

Supplementary Information

A mild and fast continuous-flow trifluoromethylation of coumarins with CF₃ radical derived from CF₃SO₂Na and TBHP

Xiaodan Zhang , Ping Huang, Yaming Li* and Chunying Duan

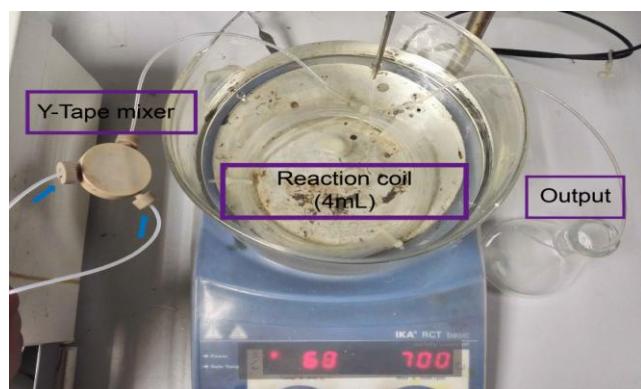
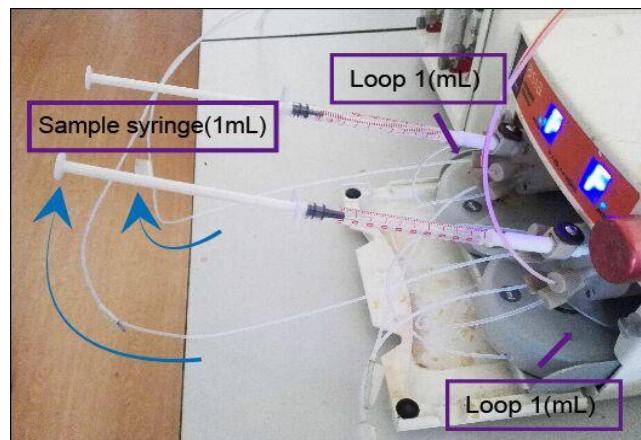
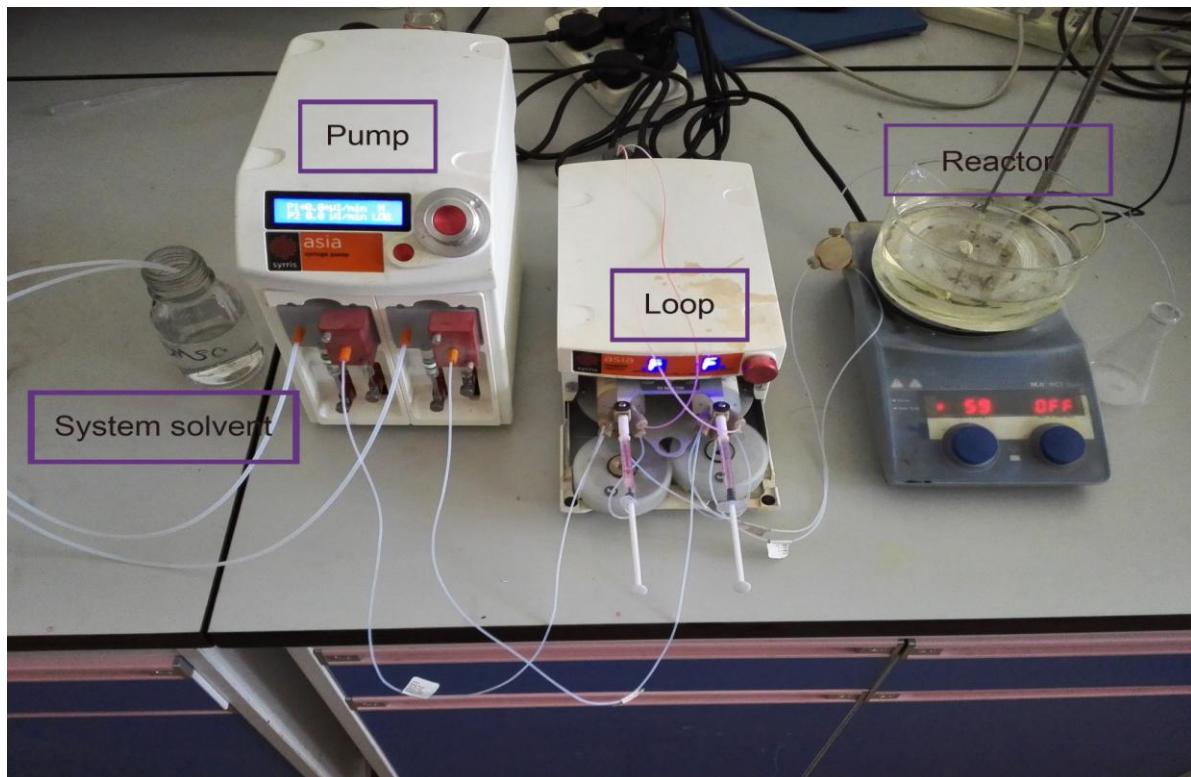
*State Key Laboratory of Fine Chemicals, Dalian University of Technology
Dalian 116024, China*

Tel./fax: +86 411 84986295; E-mail: yml@dlut.edu.cn

Content

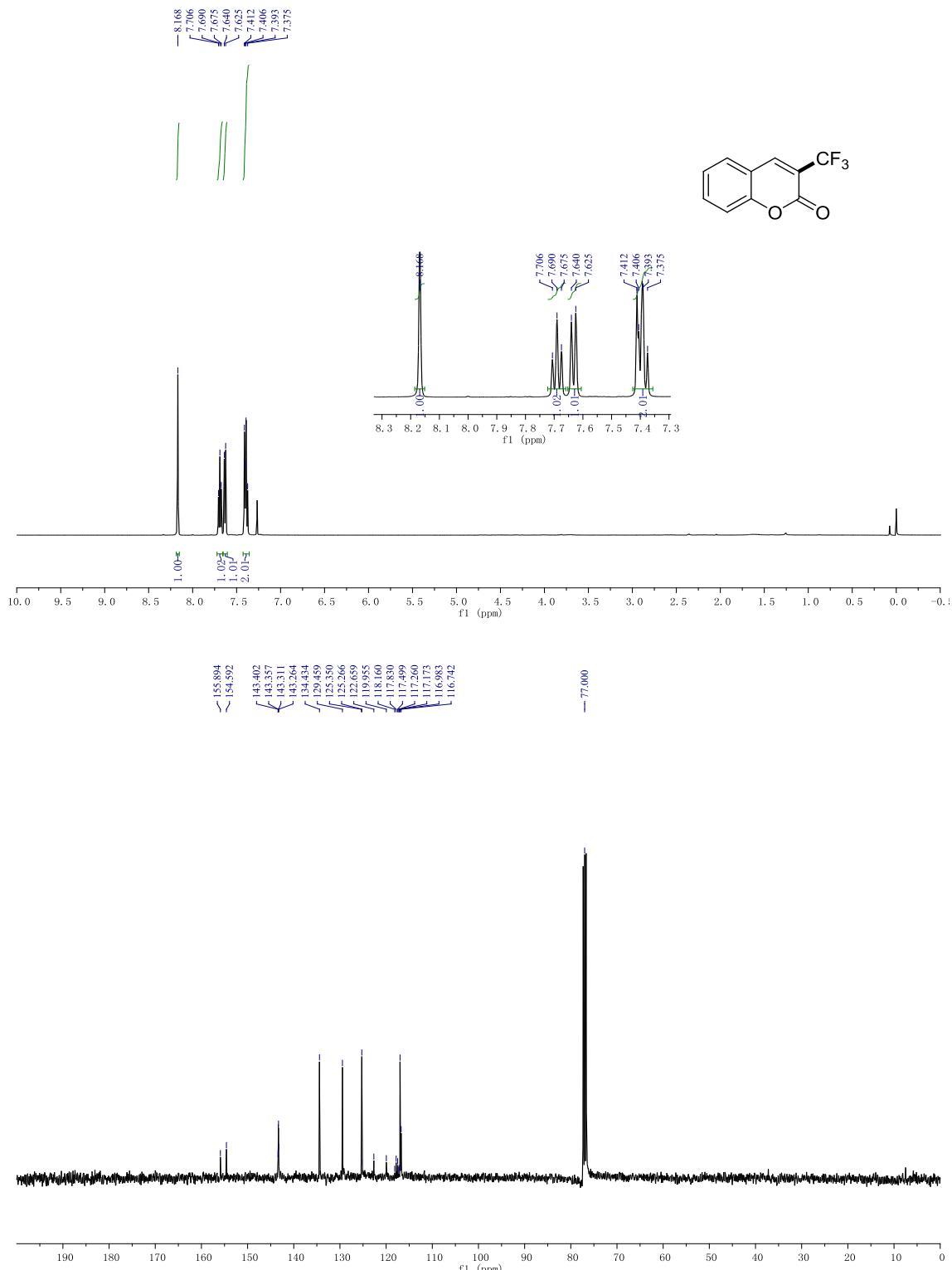
I Scheme of continuous-flow system apparatus.....	1
II Copies of ¹ H NMR, ¹³ C NMR and ¹⁹ F NMR spectra for all the compounds	2

