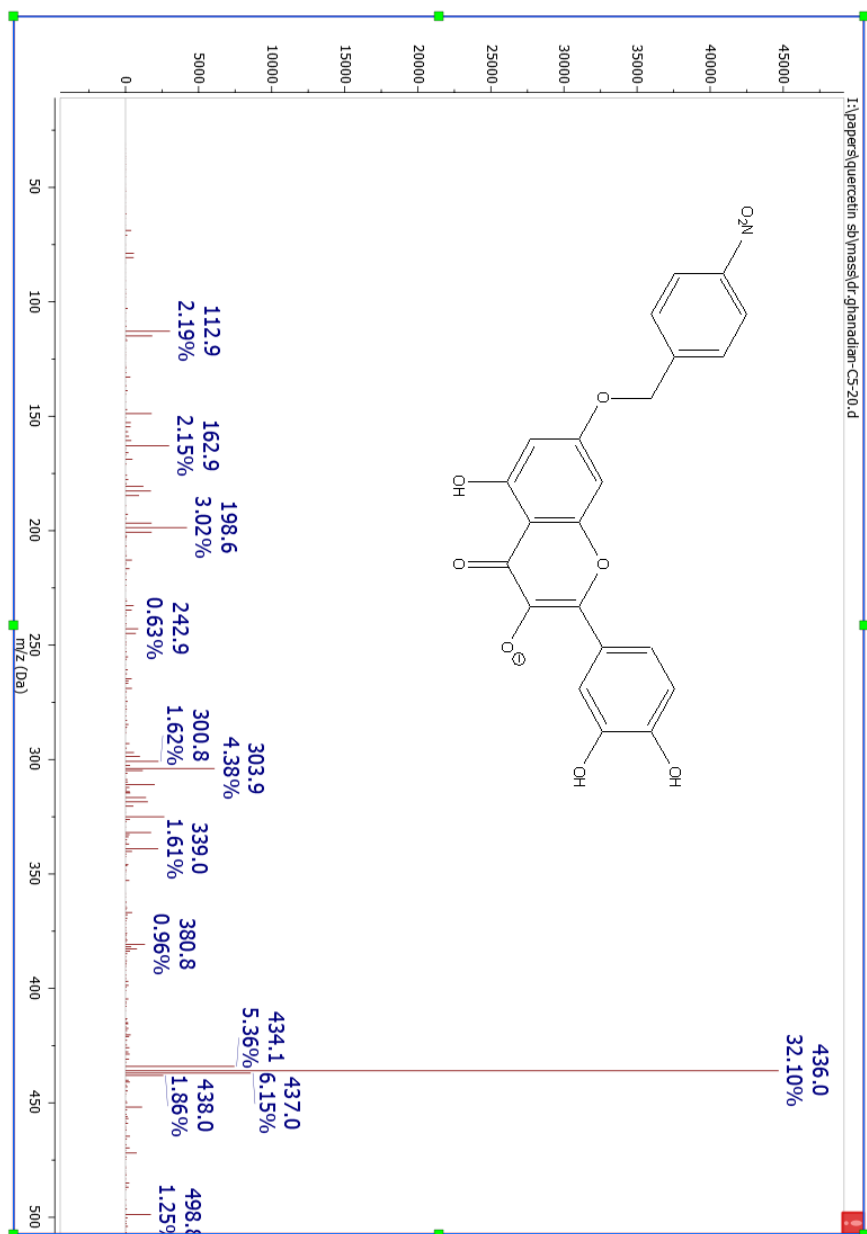


Figure 22s: Negative ESI mass of 7-O-Paranitrobenzyl quercetin (QPNB, 8)(m/z): 436 [M-H]⁻

