

Supplementary Information

Structure-activity relationships in hydroxy-2,3-diarylxanthone antioxidants. Fast kinetics spectroscopy as a tool to evaluate the potential for antioxidant activity in biological systems

Clementina M. M. Santos,^{a,b} Artur M. S. Silva,^a Paulo Filipe,^c René Santos,^d

L. K. Patterson,^{e,f} Jean-Claude Mazière,^{f,g,h} José A. S. Cavaleiro,^a Patrice Morlière,^{f,g,h,*}

^a Department of Chemistry & QOPNA, University of Aveiro, 3810-193 Aveiro, Portugal

^b Department of Vegetal Production and Technology, School of Agriculture, Polytechnic Institute of Bragança, 5301-855 Bragança, Portugal

^c Universidade de Lisboa, Hospital de Santa Maria, Clinica Universitária de Dermatologia, 1600 Lisbon, Portugal

^d Muséum National d'Histoire Naturelle, Département RDDM, F-75231 Paris, France

^e University of Notre Dame, Radiation Laboratory, Notre Dame, Indiana 46556, USA

^f CHU Amiens, Laboratoire de Biochimie, F-80054 Amiens, France

^g INSERM, ERI12, F-80054 Amiens, France

^h Université de Picardie Jules Verne, Faculté de Médecine et de Pharmacie, EA 4292, F-80036 Amiens, France

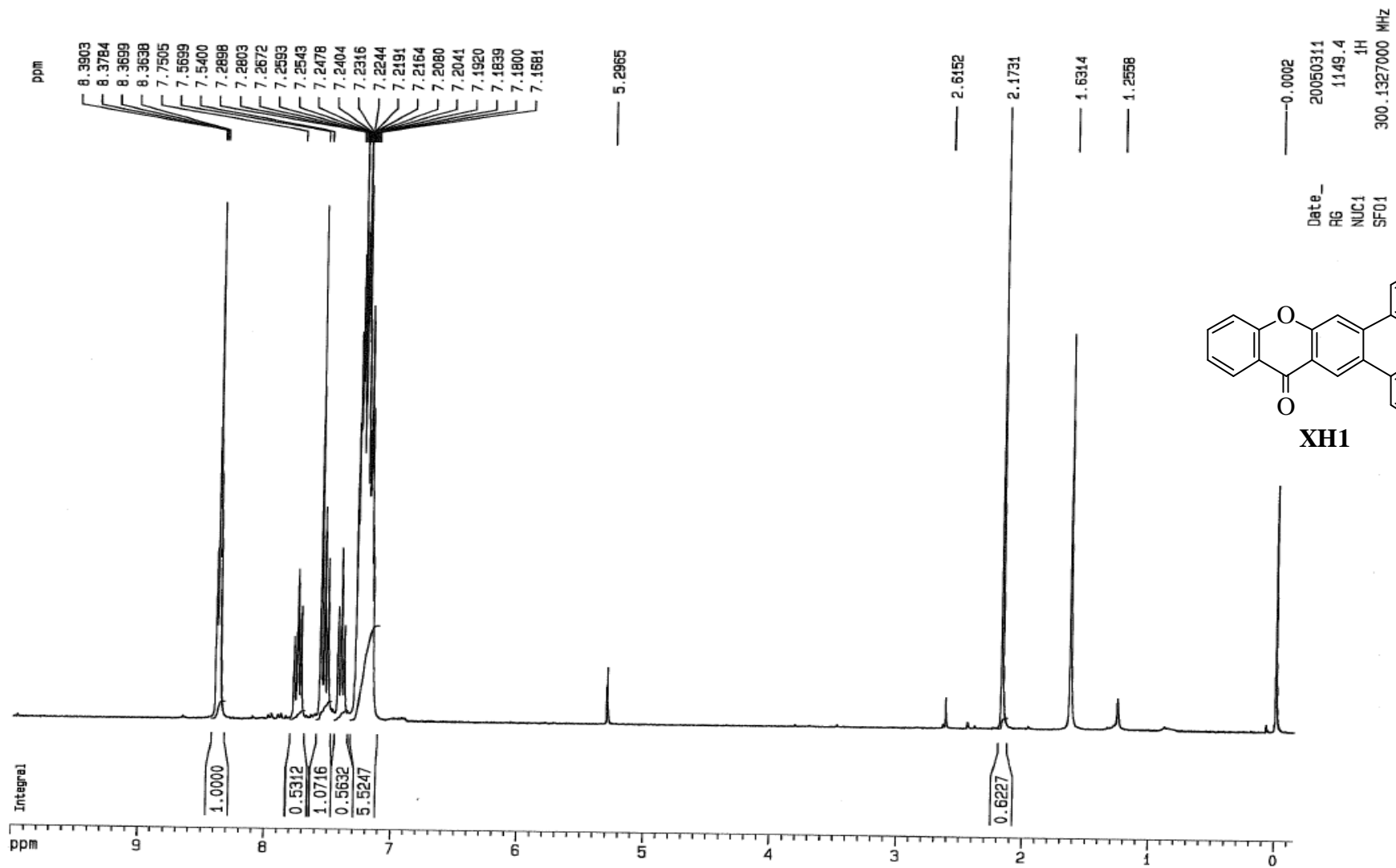
* Corresponding author: INSERM ERI12, Laboratoire de Biochimie, CHU Amiens - Hôpital Nord, place Victor Pauchet, 80054 Amiens Cedex 1, FRANCE. Phone: +33 3 22 66 86 69; Fax: +33 3 22 66 85 93; E-mail: morliere.patrice@chu-amiens.fr

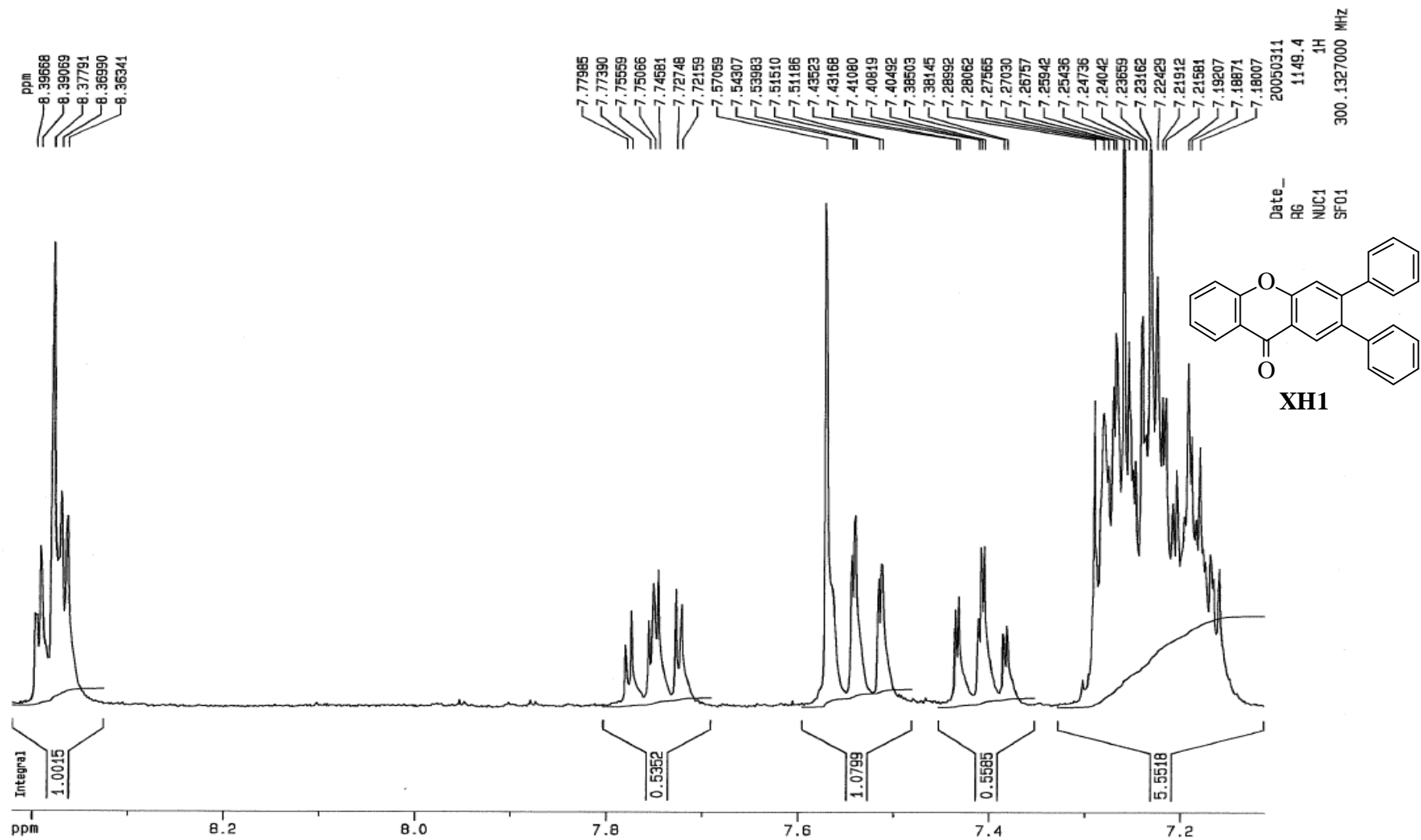
Supplementary Information

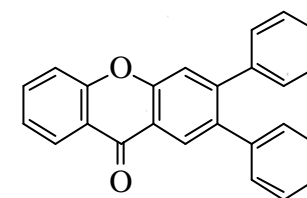
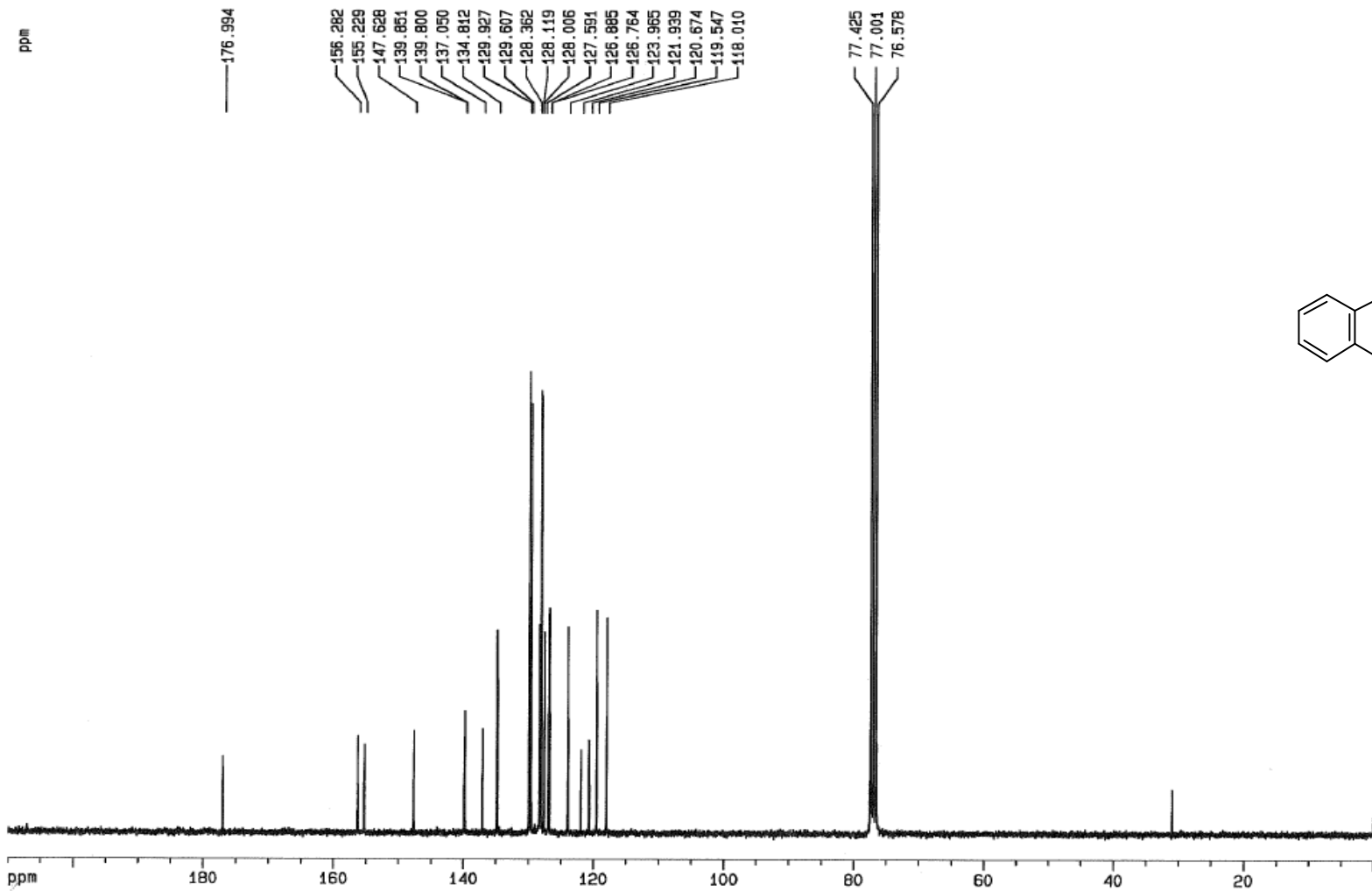
Table of Contents:

¹ H NMR spectrum of compound XH1 (300 MHz)	S4
¹ H NMR spectrum (expansion) of compound XH1 (300 MHz)	S5
¹³ C NMR spectrum of compound XH1 (75 MHz)	S6
¹³ C NMR spectrum (expansion) of compound XH1 (75 MHz)	S7
¹ H NMR spectrum of compound XH2 (300 MHz)	S8
¹ H NMR spectrum (expansion) of compound XH2 (300 MHz)	S9
¹³ C NMR spectrum of compound XH3 (75 MHz)	S10
¹³ C NMR spectrum (expansion) of compound XH2 (75 MHz)	S11
¹ H NMR spectrum of compound XH3 (300 MHz)	S12
¹ H NMR spectrum (expansion) of compound XH3 (300 MHz)	S13
¹³ C NMR spectrum of compound XH3 (75 MHz)	S14
¹³ C NMR spectrum (expansion) of compound XH3 (75 MHz)	S15
¹ H NMR spectrum of compound XH4 (300 MHz)	S16
¹ H NMR spectrum (expansion) of compound XH4 (300 MHz)	S17
¹³ C NMR spectrum of compound XH4 (75 MHz)	S18
¹³ C NMR spectrum (expansion) of compound XH4 (75 MHz)	S19
¹ H NMR spectrum of compound XH5 (300 MHz)	S20
¹ H NMR spectrum (expansion) of compound XH5 (300 MHz)	S21
¹³ C NMR spectrum of compound XH5 (75 MHz)	S22
¹³ C NMR spectrum (expansion) of compound XH5 (75 MHz)	S23
¹ H NMR spectrum of compound XH6 (300 MHz)	S24
¹ H NMR spectrum (expansion) of compound XH6 (300 MHz)	S25
¹³ C NMR spectrum of compound XH6 (75 MHz)	S26
¹³ C NMR spectrum (expansion) of compound XH6 (75 MHz)	S27
¹ H NMR spectrum of compound XH7 (300 MHz)	S28
¹ H NMR spectrum (expansion) of compound XH7 (300 MHz)	S29
¹³ C NMR spectrum of compound XH7 (75 MHz)	S30
¹³ C NMR spectrum (expansion) of compound XH7 (75 MHz)	S31
¹ H NMR spectrum of compound XH8 (300 MHz)	S32
¹ H NMR spectrum (expansion) of compound XH8 (300 MHz)	S33
¹³ C NMR spectrum of compound XH8 (75 MHz)	S34

¹³ C NMR spectrum (expansion) of compound XH8 (75 MHz)	S35
¹ H NMR spectrum of compound XH9 (300 MHz)	S36
¹ H NMR spectrum (expansion) of compound XH9 (300 MHz)	S37
¹ H NMR spectrum (expansion) of compound XH9 (300 MHz)	S38
¹³ C NMR spectrum of compound XH9 (75 MHz)	S39
¹³ C NMR spectrum (expansion) of compound XH9 (75 MHz)	S40

