

Design, Synthesis, in Vitro and in Vivo Biological Evaluation of 2-Amino-3-Aroylbenzo[*b*]furan Derivatives as Highly Potent Tubulin Polymerization Inhibitors

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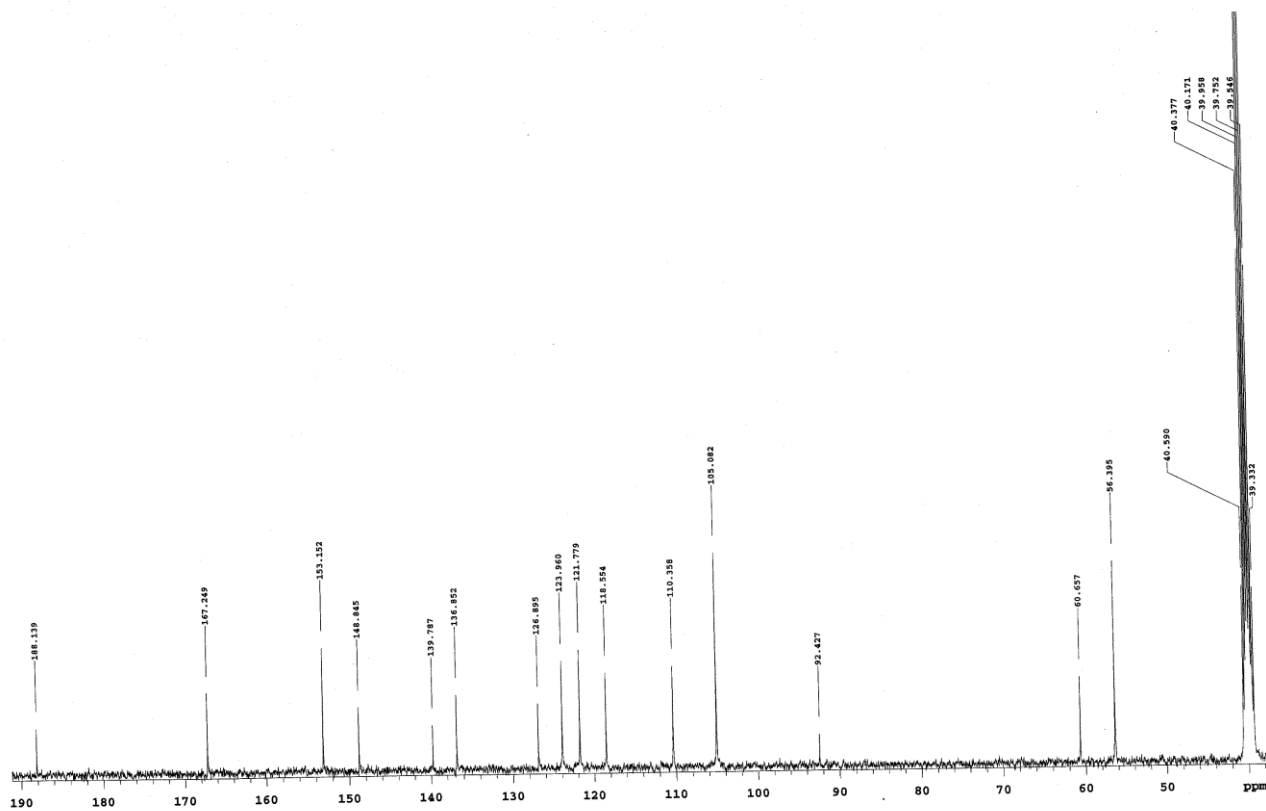
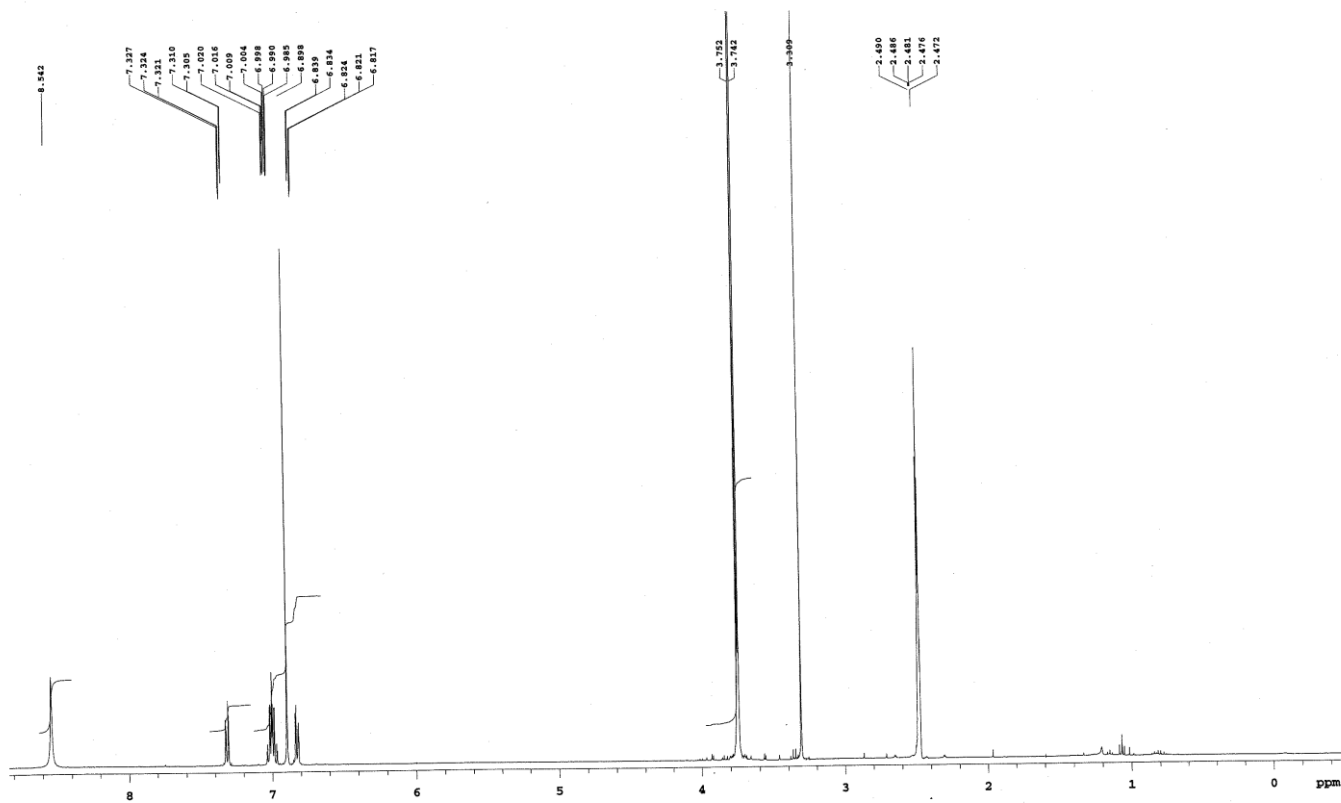
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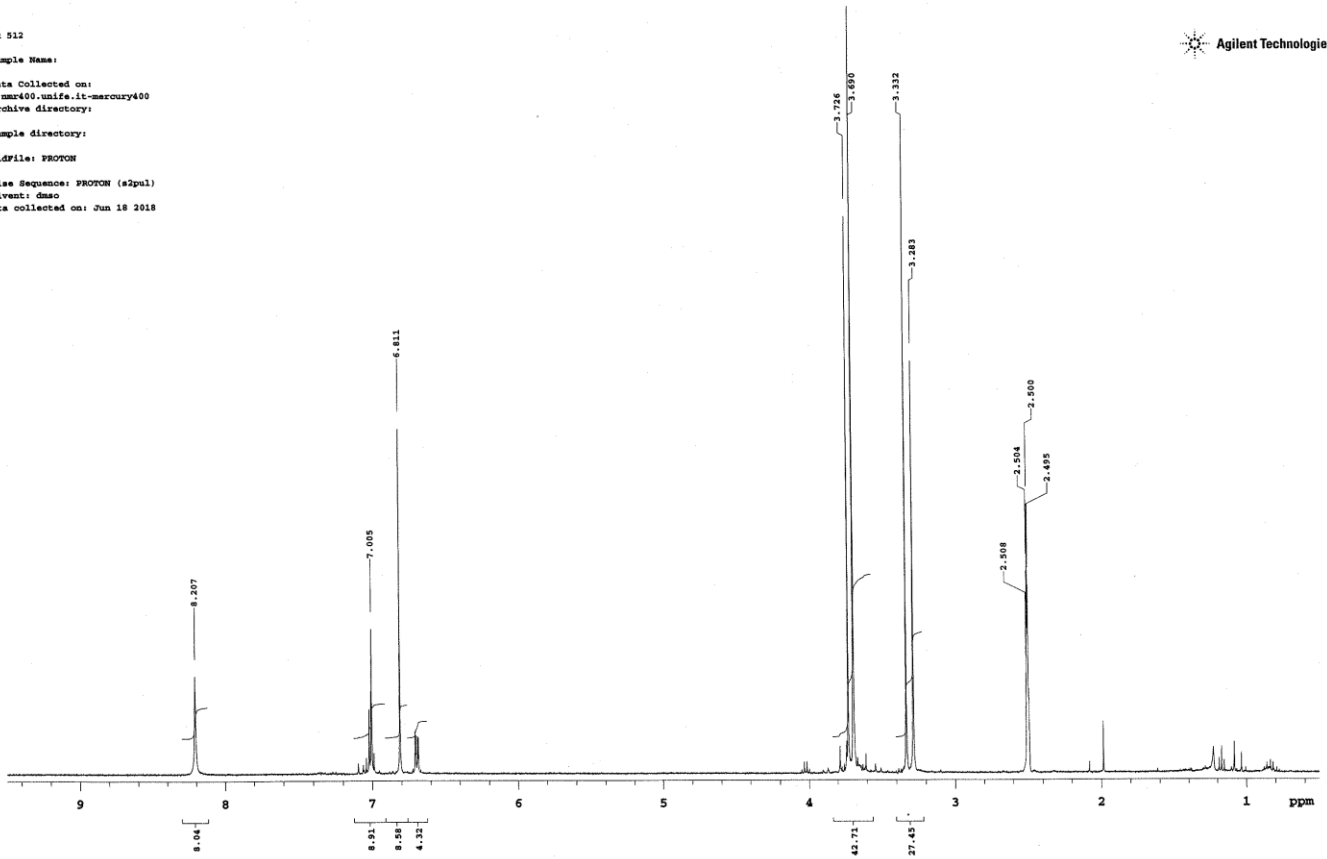


¹H-NMR (400 MHz, *d*₆-DMSO) and ¹³C-NMR (100 MHz, *d*₆-DMSO) spectra of compound 4a

TER 512

Sample Name:
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
FidFile: PROTON
Pulse Sequence: PROTON (s2pul)
Solvent: dmsc
Data collected on: Jun 18 2018

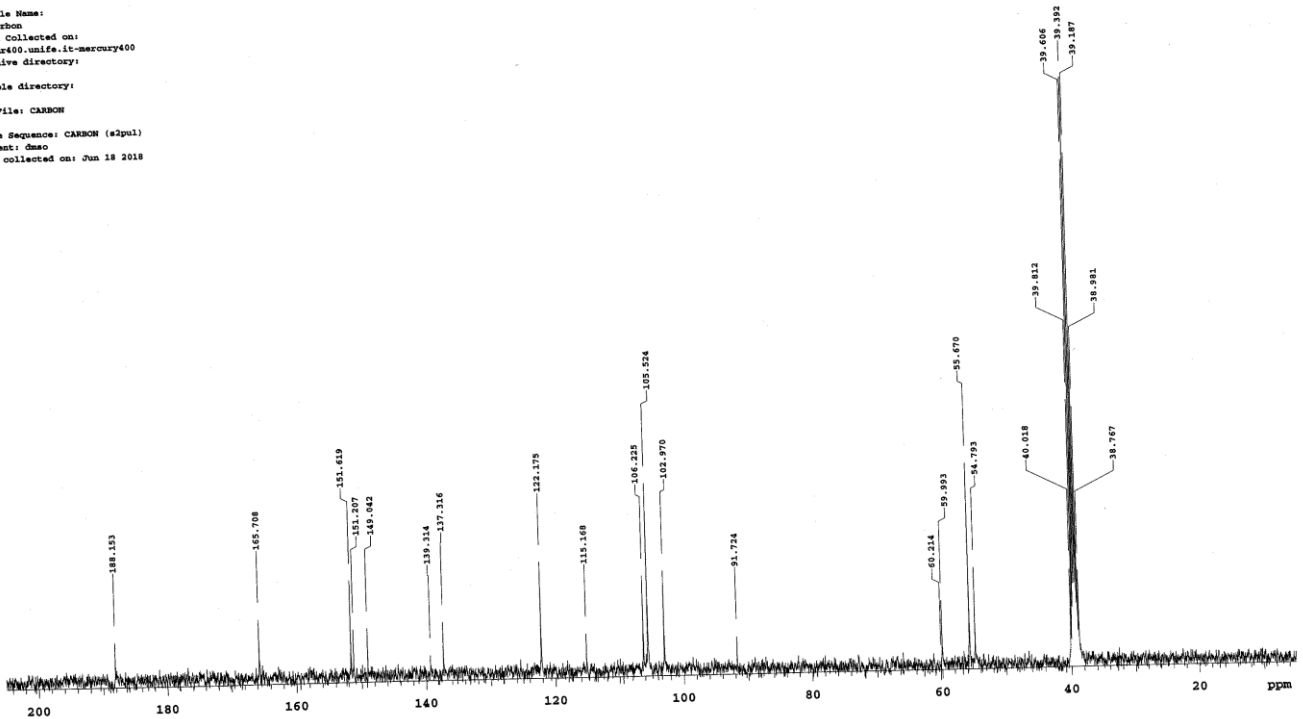
Agilent Technologies



TER 512

Sample Name:
carbon
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
FidFile: CARBON
Pulse Sequence: CARBON (s2pul)
Solvent: dmsc
Data collected on: Jun 18 2018

Agilent Technologies

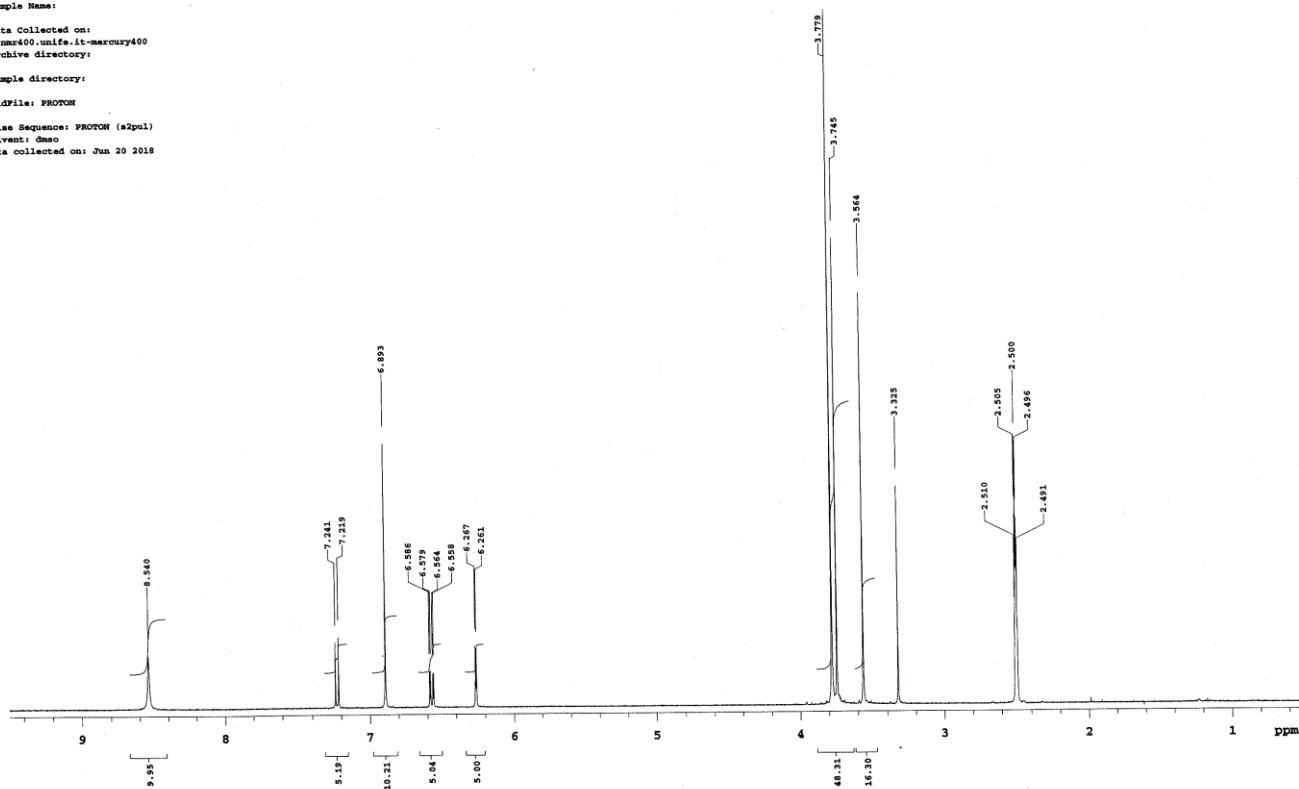


$^1\text{H-NMR}$ (400 MHz, d_6 -DMSO) and $^{13}\text{C-NMR}$ (100 MHz, d_6 -DMSO) spectra of compound **4b**