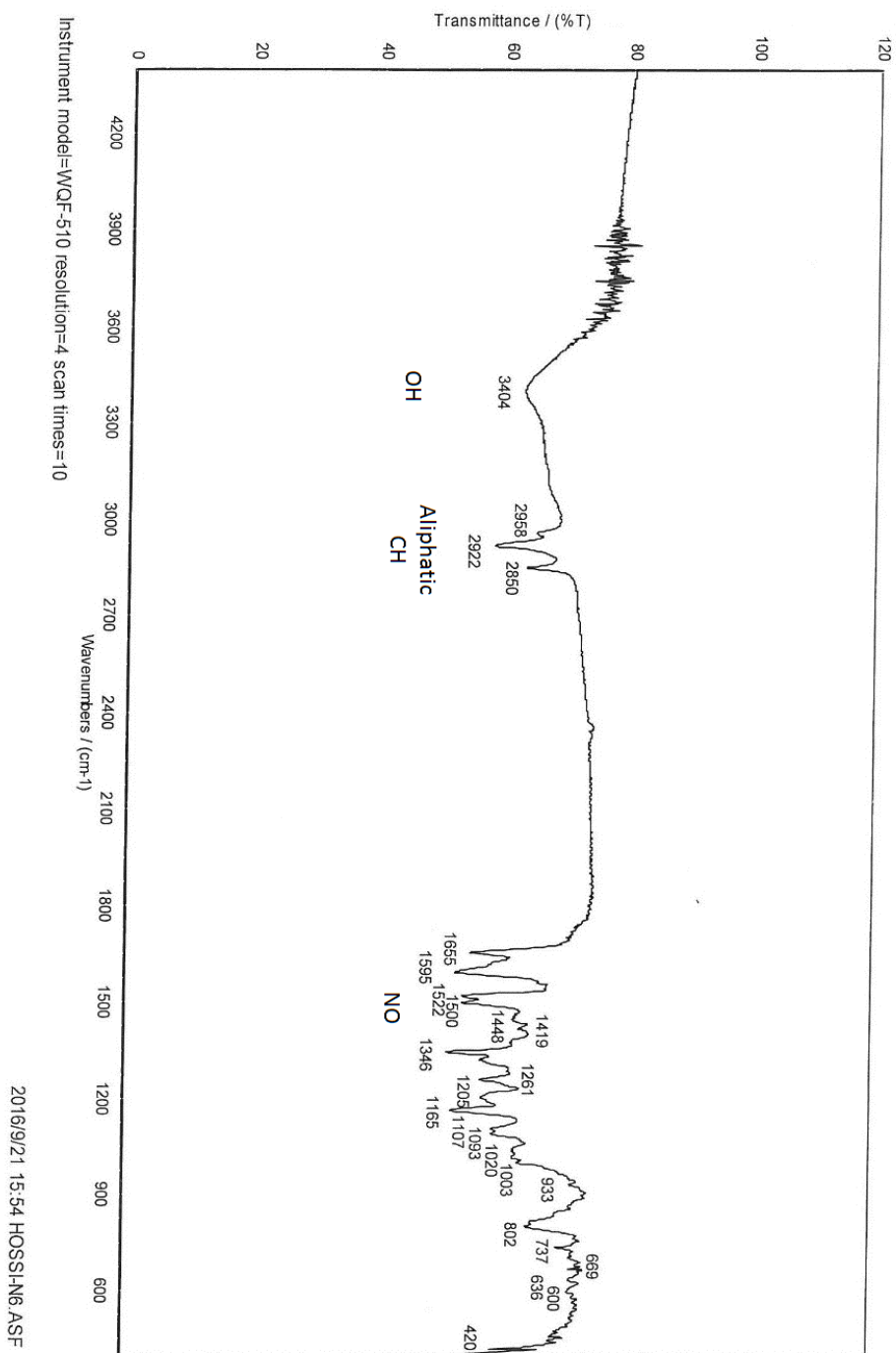


Figure 23s: IR spectrum of 7-O-Paranitrobenzyl quercetin (QPNB, 8)

