

Photocatalytic Transformations of the Resveratrol Derivative in Microflow Reactor

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Content:

1. NMR spectra of the compounds *trans*-**1**, *cis*-**1** and **2-4** (Figs S2-S12)
2. HRMS analyses (Figs S13-S16)

1. NMR spectra of pure compounds

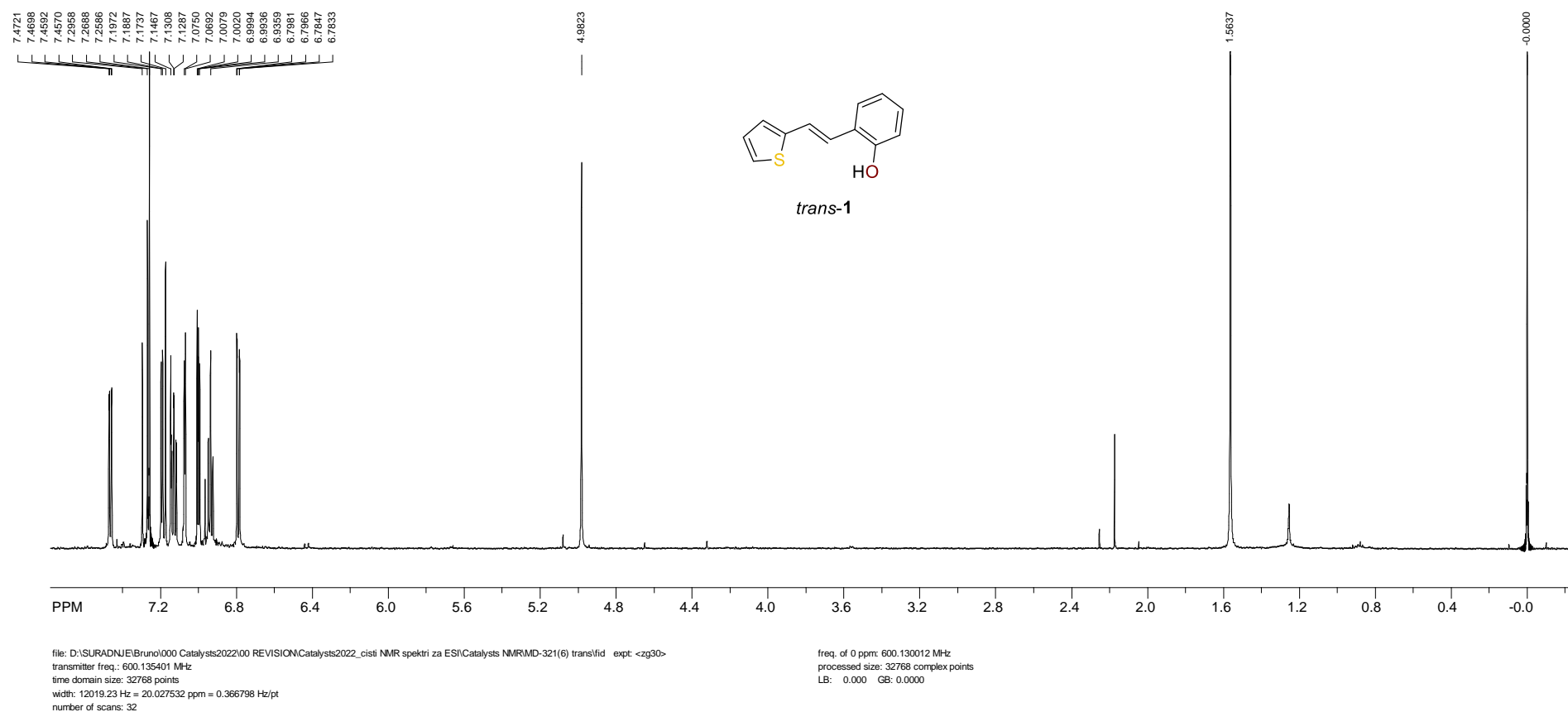


Figure S1. ^1H NMR spectrum (CDCl_3) of (*E*)-2-(2-(thiophen-2-yl)vinyl)phenol (*trans*-1).