TRR 511 nuovo

Agilent Technologies

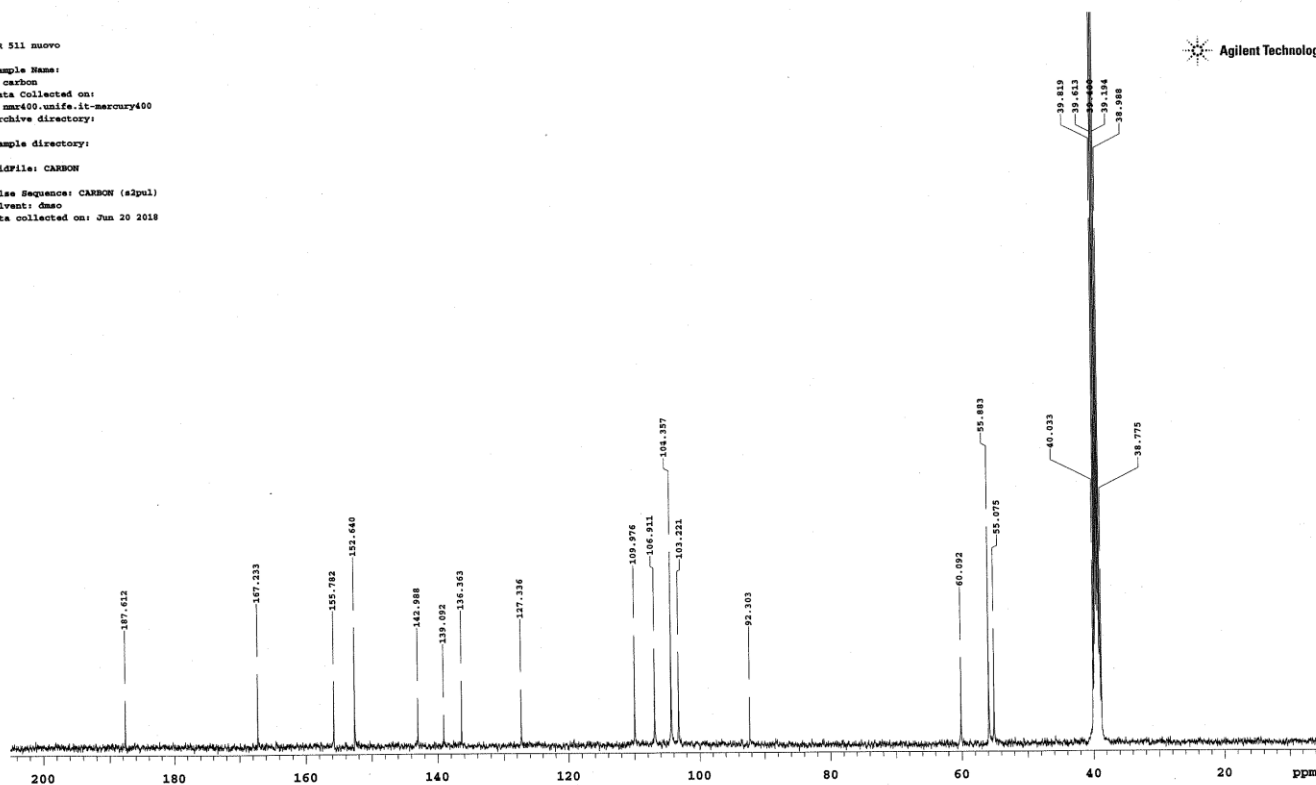
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Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
FidFile: PROTON
Pulse Sequence: PROTON (s2pul)
Solvent: dmsc
Data collected on: Jun 20 2018



TRR 511 nuovo

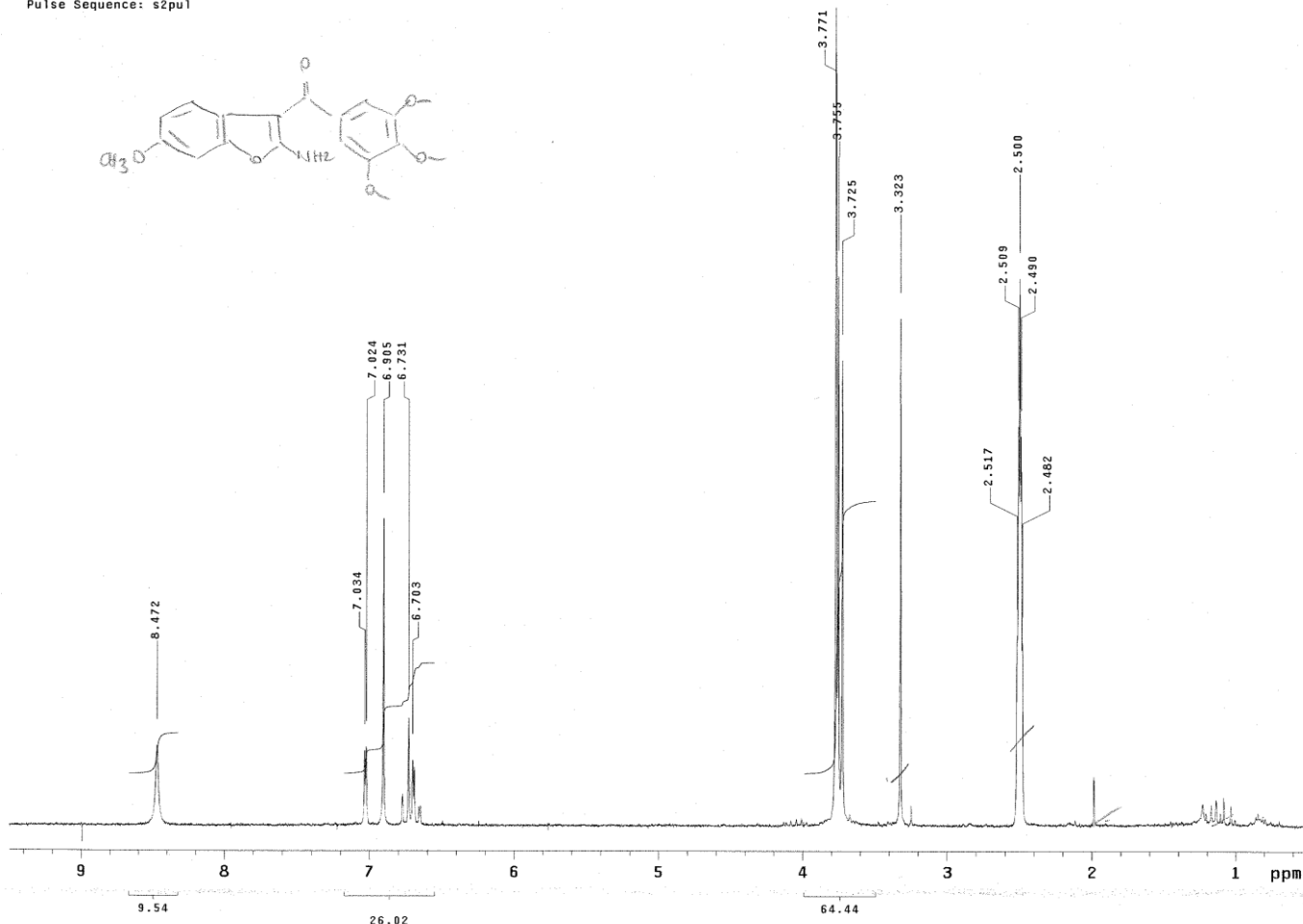
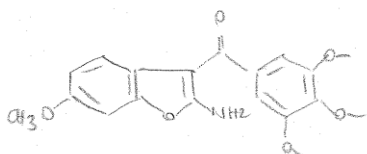
Agilent Technologies

Sample Name:
carbon
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
FidFile: CARBON
Pulse Sequence: CARBON (s2pul)
Solvent: dmsc
Data collected on: Jun 20 2018



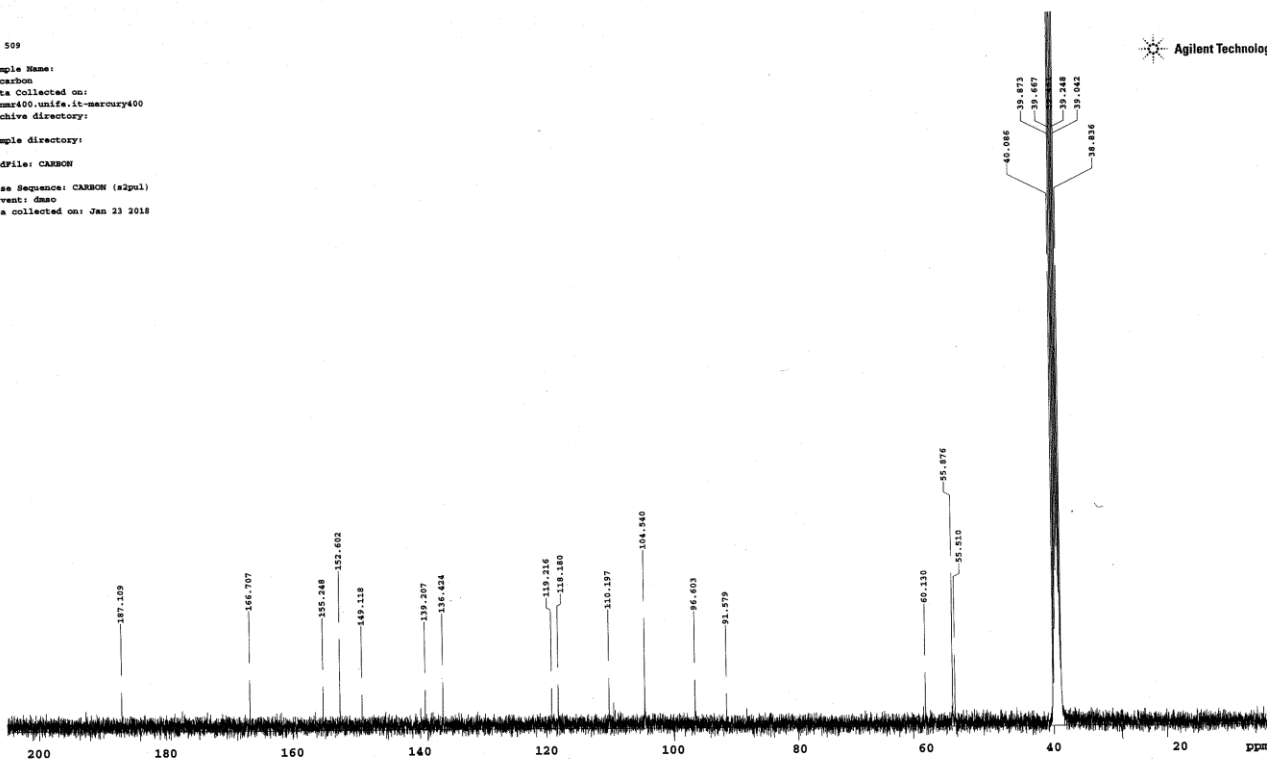
$^1\text{H-NMR}$ (400 MHz, d_6 -DMSO) and $^{13}\text{C-NMR}$ (100 MHz, d_6 -DMSO) spectra of compound **4c**

TRR 309
Pulse Sequence: s2pul



TRR 509
Sample Name: carbon
Data Collected on: smc400.unife.it-mercury400
Archive directory:
Sample directory:
Fidfile: CARBON
Pulse Sequence: CARBON (s2pul)
Solvent: dmsc
Data collected on: Jan 23 2018

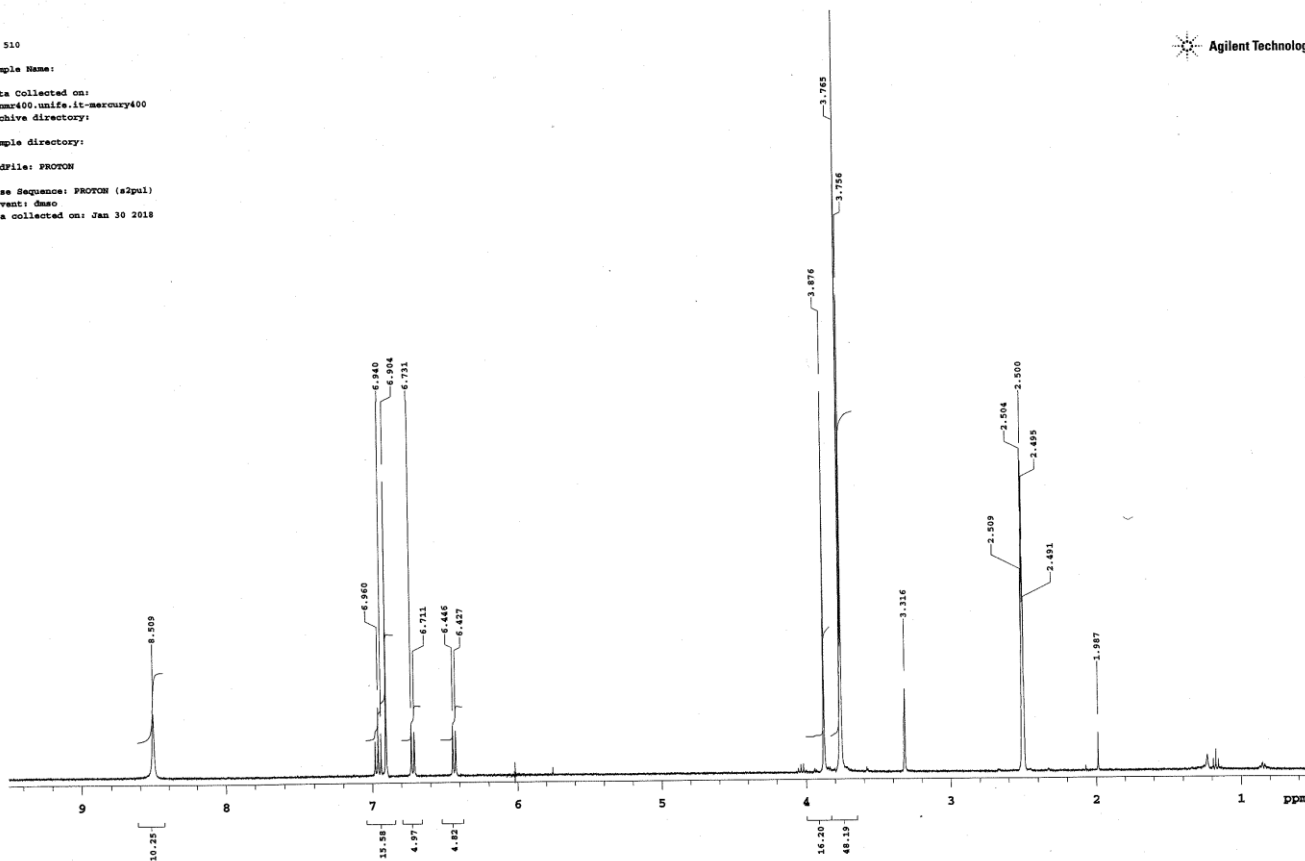
Agilent Technologies



$^1\text{H-NMR}$ (400 MHz, d_6 -DMSO) and $^{13}\text{C-NMR}$ (100 MHz, d_6 -DMSO) spectra of compound 4d