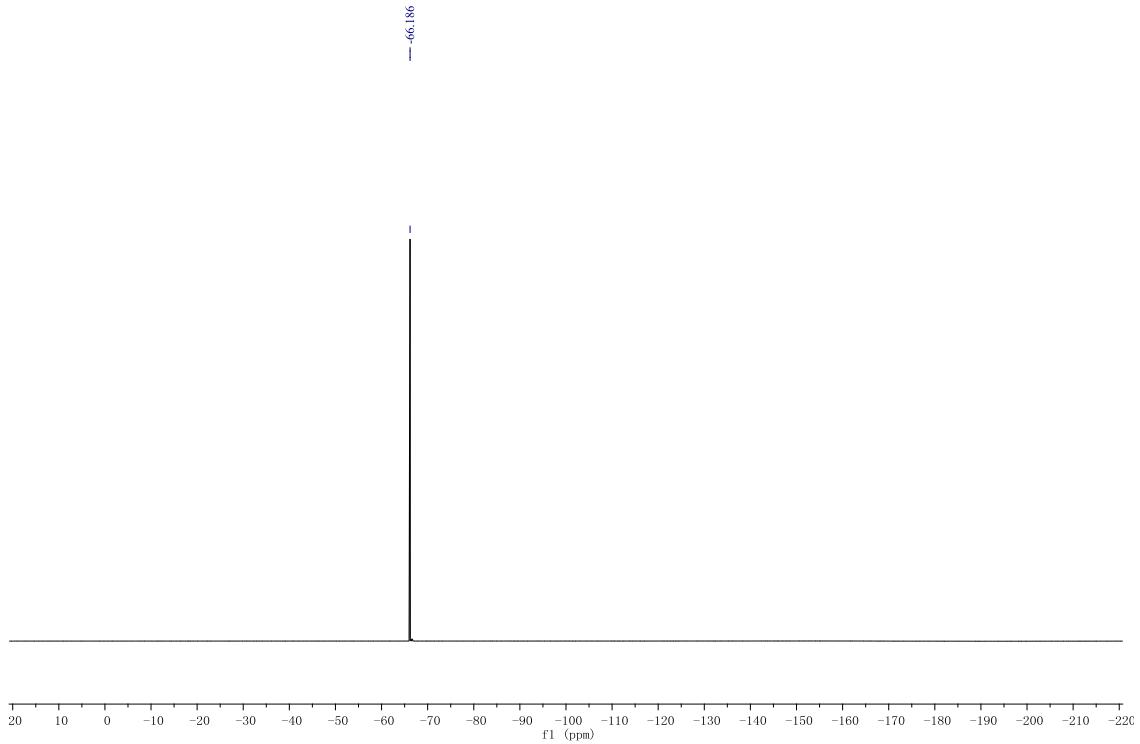
I Scheme of continuous-flow system apparatus



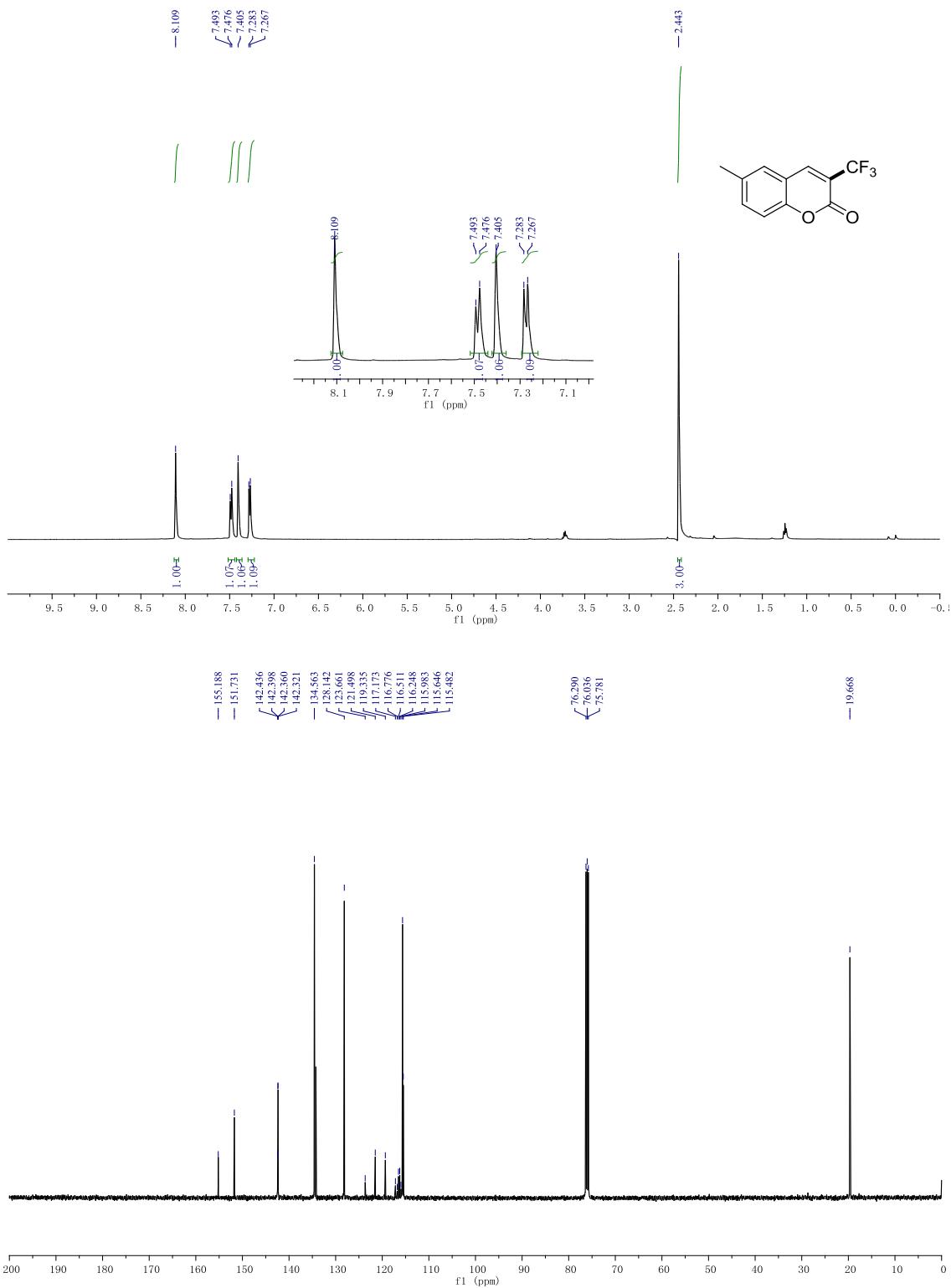
II Copies of ^1H NMR, ^{13}C NMR, ^{19}F NMR spectra for all the compounds

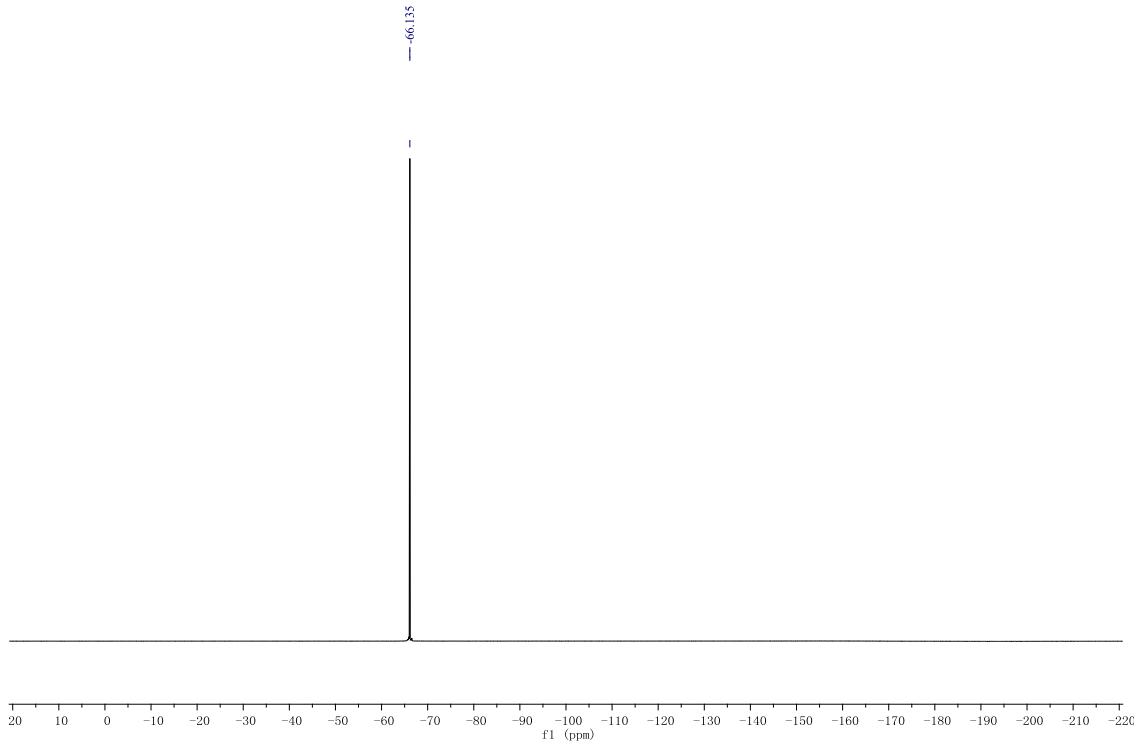
3-(trifluoromethyl)-2*H*-1-Benzopyran-2-one (2a, CAS: 497959-34-9).