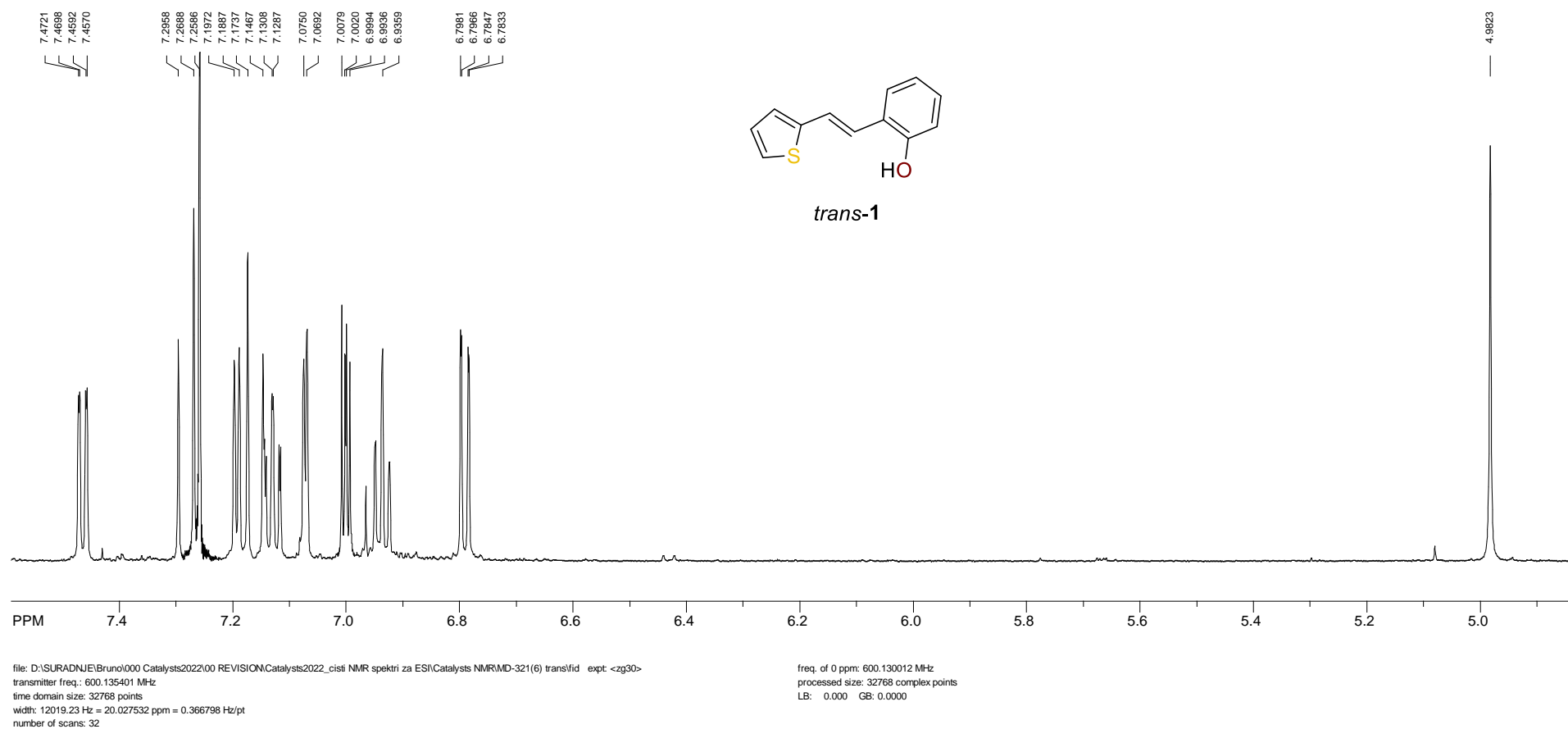


Figure S2. Part of the ^1H NMR spectrum (CDCl_3) of (*E*)-2-(2-(thiophen-2-yl)vinyl)phenol (*trans*-1).

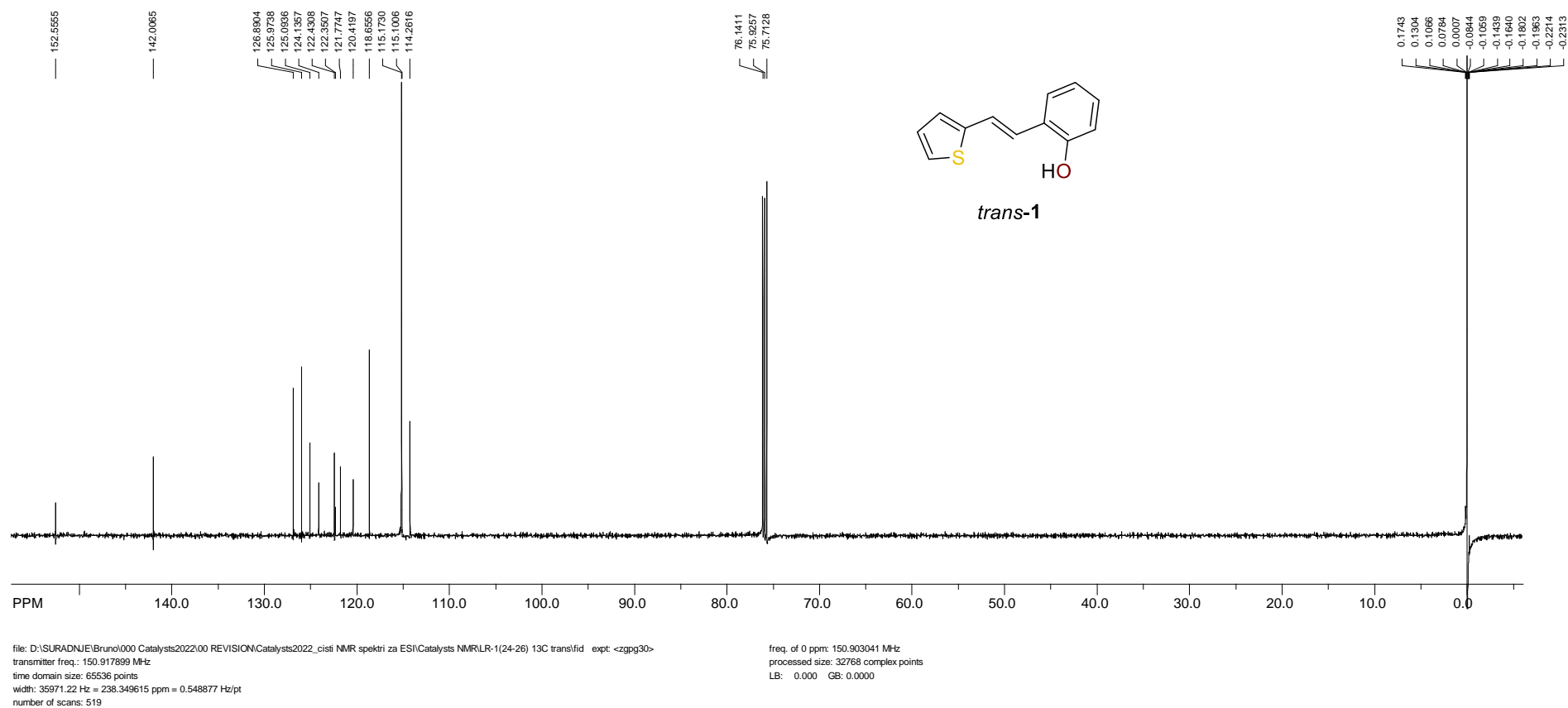


Figure S3. ¹³C NMR spectrum (CDCl₃) of (*E*)-2-(2-(thiophen-2-yl)vinyl)phenol (*trans*-1).