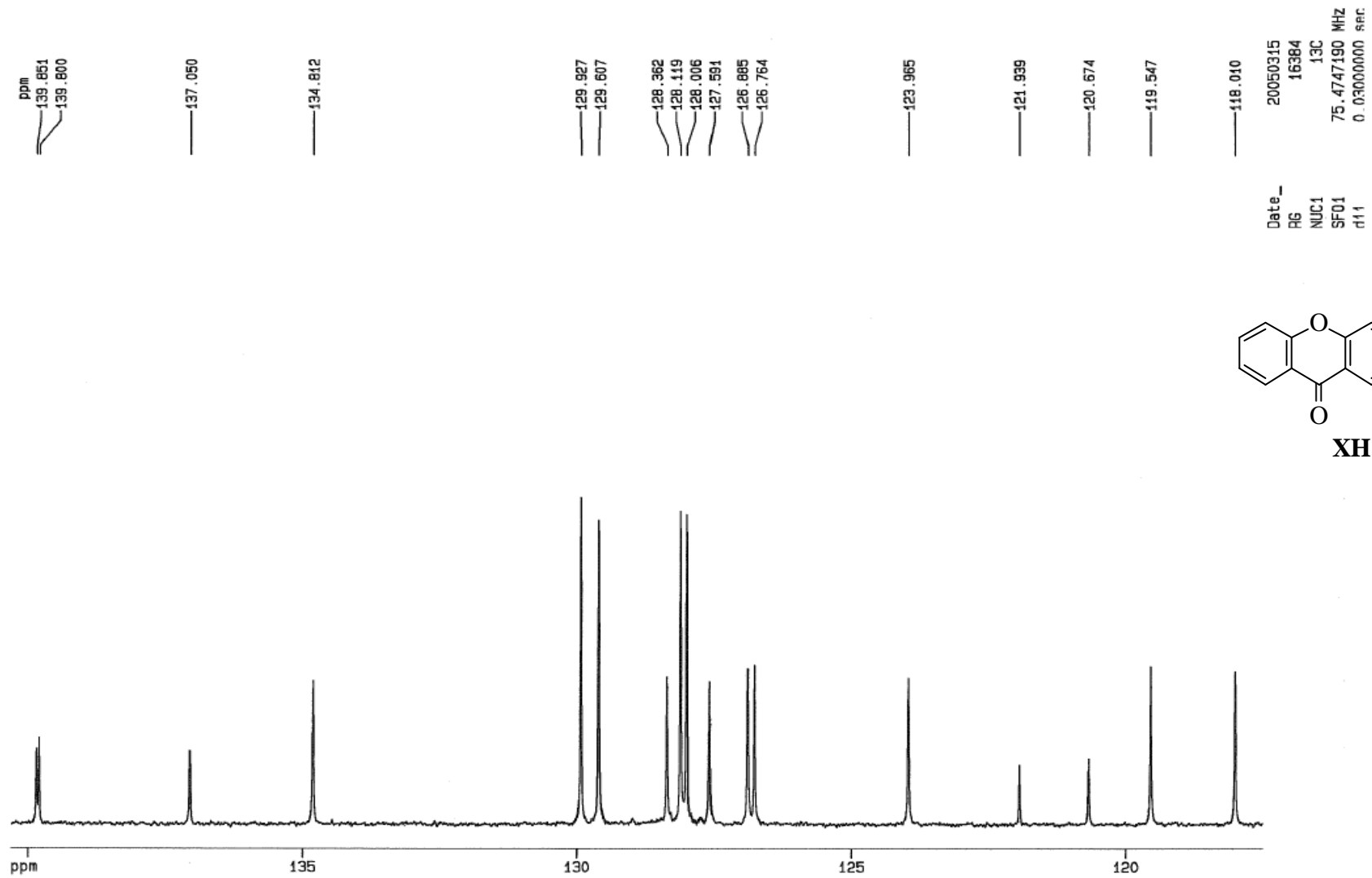


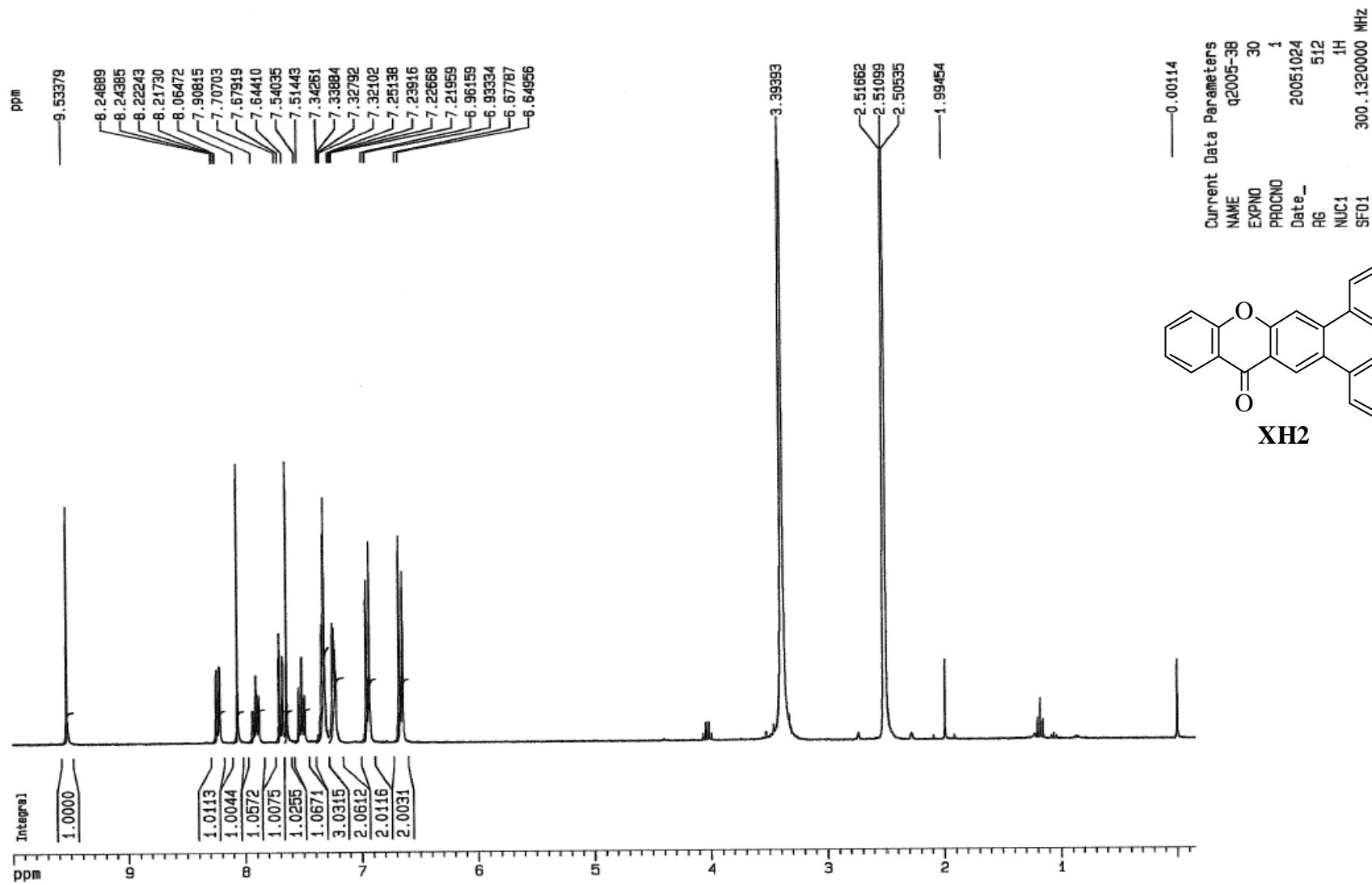


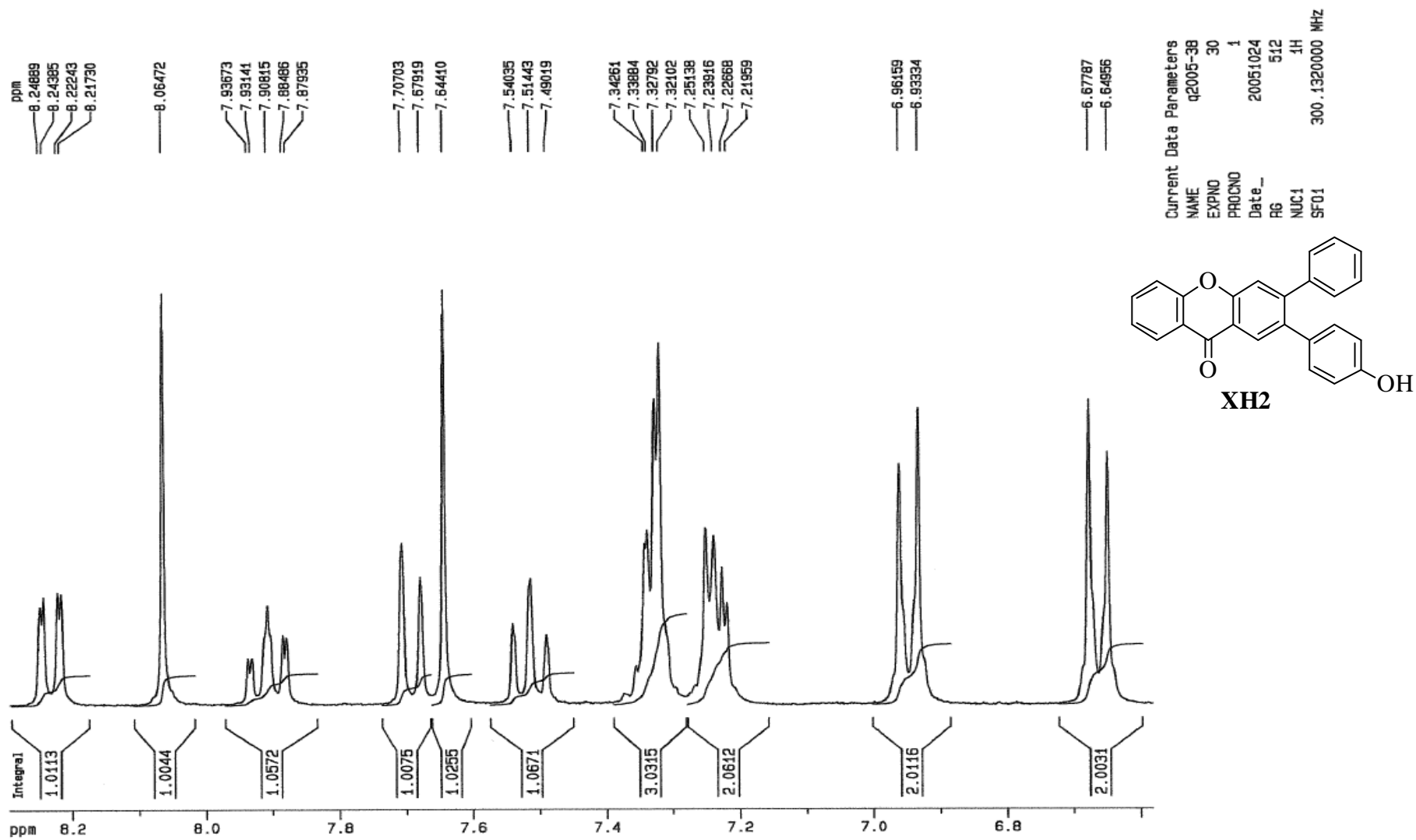


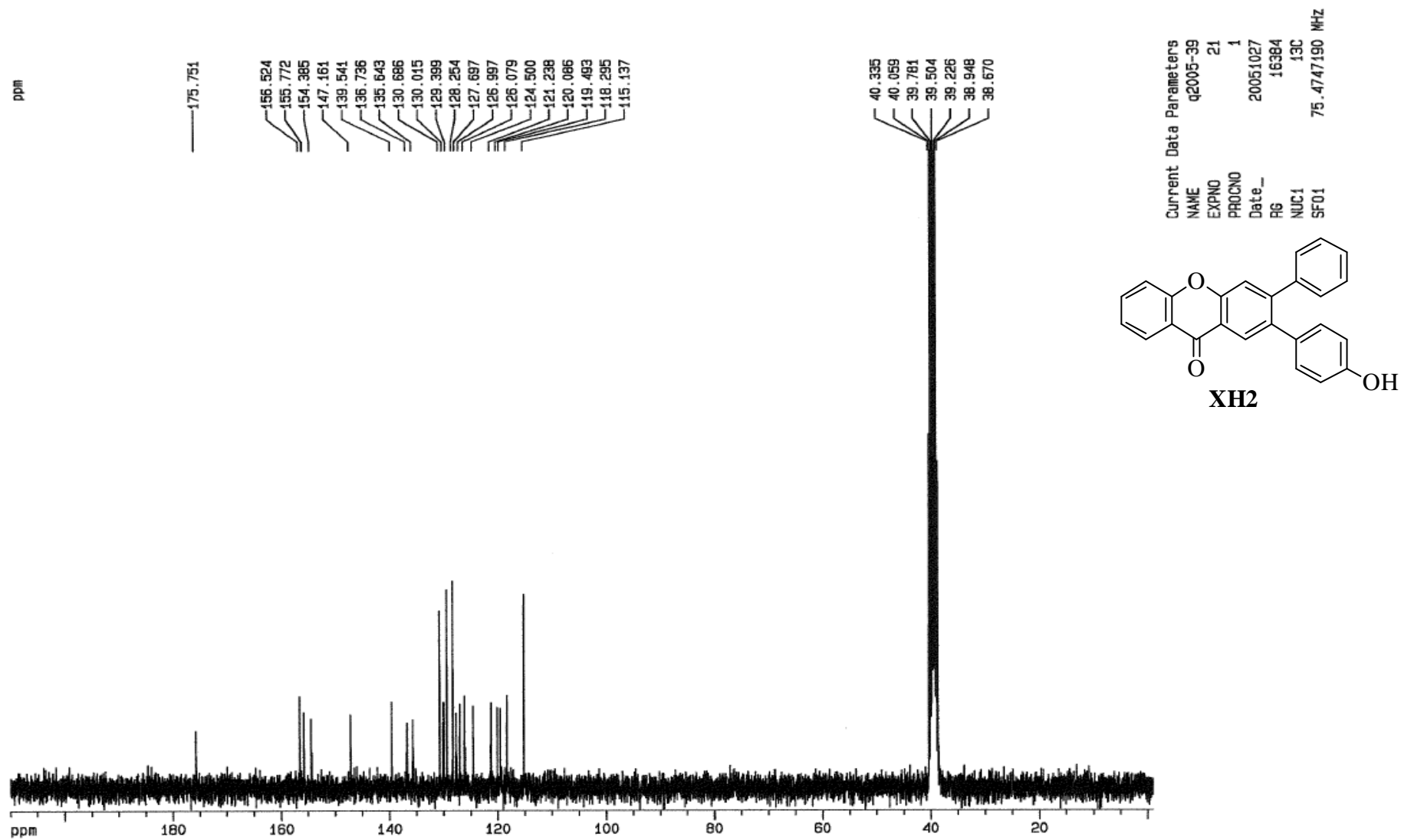
XH1

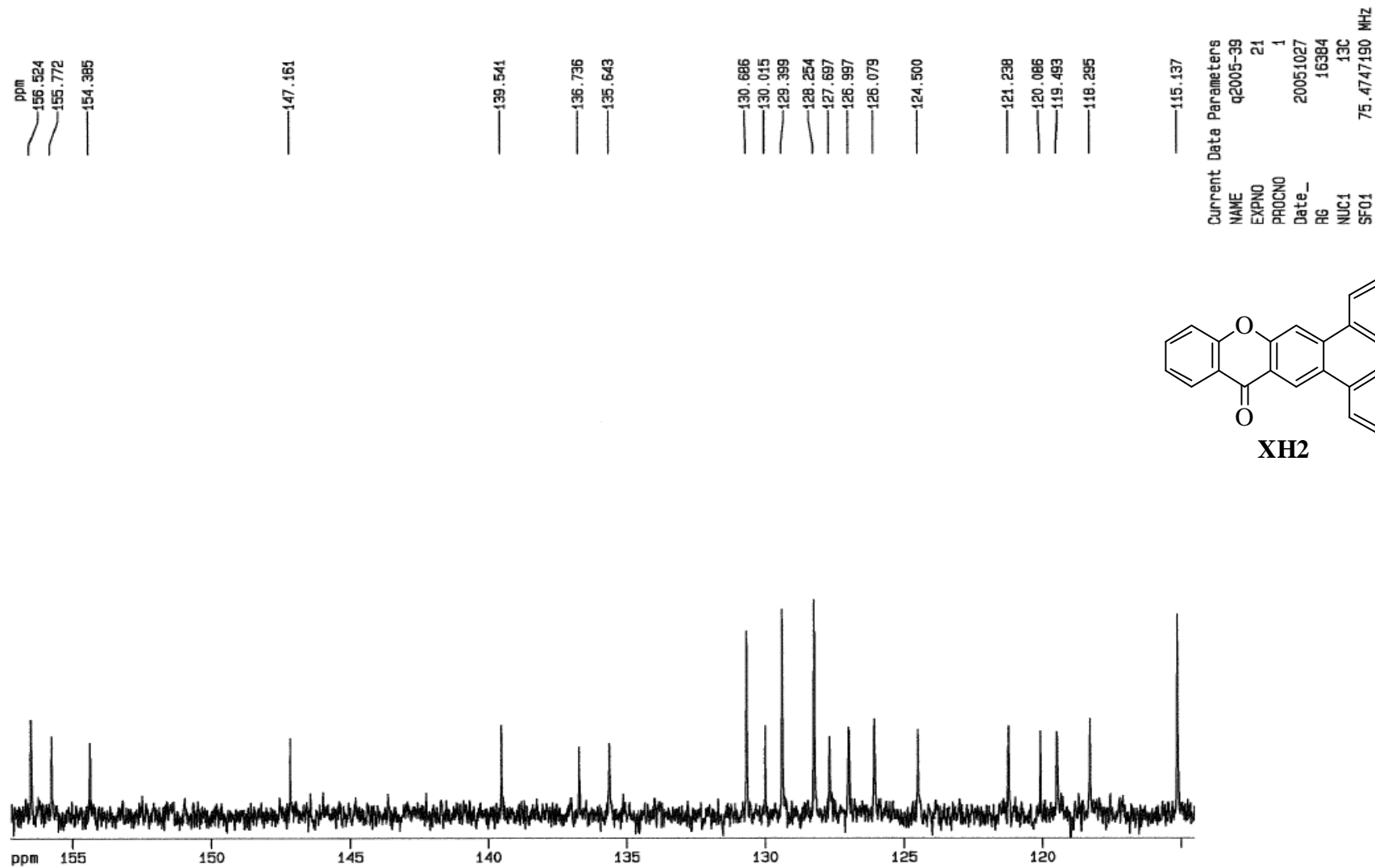
Date_ 20050315
RG 16364
NUC1 13C
SF01 75.4747190 MHz
d11 0.03000000 sec.