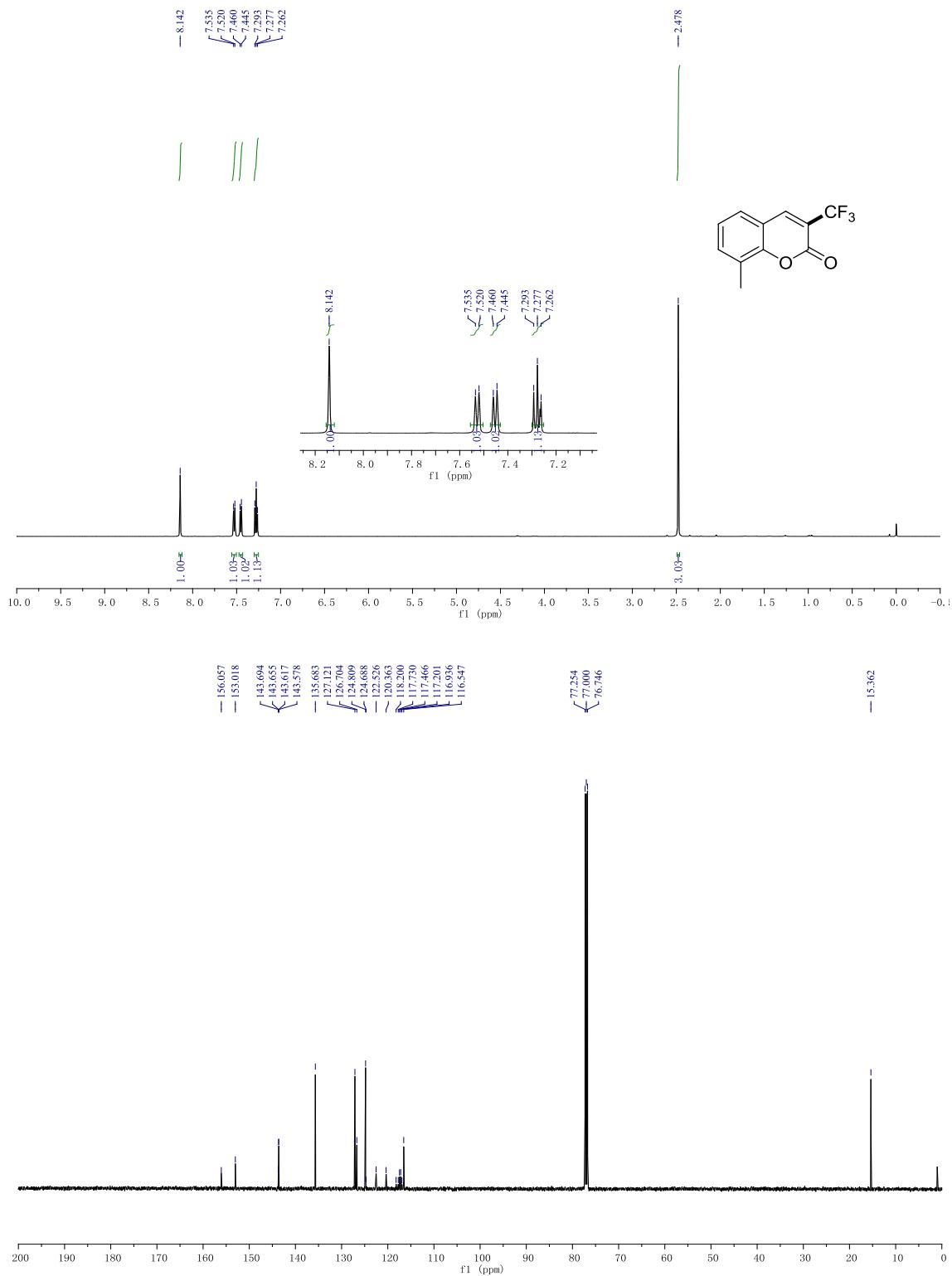


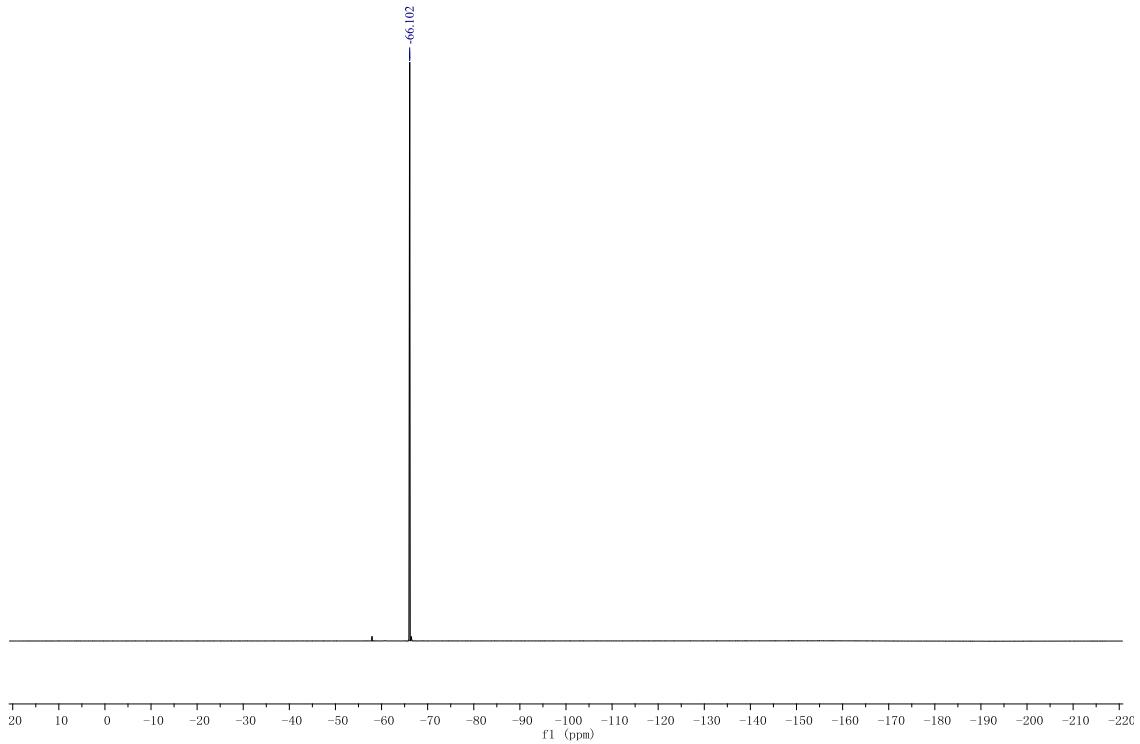
6-Methyl-3-(trifluoromethyl)-2H-1-Benzopyran-2-one (2b, CAS: 1562426-71-4).