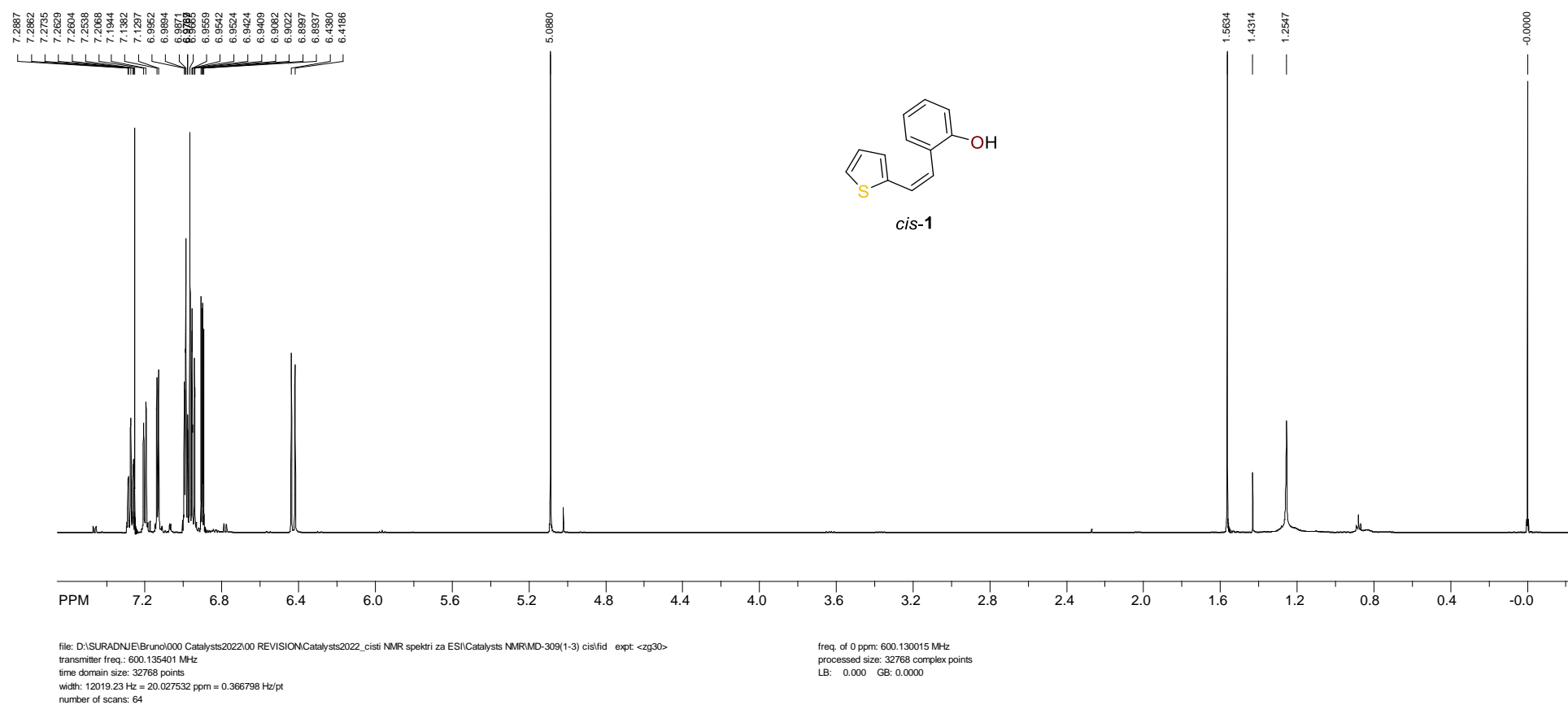


Figure S4. ^1H NMR spectrum (CDCl_3) of (Z)-2-(2-(thiophen-2-yl)vinyl)phenol (*cis-1*).

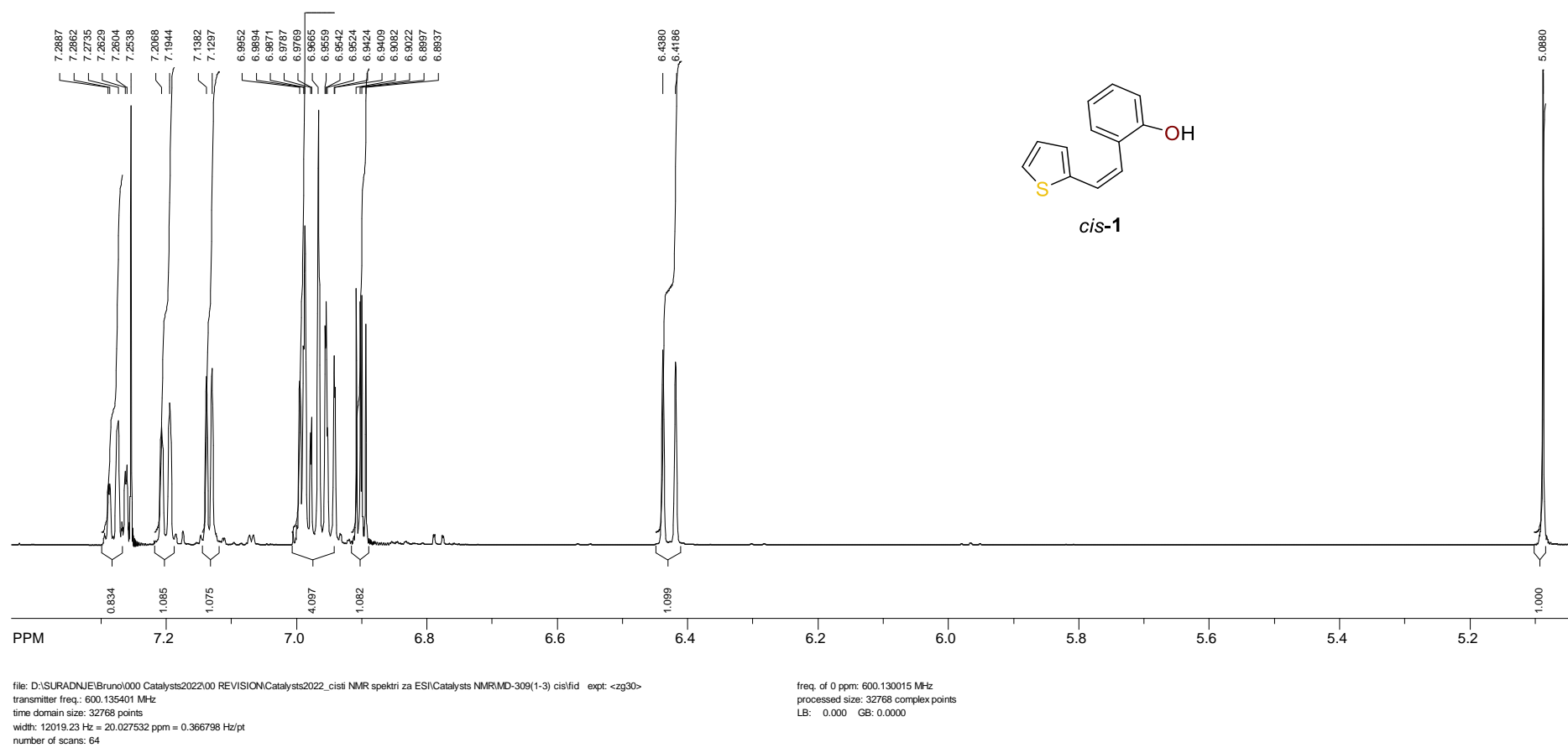


Figure S5. Part of the ¹H NMR spectrum (CDCl₃) of (Z)-2-(2-(thiophen-2-yl)vinyl)phenol (*cis-1*).