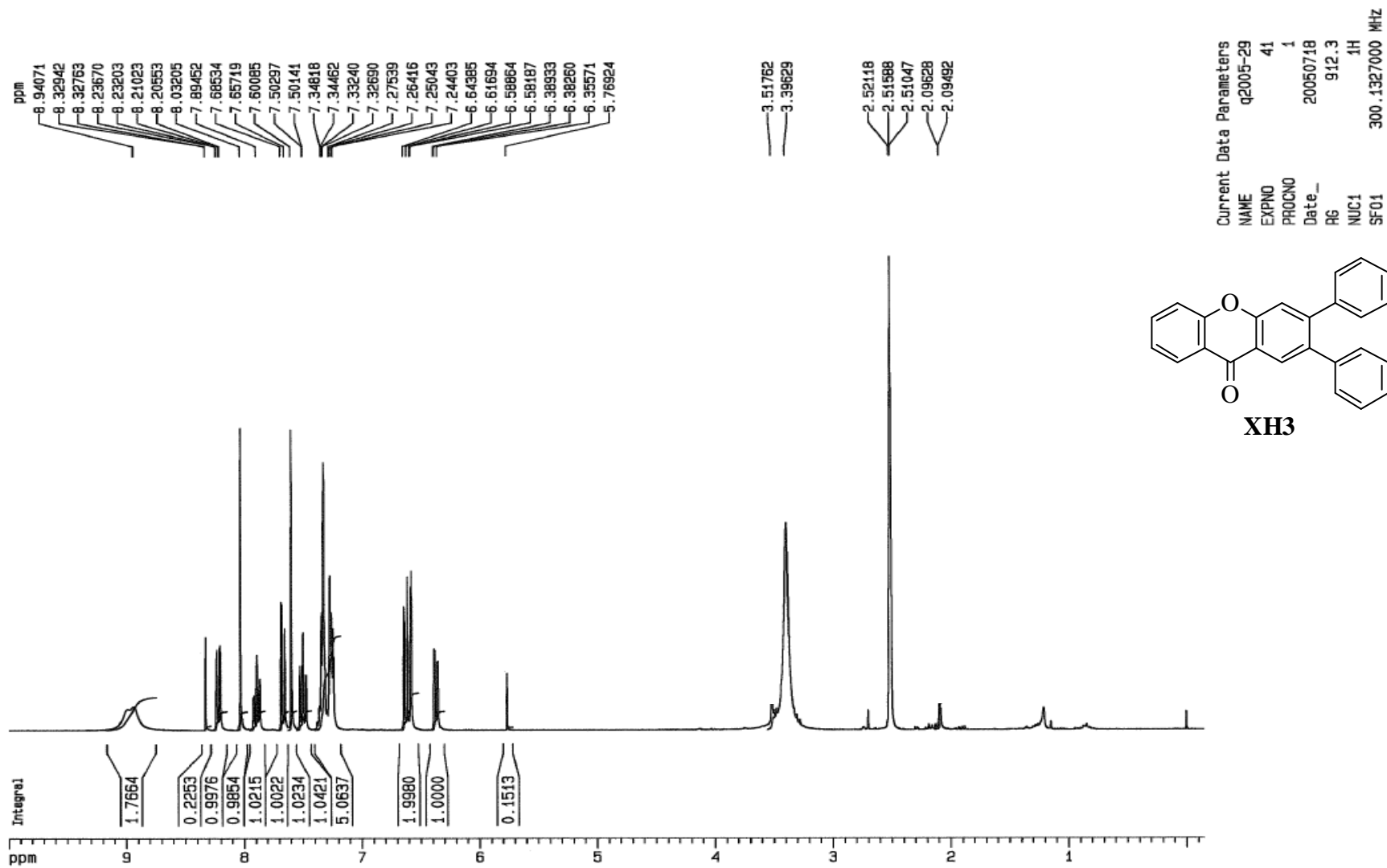


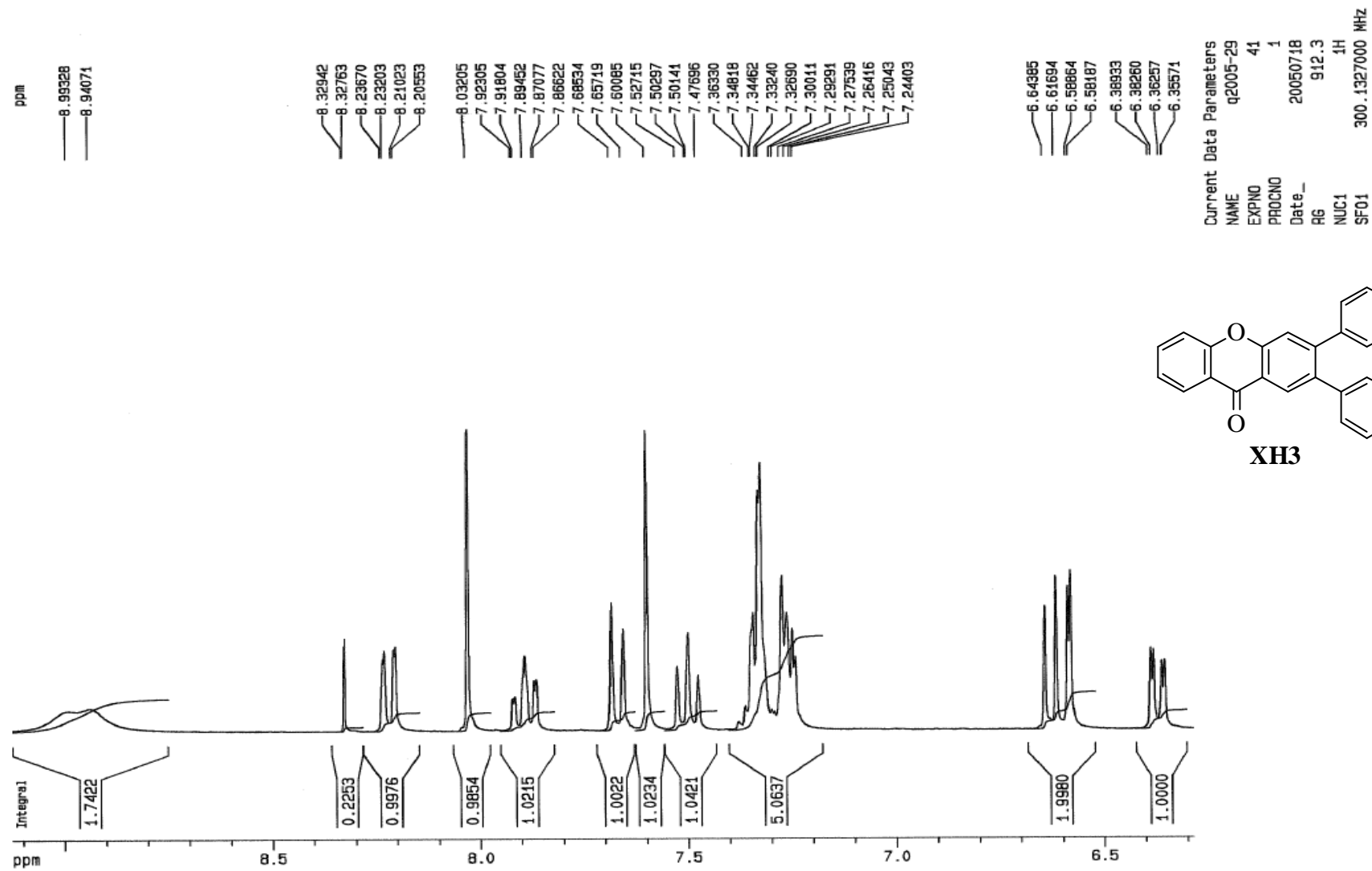


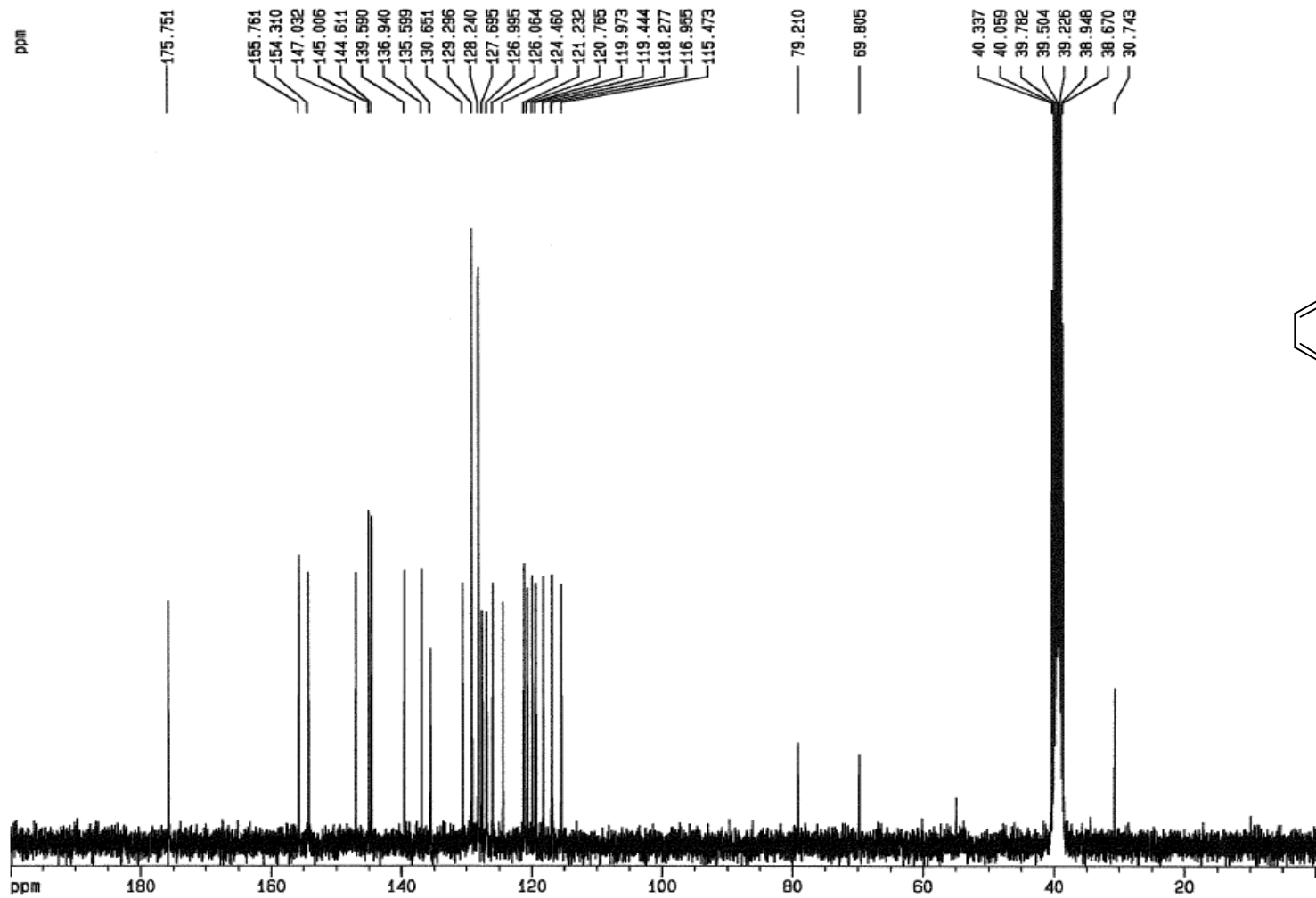






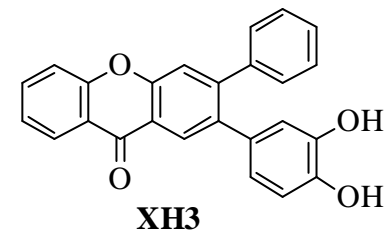


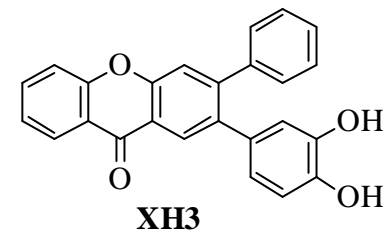
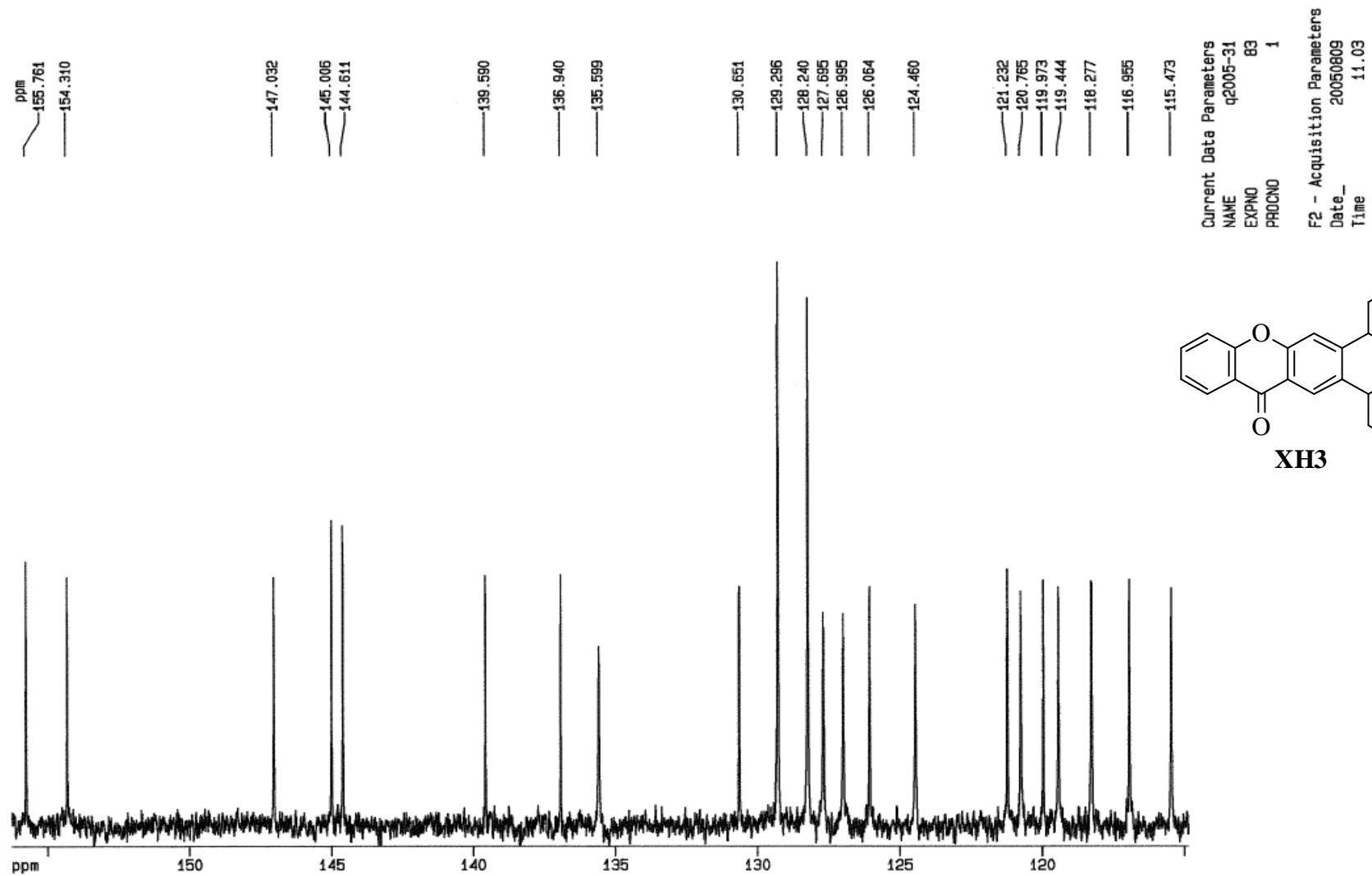