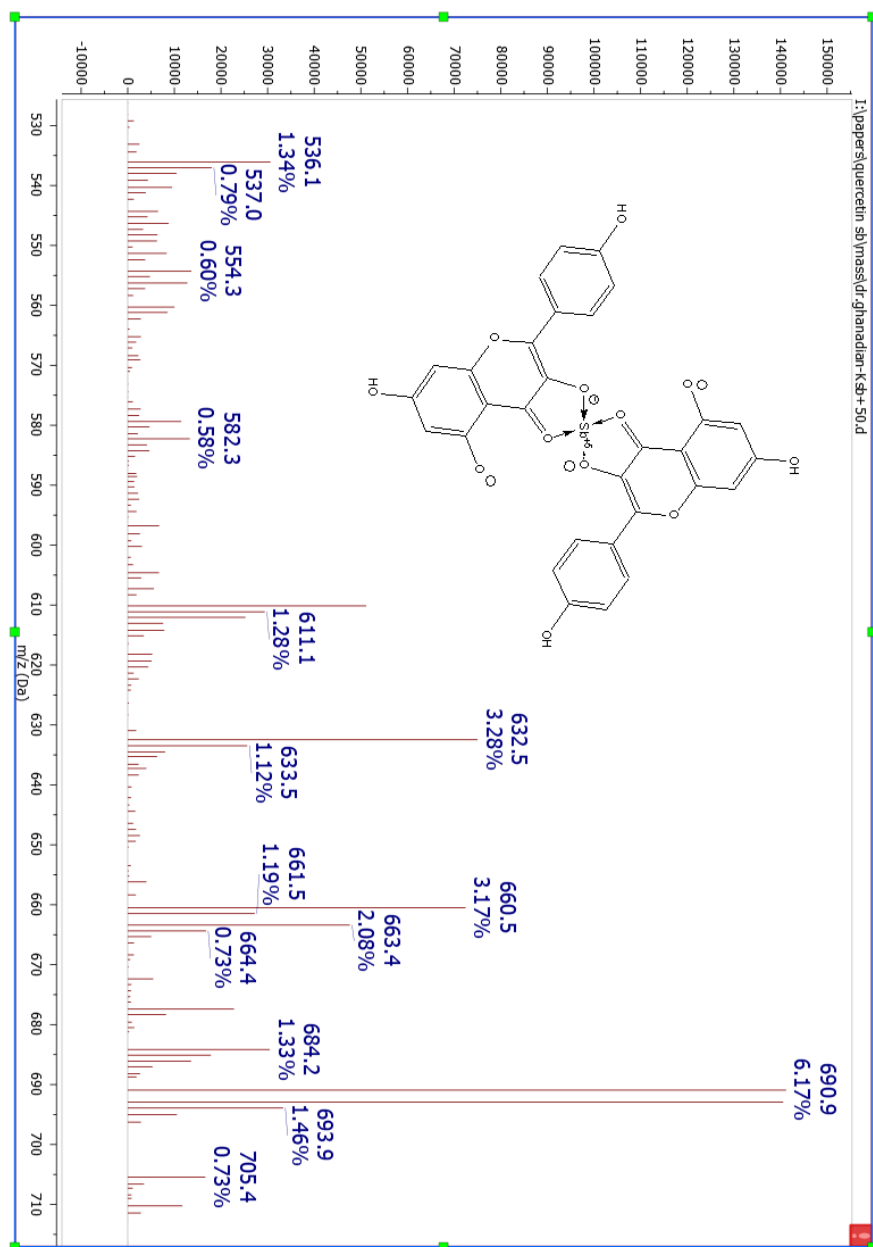


Figure 24s: Positive ESI-MS (m/z) spectrum of Sb (V) Kaempferol complex (K-Sb, 9): 690 [C₃₀H₁₆O₁₂Sb⁺, 2Kaempferol+Sb]⁺