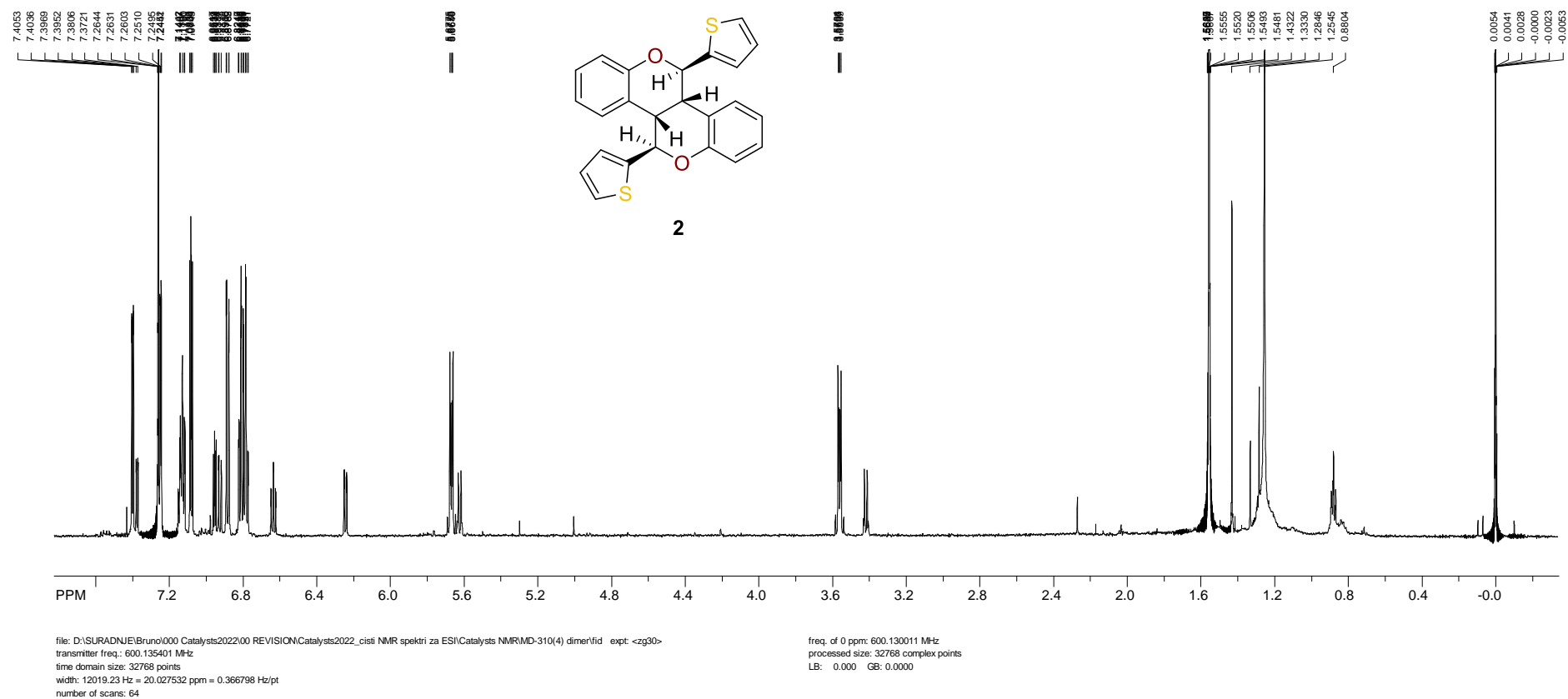
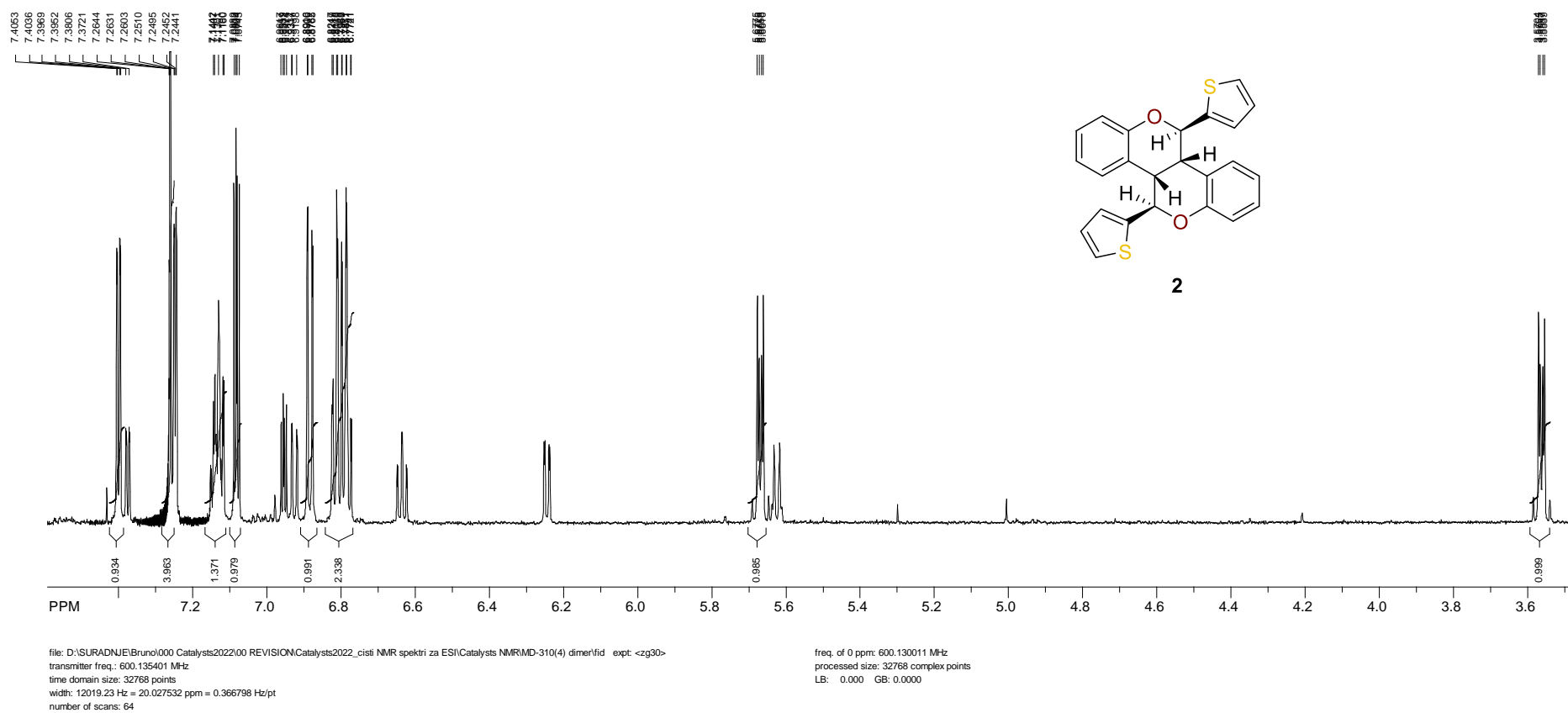


Figure S7. ¹H NMR spectrum (CDCl₃) of (4b*S*,5*R*,10b*S*,11*R*)-5,11-di(thiophen-2-yl)-4b,5,10b,11-tetrahydrochromeno[4,3-*c*]chromene (2).