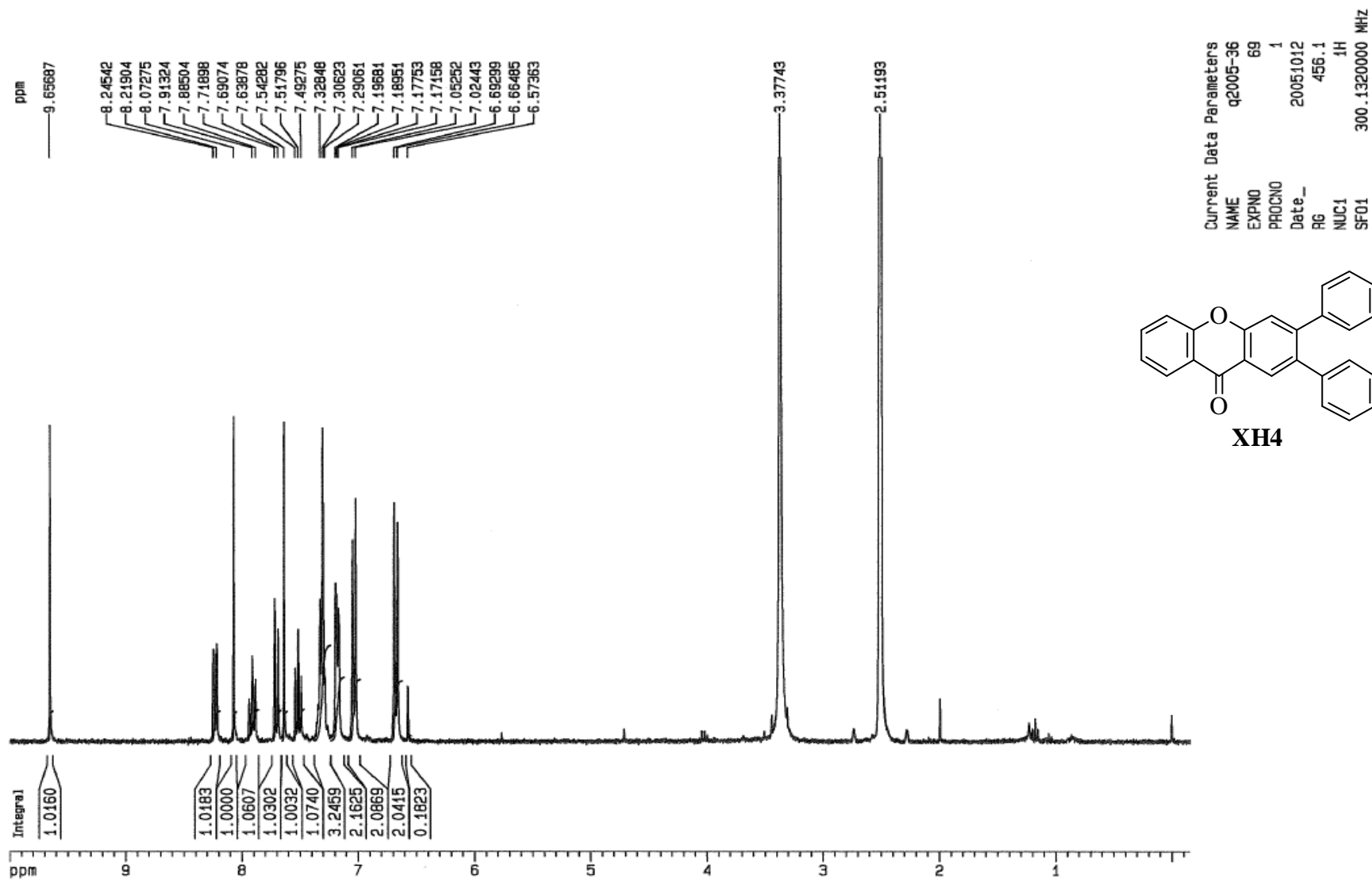


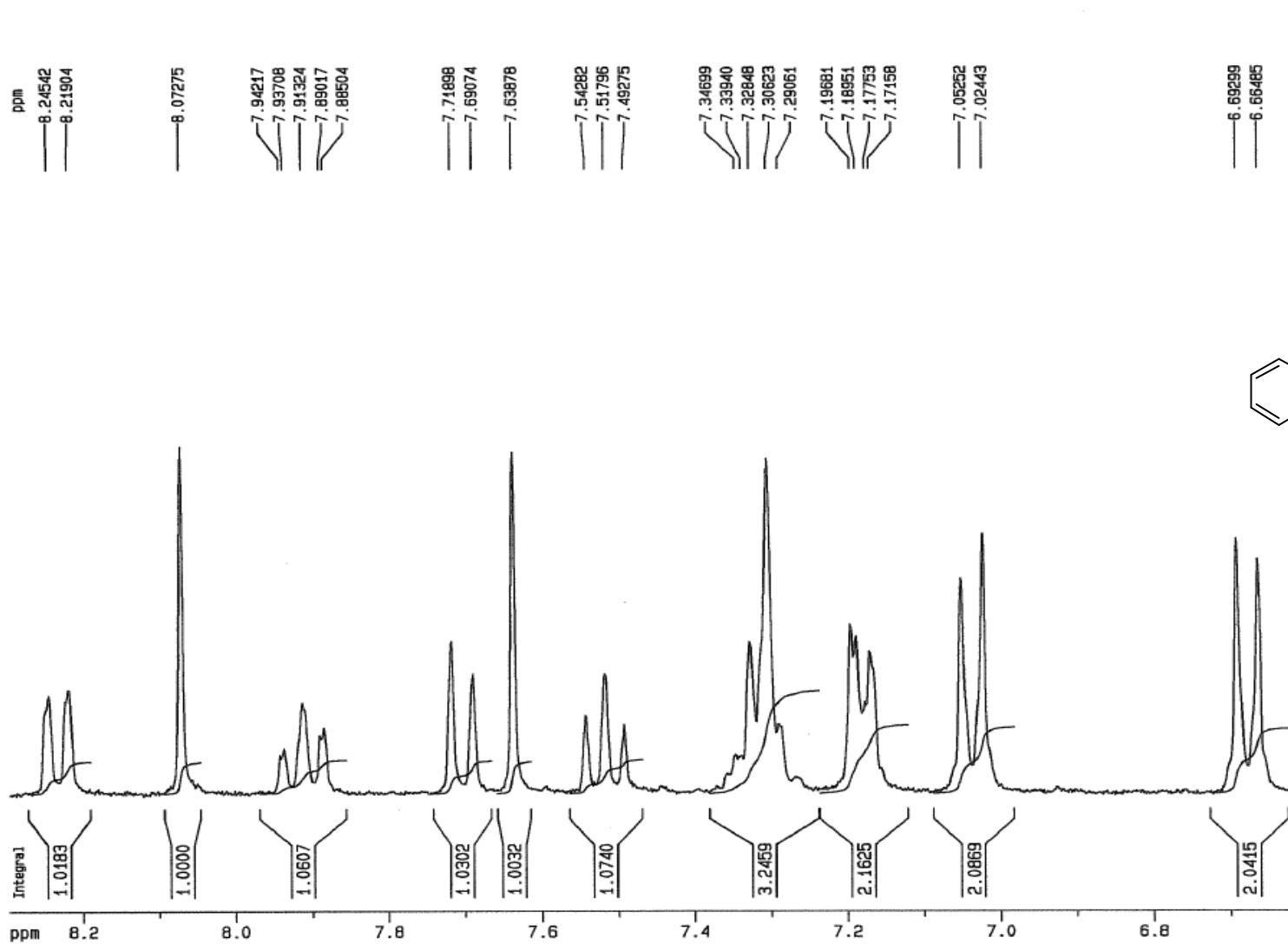
Current Data Parameters
NAME q2005-31
EXPNO 83
PROCNO 1

F2 - Acquisition Parameters
Date_ 20050809
Time 11.03

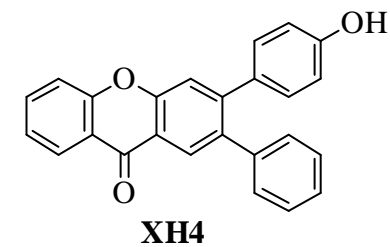


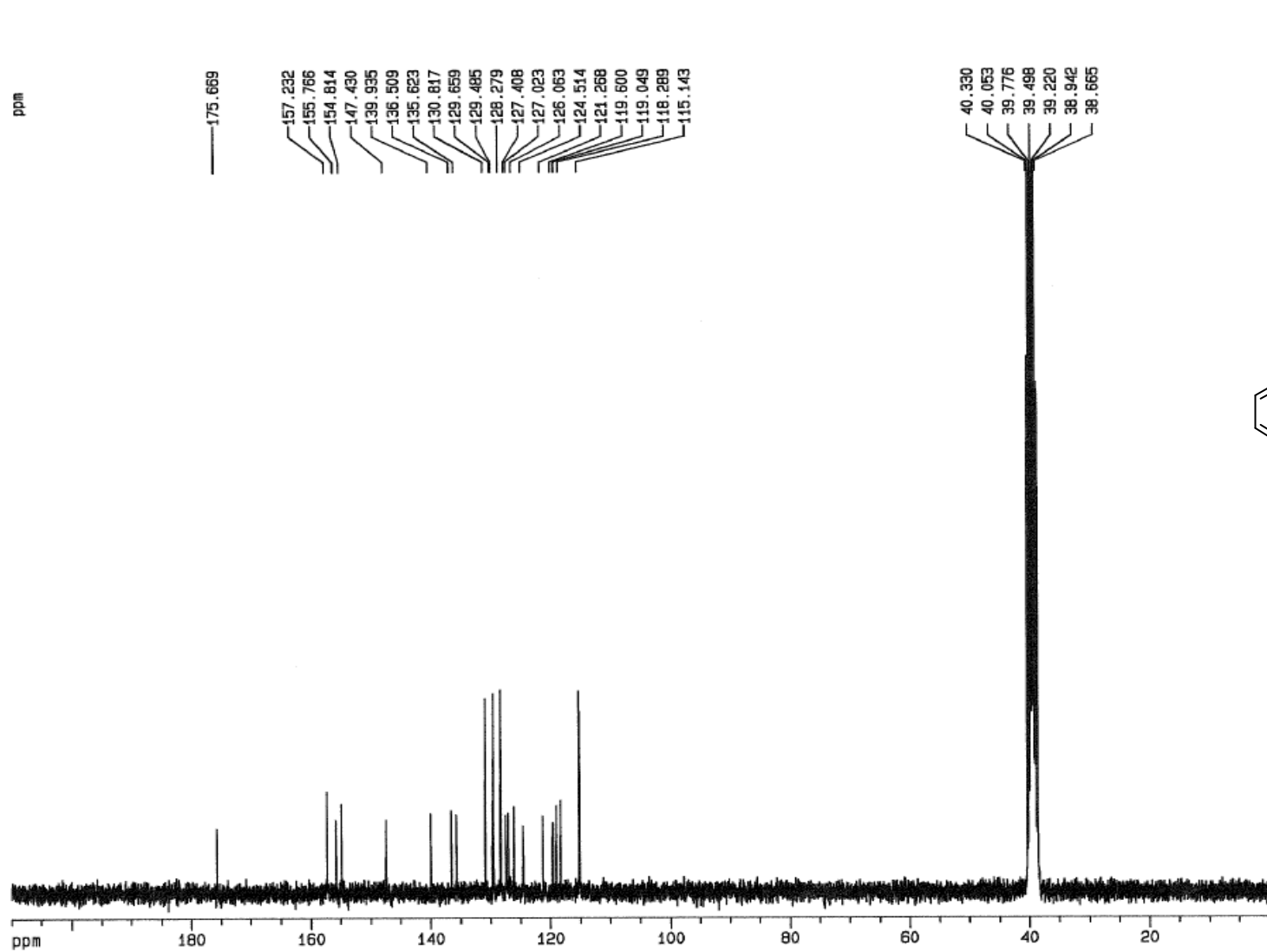






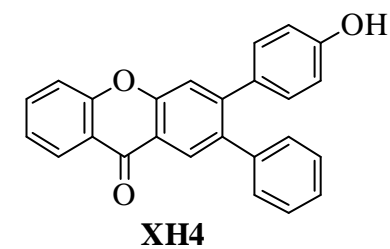
Current Data Parameters
NAME q2005-36
EXPNO 69
PROCNO 1
Date_ 20051012
RG 456.1
MUC1 1H
SF01 300.132000 MHz

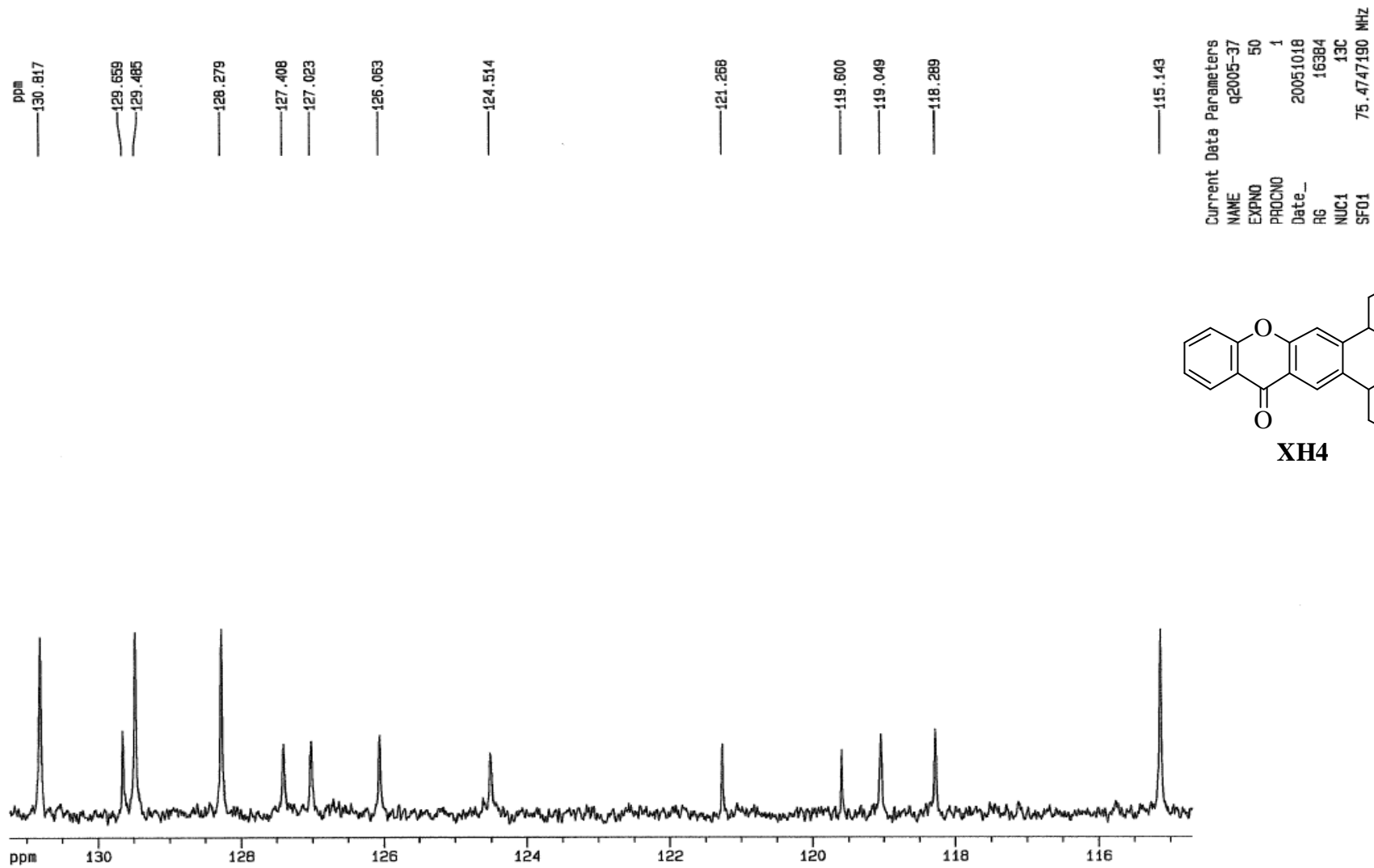


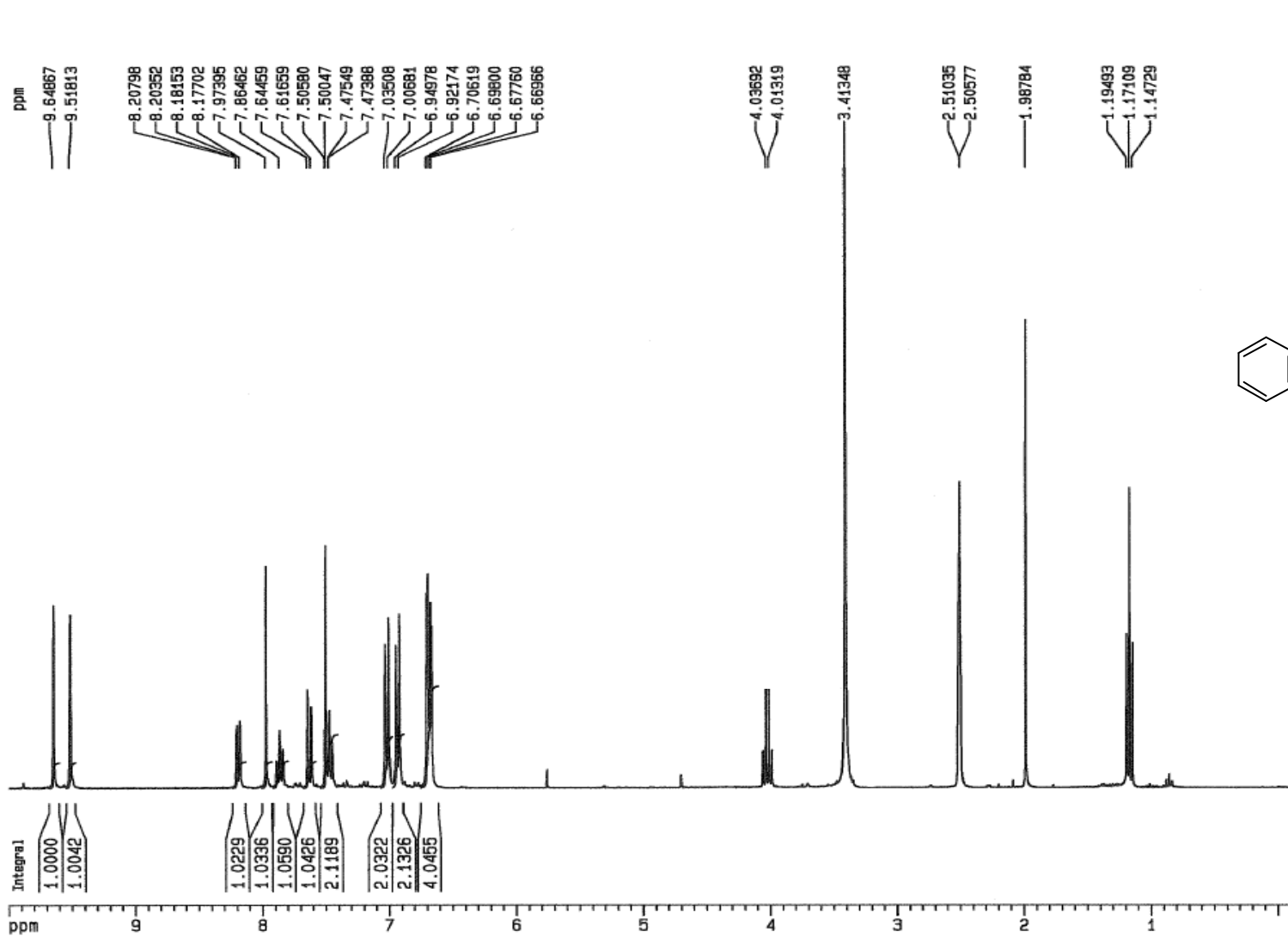


Current Data Parameters

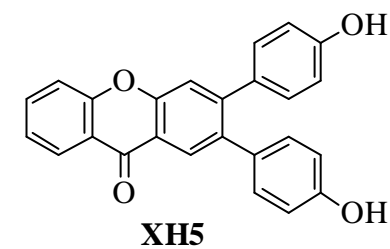
NAME	q2005-37
EXPNO	50
PROCNO	1
Date_	20051016
RG	16384
NUC1	13C
SF01	75.4747190 MHz