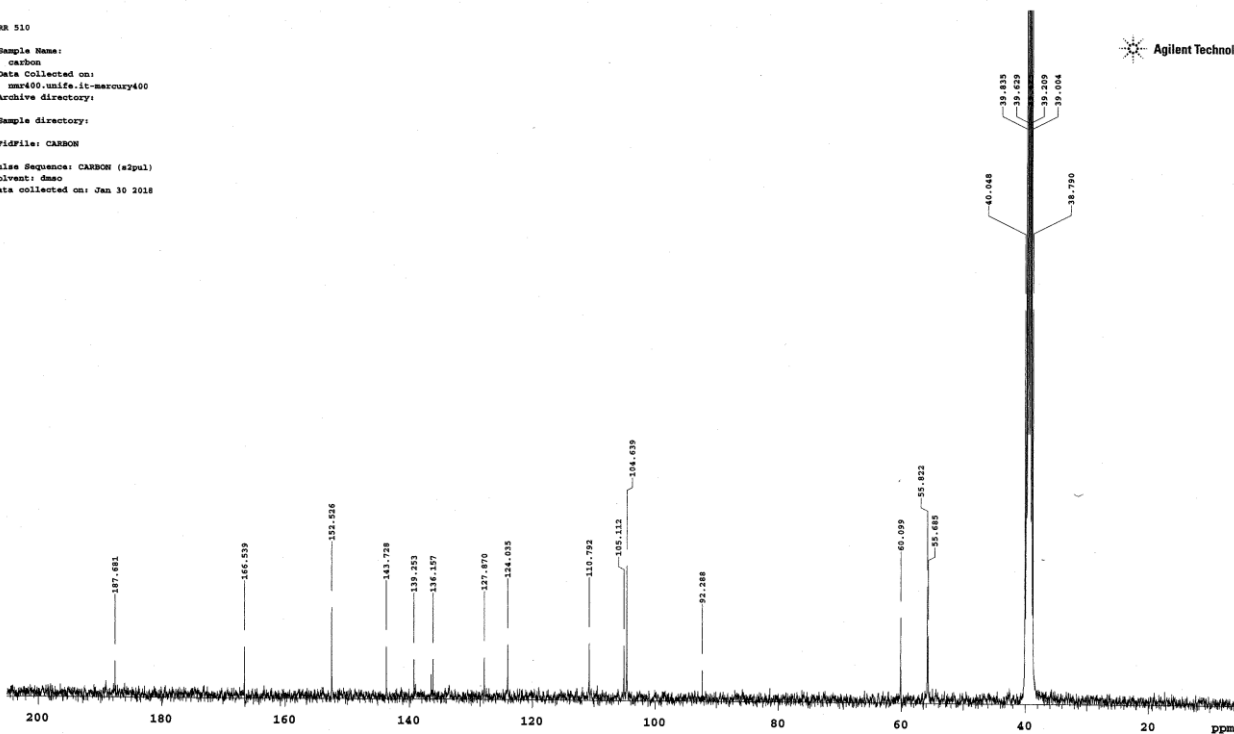
TMR 510

Sample Name:
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
Fidfile: PROTON
Pulse Sequence: PROTON (s2pul)
Solvent: dms0
Data collected on: Jan 30 2018



TMR 510

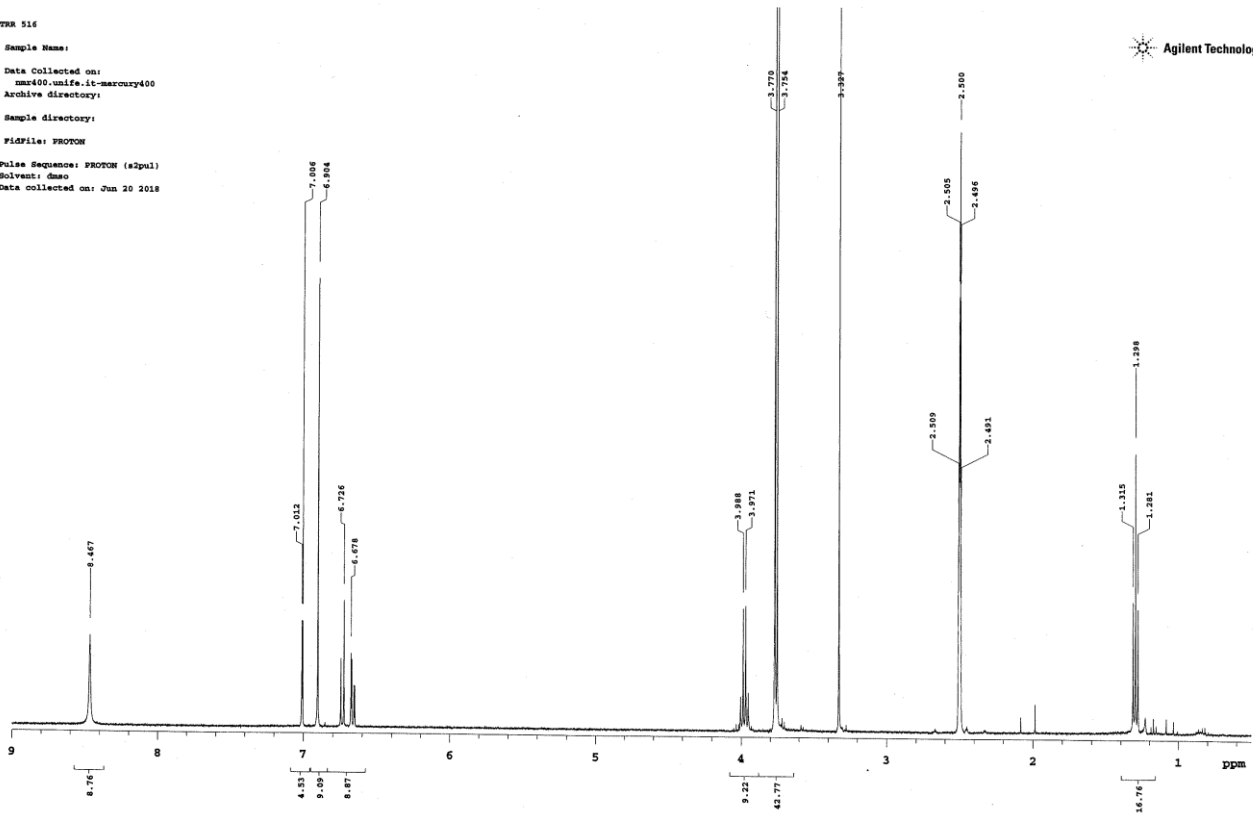
Sample Name:
carbon
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
Fidfile: CARBON
Pulse Sequence: CARBON (s2pul)
Solvent: dms0
Data collected on: Jan 30 2018



¹H-NMR (400 MHz, d₆-DMSO) and ¹³C-NMR (100 MHz, d₆-DMSO) spectra of compound 4e

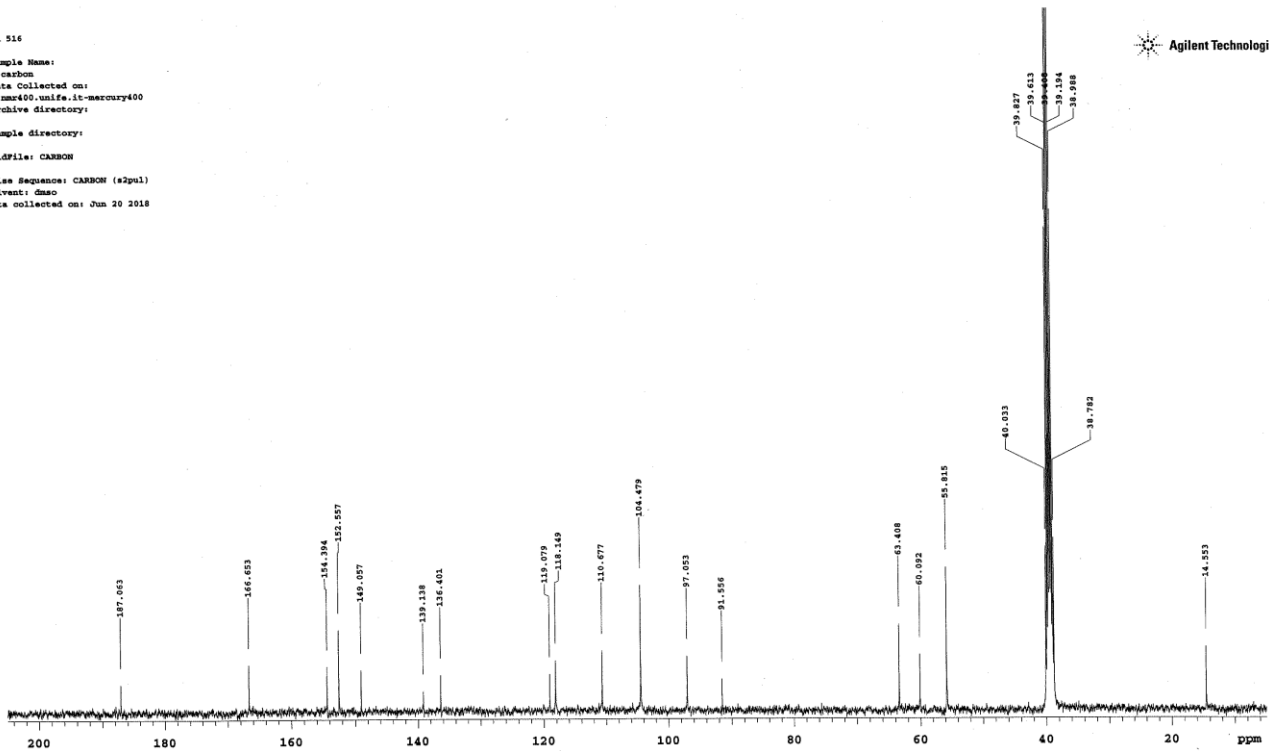
TRN 516
 Sample Name:
 Data Collected on:
 nm400.unife.it-mercury400
 Archive directory:
 Sample directory:
 FidFile: PROTON
 Pulse Sequence: PROTON (s2pul)
 Solvent: dms
 Data collected on: Jun 20 2018

Agilent Technologies



TRN 516
 Sample Name:
 carbon
 Data Collected on:
 nm400.unife.it-mercury400
 Archive directory:
 Sample directory:
 FidFile: CARBON
 Pulse Sequence: CARBON (s2pul)
 Solvent: dms
 Data collected on: Jun 20 2018

Agilent Technologies



$^1\text{H-NMR}$ (400 MHz, $d_6\text{-DMSO}$) and $^{13}\text{C-NMR}$ (100 MHz, $d_6\text{-DMSO}$) spectra of compound **4f**

YMR 517 nuovo

Sample Name:
hh_calib

Data Collected on:
nmr400.unife.it-mercury400

Archive directory:
/home/vmr1/vmrays/data

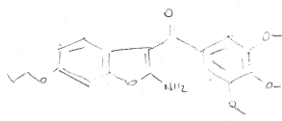
Sample directory:
hh_calib_20180530_02

File name:
hh_calib_20180530_02

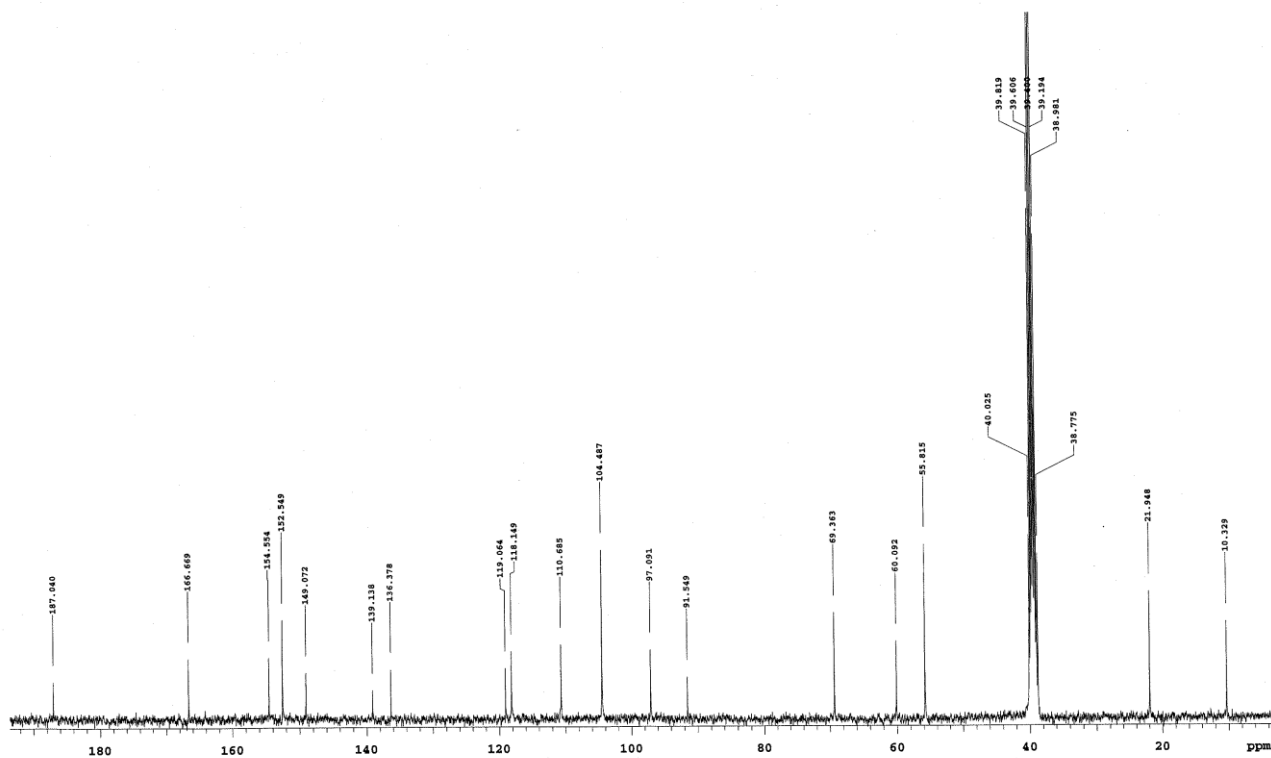
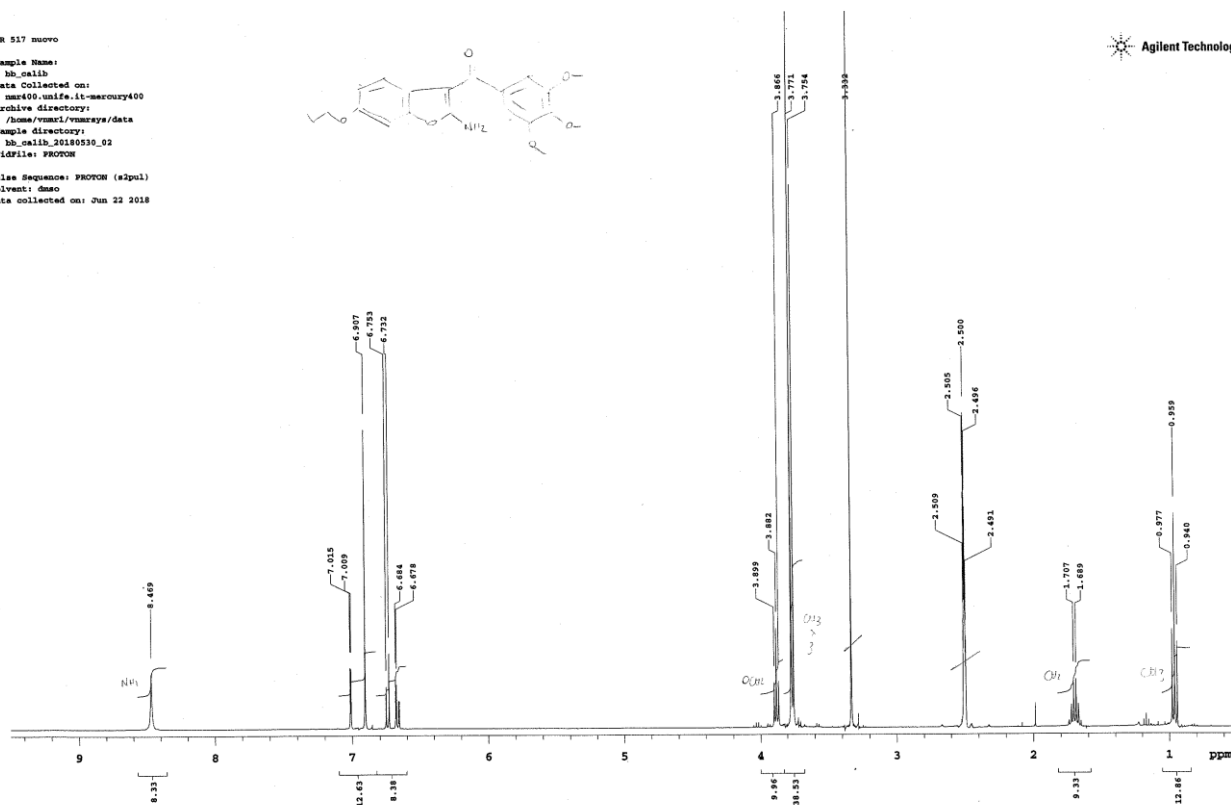
Pulse Sequence: PROTON (s2pul)