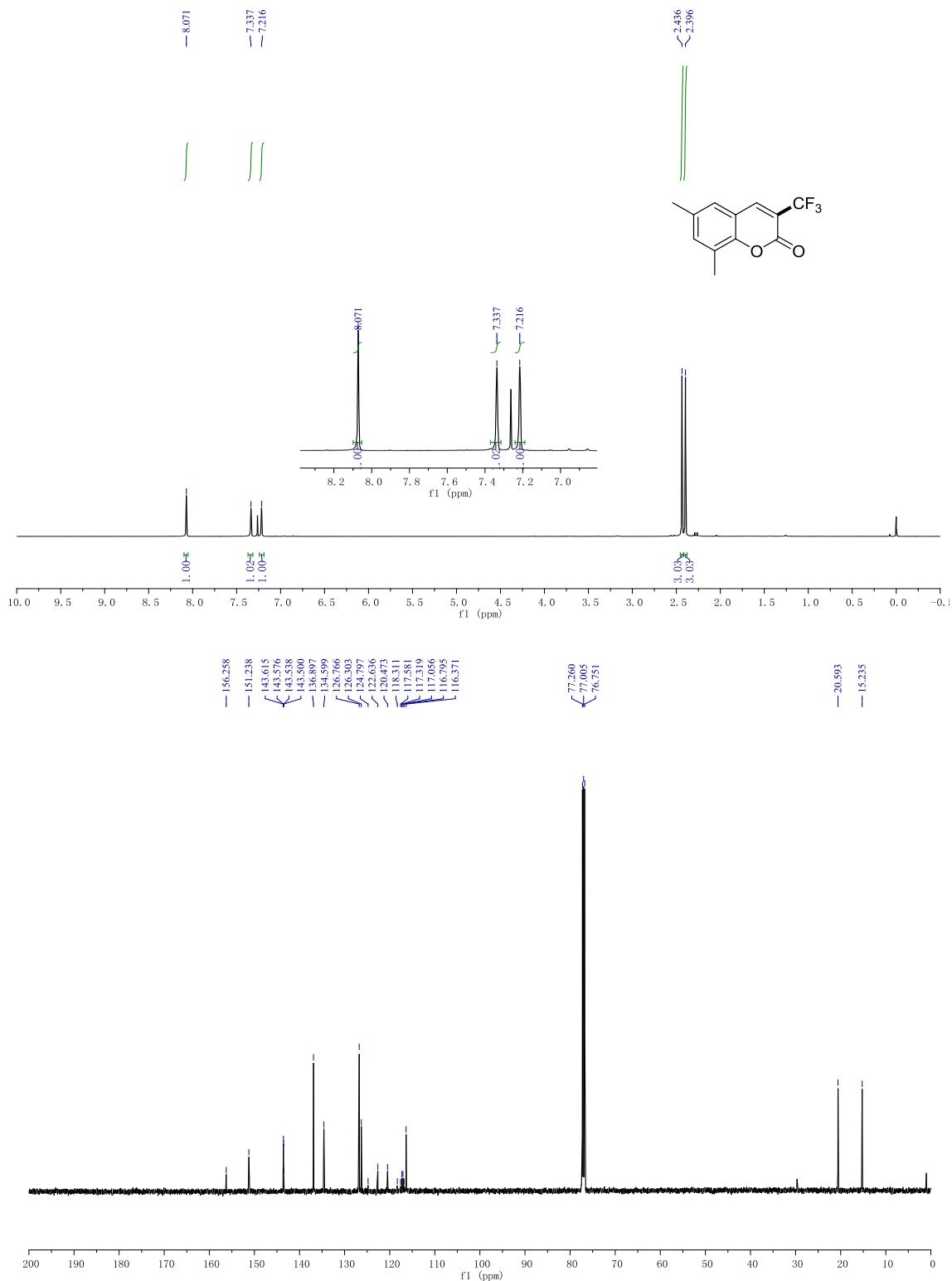


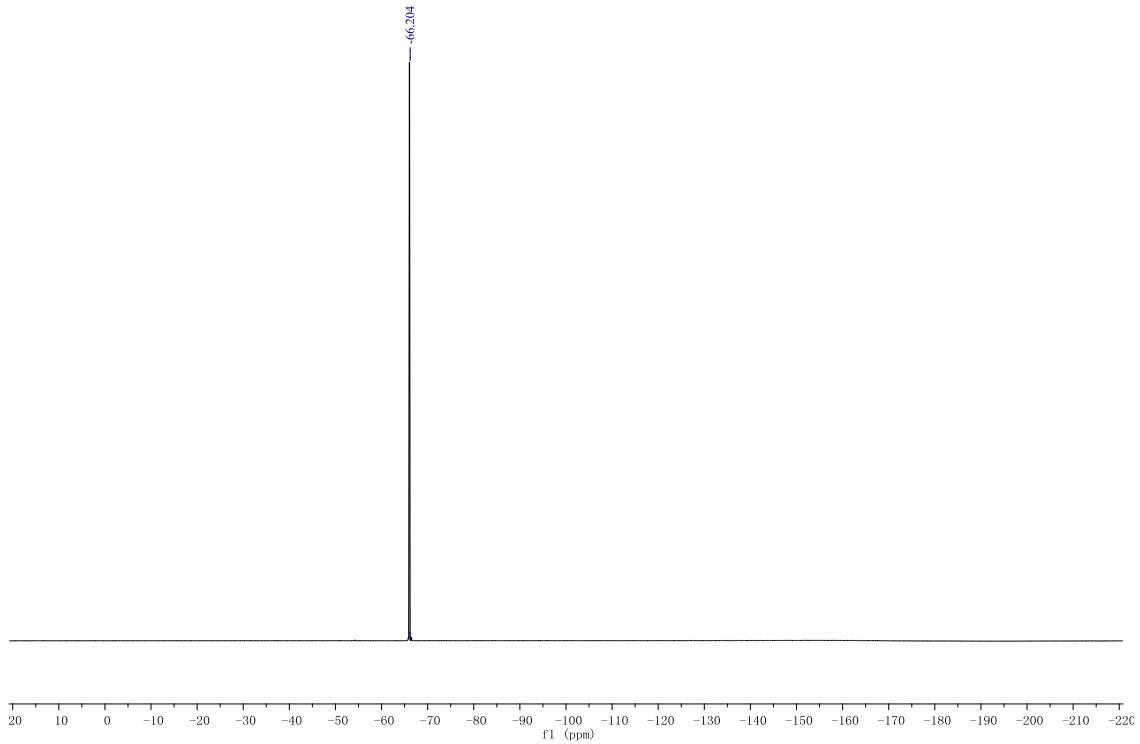
8-Methyl-3-(trifluoromethyl)-2H-1-Benzopyran-2-one (2c, CAS: 1562426-83-8).