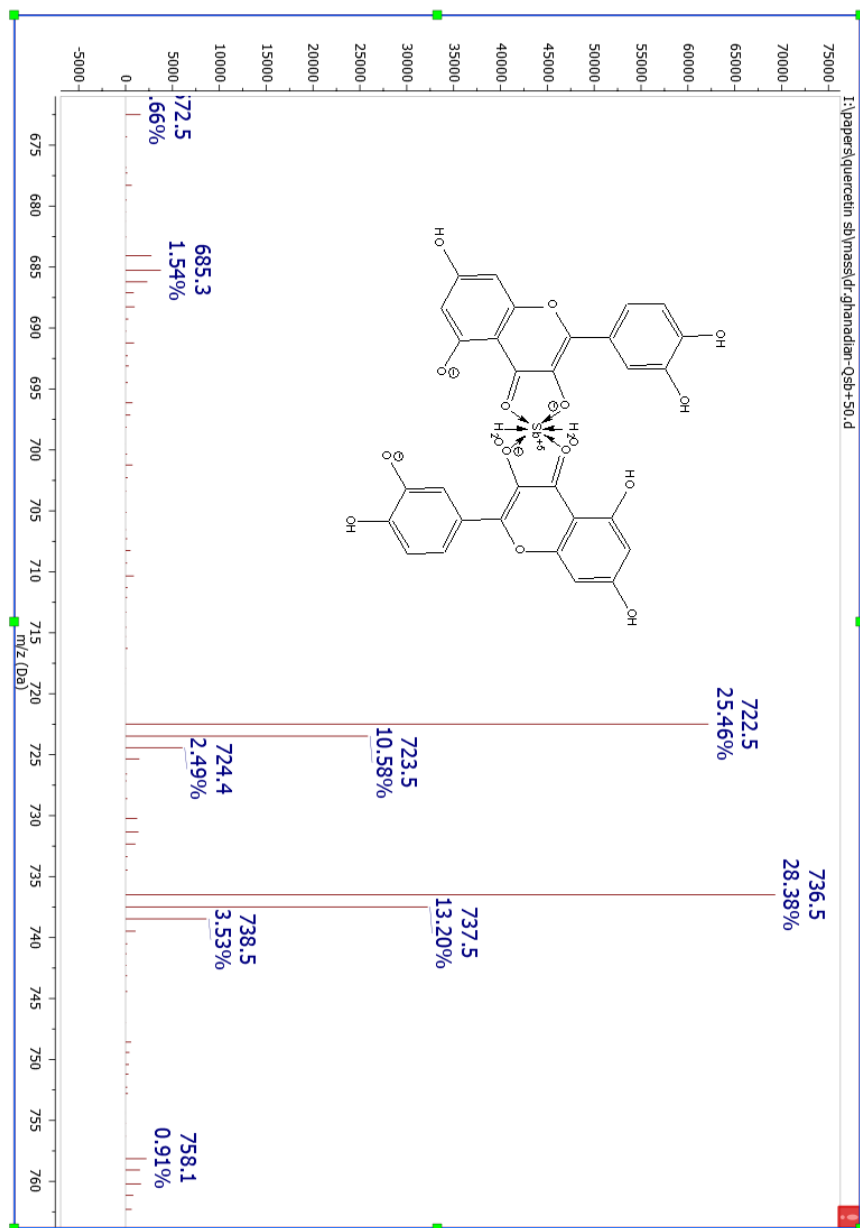


Figure 25s: Positive ESI-MS (m/z) spectrum of Sb (V) Quercetin complex (Q-Sb, 10) :ESI-MS (m/z): 758[C₃₀H₂₀O₁₆Sb, 2Q+Sb+2H₂O]⁺, 722[C₃₀H₁₆O₁₄Sb, 2Q+Sb]⁺.