Solvent: dms

Data collected on: Jun 22 2018



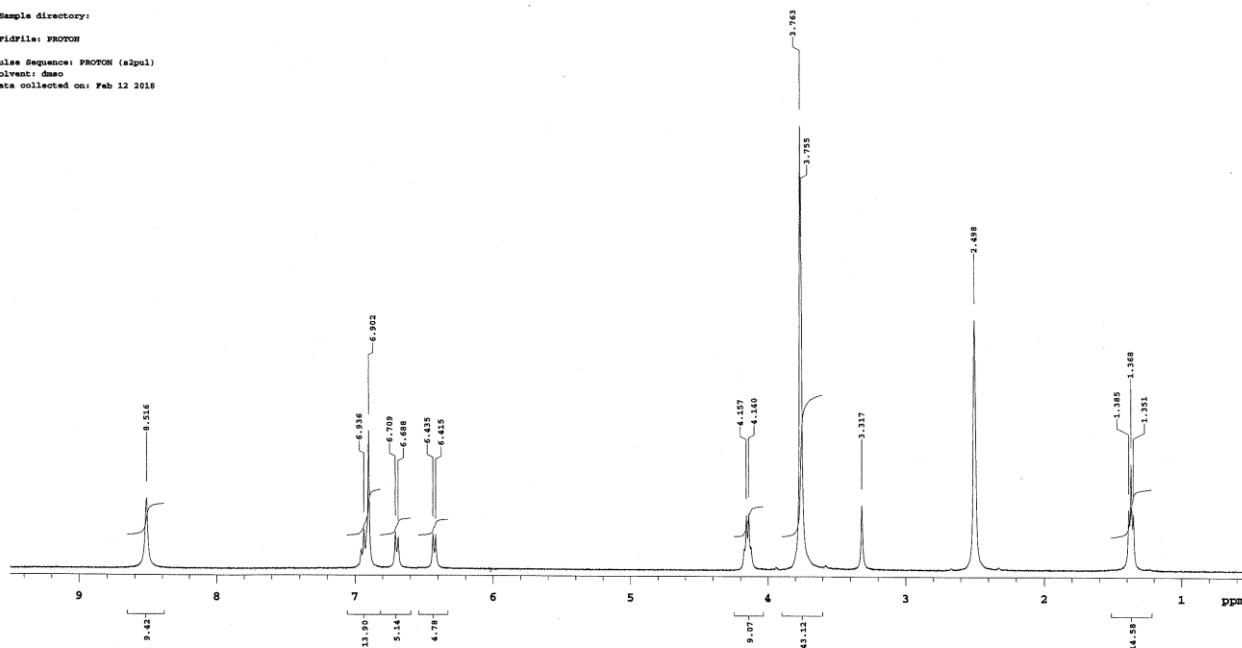
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$^1\text{H-NMR}$ (400 MHz, $d_6\text{-DMSO}$) and $^{13}\text{C-NMR}$ (100 MHz, $d_6\text{-DMSO}$) spectra of compound **4g**

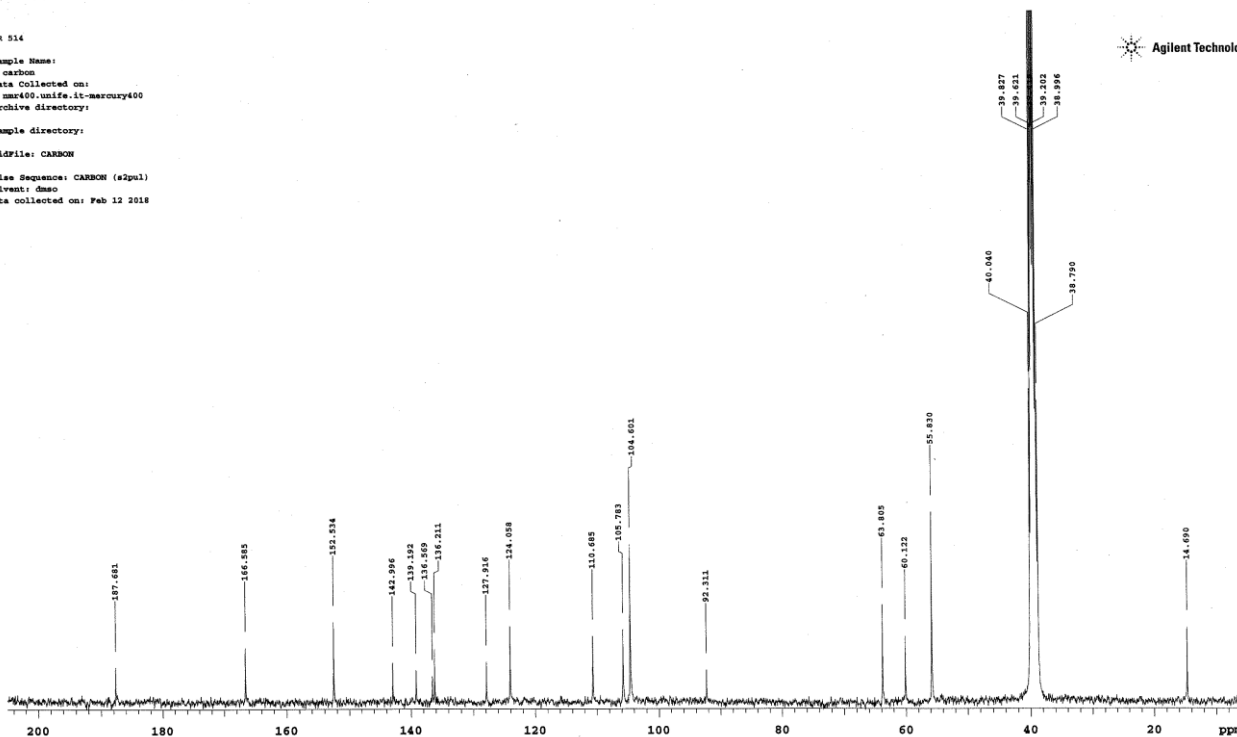
TRR 514

Sample Name:
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
Fidfile: PROTON
Pulse Sequence: PROTON (s2pul)
Solvent: dms
Data collected on: Feb 12 2018



TRR 514

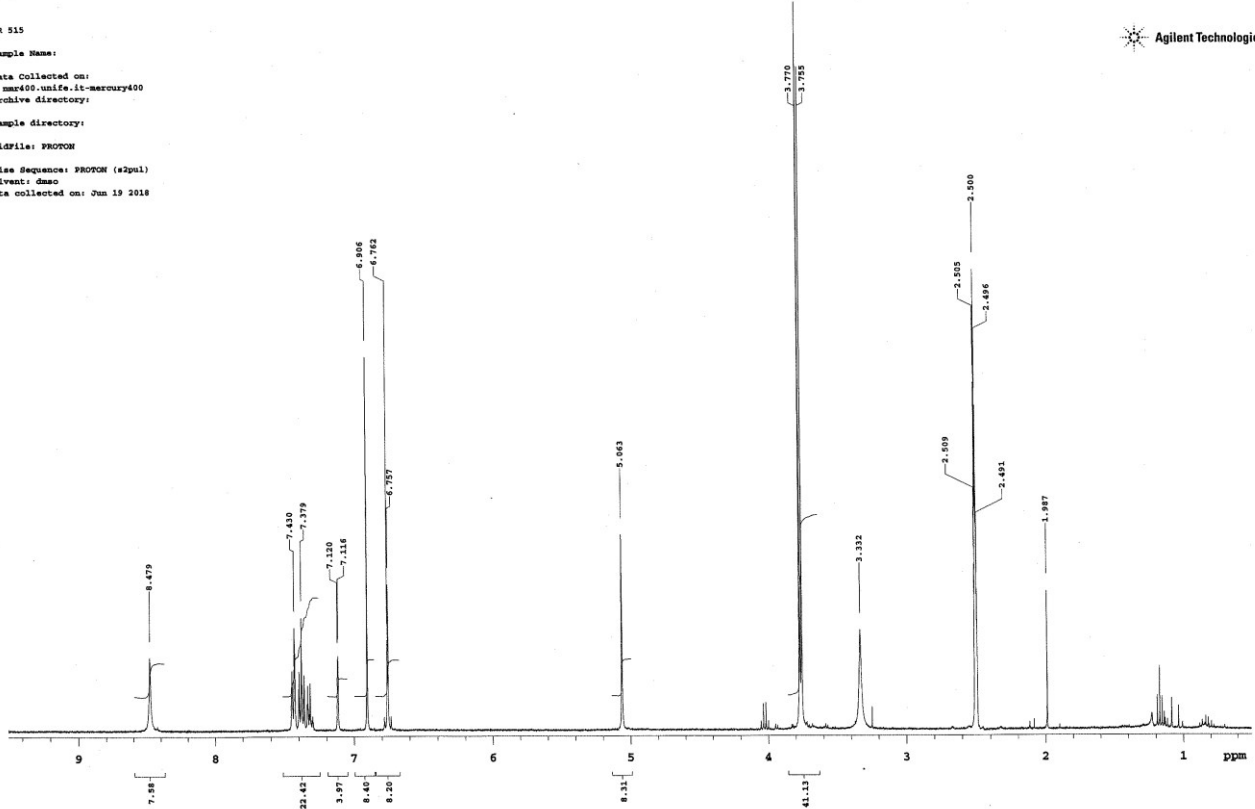
Sample Name:
carbon
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
Fidfile: CARBON
Pulse Sequence: CARBON (s2pul)
Solvent: dms
Data collected on: Feb 12 2018



$^1\text{H-NMR}$ (400 MHz, $d_6\text{-DMSO}$) and $^{13}\text{C-NMR}$ (100 MHz, $d_6\text{-DMSO}$) spectra of compound **4h**

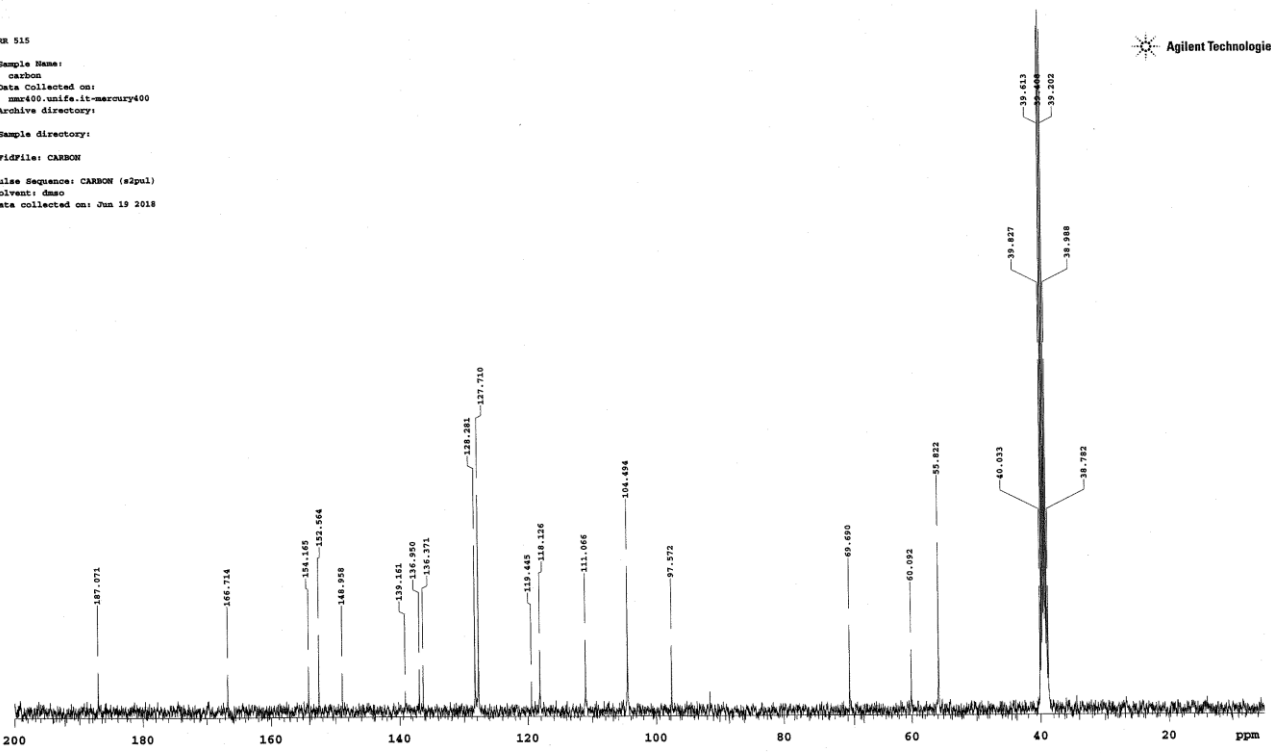
TRR 515

Sample Name:
 Data Collected on: mmr400.unife.it-mercury400
 Archive directory:
 Sample directory:
 FidFile: PROTON
 Pulse Sequence: PROTON (#2pul)
 Solvent: dms
 Data collected on: Jun 19 2018



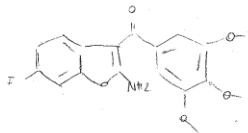
TRR 515

Sample Name: carbon
 Data Collected on: mmr400.unife.it-mercury400
 Archive directory:
 Sample directory:
 FidFile: CARBON
 Pulse Sequence: CARBON (#2pul)
 Solvent: dms
 Data collected on: Jun 19 2018

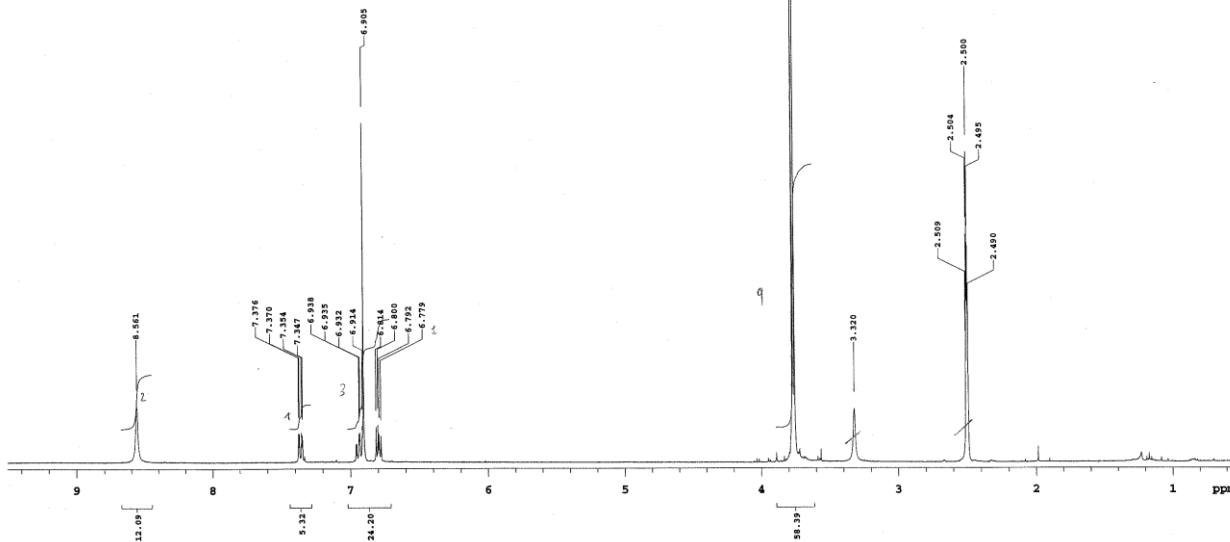


¹H-NMR (400 MHz, *d*₆-DMSO) and ¹³C-NMR (100 MHz, *d*₆-DMSO) spectra of compound **4i**

TRR 520
Sample Name:
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
FidFile: PROTON
Pulse Sequence: PROTON (s2pul)
Solvent: dms
Data collected on: Mar 1 2018