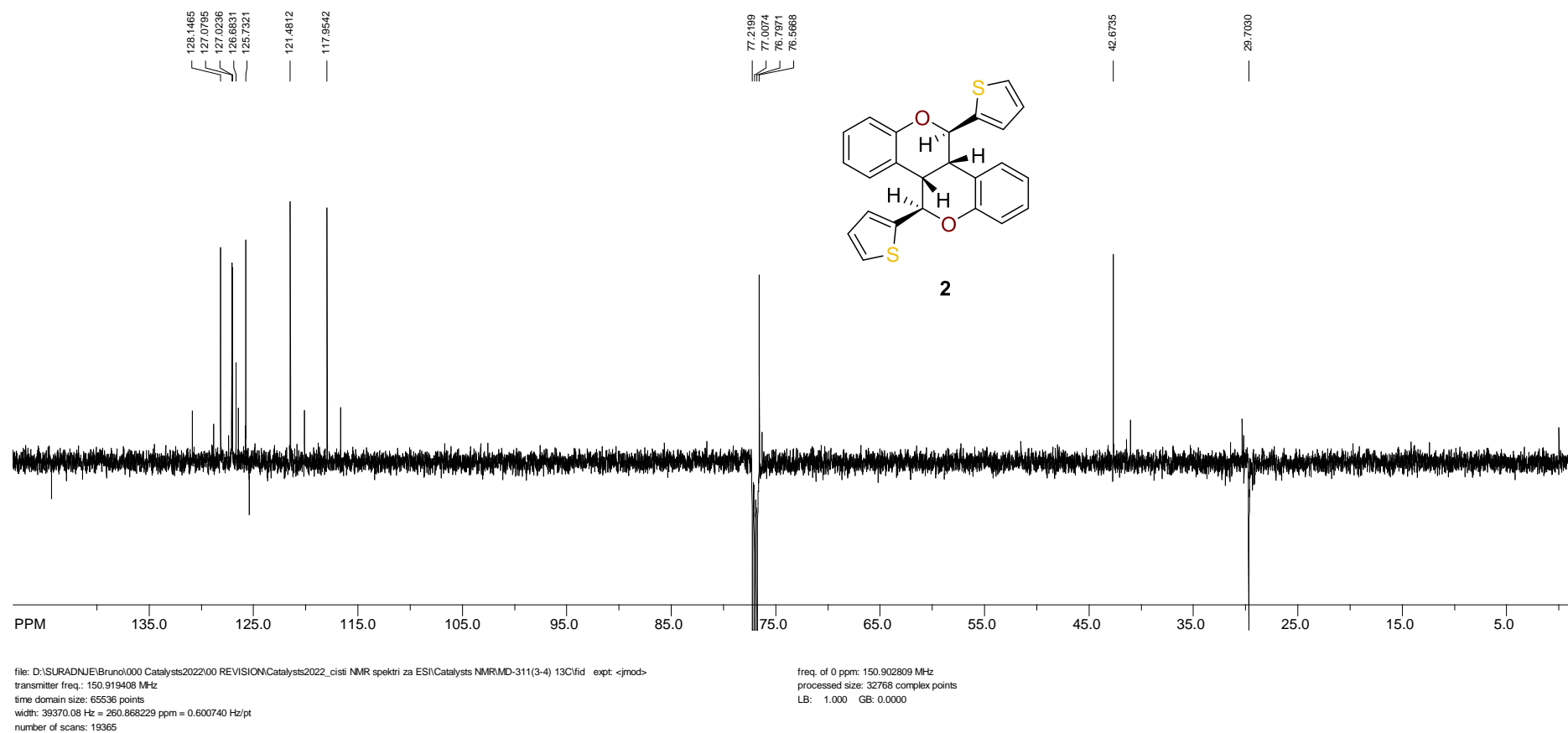


Figure S9. ¹³C NMR spectrum (CDCl₃) of (4*b**S*,5*R*,10*b**S*,11*R*)-5,11-di(thiophen-2-yl)-4*b*,5,10*b*,11-tetrahydrochromeno[4,3-*c*]chromene (**2**).