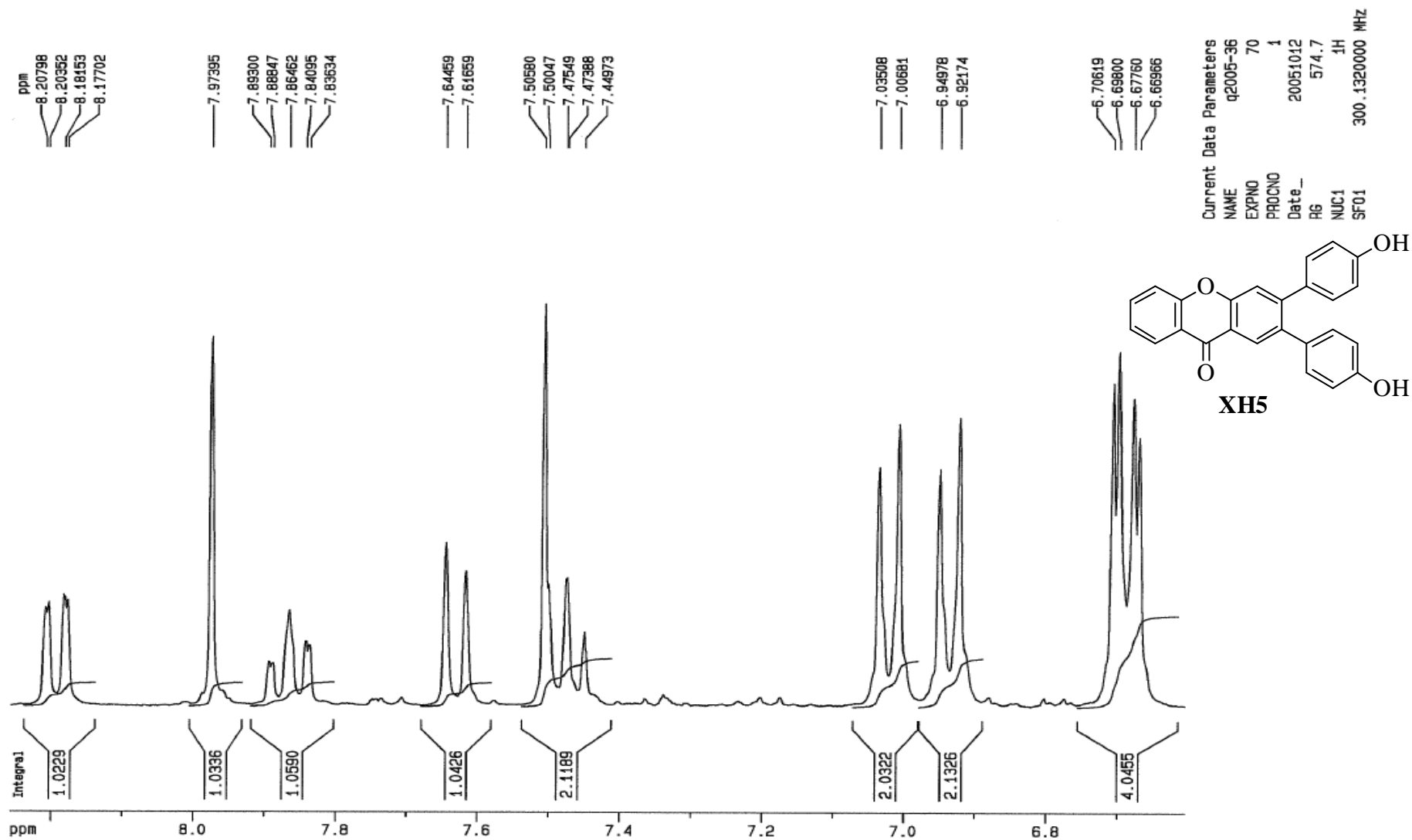


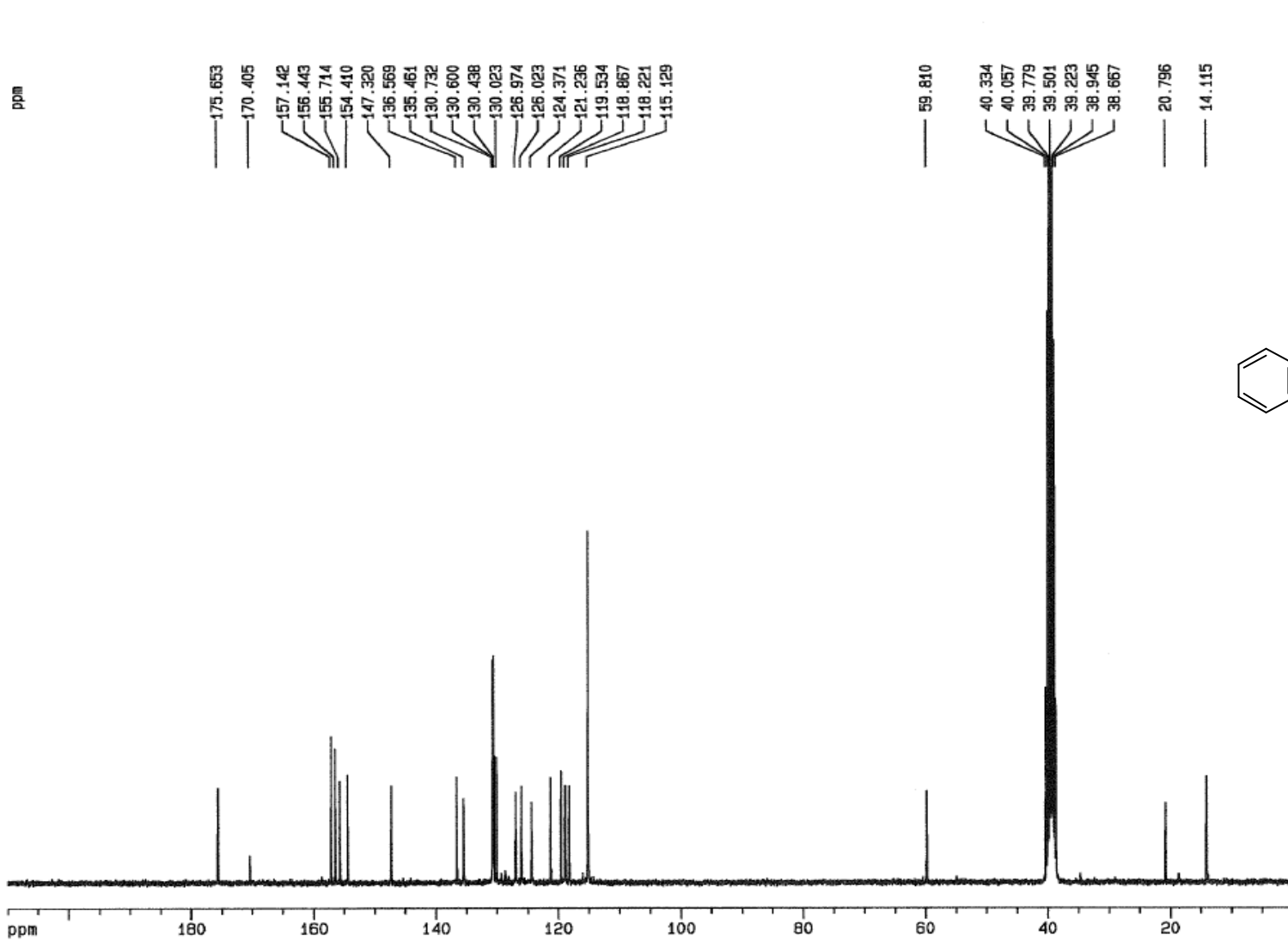




Current Data Parameters
NAME q2005-36
EXPNO 70
PROCNO 1
Date_ 20051012
RG 574.7
NUC1 1H
SFO1 300.132000 MHz

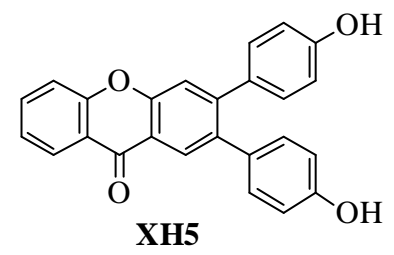


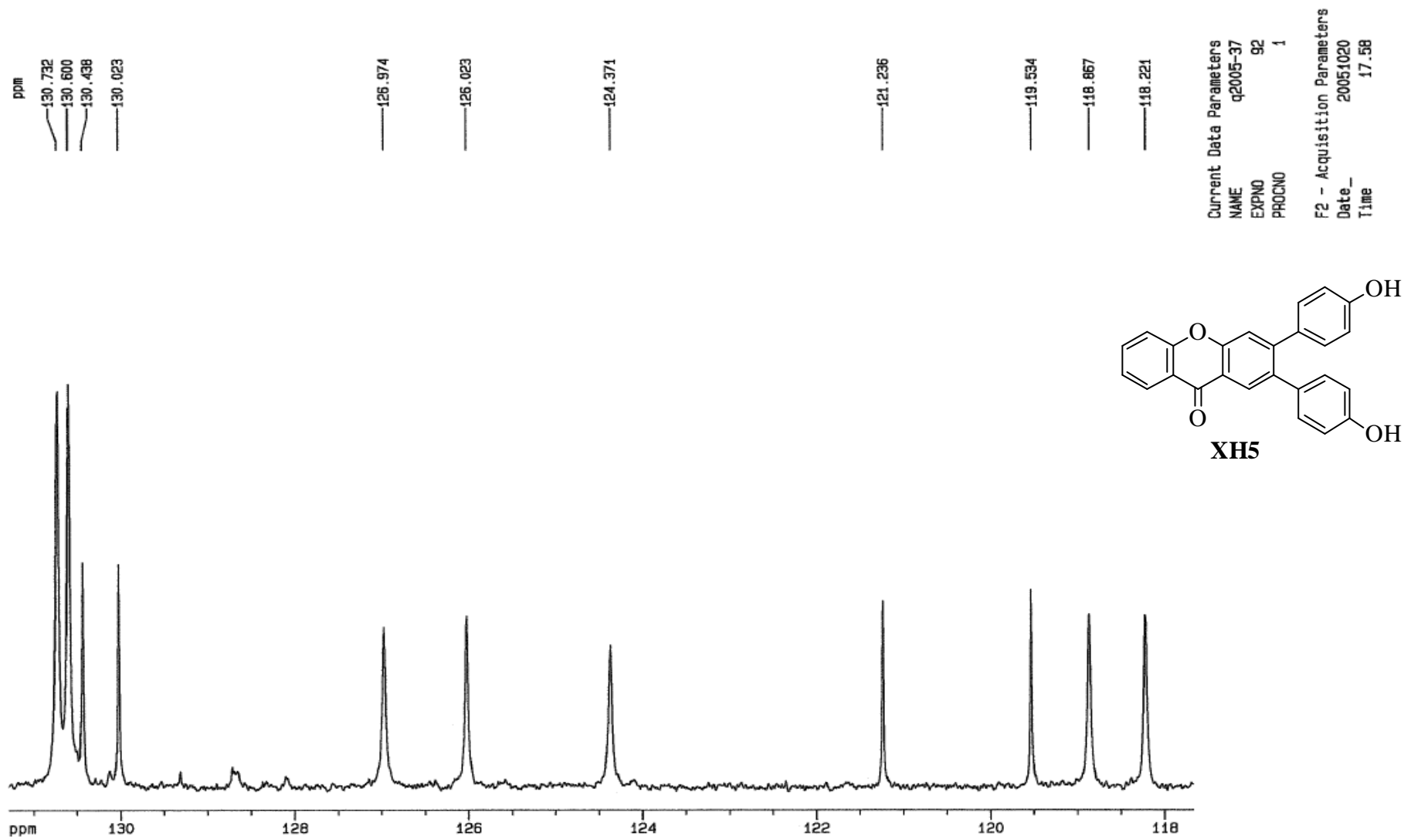


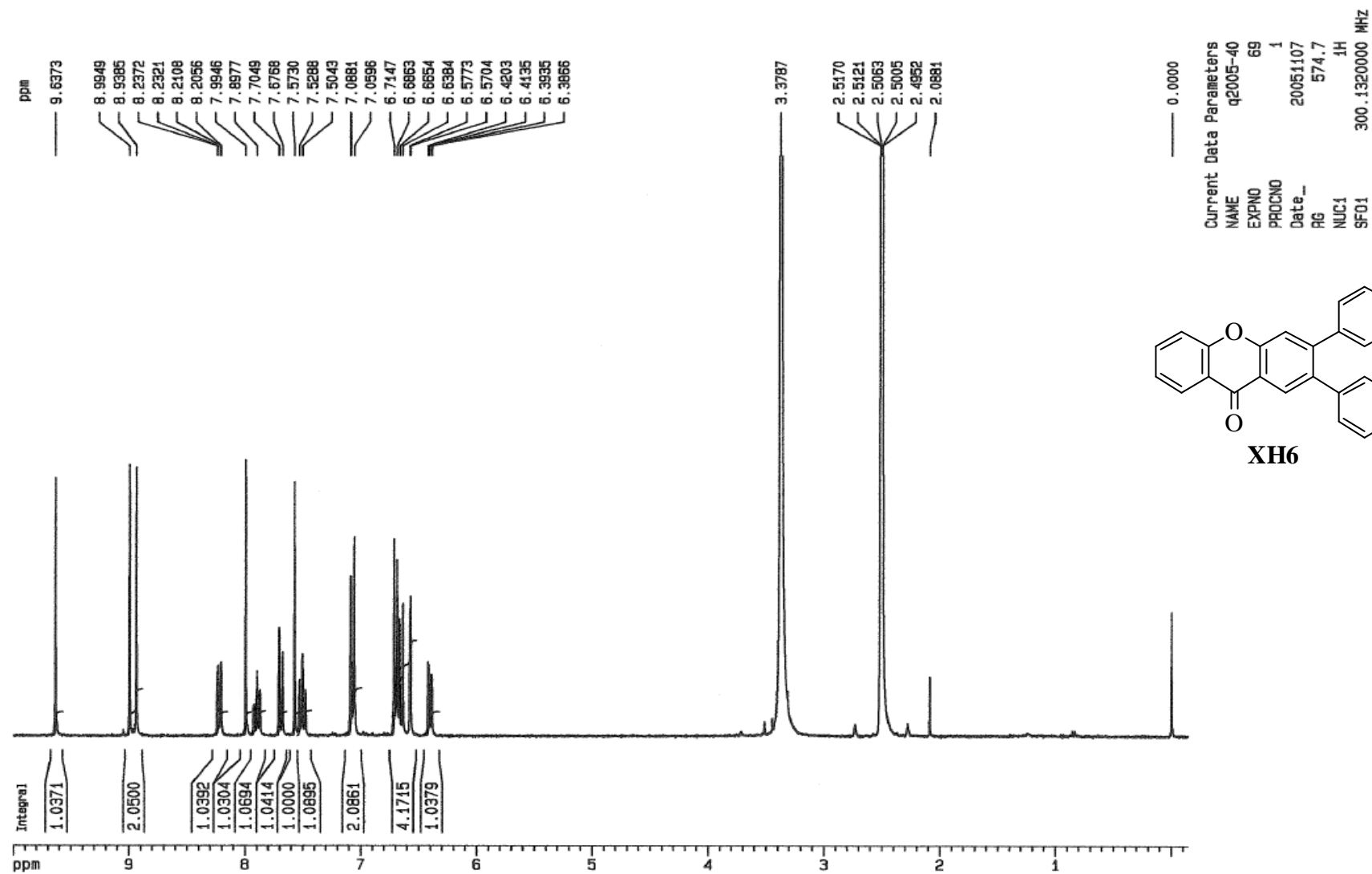


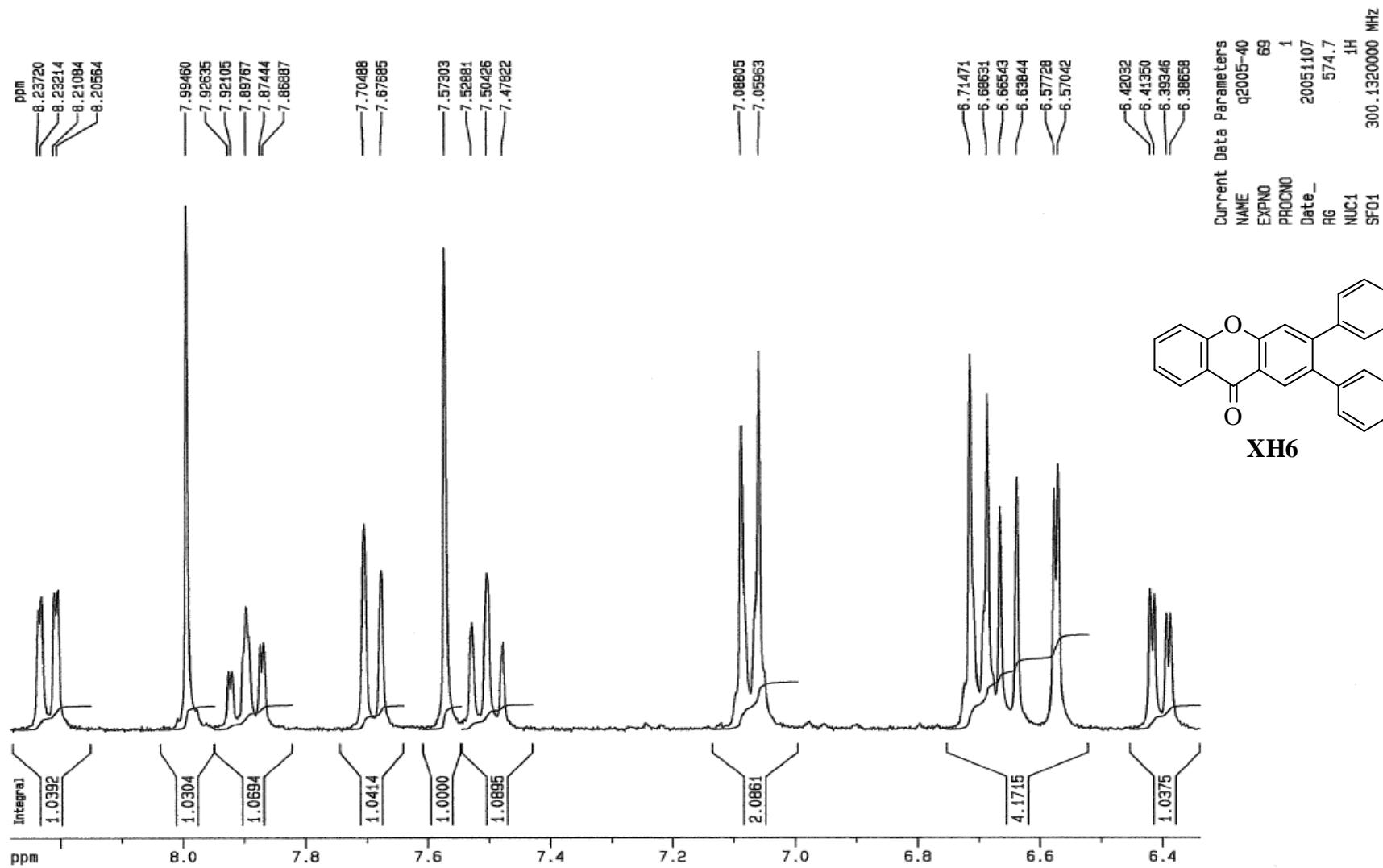
Current Data Parameters
NAME q2005-37
EXPNO 92
PROCNO 1