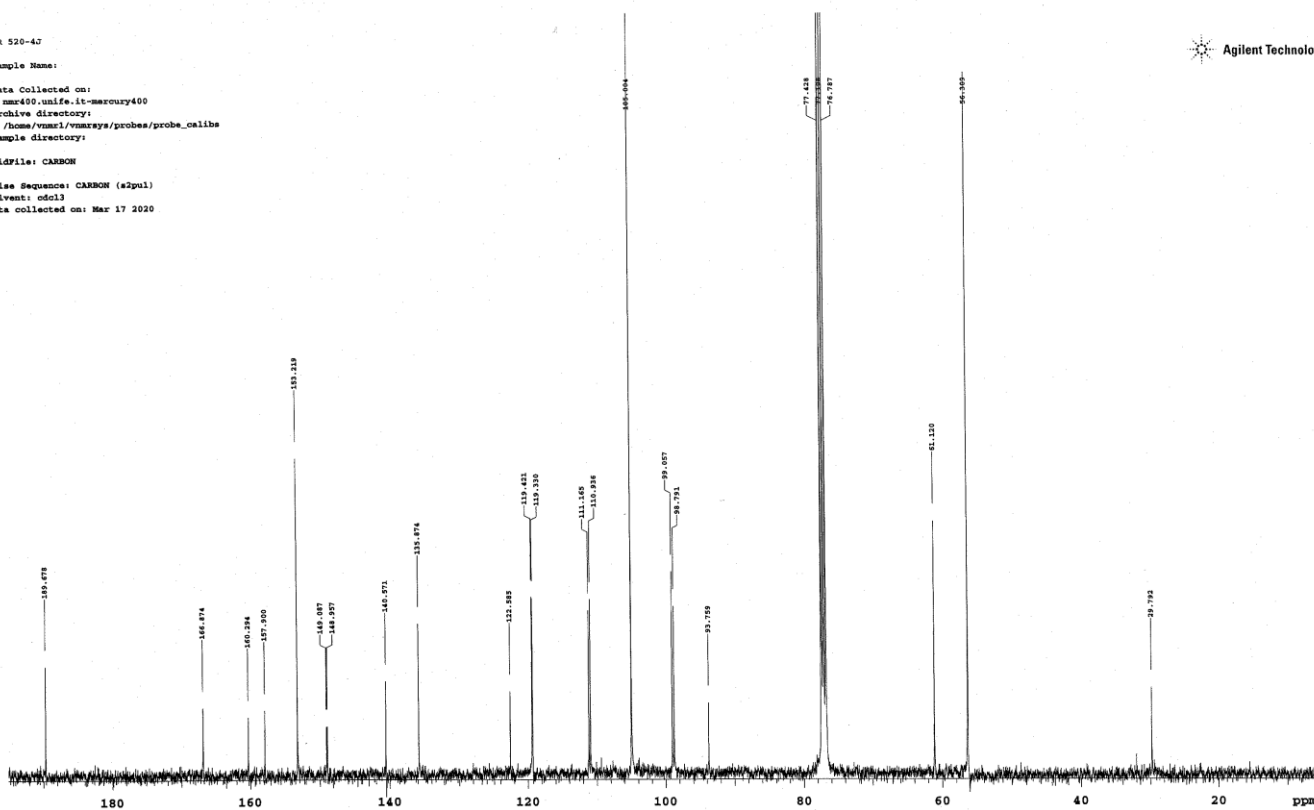


Agilent Technologies



TRR 520-47
Sample Name:
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
/home/vmm1/vmmrwy/probes/probe_calibs
Sample directory:
FidFile: CARBON
Pulse Sequence: CARBON (s2pul)
Solvent: cdcl3
Data collected on: Mar 17 2020

Agilent Technologies

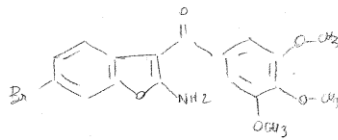


$^1\text{H-NMR}$ (400 MHz, $d_6\text{-DMSO}$) and $^{13}\text{C-NMR}$ (100 MHz, CDCl_3) spectra of compound **4j**

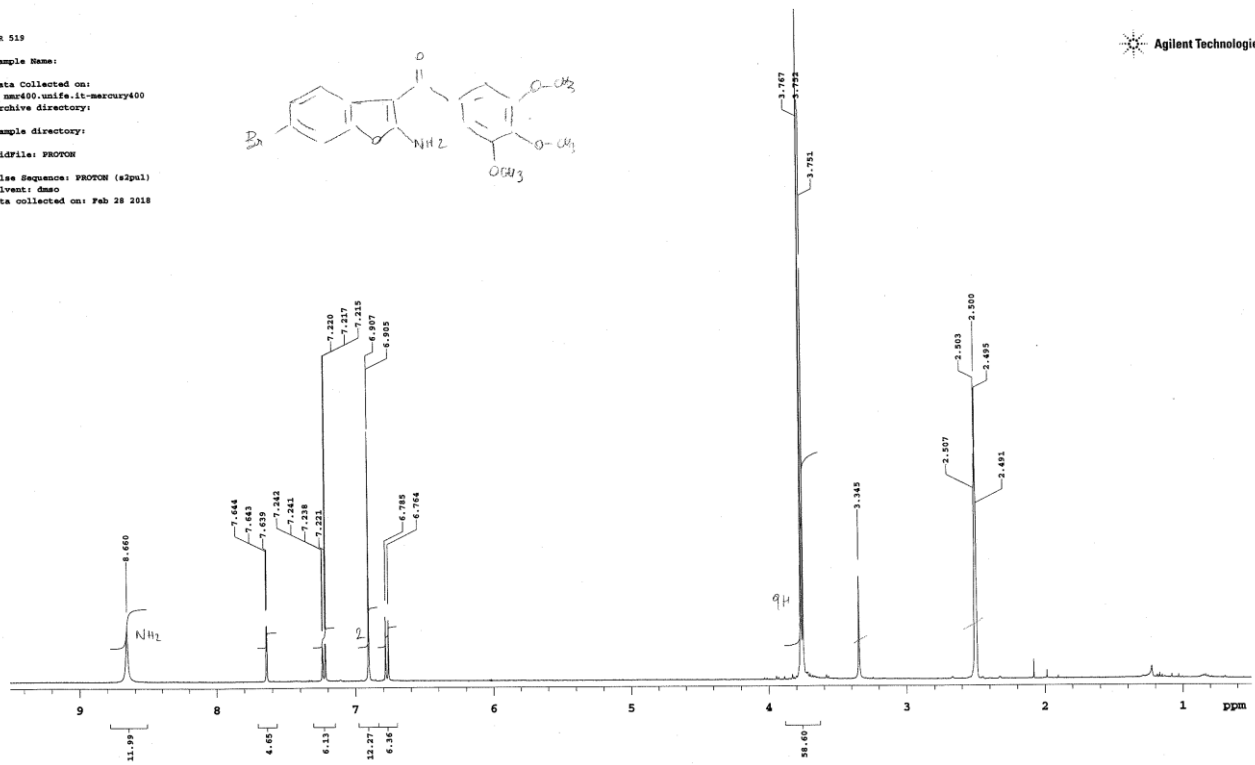
TRR 519

Sample Name:

Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
FidFile: PROTON
Pulse Sequence: PROTON (s2pul)
Solvent: dmsc
Data collected on: Feb 28 2018



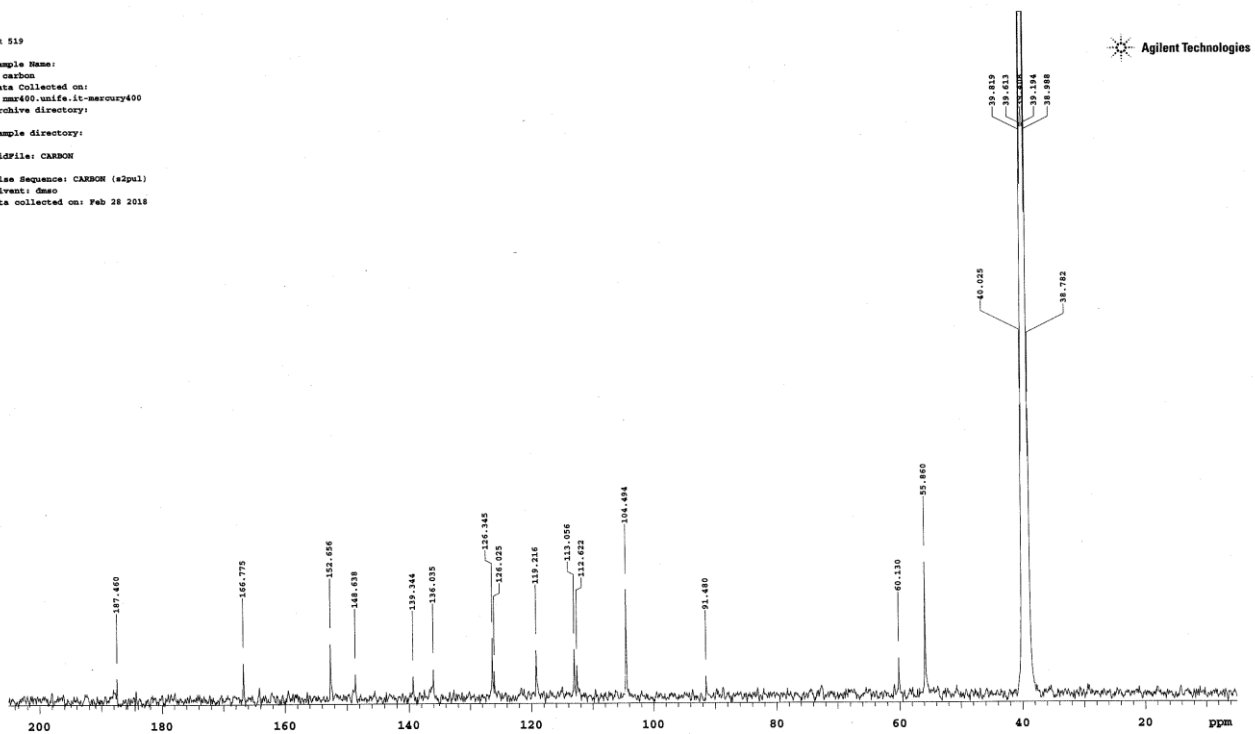
Agilent Technologies



TRR 519

Sample Name:

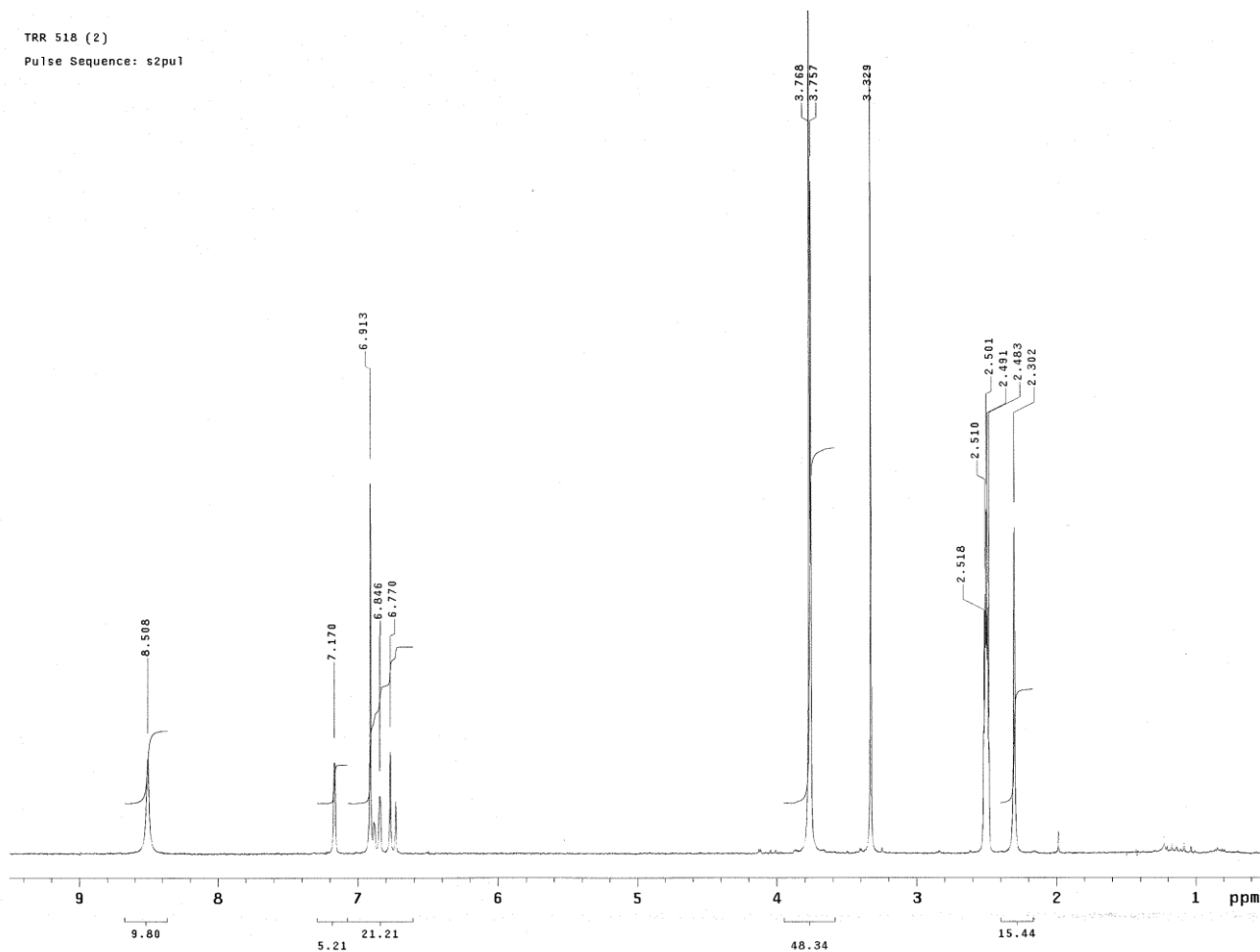
carbon
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
FidFile: CARBON
Pulse Sequence: CARBON (s2pul)
Solvent: dmsc
Data collected on: Feb 28 2018



Agilent Technologies

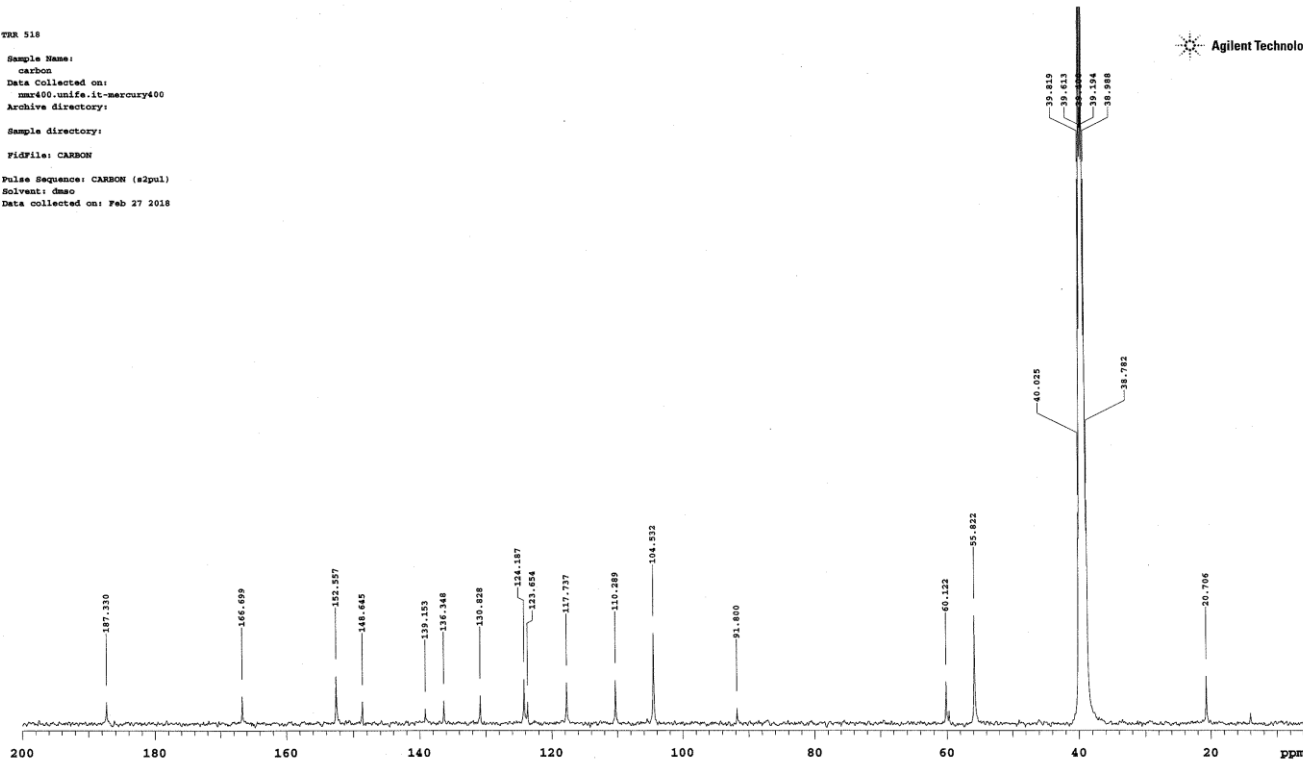
$^1\text{H-NMR}$ (400 MHz, d_6 -DMSO) and $^{13}\text{C-NMR}$ (100 MHz, d_6 -DMSO) spectra of compound **4k**