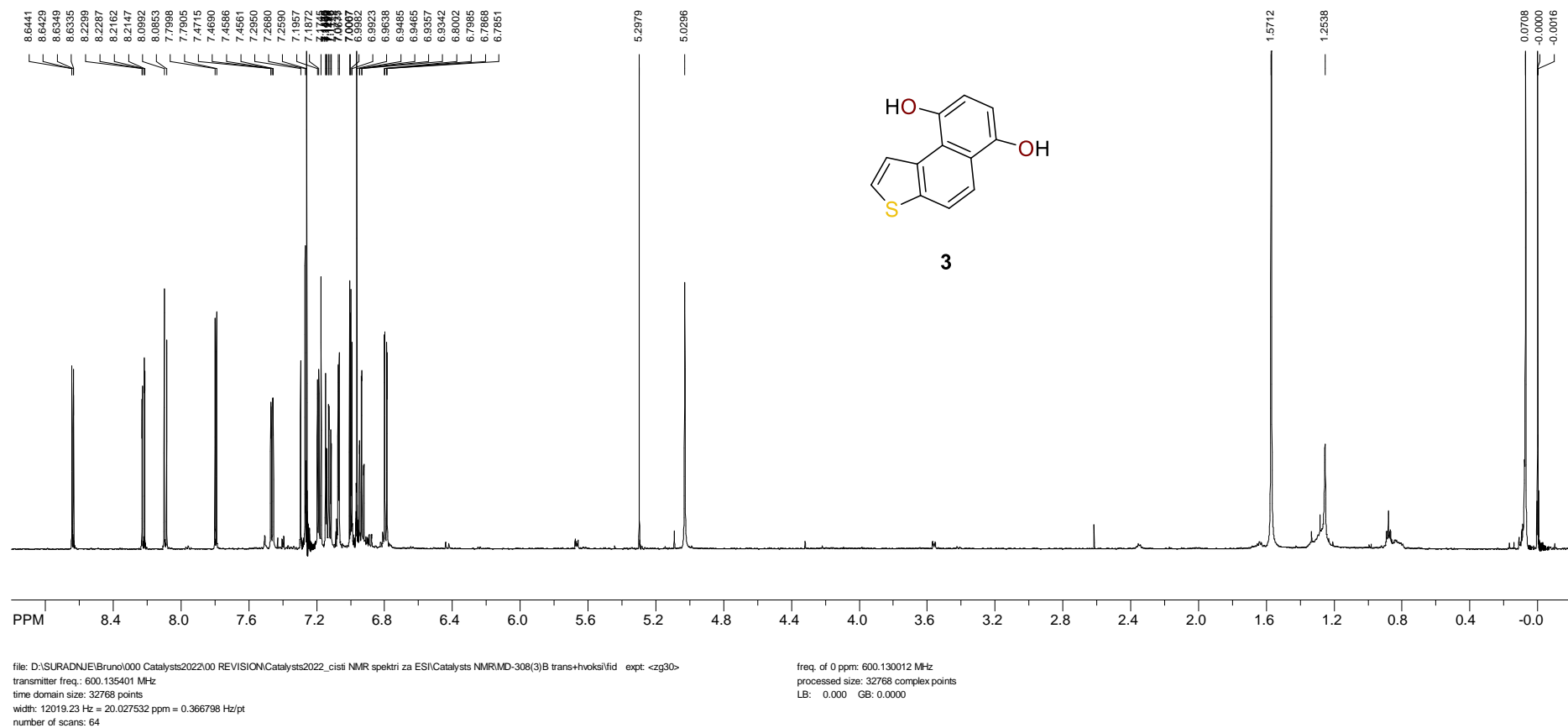
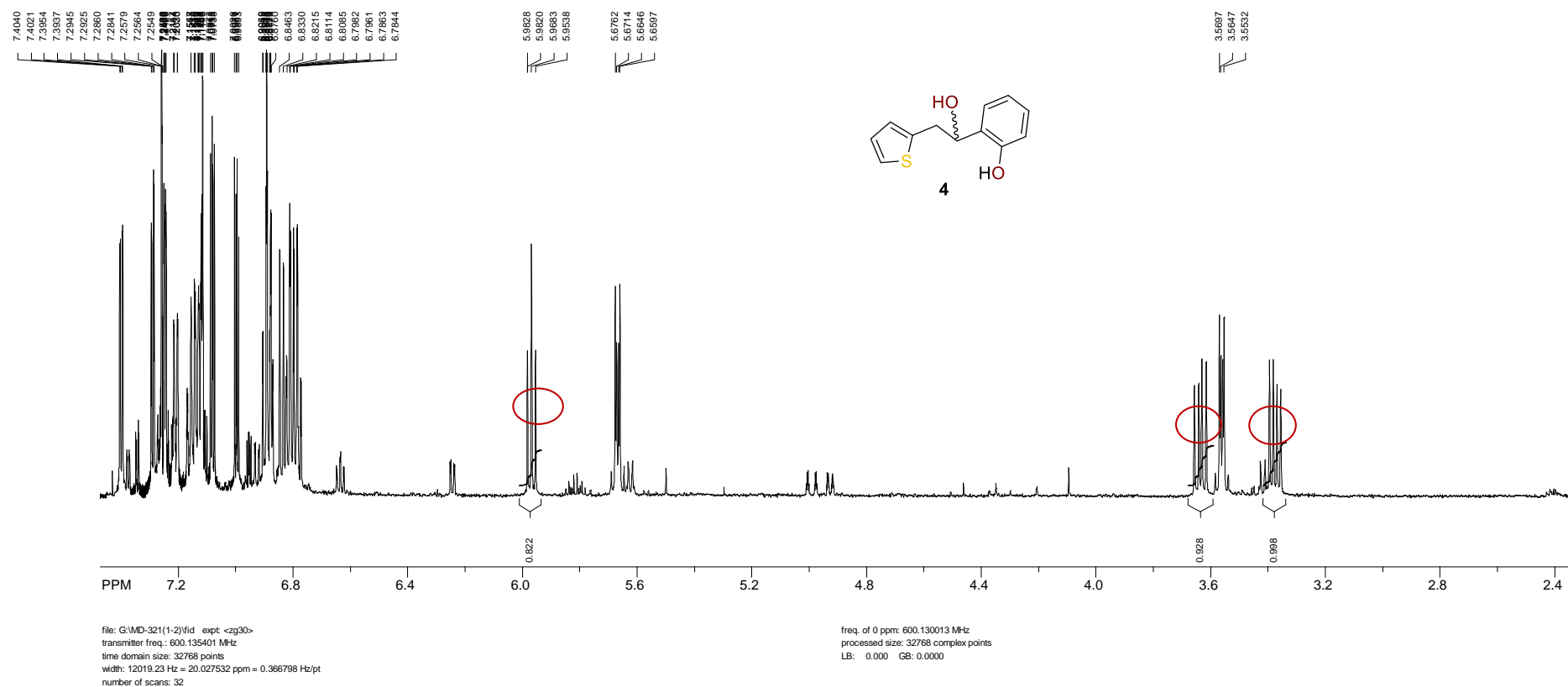


Figure S10. ¹H NMR spectrum (CDCl₃) of naphtho[2,1-*b*]thiophene-6,9-diol (**3**) in the mixture with *trans*-**1**.



FigureS11. ¹H NMR spectrum (CDCl₃) of the mixture of **2** and **4**.