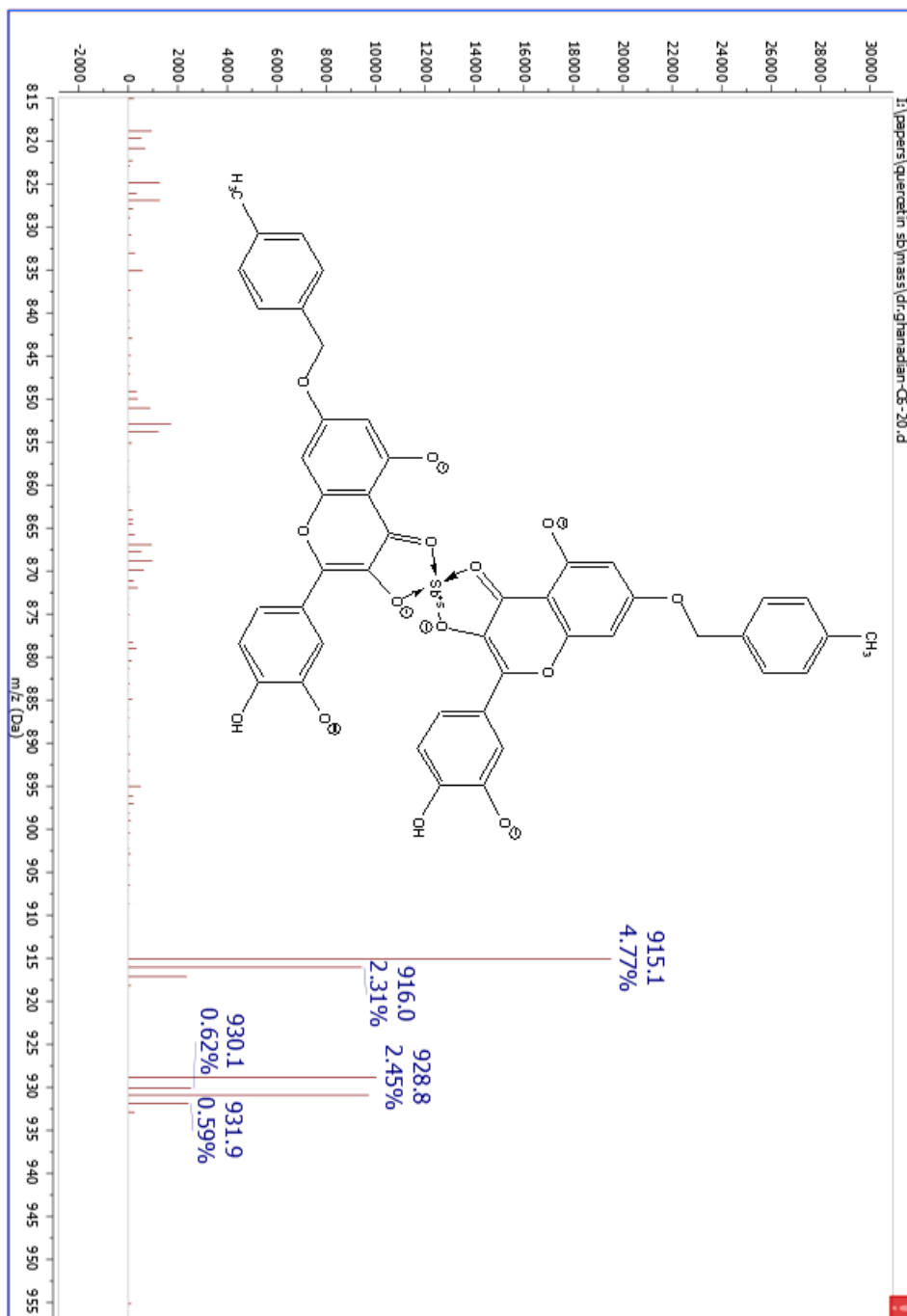
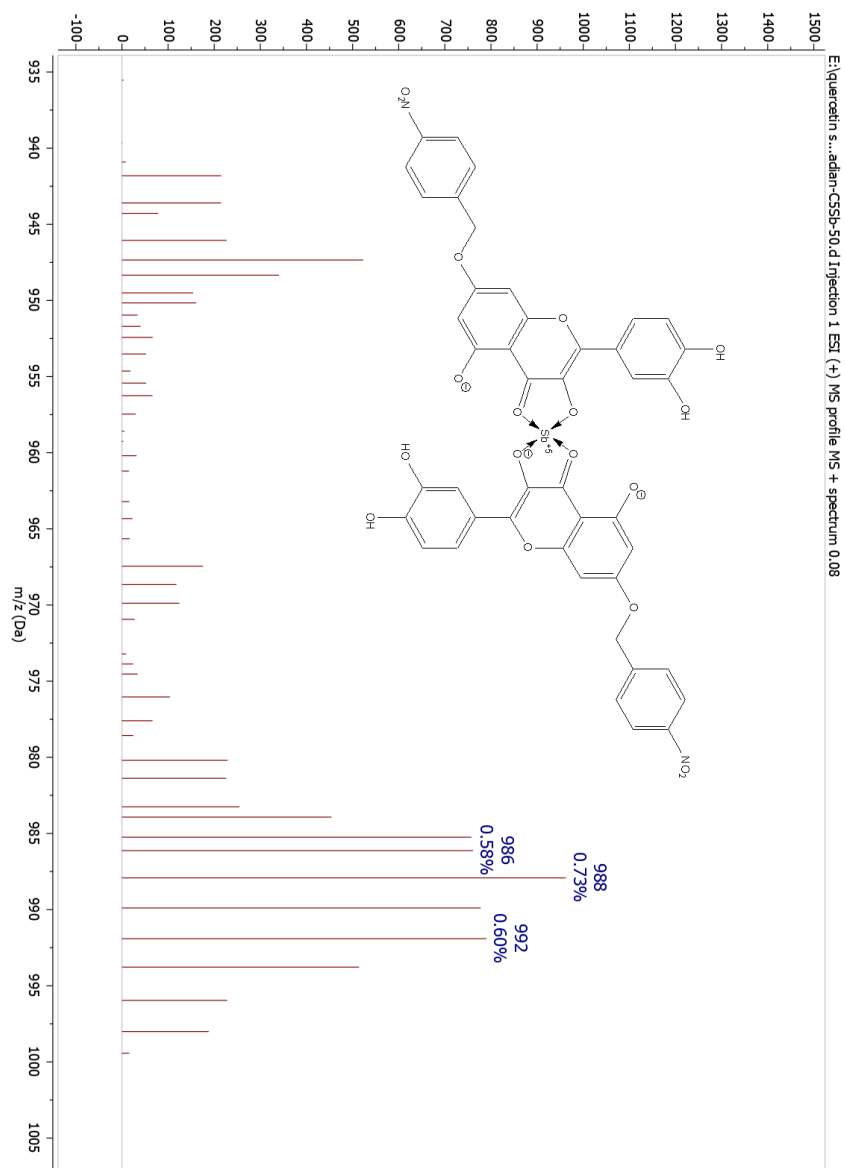