TRR 518 (2)
Pulse Sequence: s2pul



TRR 518
Sample Name:
carbon
Data collected on:
msx100.unife.it-mercury400
Archive directory:
Sample directory:
FidFile: CARBON
Pulse Sequence: CARBON (s2pul)
Solvent: dms
Data collected on: Feb 27 2018

Agilent Technologies

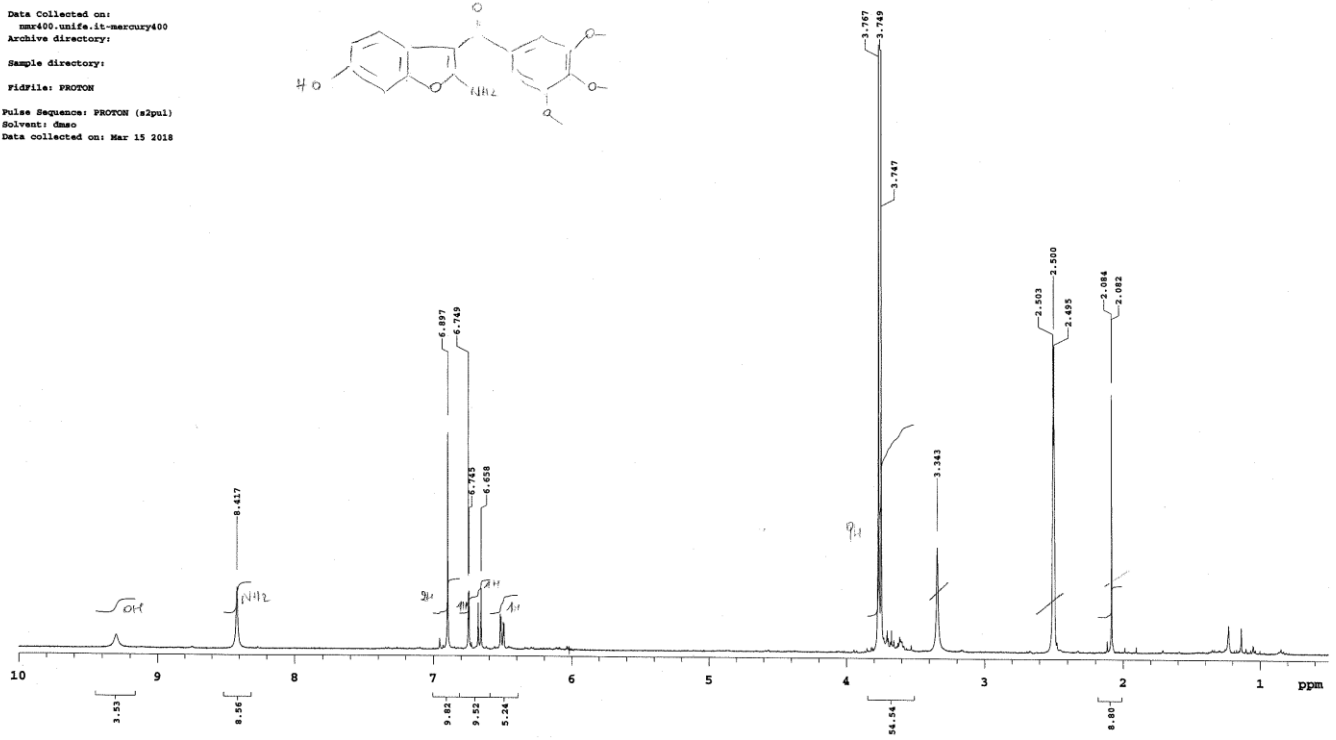
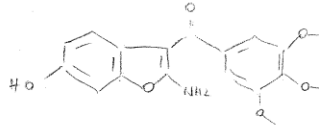


$^1\text{H-NMR}$ (400 MHz, d_6 -DMSO) and $^{13}\text{C-NMR}$ (100 MHz, d_6 -DMSO) spectra of compound 41

TRR 523

Sample Name:
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
Fidfile: PROTON
Pulse Sequence: PROTON (s2pul)
Solvent: dmsd
Data collected on: Mar 15 2018

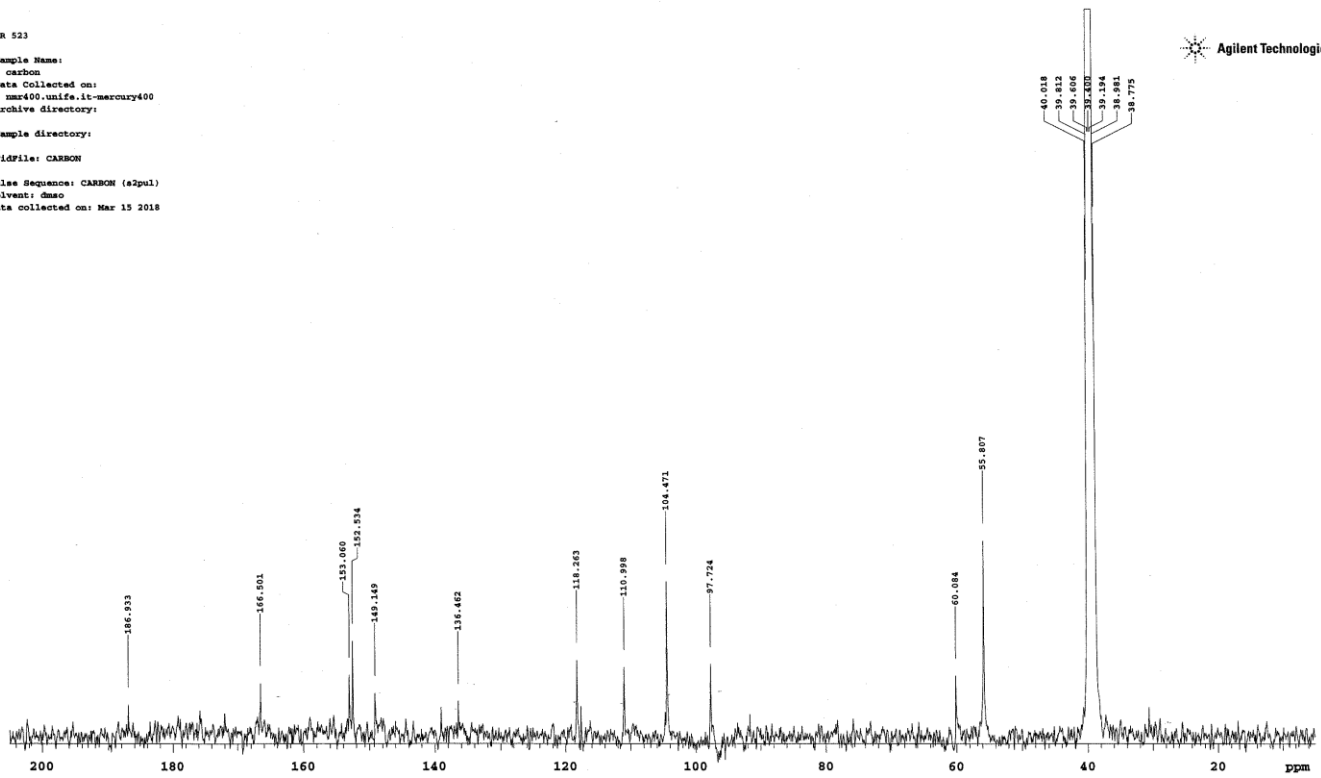
Agilent Technologies



TRR 523

Sample Name:
carbon
Data collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
Fidfile: CARBON
Pulse Sequence: CARBON (s2pul)
Solvent: dmsd
Data collected on: Mar 15 2018

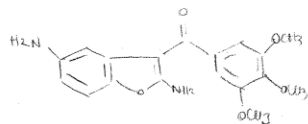
Agilent Technologies



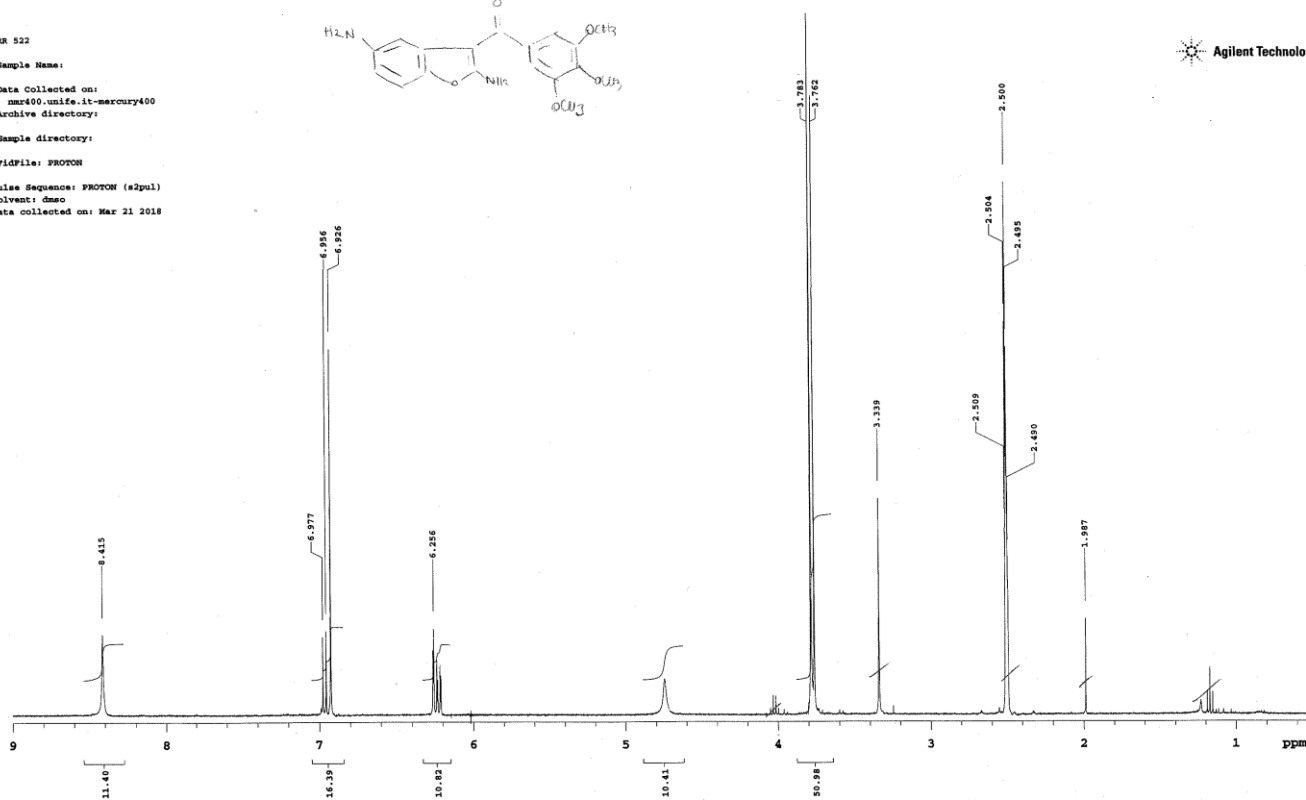
¹H-NMR (400 MHz, d₆-DMSO) and ¹³C-NMR (100 MHz, d₆-DMSO) spectra of compound 4m

TRR 522

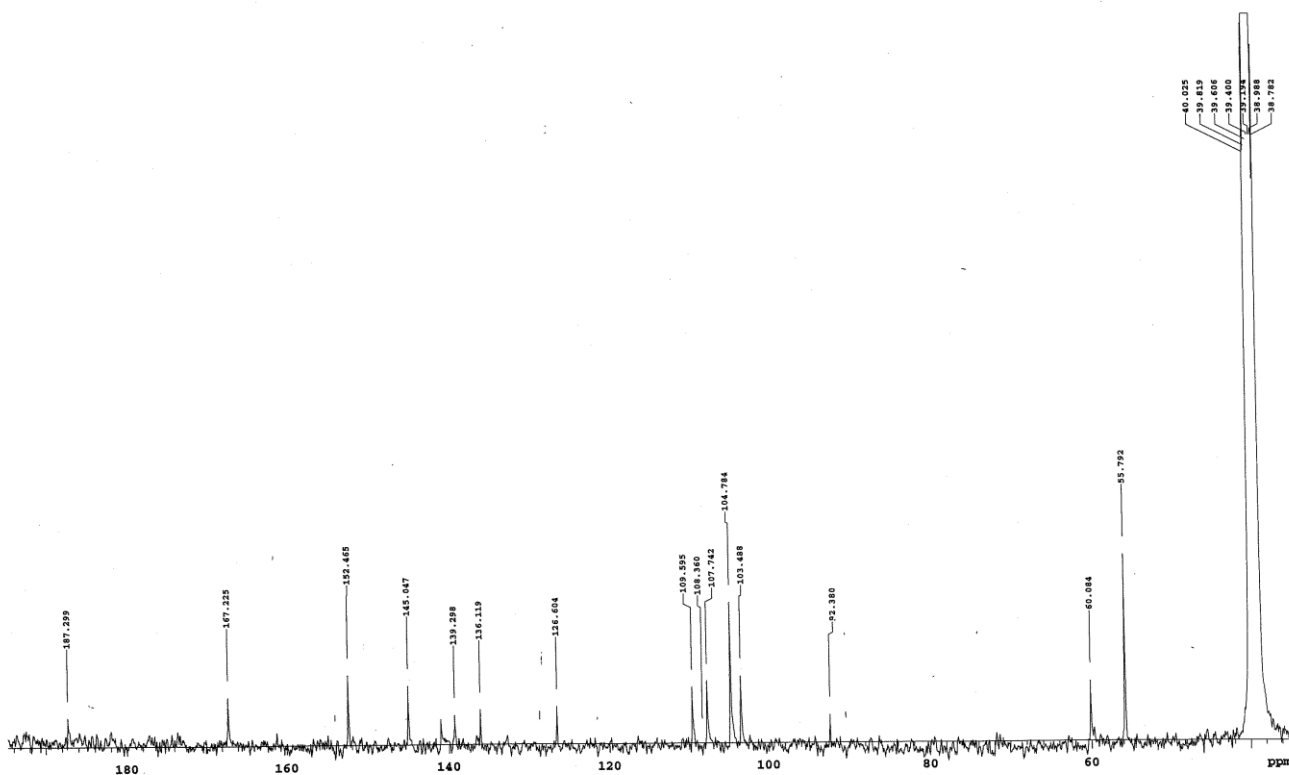
Sample Name:
Data Collected on:
nmr400.unife.it-mercury400
Archive directory:
Sample directory:
Fidfile: PROTON
Pulse Sequence: PROTON (s2pul)
Solvent: dmsc
Data collected on: Mar 21 2018



Agilent Technologies

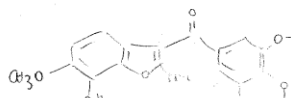


TRR 522

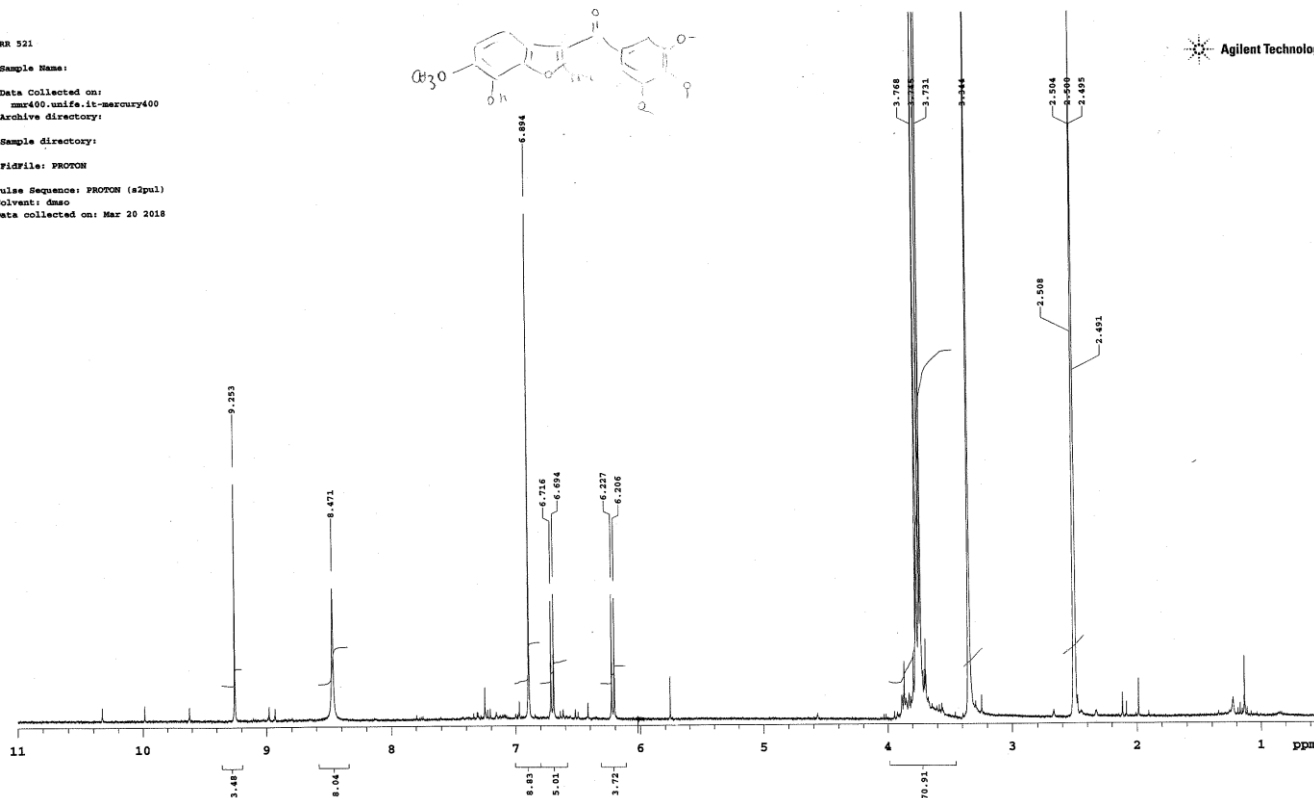


¹H-NMR (400 MHz, *d*₆-DMSO) and ¹³C-NMR (100 MHz, *d*₆-DMSO) spectra of compound 4n