2. Chromatograms, MS spectra and HRMS analyses of the detected compounds *cis*-1 and 2-4

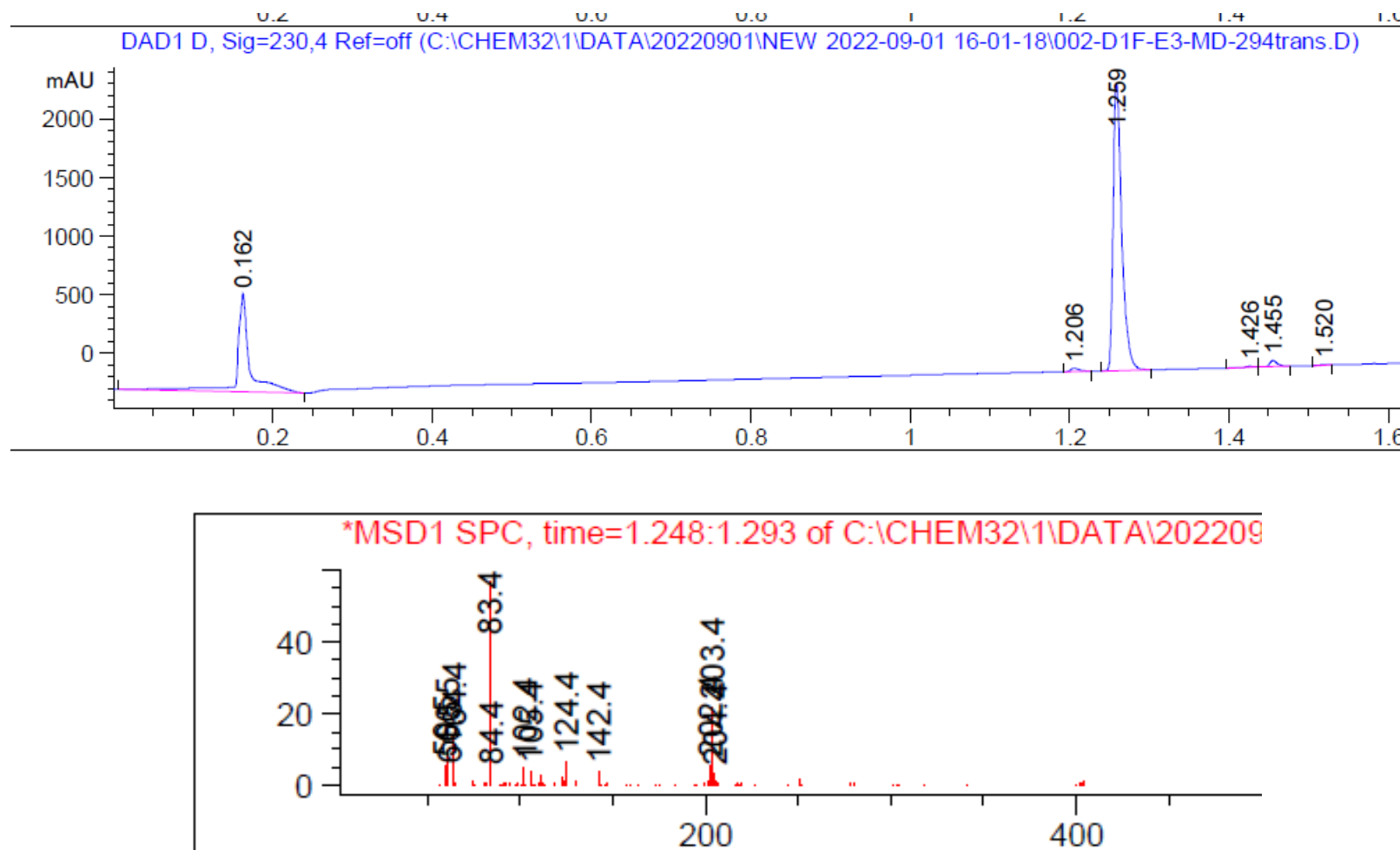


Figure S12. Chromatogram and MS spectrum of *trans*-1.

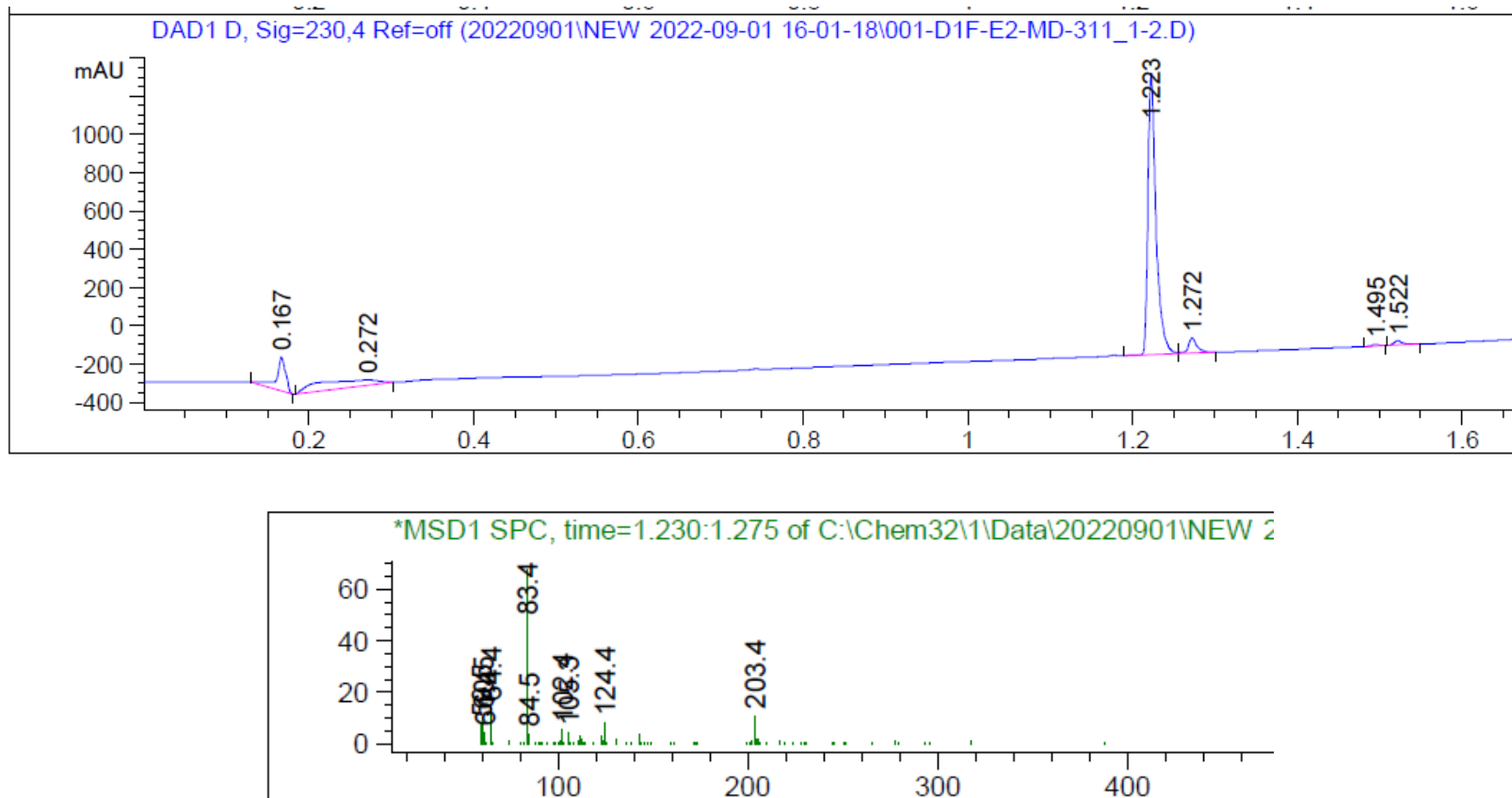


Figure S13. Chromatogram of the mixture of *trans*-1 and *cis*-1 and the MS spectrum of *cis*-1.