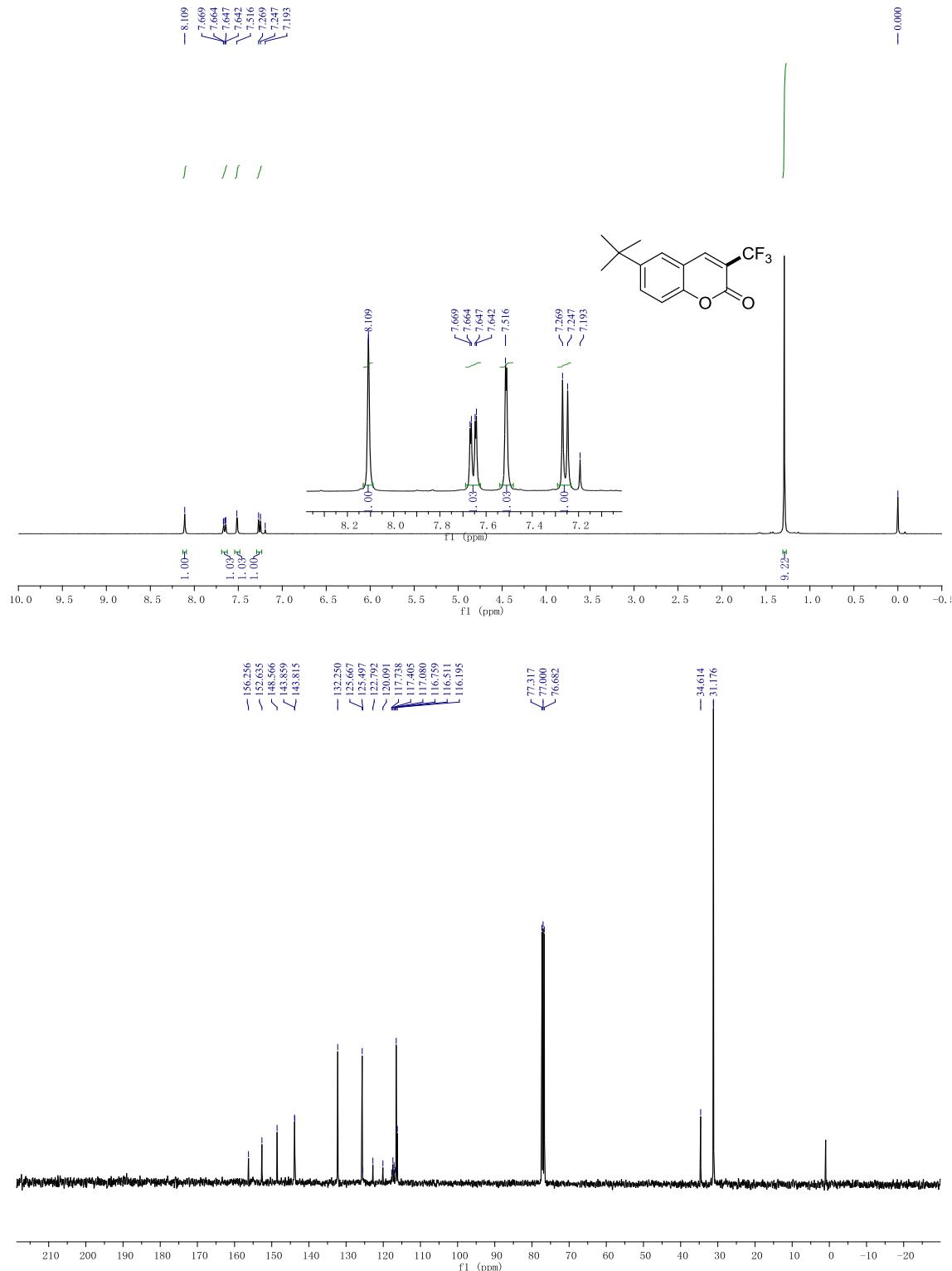


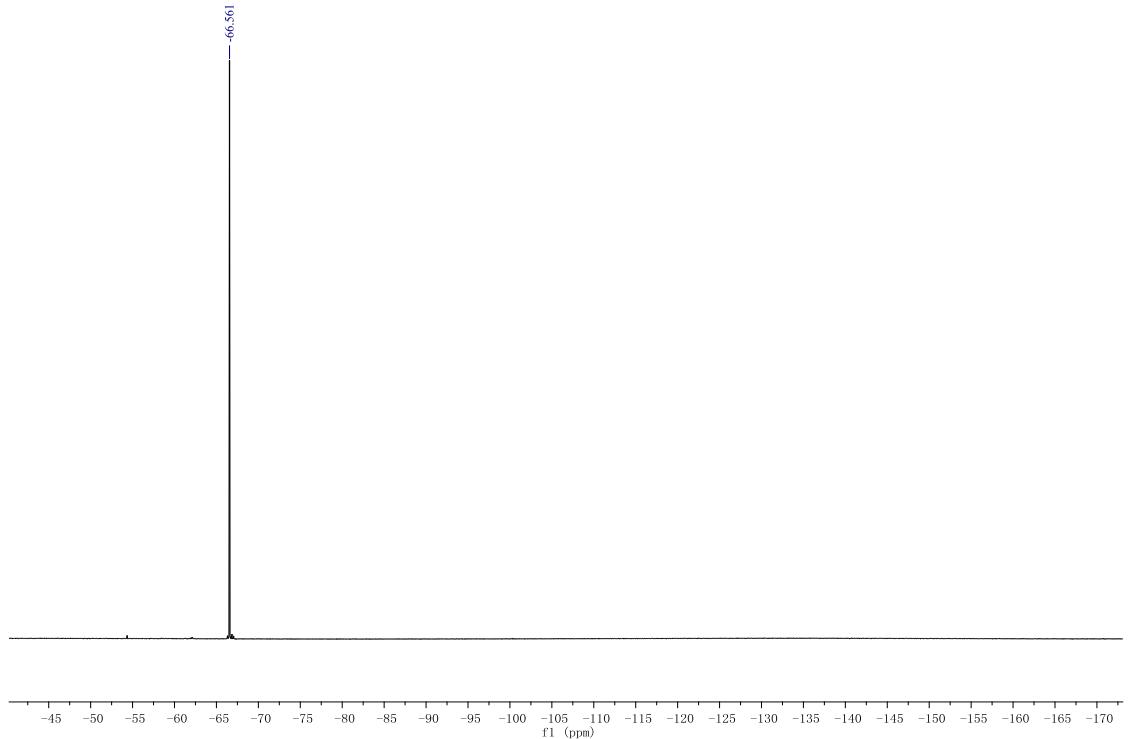
6,8-Dimethyl-3-(trifluoromethyl)-2H-1-Benzopyran-2-one (2d).



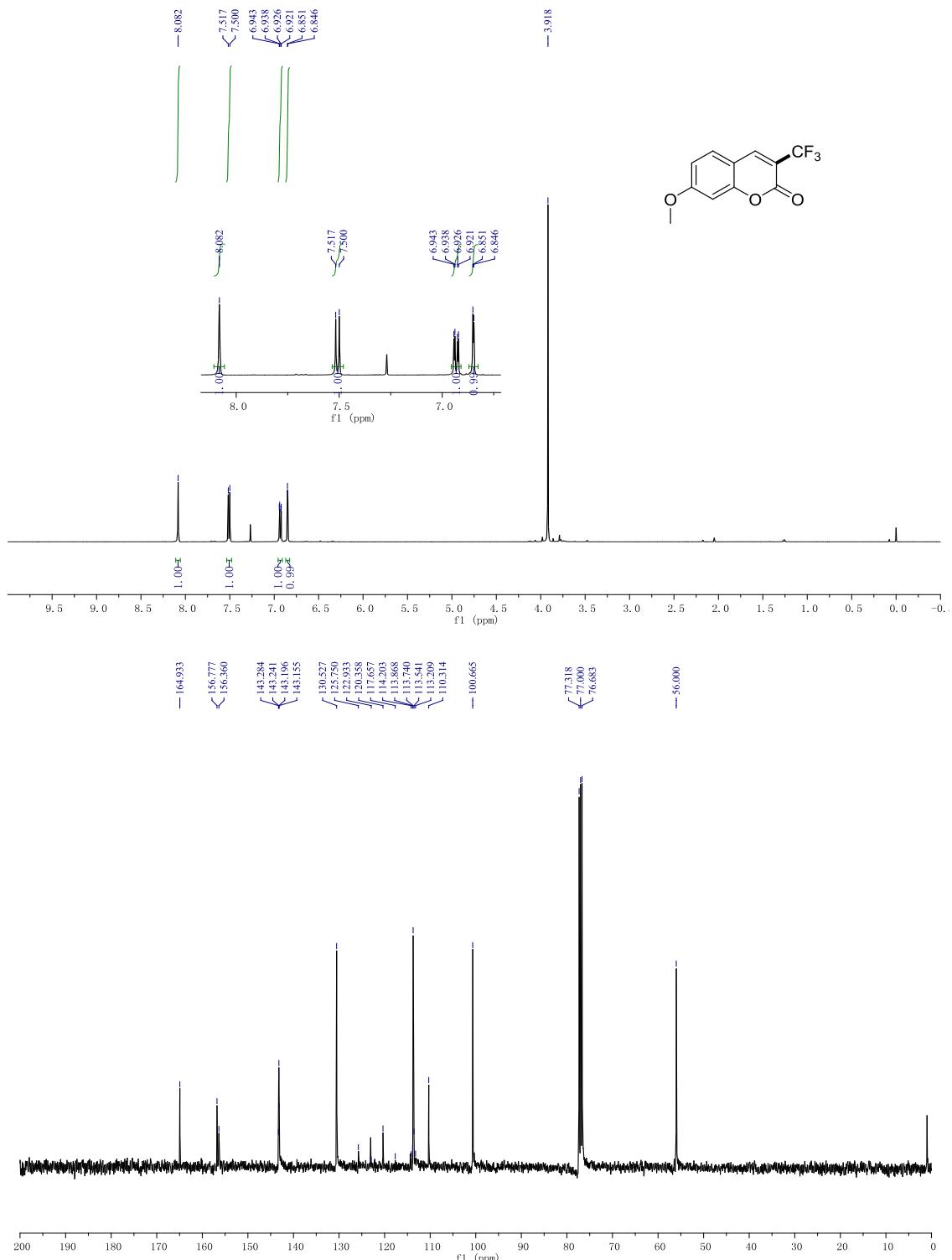


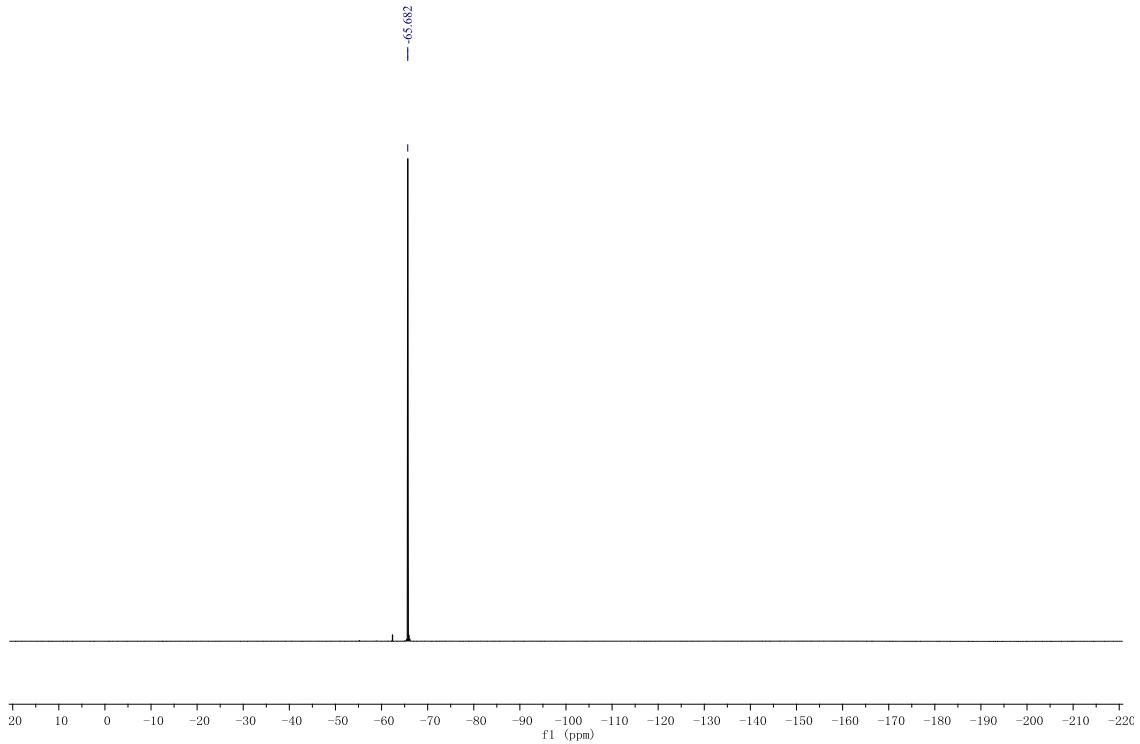
6-*t*-Butyl-3-(trifluoromethyl)-2H-1-Benzopyran-2-one (2e).