TRR 521
 Sample Name:
 Data Collected on:
 mm400.unife.it-mercury400
 Archive directory:
 Sample directory:
 Fidfile: PROTON
 Pulse Sequence: PROTON (s2pul)
 Solvent: dmsc
 Data collected on: Mar 20 2018

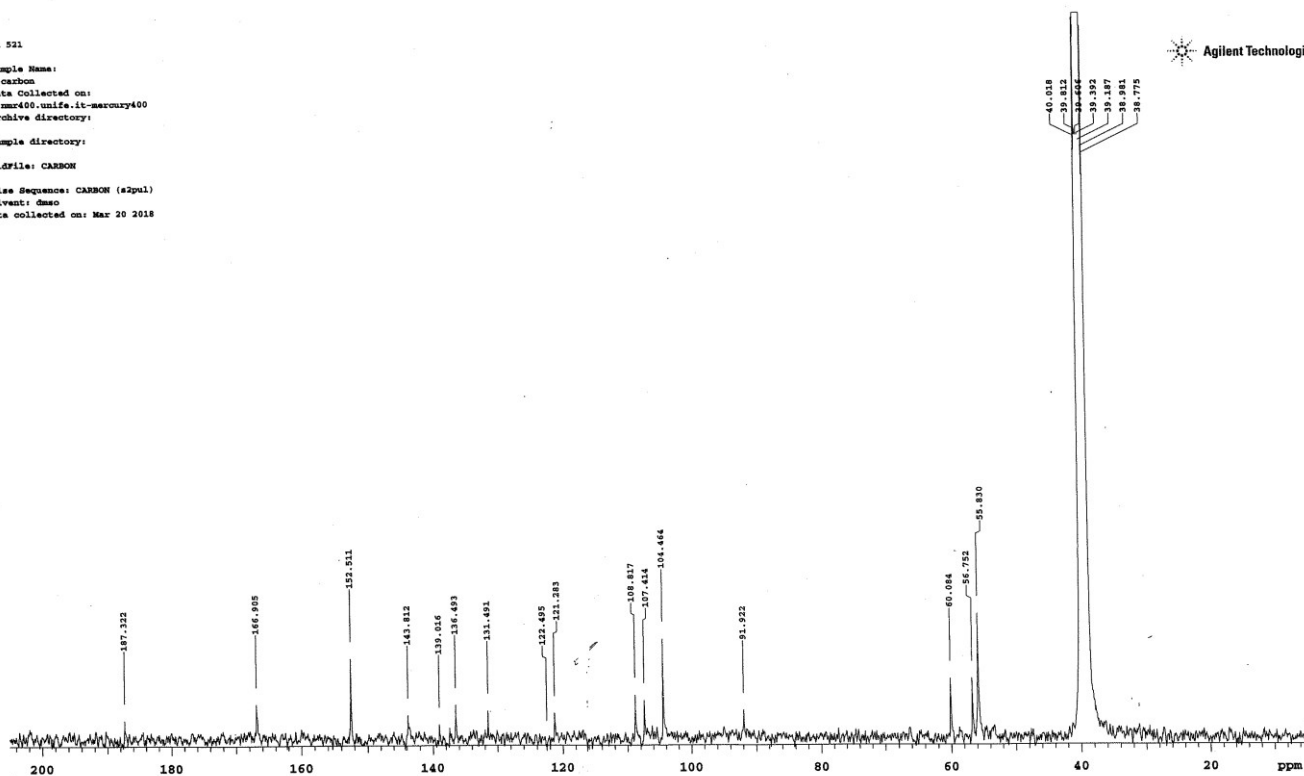


Agilent Technologies

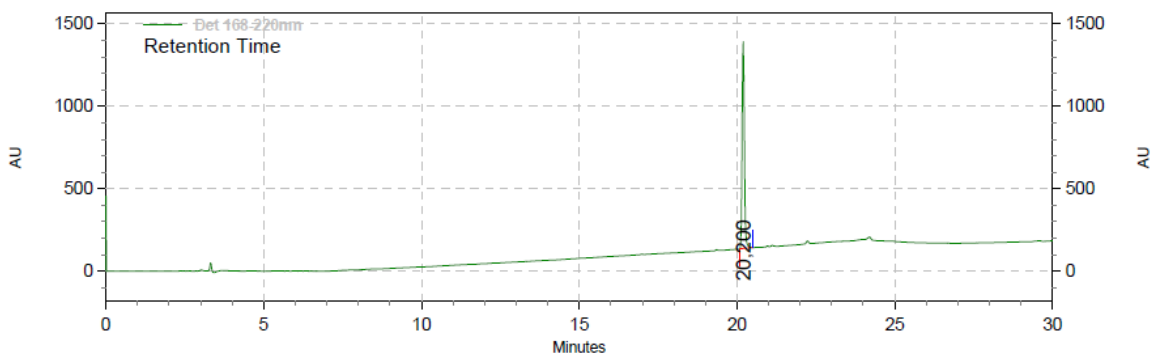


TRR 521
 Sample Name:
 carbon
 Data Collected on:
 mm400.unife.it-mercury400
 Archive directory:
 Sample directory:
 Fidfile: CARBON
 Pulse Sequence: CARBON (s2pul)
 Solvent: dmsc
 Data collected on: Mar 20 2018

Agilent Technologies



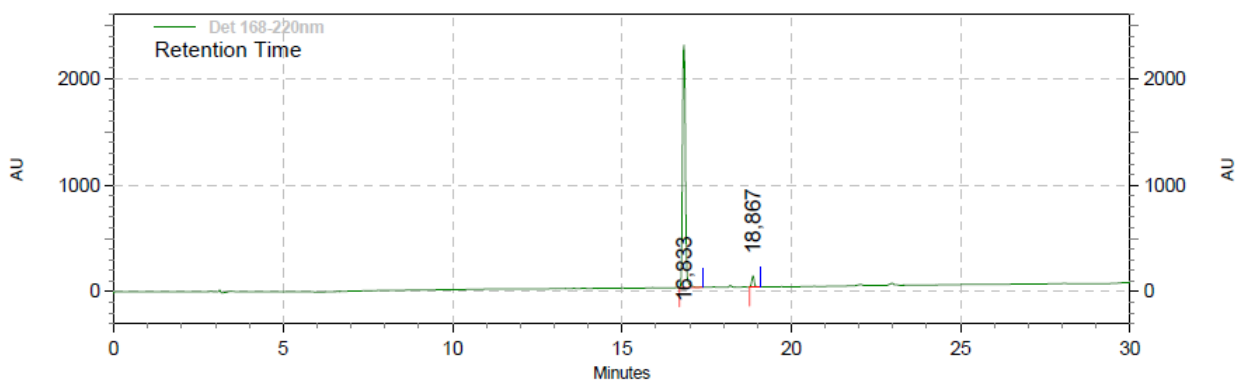
¹H-NMR (400 MHz, *d*₆-DMSO) and ¹³C-NMR (100 MHz, *d*₆-DMSO) spectra of compound **3c**



**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
20,200	6282901	100,00	1254972	100,00
Totals				
	6282901	100,00	1254972	100,00

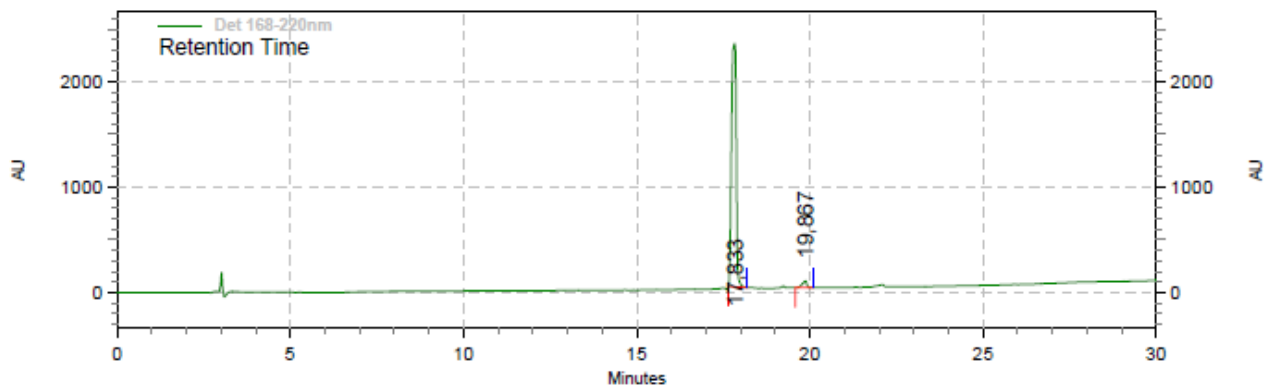
HPLC trace compound 4a



**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
16,833	13775576	96,37	2276837	95,61
18,867	518333	3,63	104556	4,39
Totals				
	14293909	100,00	2381393	100,00

HPLC trace compound 4b

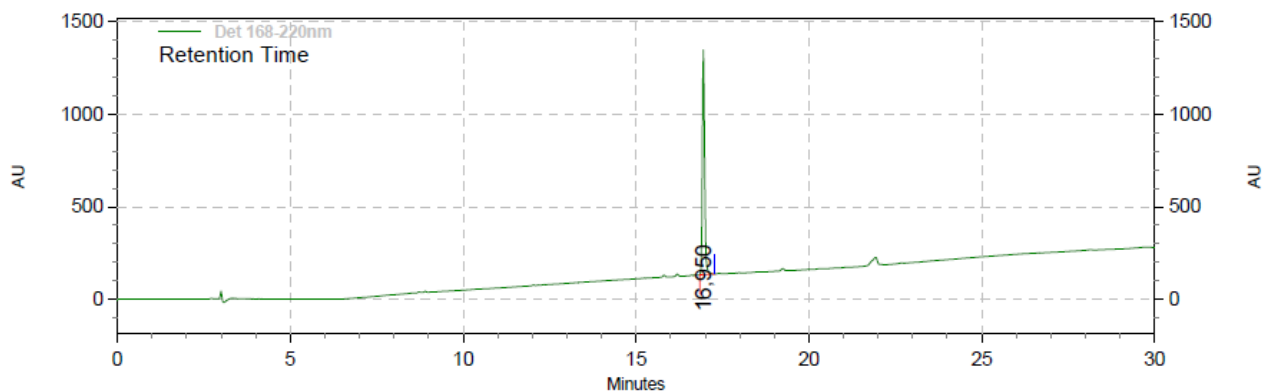


**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
17,833	22360470	97,51	2307923	97,33
19,867	571927	2,49	63301	2,67

Totals	22932397	100,00	2371224	100,00
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HPLC trace compound 4c

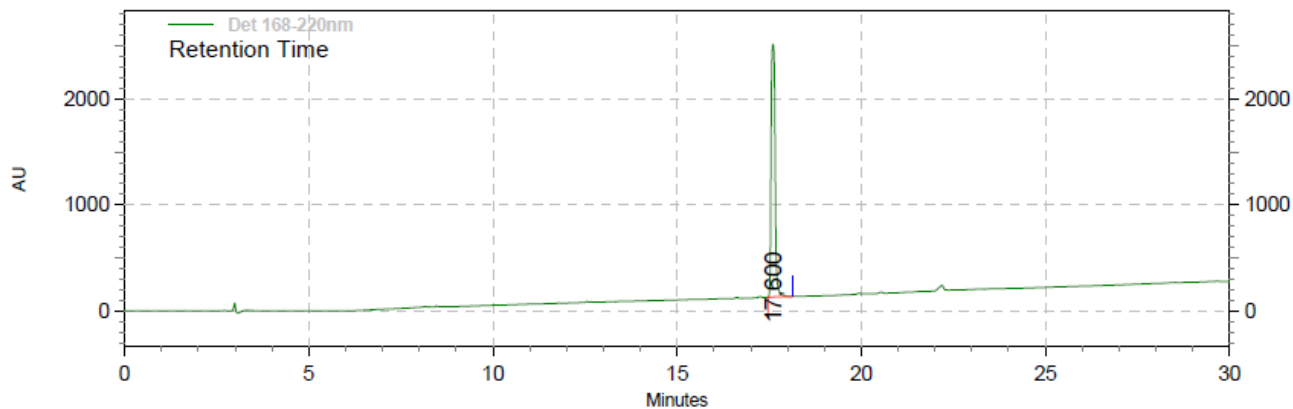


**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
16,950	5599539	100,00	1215404	100,00

Totals	5599539	100,00	1215404	100,00
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HPLC trace compound 4d

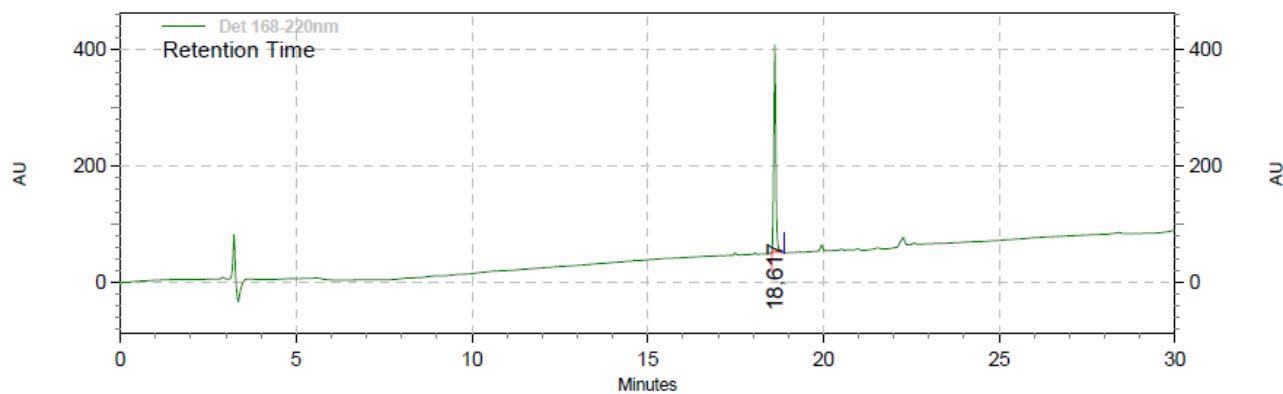


Det 168-220nm

Results

Time	Area	Area %	Height	Height %
17,600	17736183	100,00	2384957	100,00
Totals				
	17736183	100,00	2384957	100,00