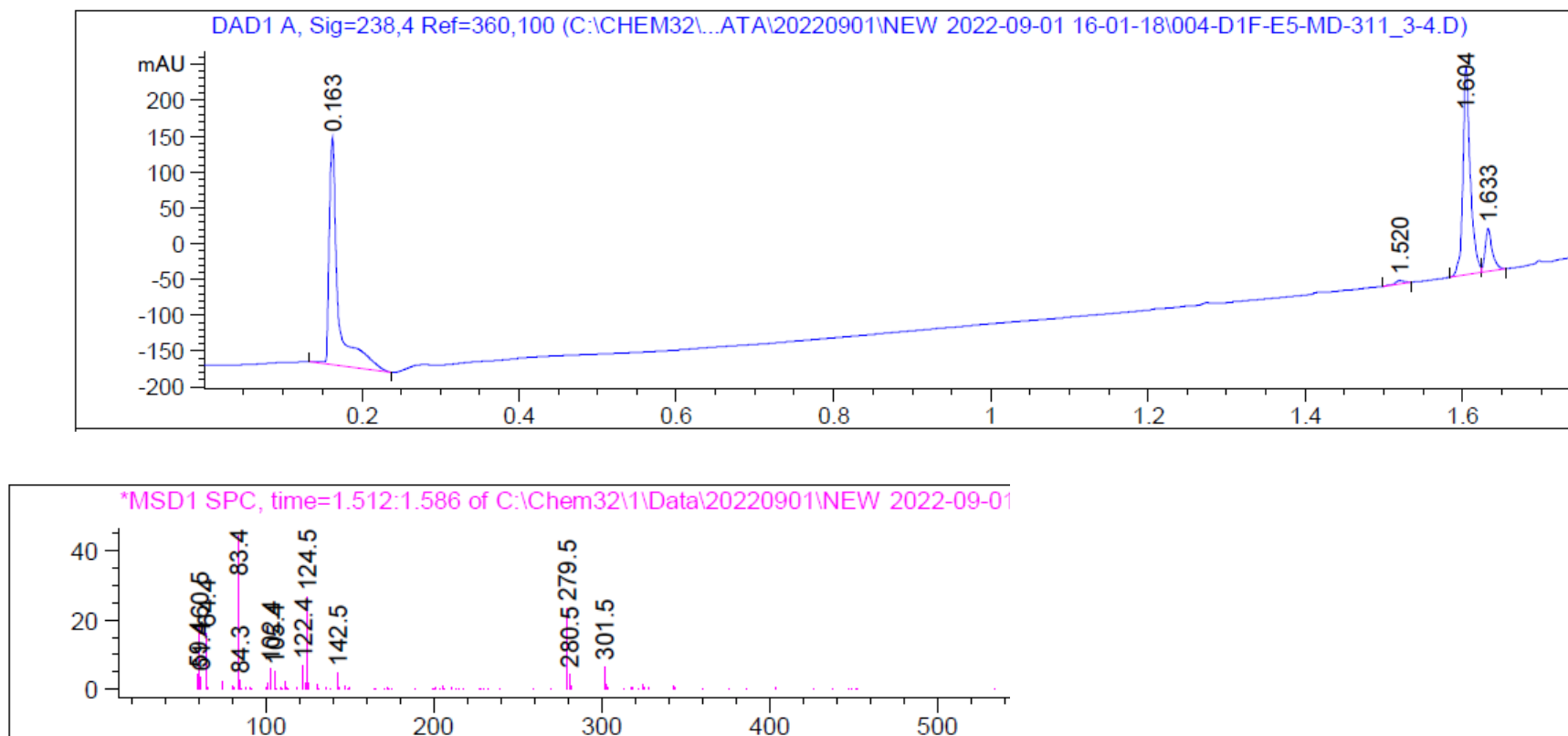
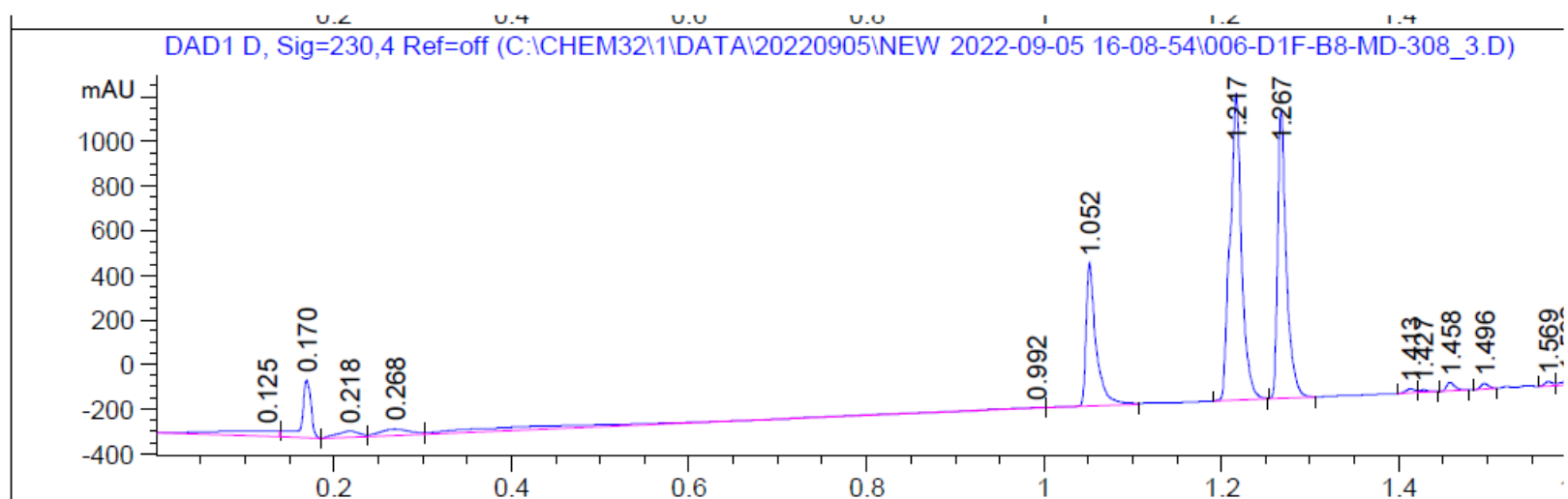


Figure S14. Chromatogram and MS spectrum of dimer 2.



Formula Calculator Results

| Formula | Best | Mass | Tgt Mass | Diff (ppm) | Ion Species | Score |
|-------------|------|-----------|----------|------------|-------------|-------|
| C12 H8 O2 S | True | 216.02426 | 216.0245 | 1.13 | C12 H7 O2 S | 77.88 |

Figure S15. Chromatogram (1.052') and HRMS analysis of oxygenated electrocyclization product **3**.