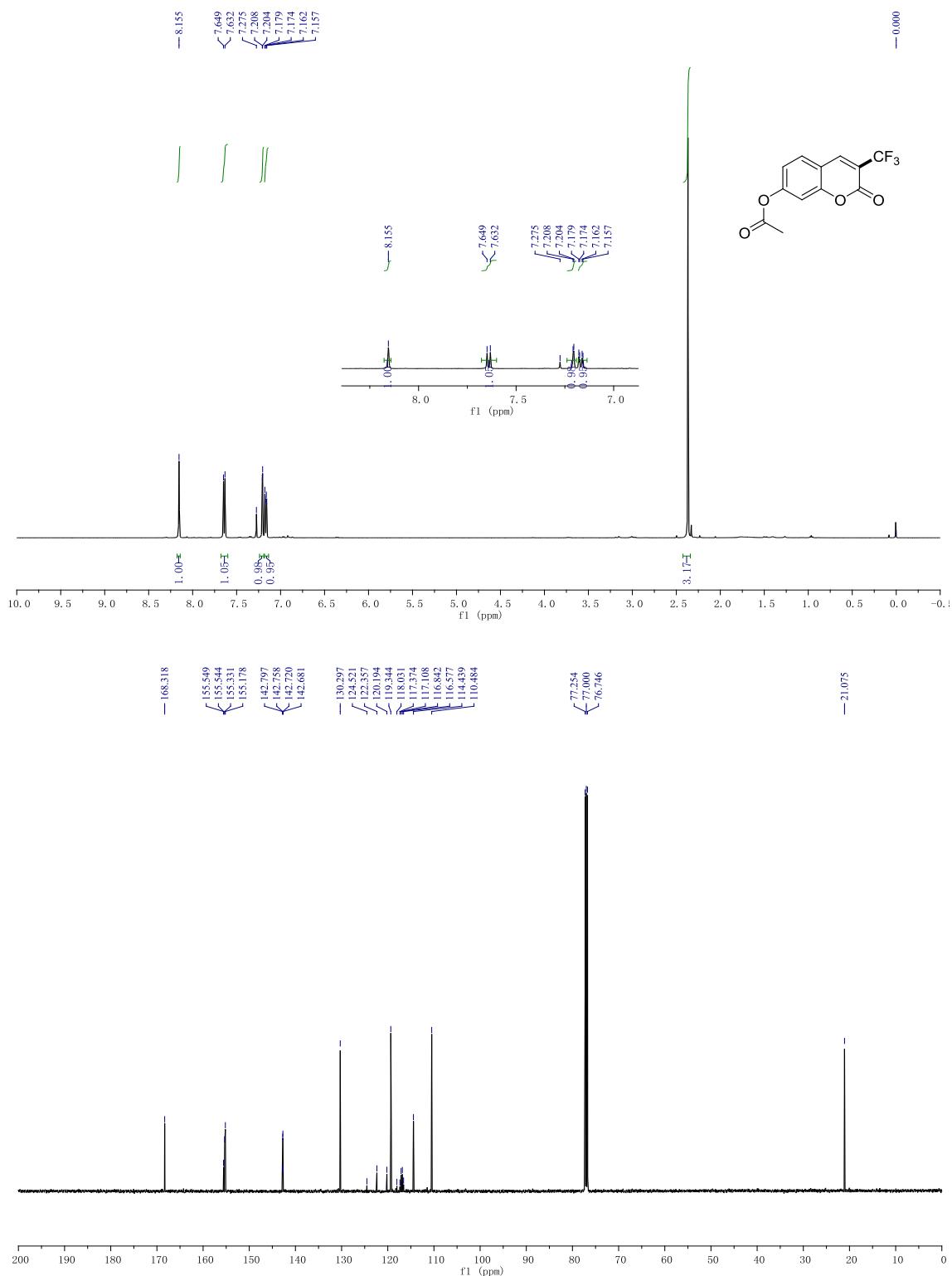


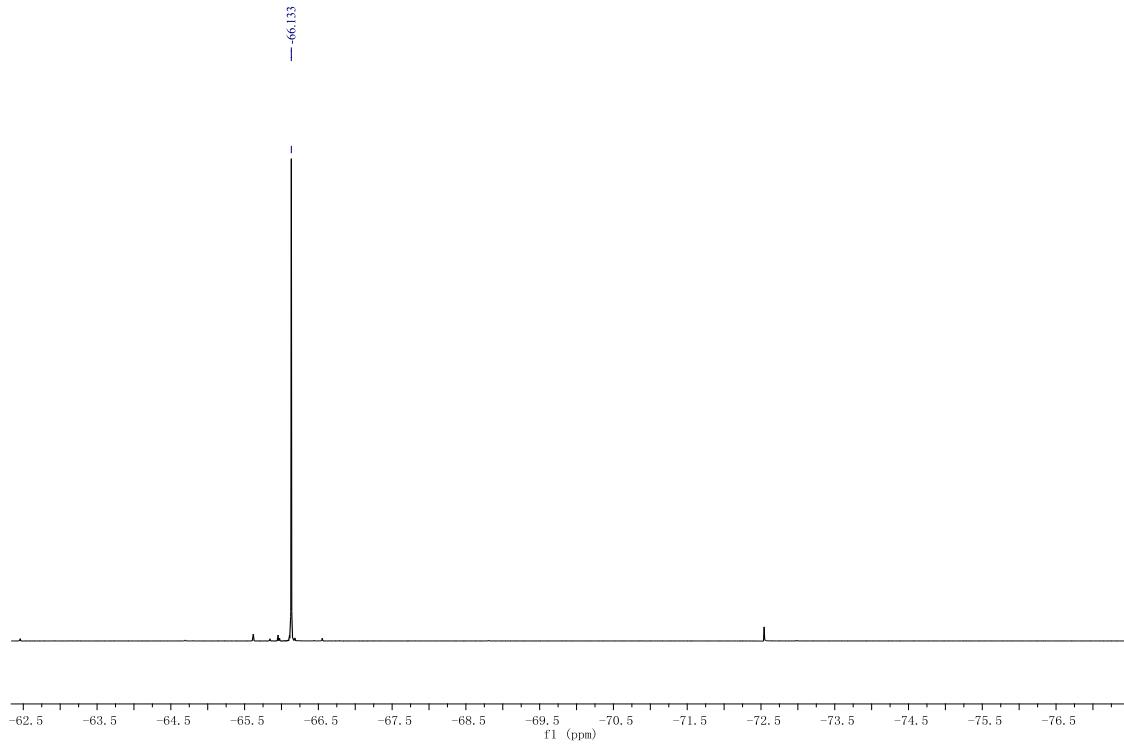
7-Methoxyl-3-(trifluoromethyl)-2H-1-Benzopyran-2-one(2f, CAS:1562426-78-1).



