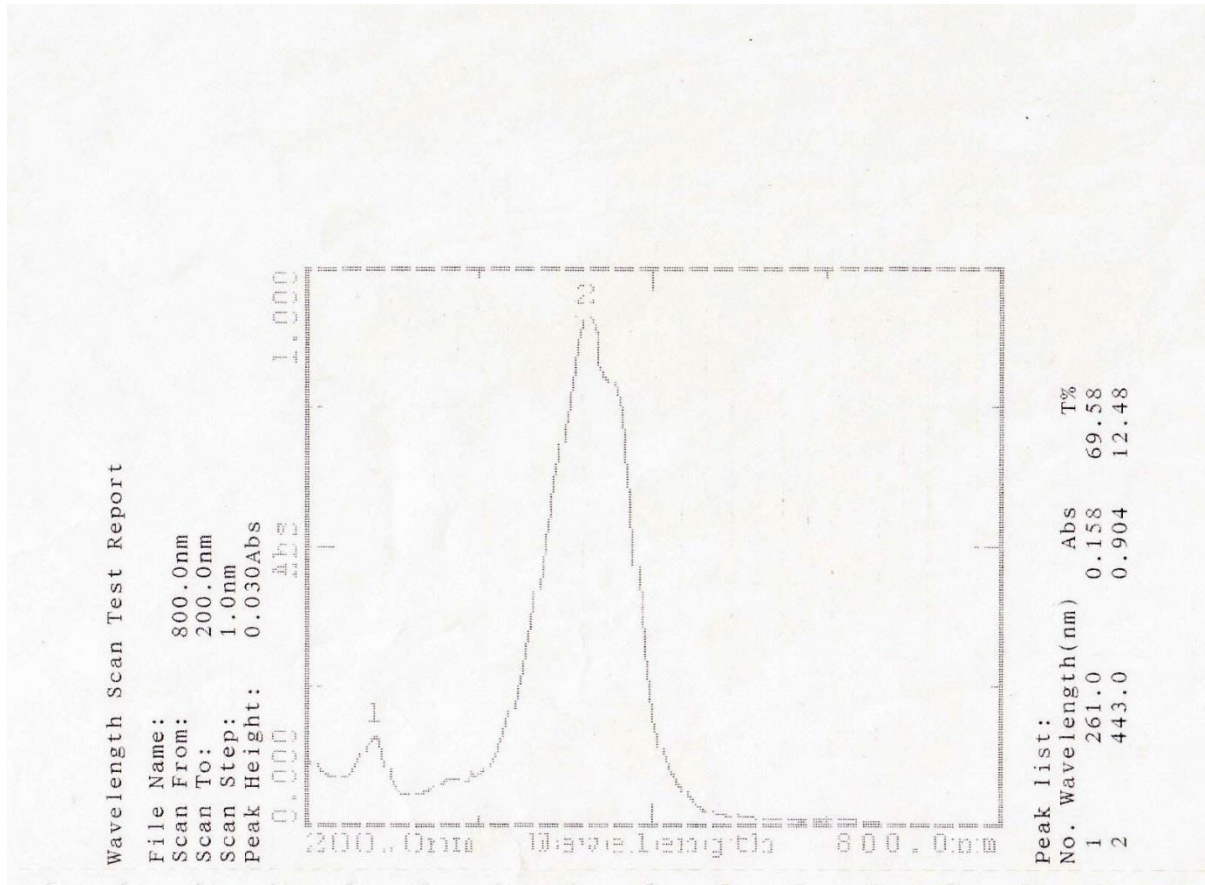


UV/Visible spectra - HPLC analysis - HNMR spectra - CNMR spectra

1. UV/Visible spectra of 0.0001 % (1 mg/L) of crocin (190-800 nm)

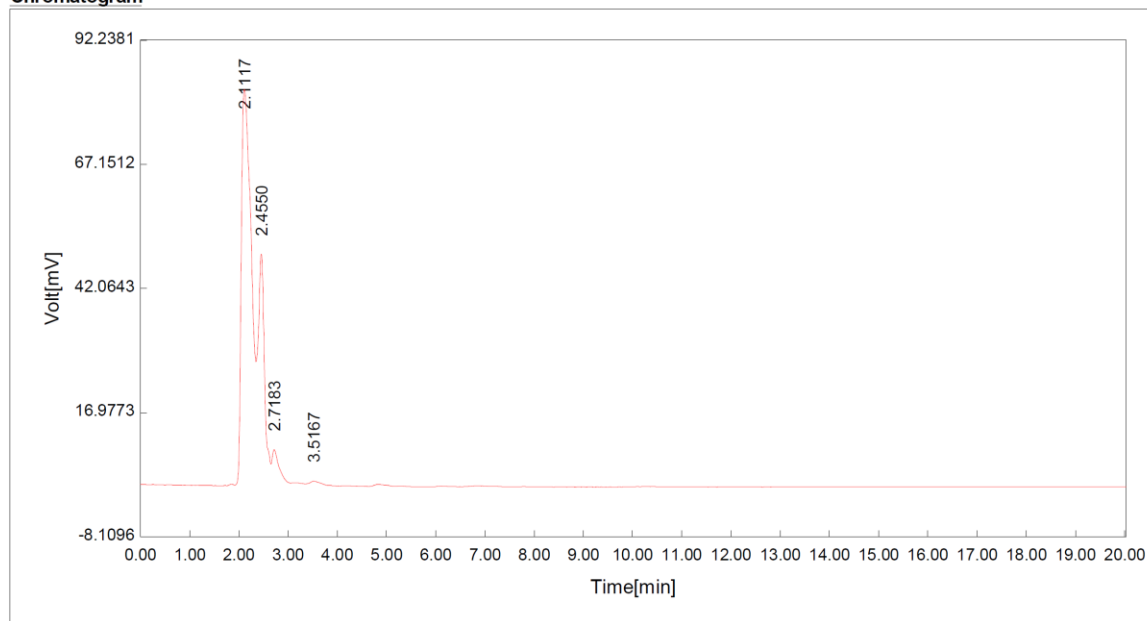


2. HPLC analysis of crocin at 443 nm (concentration: 0.0001 % or 1 mg/L); the main three peaks is related to the crocin-1 (alpha-crocin), crocin-2 and crocin-3 respectively.

Analysis Information

File Name : cc004.raw
 Sample Name : 201704301210071
 Analysis Time : 30/ 04/ 2017 12: 10: 07
 Print Time : 30 / 4 / 2017, 12 : 30 : 11