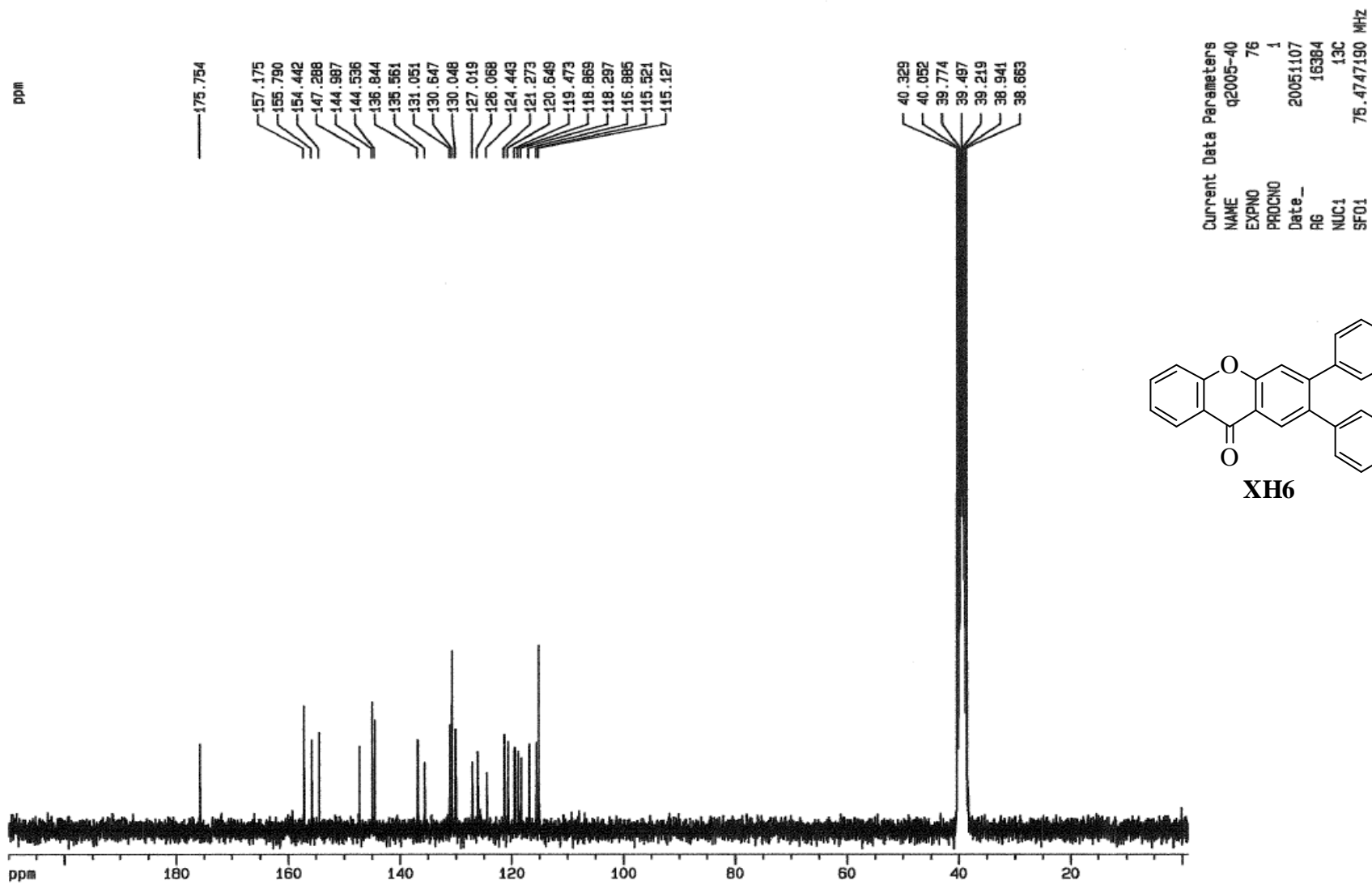
F2 - Acquisition Parameters
Date_ 20051020
Time 17.58











ppm
147.268

144.987
144.536

136.844
135.561

131.051
130.647
130.048

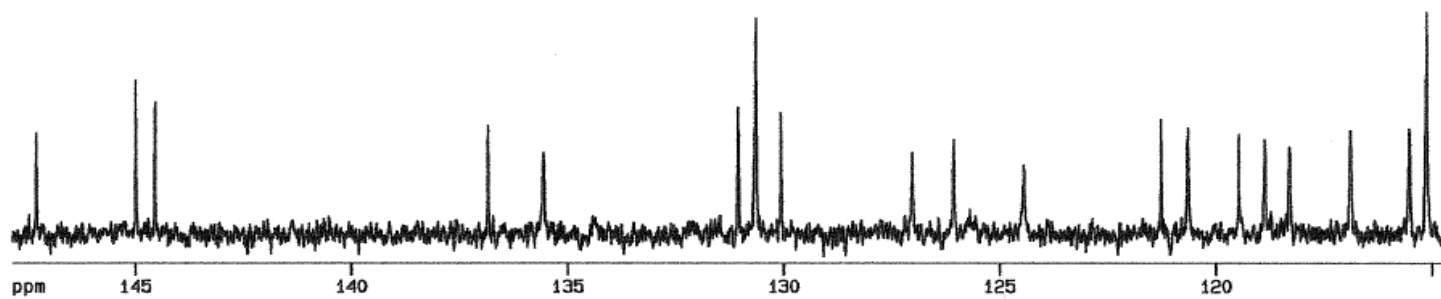
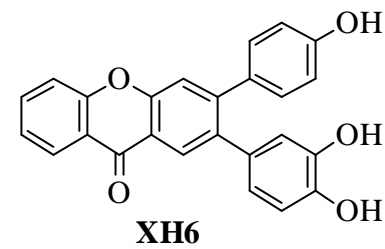
127.019
126.068
124.443

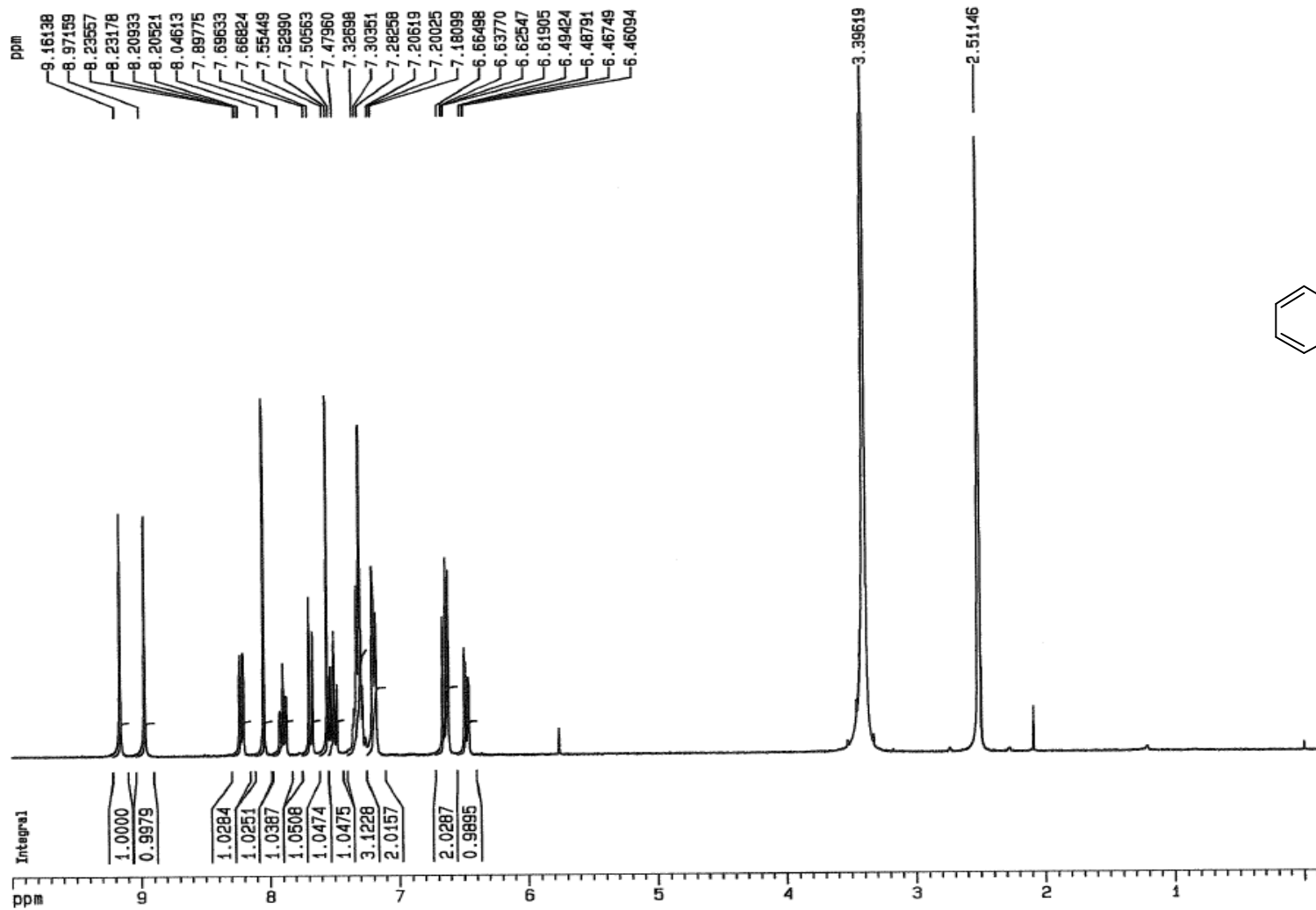
121.273
120.649

119.473
118.869
118.297

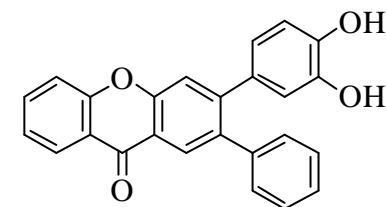
116.885
115.521
115.127

Current Data Parameters
NAME Q2005-40
EXPNO 76
PROCNO 1
Date_ 20051107
RG 16384
NUC1 13C
SFO1 75.4747190 MHz