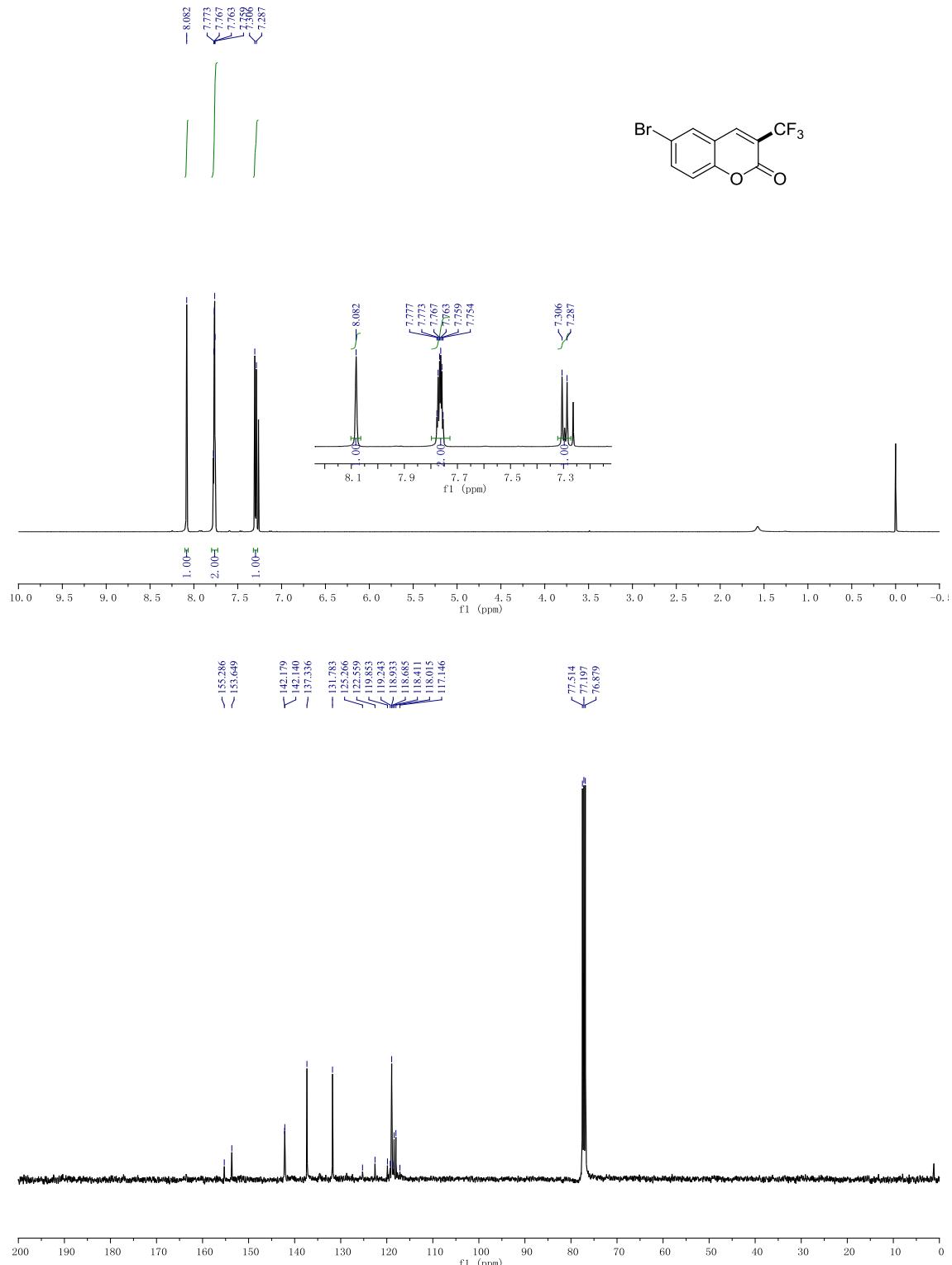


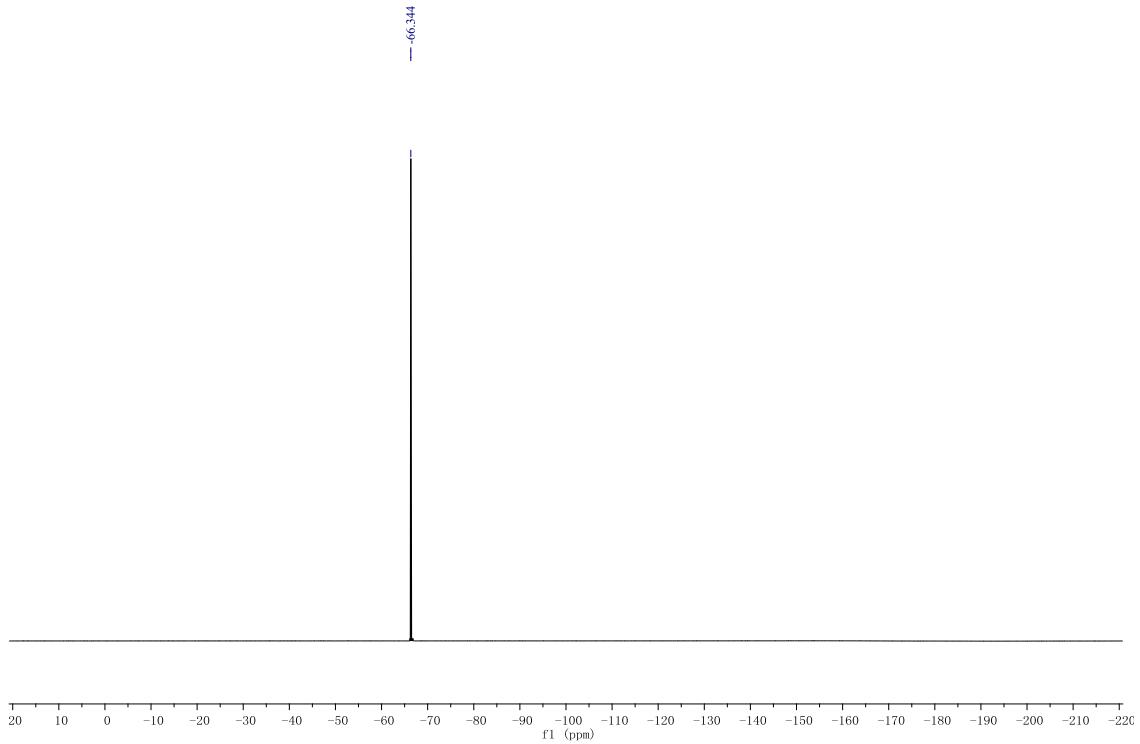
7-(Acetoxy)-3-(trifluoromethyl)-2H-1-Benzopyran-2-one (2g, CAS:1562426-82-7).