HPLC trace compound 4e

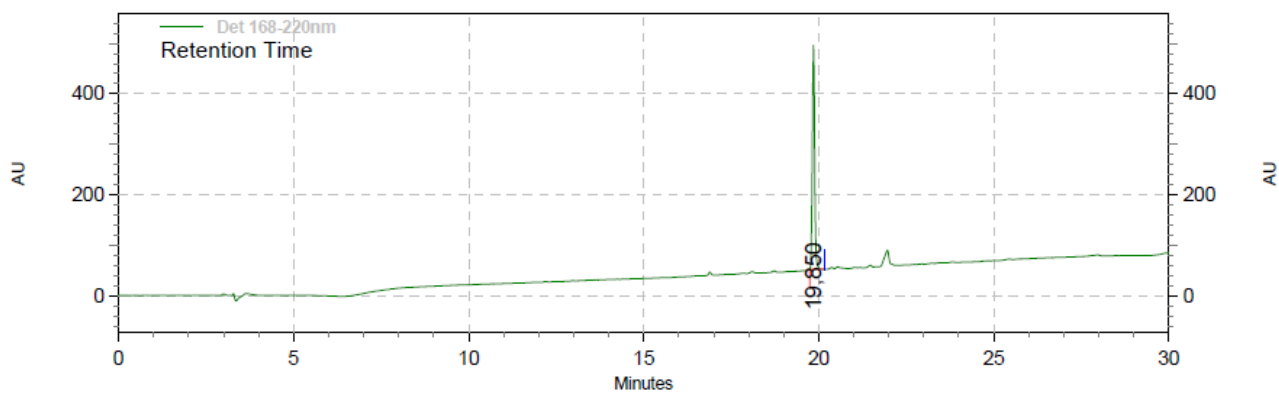


Det 168-220nm

Results

Time	Area	Area %	Height	Height %
18,617	1458698	100,00	354511	100,00
Totals				
	1458698	100,00	354511	100,00

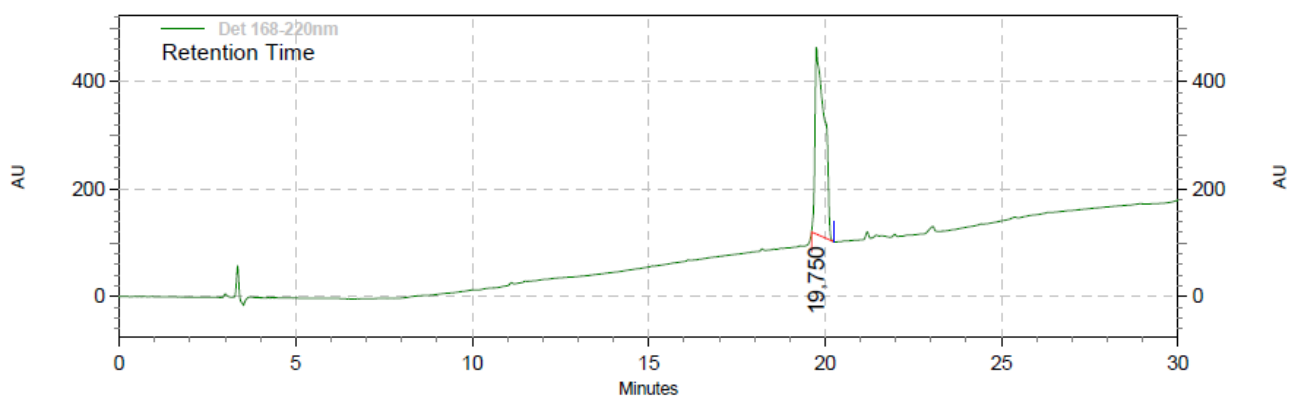
HPLC trace compound 4f



**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
19,850	2021026	100,00	443946	100,00
Totals				
	2021026	100,00	443946	100,00

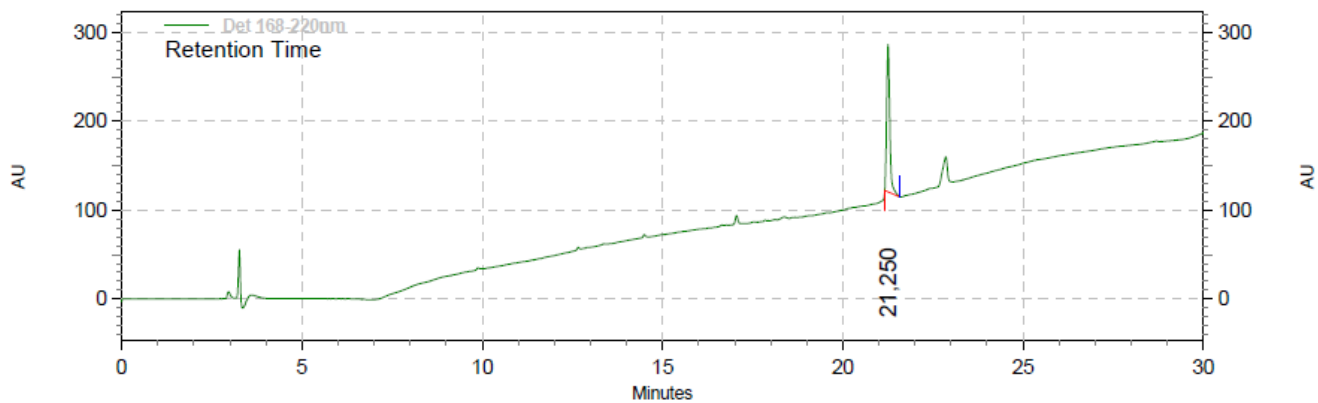
HPLC trace compound **4g**



**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
19,750	6360905	100,00	346901	100,00
Totals				
	6360905	100,00	346901	100,00

HPLC trace compound **4h**

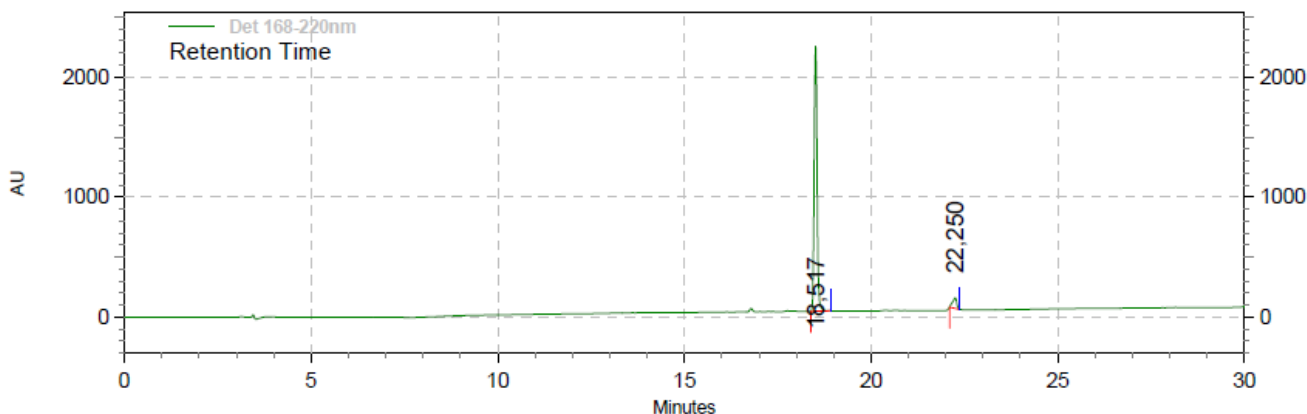


Det 168-220nm

Results

Time	Area	Area %	Height	Height %
21,250	993910	100,00	165834	100,00
Totals				
	993910	100,00	165834	100,00

HPLC trace compound 4i

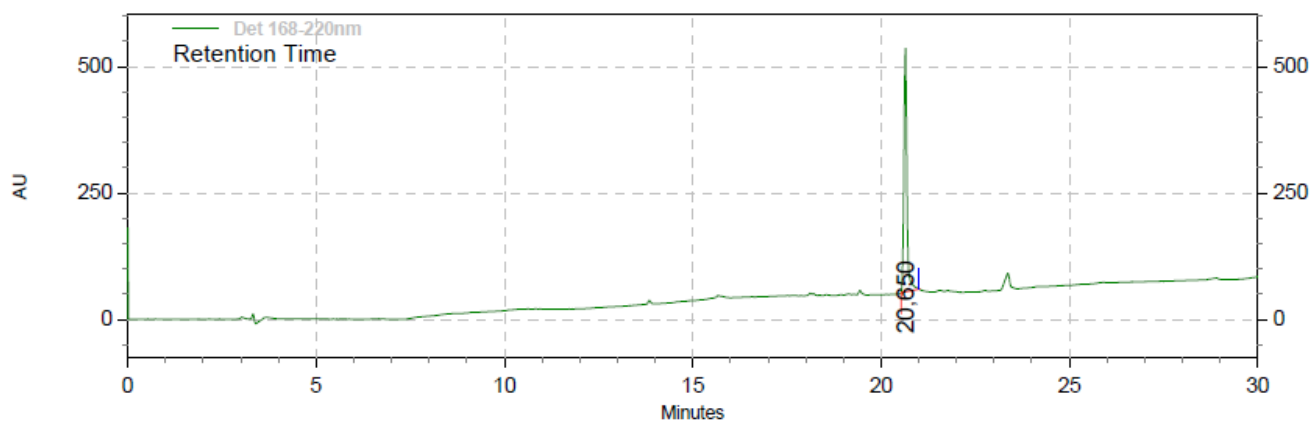


Det 168-220nm

Results

Time	Area	Area %	Height	Height %
18,517	12099682	94,83	2204887	96,18
22,250	659354	5,17	87506	3,82
Totals				
	12759036	100,00	2292393	100,00

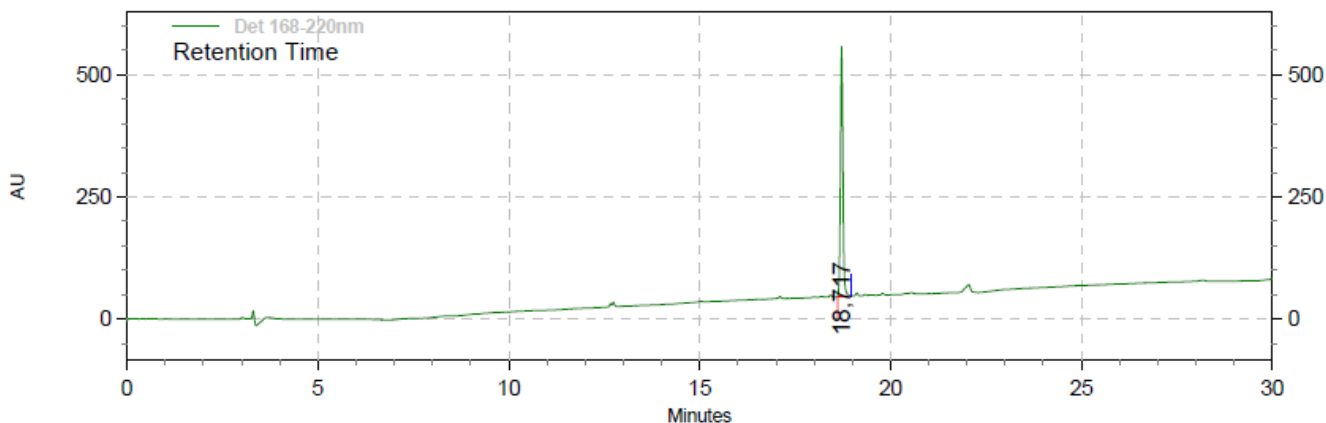
HPLC trace compound 4j



**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
20,650	2721197	100,00	481114	100,00
Totals				
	2721197	100,00	481114	100,00

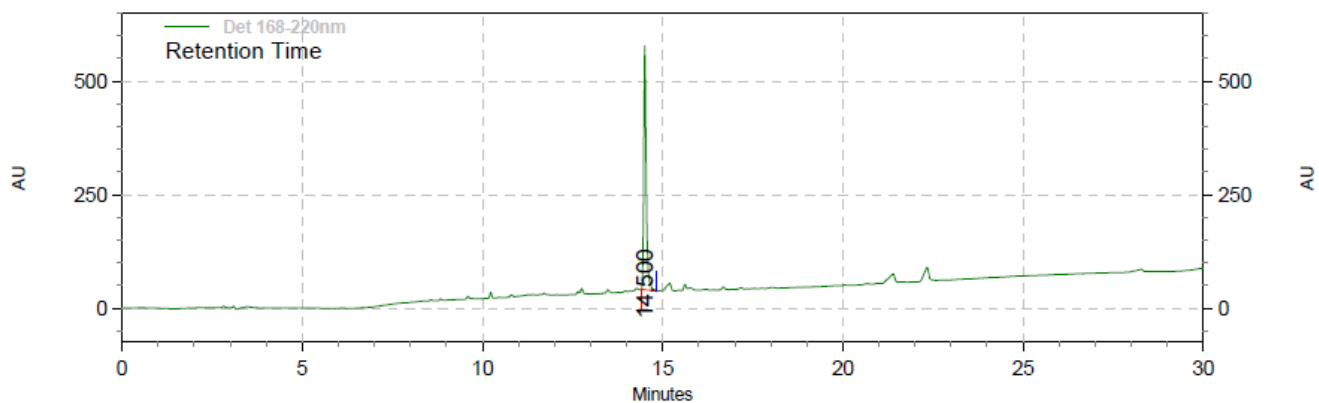
HPLC trace compound 4k



**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
18,717	2301769	100,00	511398	100,00
Totals				
	2301769	100,00	511398	100,00

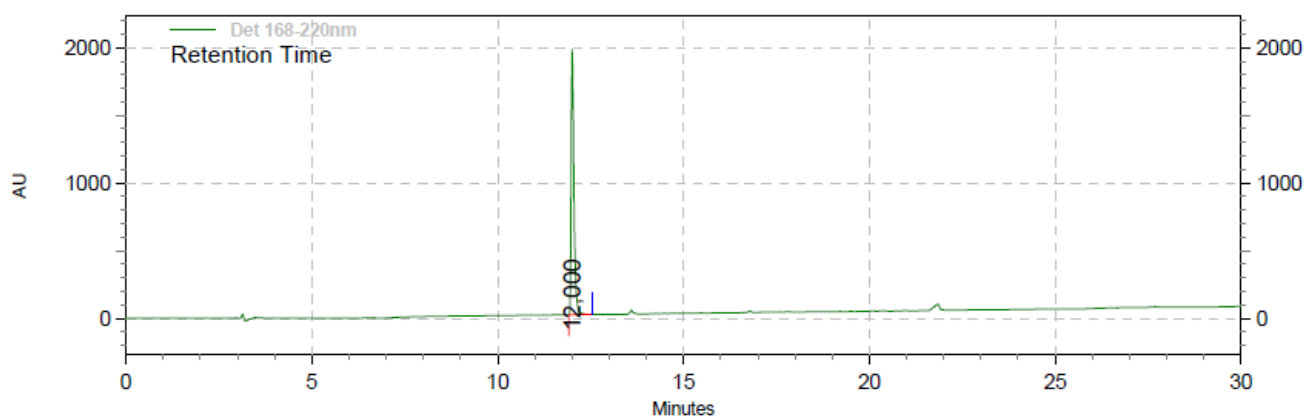
HPLC trace compound 4l



**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
14,500	2601026	100,00	536994	100,00
Totals				
	2601026	100,00	536994	100,00

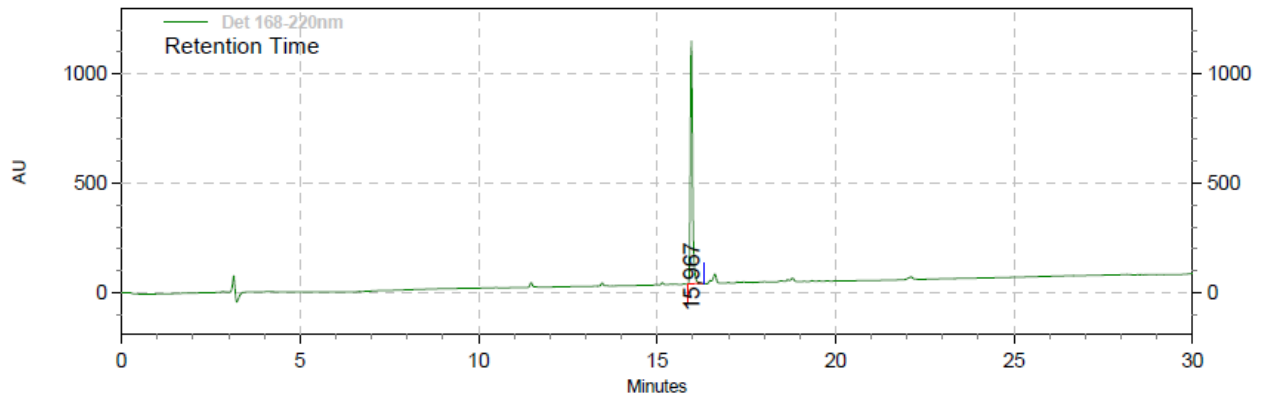
HPLC trace compound 4m



**Det 168-220nm
Results**

Time	Area	Area %	Height	Height %
12,000	10098973	100,00	1960279	100,00
Totals				
	10098973	100,00	1960279	100,00

HPLC trace compound 4n



Det 168-220nm

Results

Time	Area	Area %	Height	Height %
15,967	4760071	100,00	1108810	100,00
Totals	4760071	100,00	1108810	100,00

HPLC trace compound **3c**