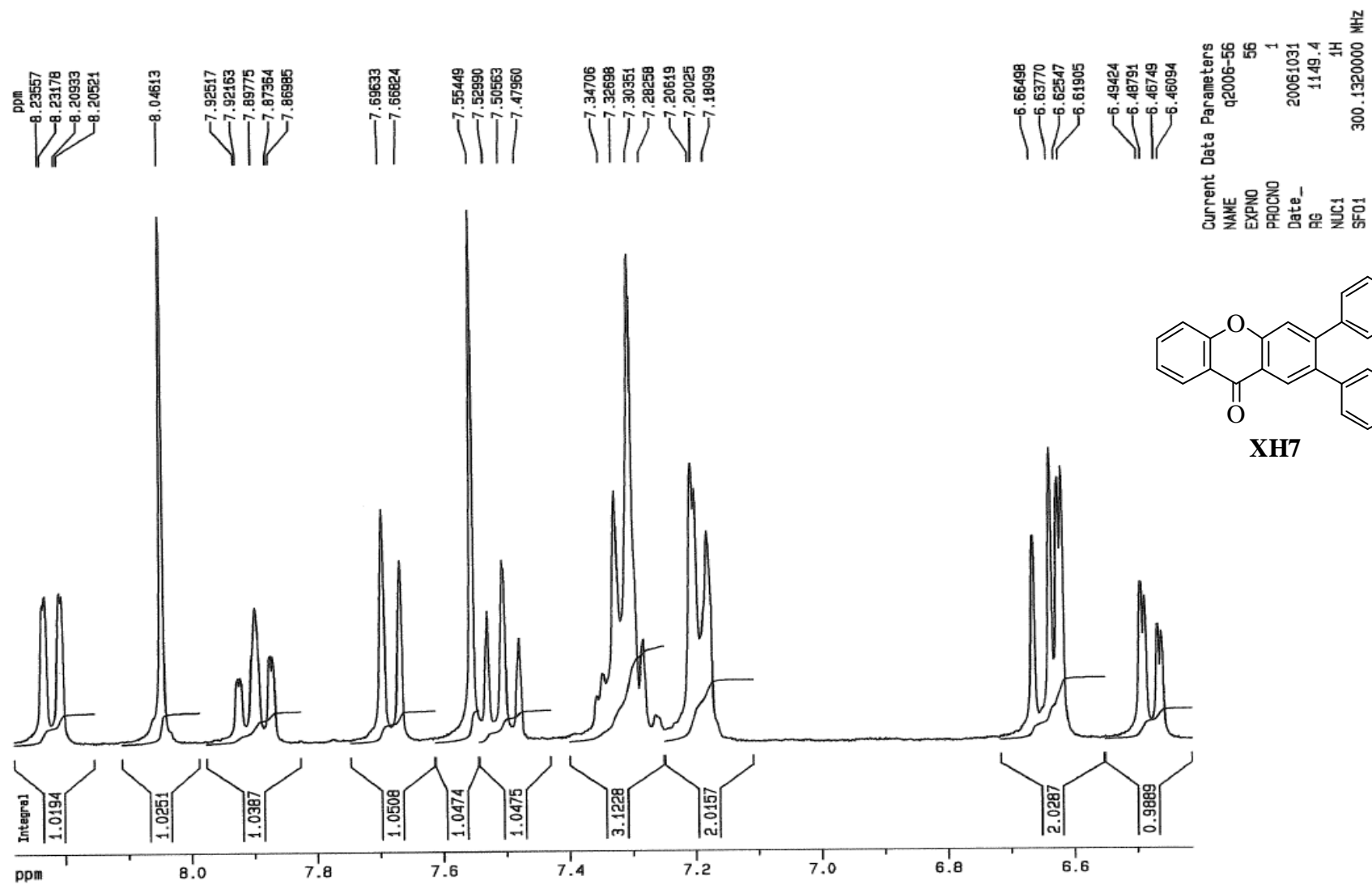


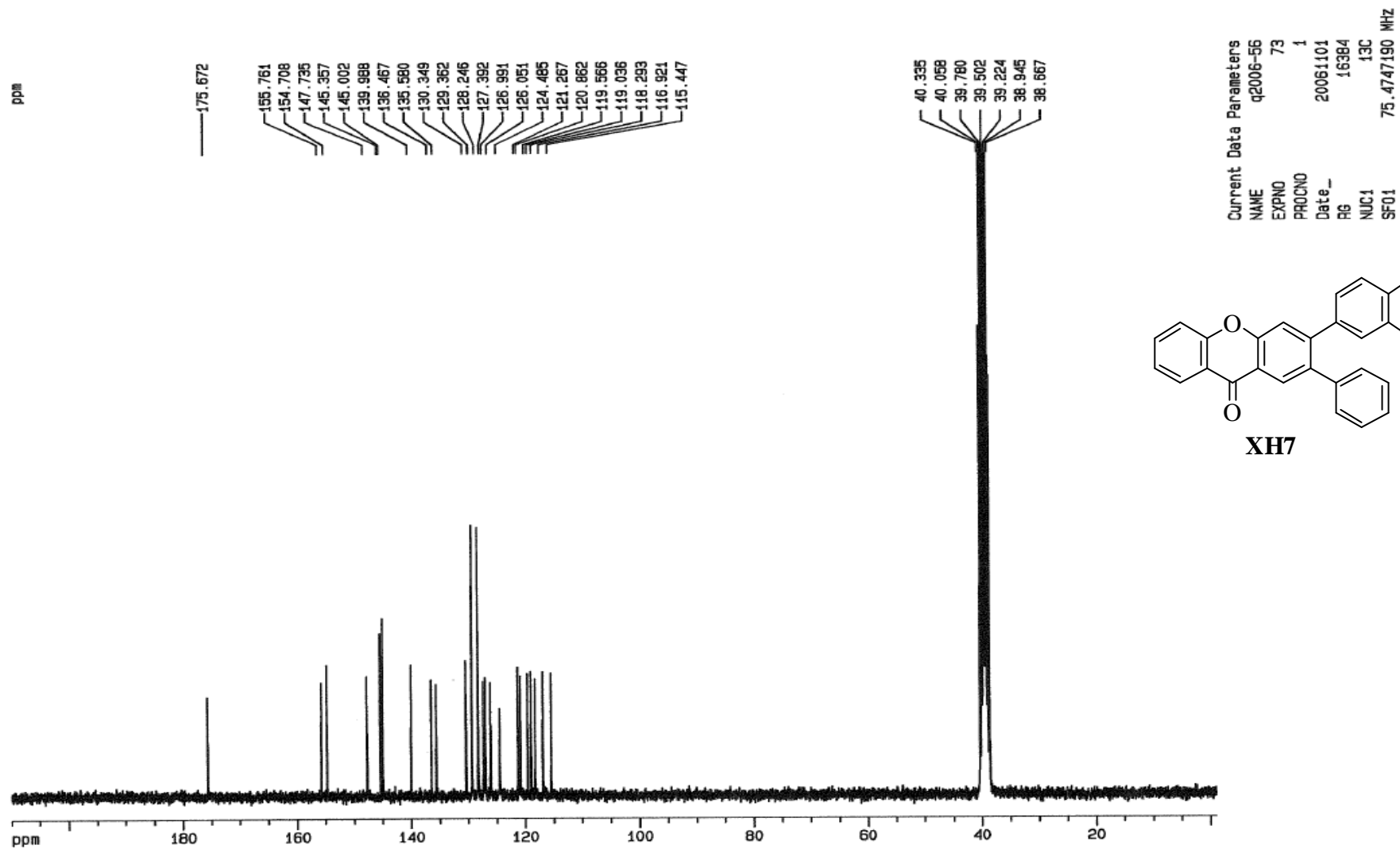


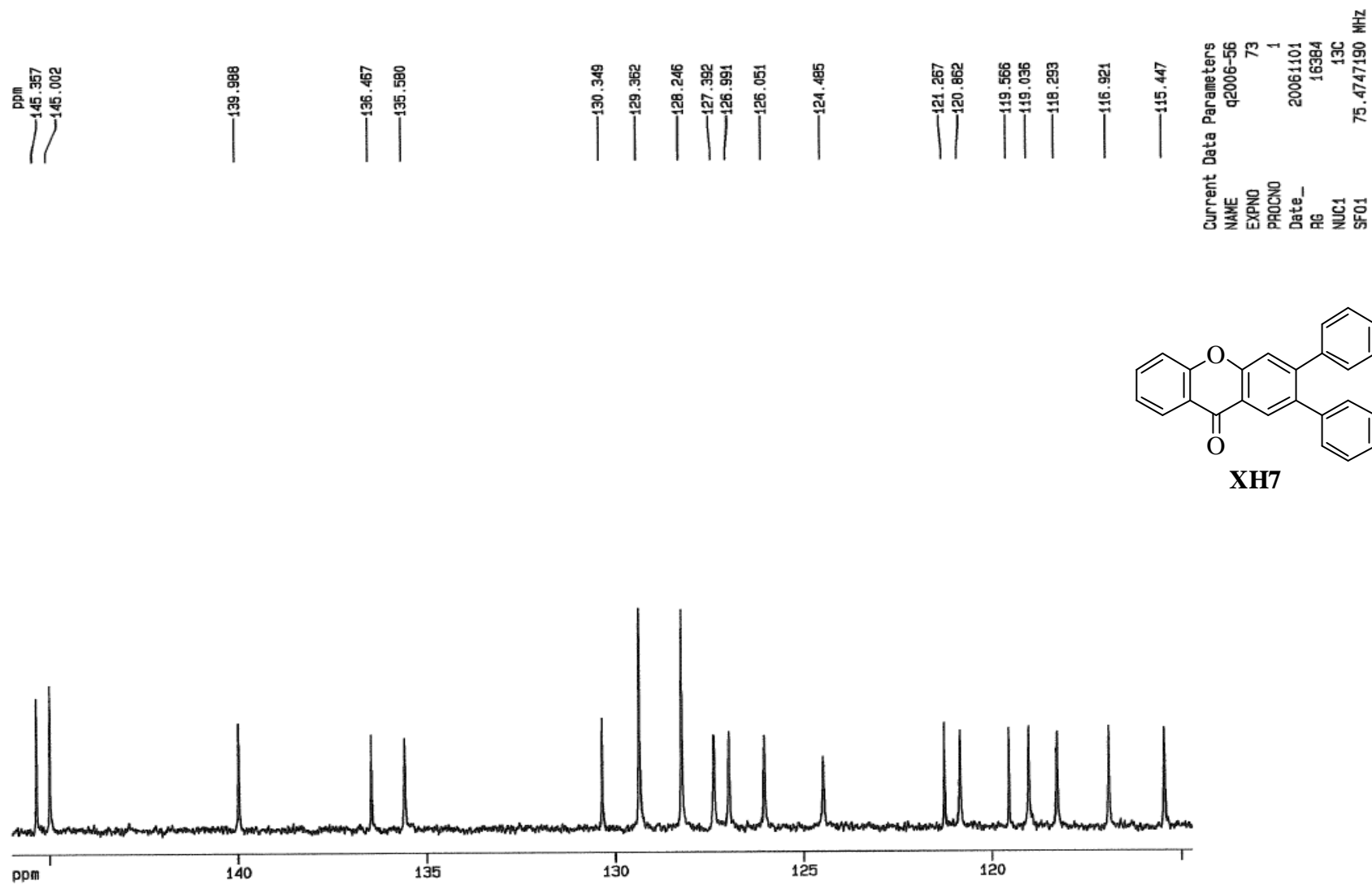
Current Data Parameters
NAME q2006-56
EXPNO 56
PROCNO 1
Date_ 20061031
RG 1149.4
NUC1 1H
SF01 300.132000 MHz

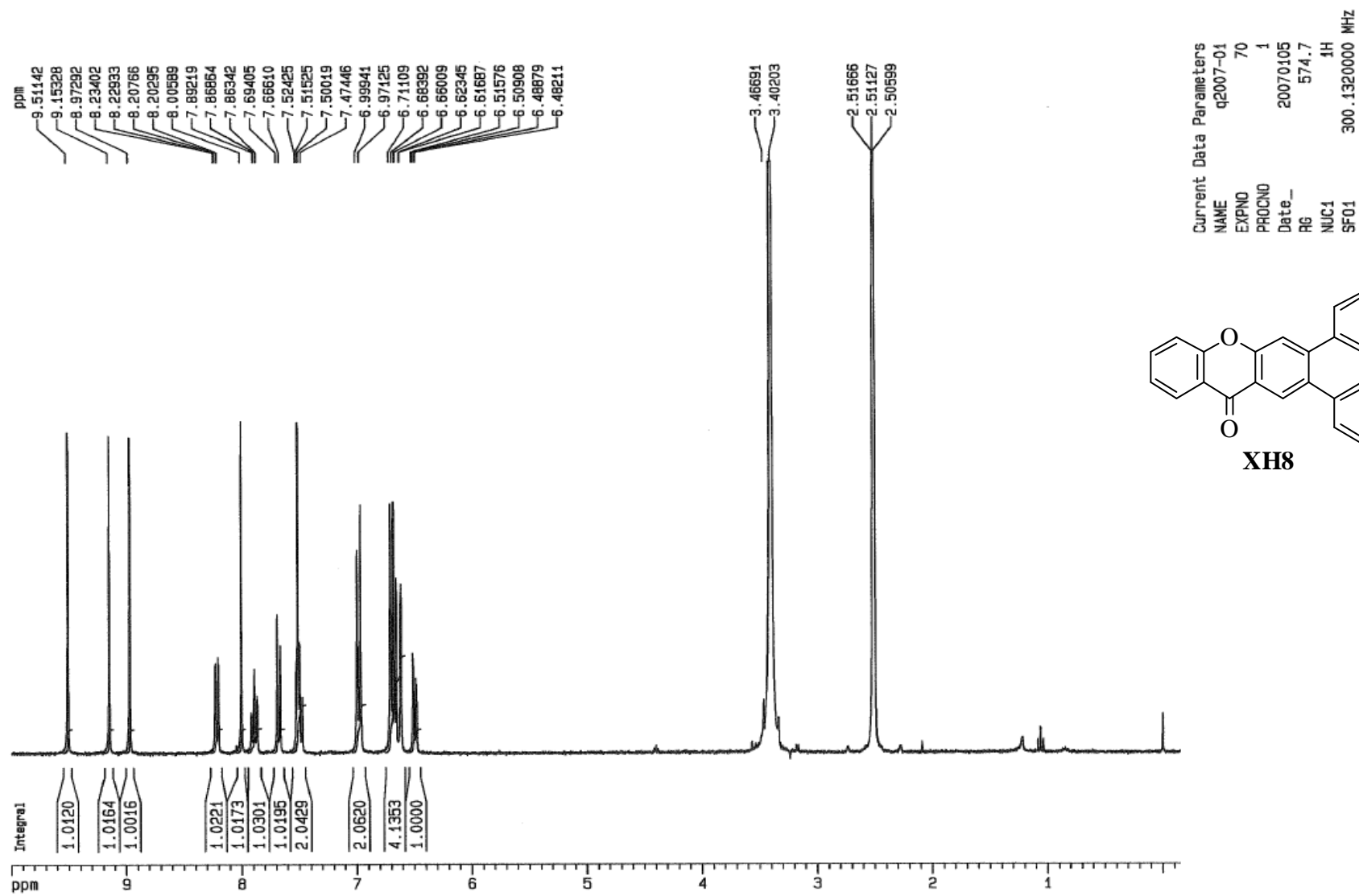


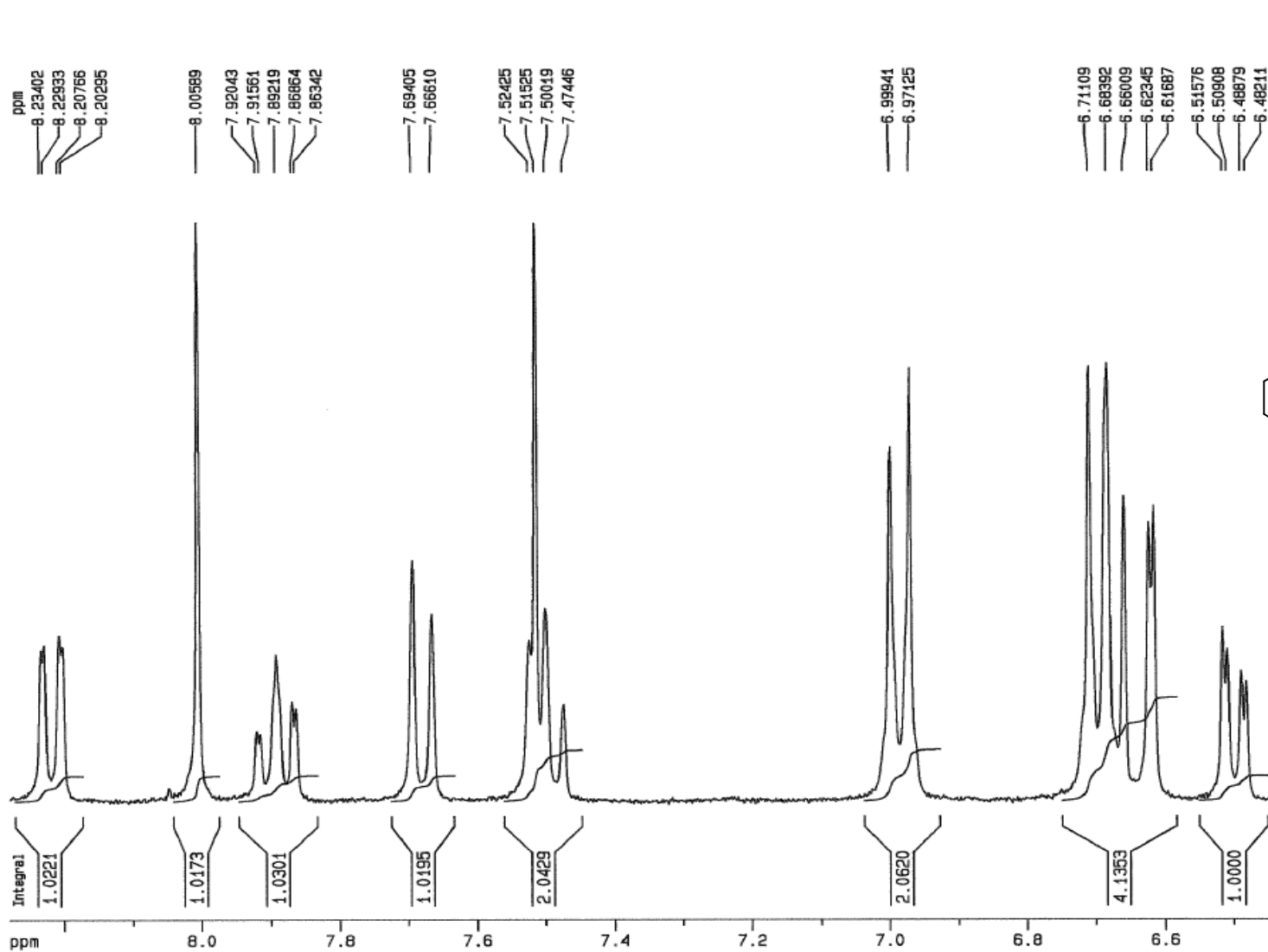
XH7



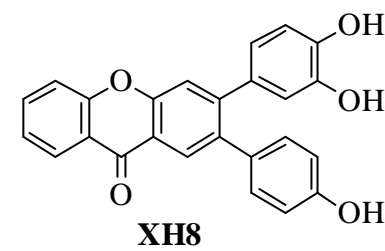


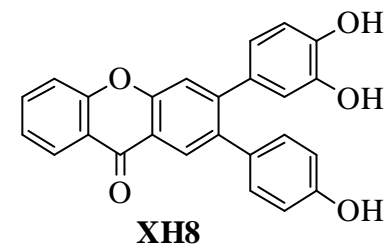
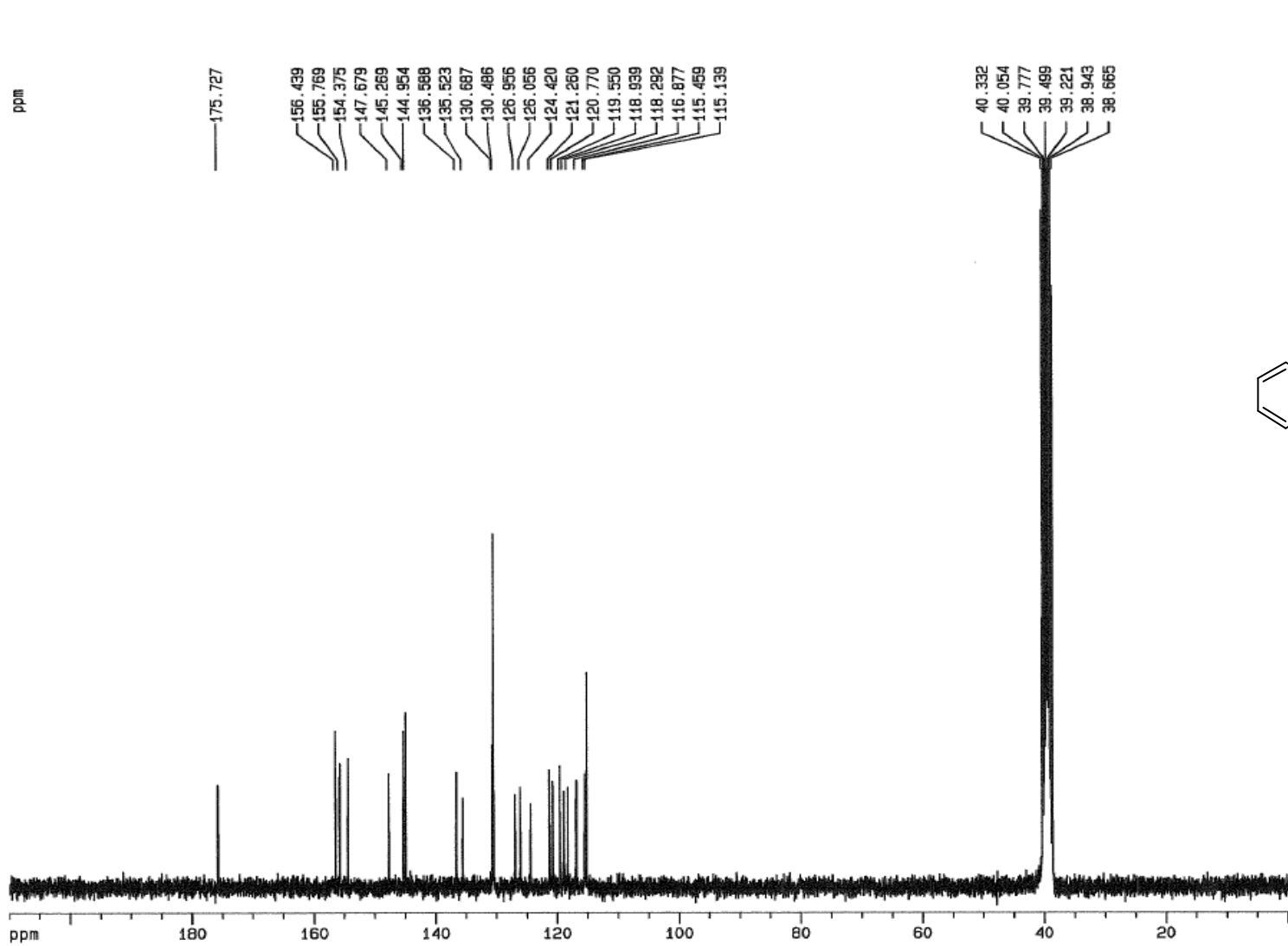