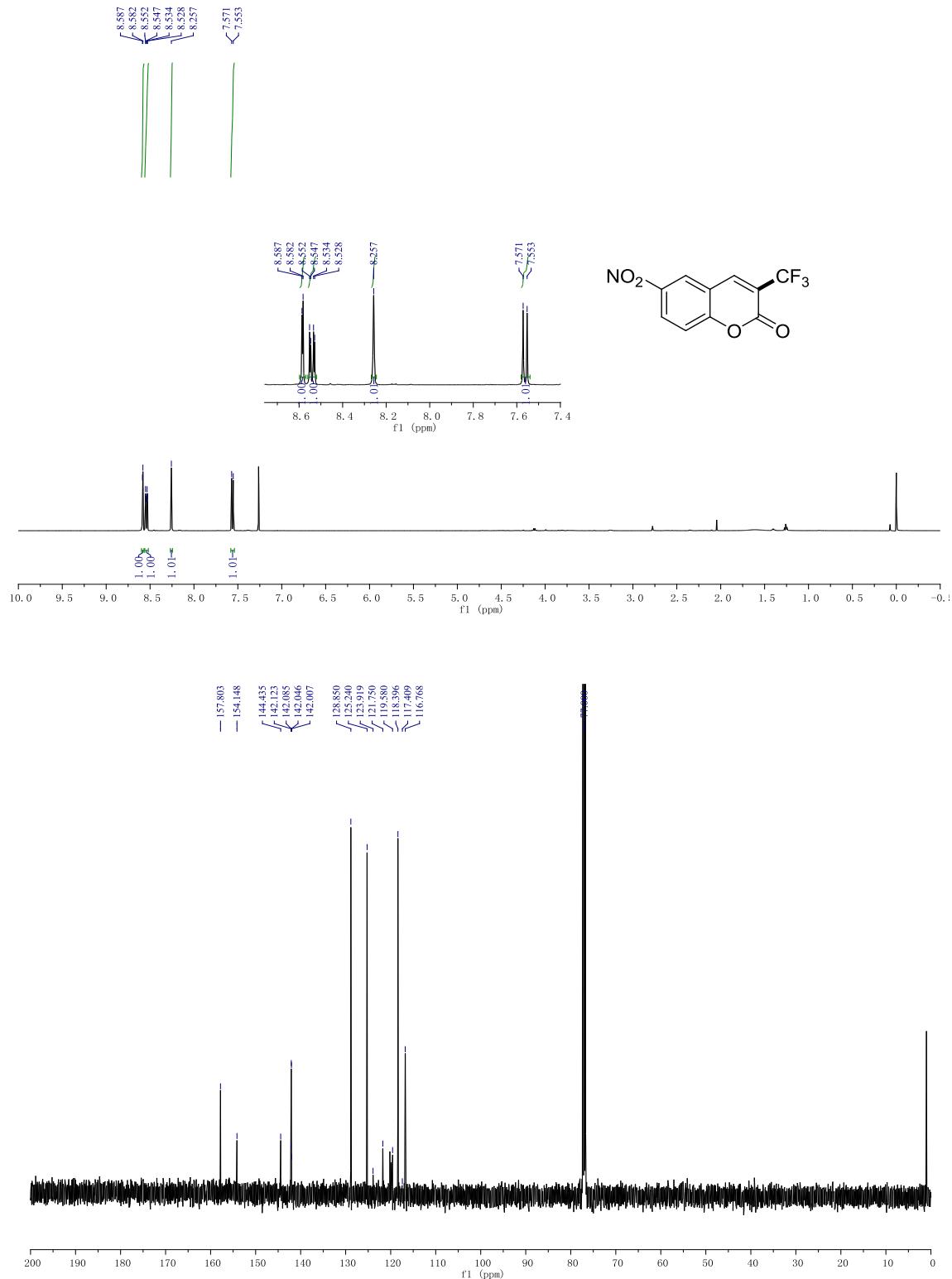


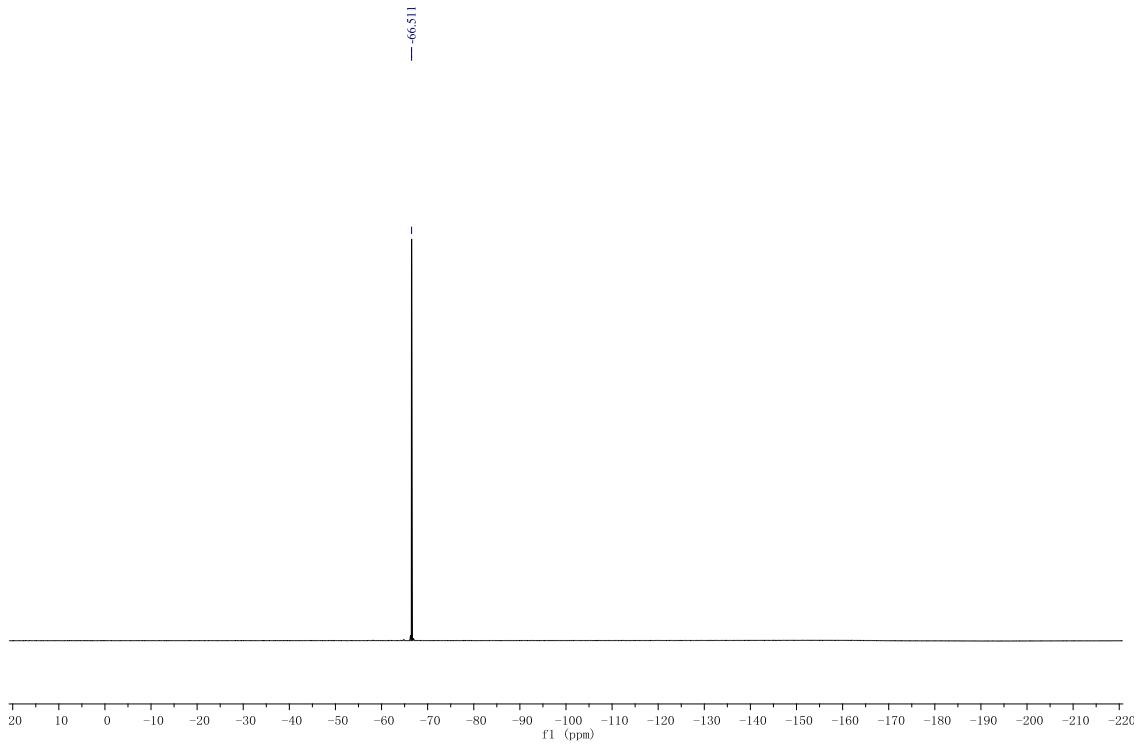
7-Bromo-3-(trifluoromethyl)-2H-1-Benzopyran-2-one (2h, CAS:1562426-73-6).



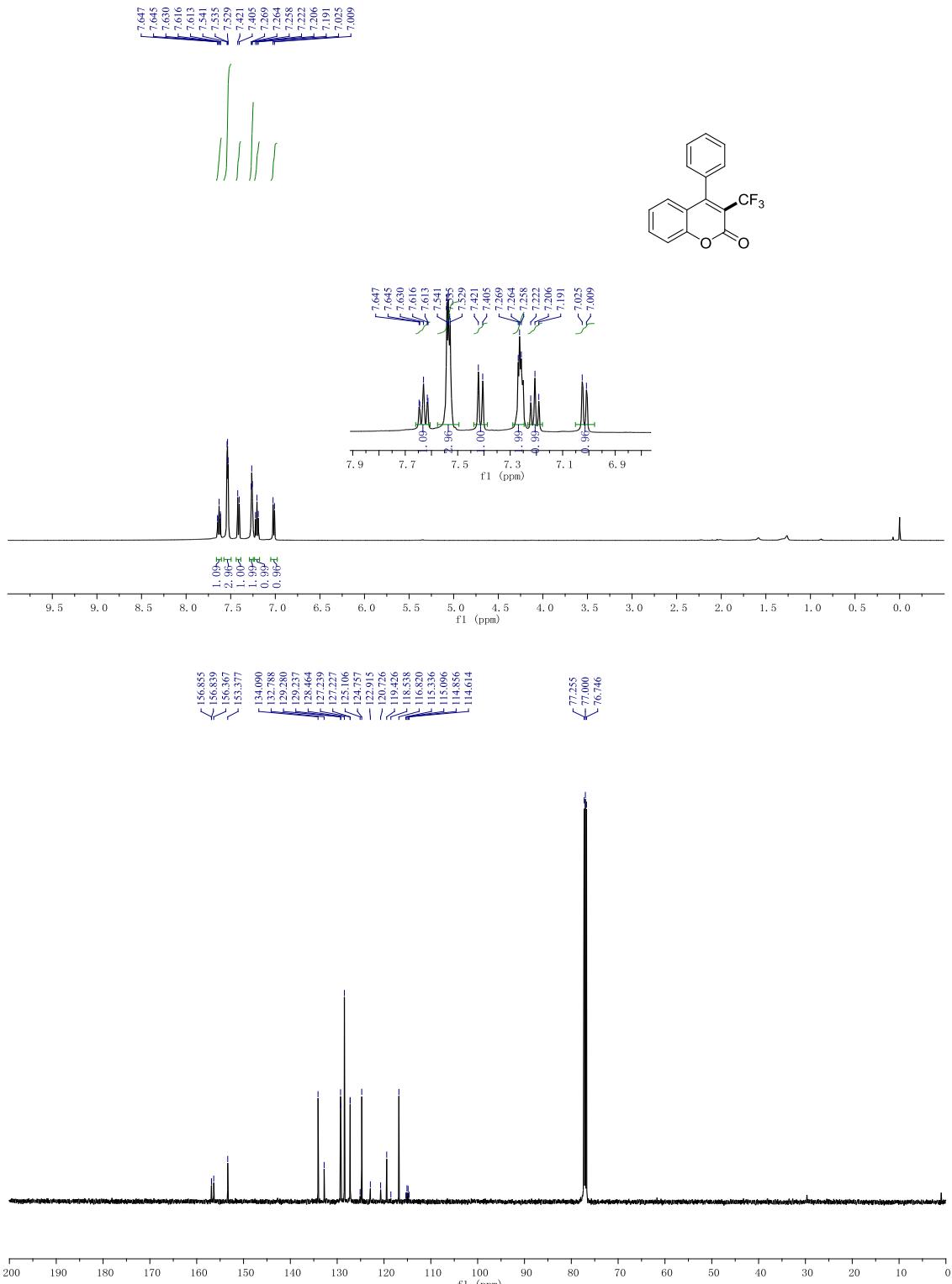


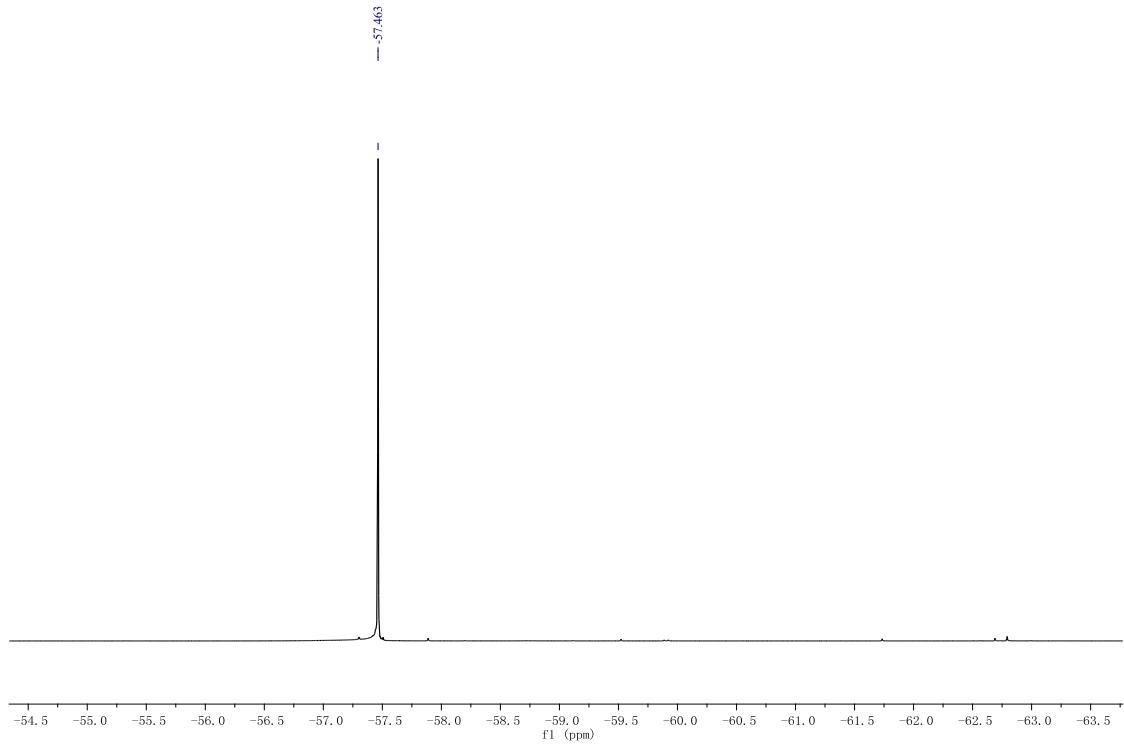
6-Nitro-3-(trifluoromethyl)-2H-1-Benzopyran-2-one (2i, CAS: 500552-10-3).





4-Phenyl-3-(trifluoromethyl)-2H-1-Benzopyran-2-one (2j, CAS: 1562426-68-9)





7-(Diethylamino)-4-methyl-3-(trifluoromethyl)-2H-1-Benzopyran-2-one (2k, CAS: 133721-29-6)