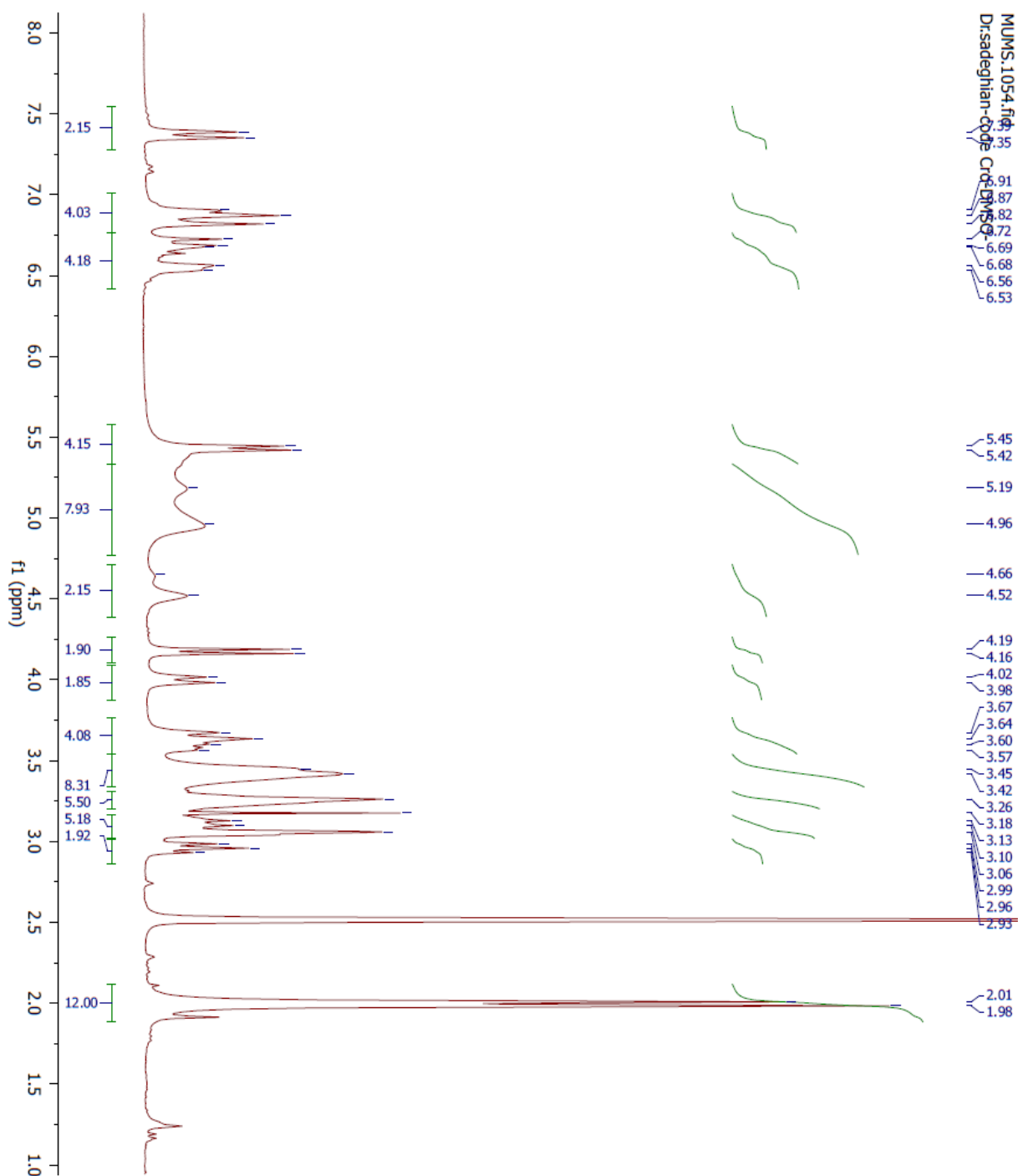
Chromatogram



Result

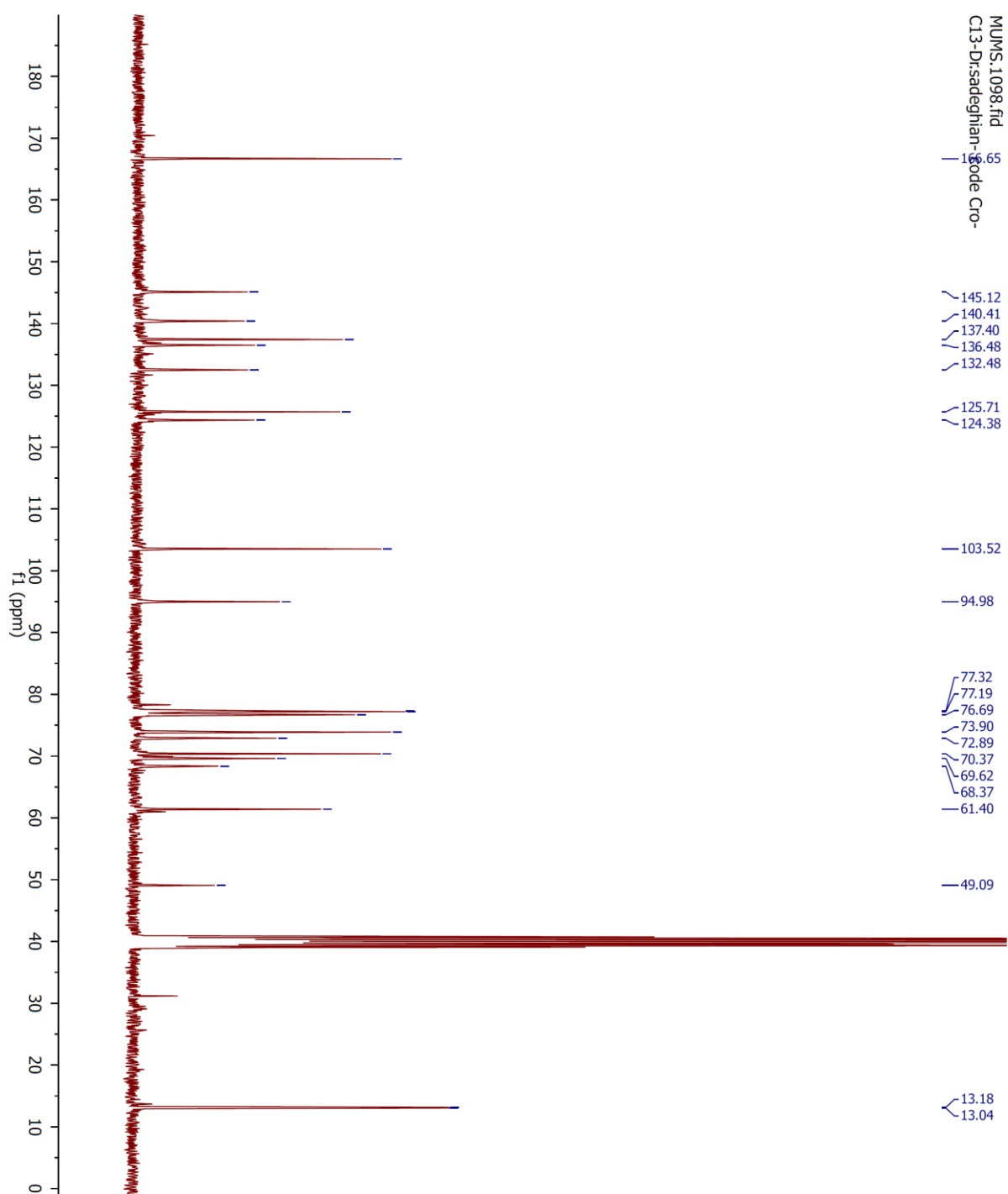
Num	RT[min]	Area[mV*s]	Type	Width[sec]	Area%
1	2.1117	1119.6949	BB	24.9000	68.5169
2	2.4550	444.0173	BB	18.2000	27.1705
3	2.7183	68.8590	VB	22.3000	4.2137
4	3.5167	1.6158	BB	9.3000	0.0989
Sum		1634.1870			

3. HNMR spectra of crocin in DMSO-d₆



Parameter	Value
Title	MUMS.1054.fid
Origin	Brucker Biospin GmbH
Spectrometer	spect
Author	
Solvent	DMSO
Temperature	289.5
Pulse Sequence	zg30
Experiment	1D
Probe	5 mm PABBO BB-1H / D-Z-GRD Z104275 / 0252
Number of Scans	96
Receiver Gain	127
Relaxation Delay	1.0000
Pulse Width	15.0000
Presaturation	
Frequency	
Acquisition Time	5.4395
Acquisition Date	2017-02-19T11:17:00
Modification Date	2017-02-19T11:17:38
Spectrometer	300.85
Frequency	
Spectral Width	6024.1
Lowest Frequency	-1153.8
Nucleus	¹ H

4. CNMR spectra of crocin in DMSO-d6



Parameters

Parameter	Value
Title	MUMS_1098.fid
Origin	Brucker Biospin GmbH
Spectrometer	spect
Author	
Solvent	DMSO
Temperature	291.1
Pulse Sequence	zgpg30
Experiment	1D
Probe	5 mm PABBO BB-1H/ D Z-GRD Z104275/0252
Number of Scans	6000
Receiver Gain	202
Relaxation Delay	2.0000
Pulse Width	10.0000
Presaturation	
Frequency	
Acquisition Time	1.8088
Acquisition Date	2017-02-20T20:43:00
Modification Date	2017-02-20T20:43:48
Spectrometer Frequency	75.66
Spectral Width	18115.9
Lowest Frequency	-1493.8
Nucleus	¹³ C