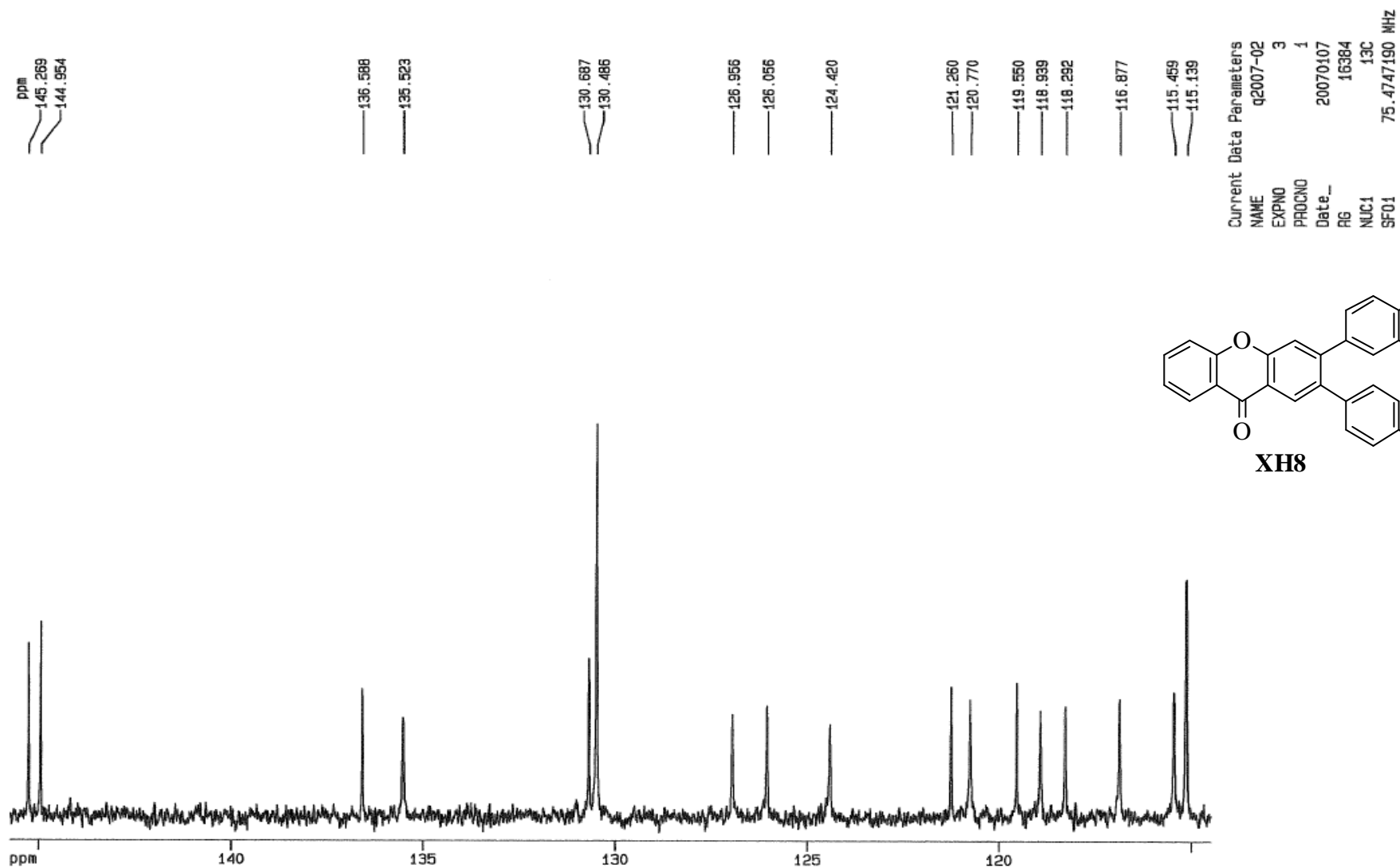


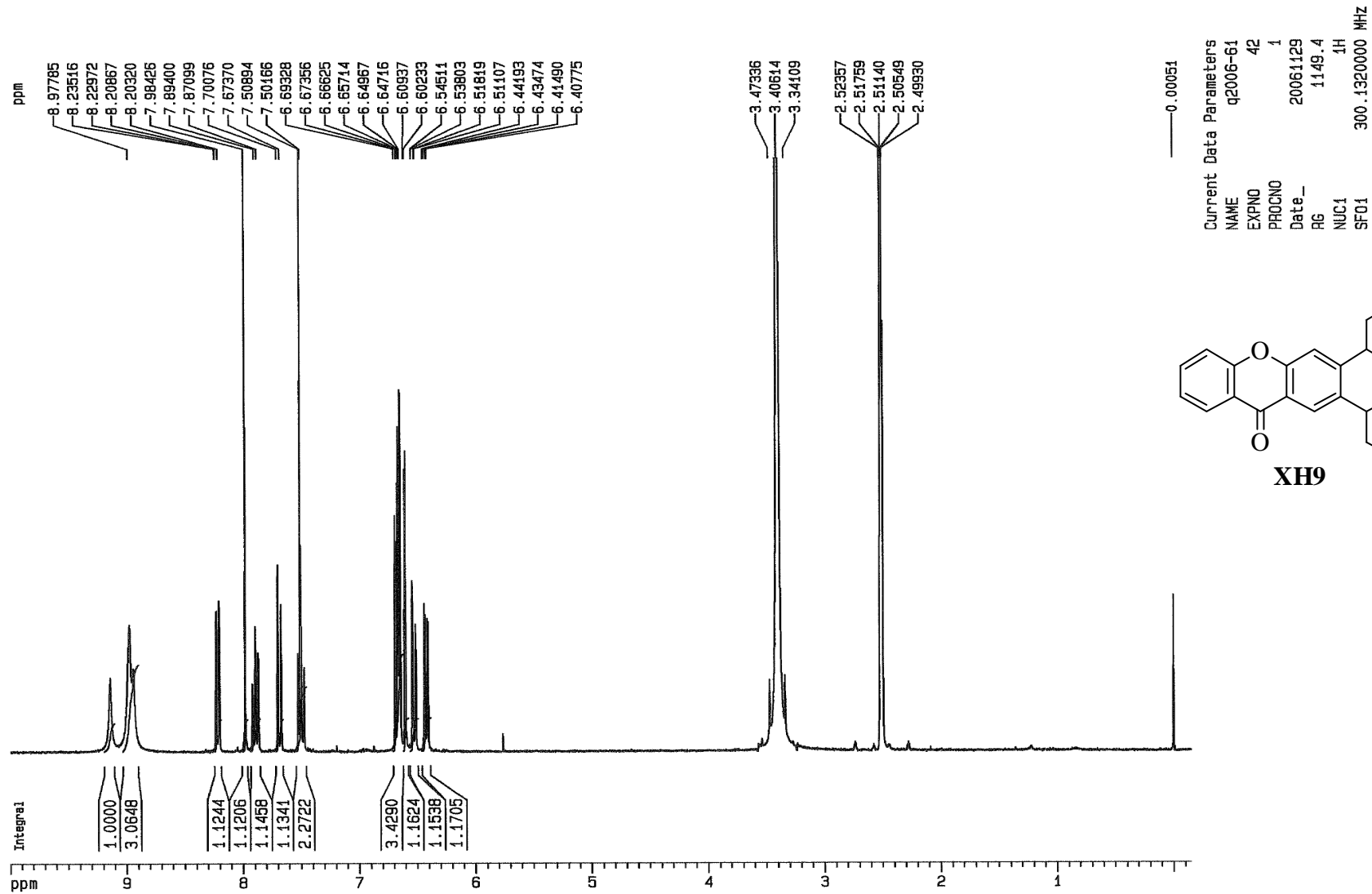


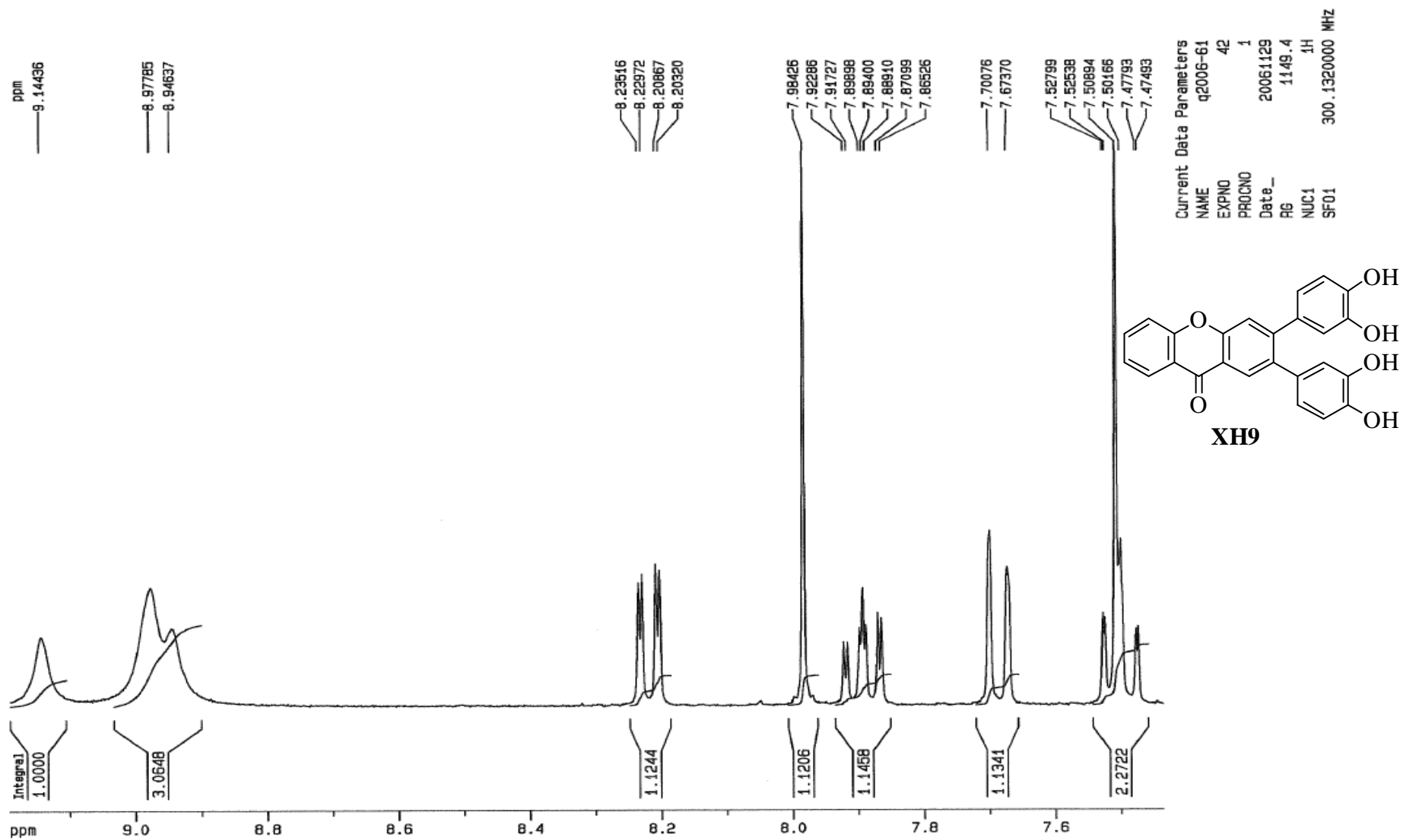
Current Data Parameters
NAME q2007-01
EXPNO 70
PROCNO 1
Date_ 20070105
RG 574.7
NUC1 1H
SF01 300.132000 MHz

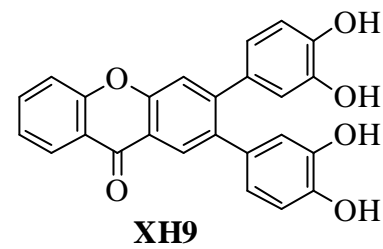
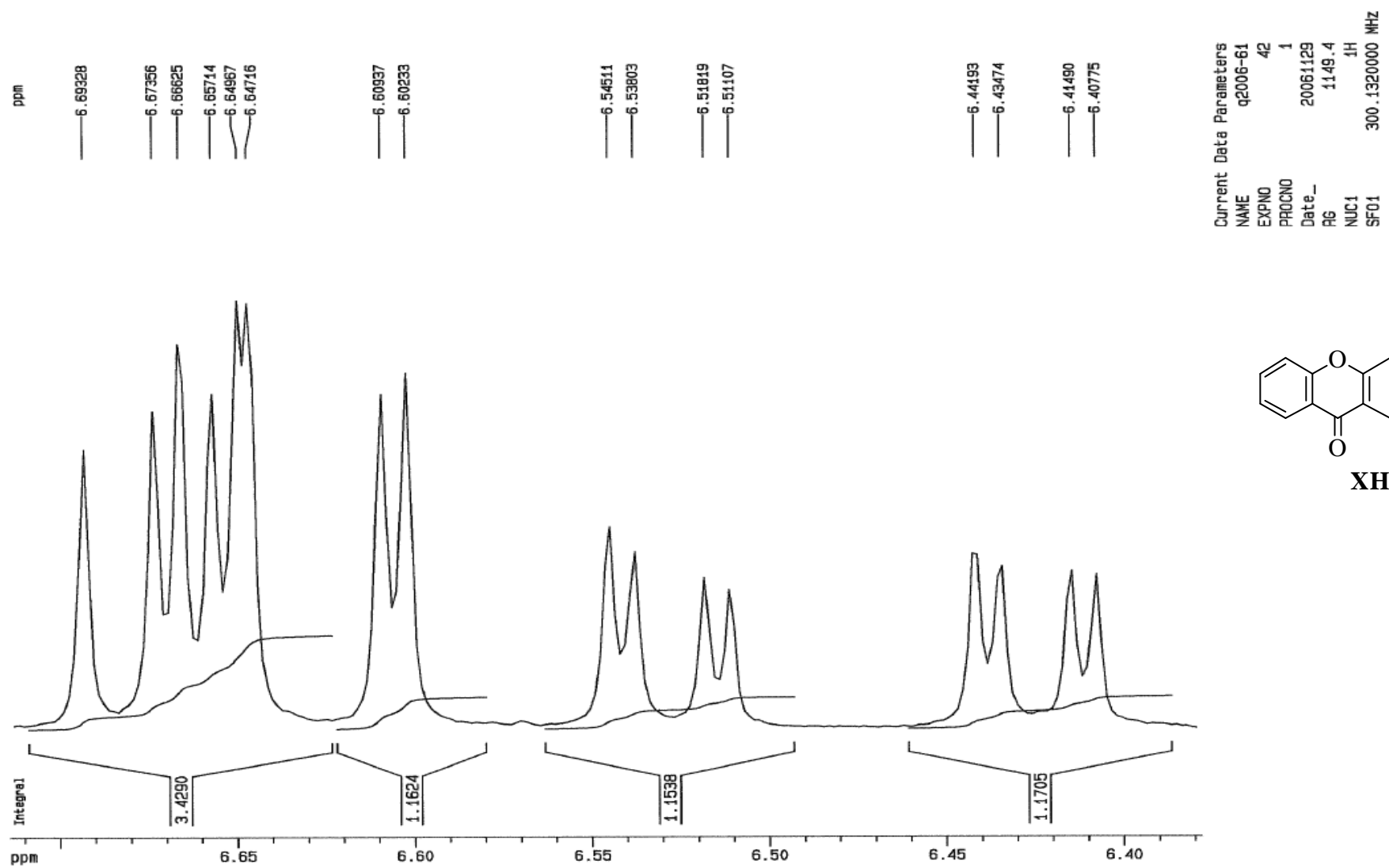


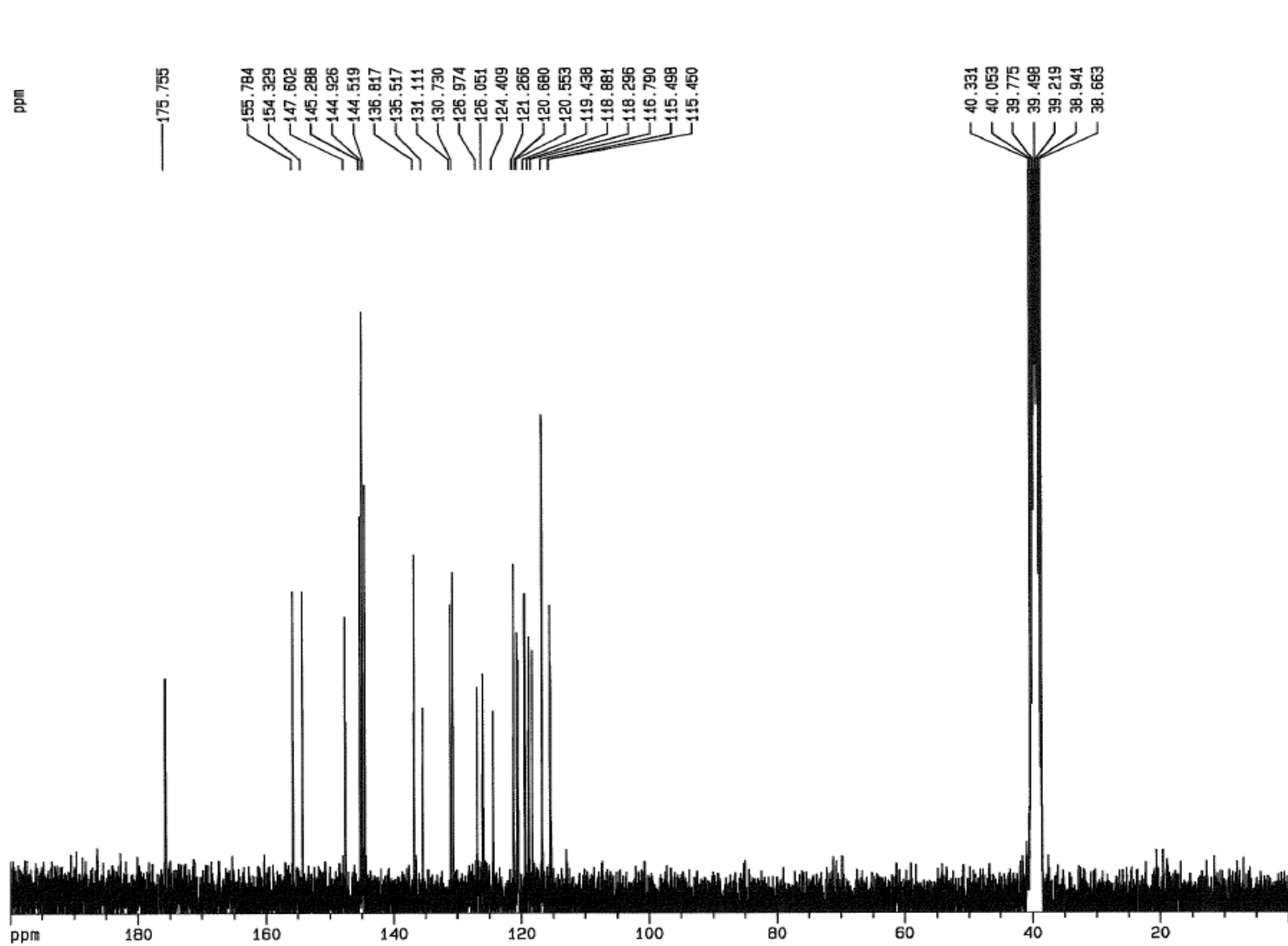












Current Data Parameters
NAME q2006-61
EXPNO 43
PROCNO 1
Date_ 20061129
RG 16384
NUC1 13C
SF01 75.4747190 MHz