Figure 26s: Sb (V) 7-O-Paramethylbenzyl quercetin complex (QPMB-Sb, 11): Negative ESI-MS (m/z): 928 [C₄₆H₃₀O₁₄Sb, 2QPMB +Sb]⁻



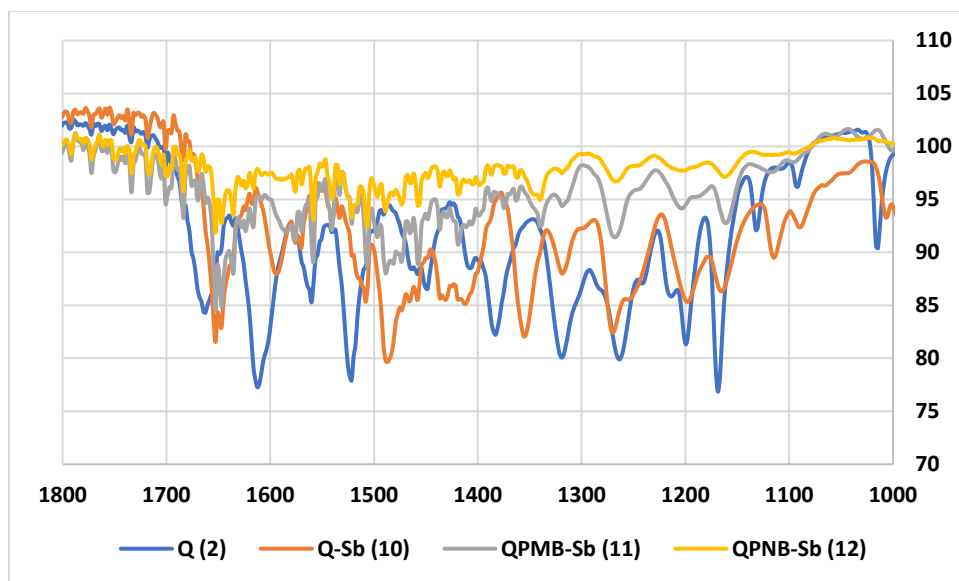
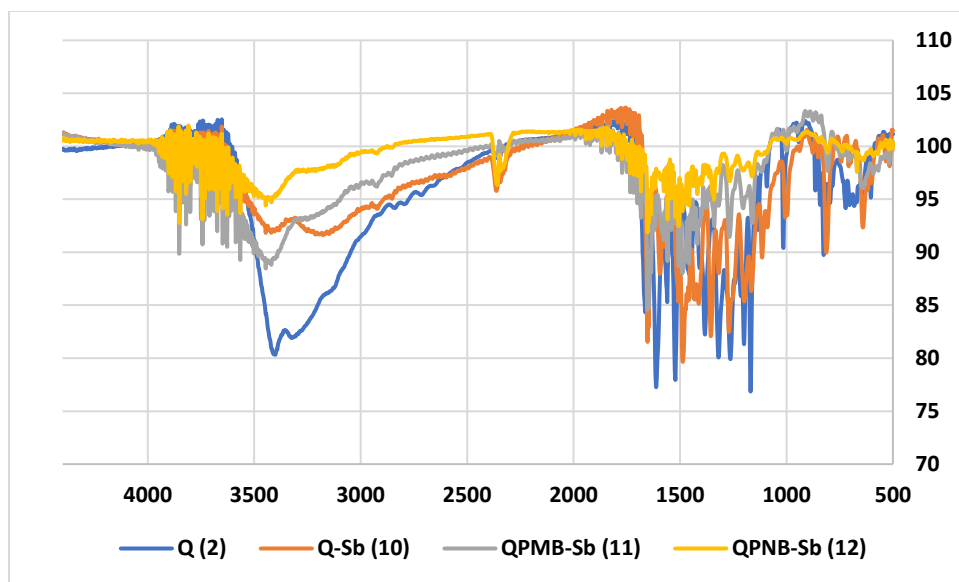


Figure 28s: Comparative IR spectra of quercetin with Sb (V) Quercetin derivative complexes