

## Supplementary Material

### Fused thieno[2,3-*b*]pyridines: Synthesis and characterization of new condensed pyridothienopyrimidines

Etify A. Bakhite, Ahmed Abdou O. Abeed\* and Ola E. A. Ahmed

*Chemistry Department, Faculty of Science, Assiut University, Assiut 71415, Egypt*

*E-mails: [ahmed.abdelrahman1@science.au.edu.eg](mailto:ahmed.abdelrahman1@science.au.edu.eg)*

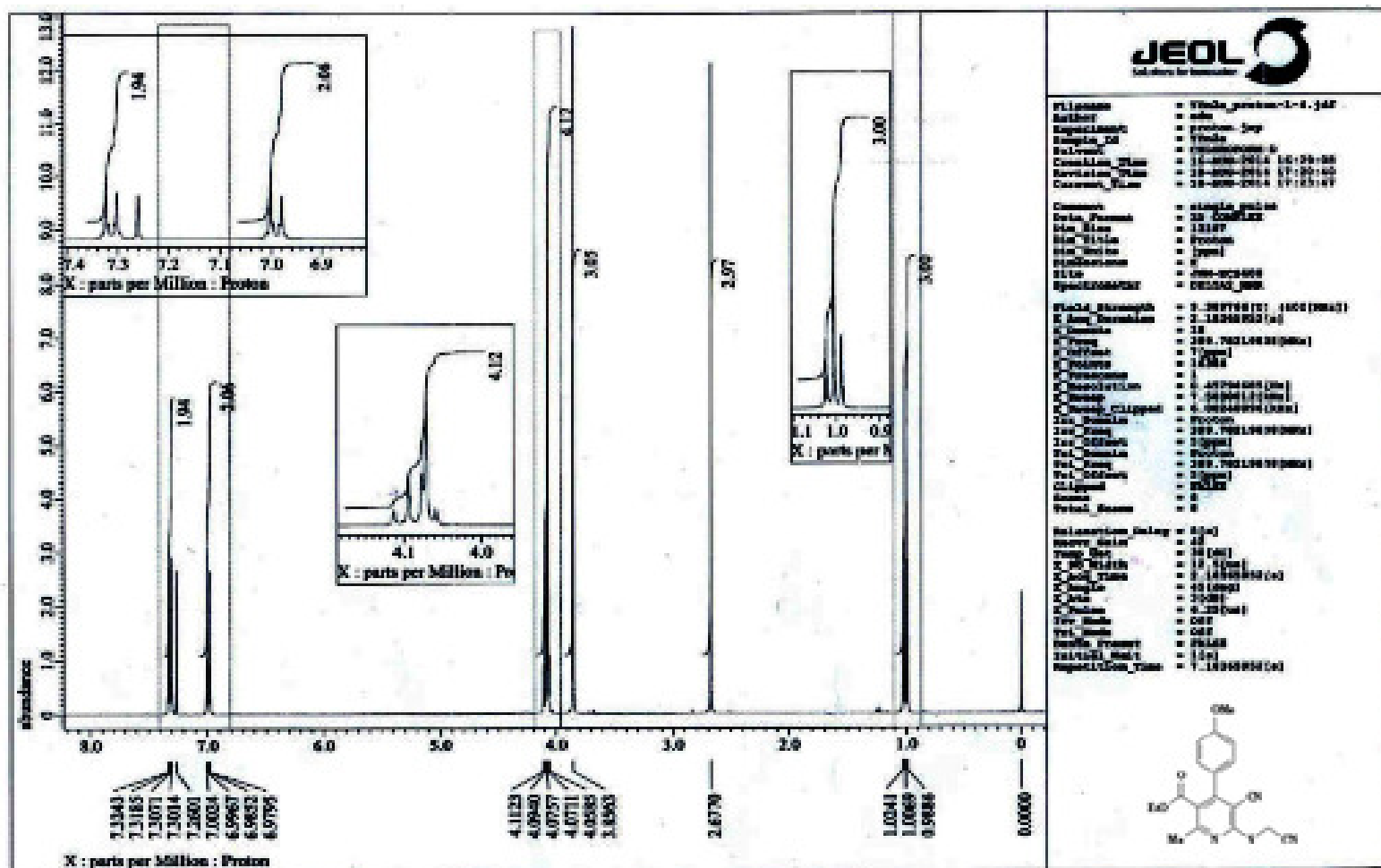
#### Table of Contents

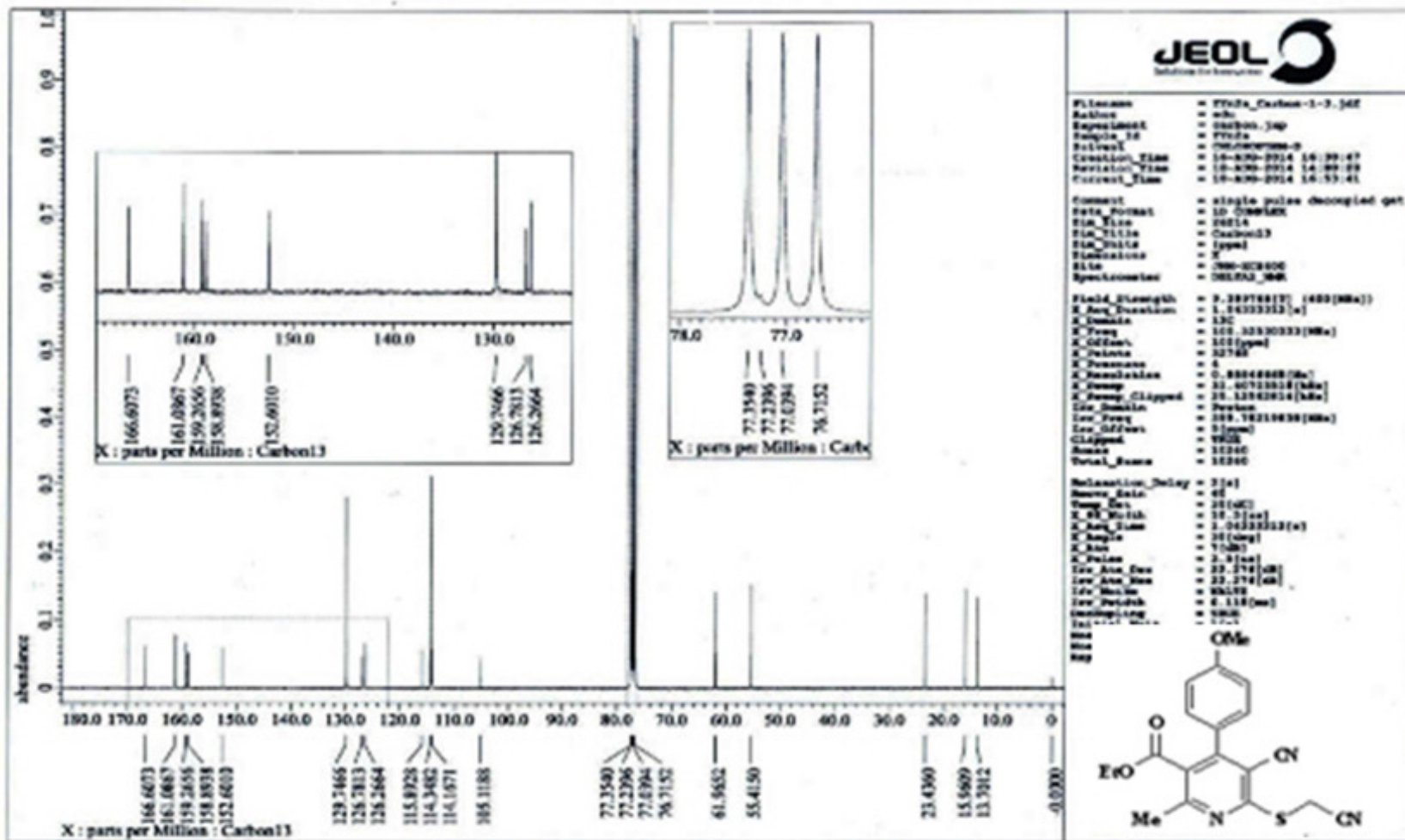
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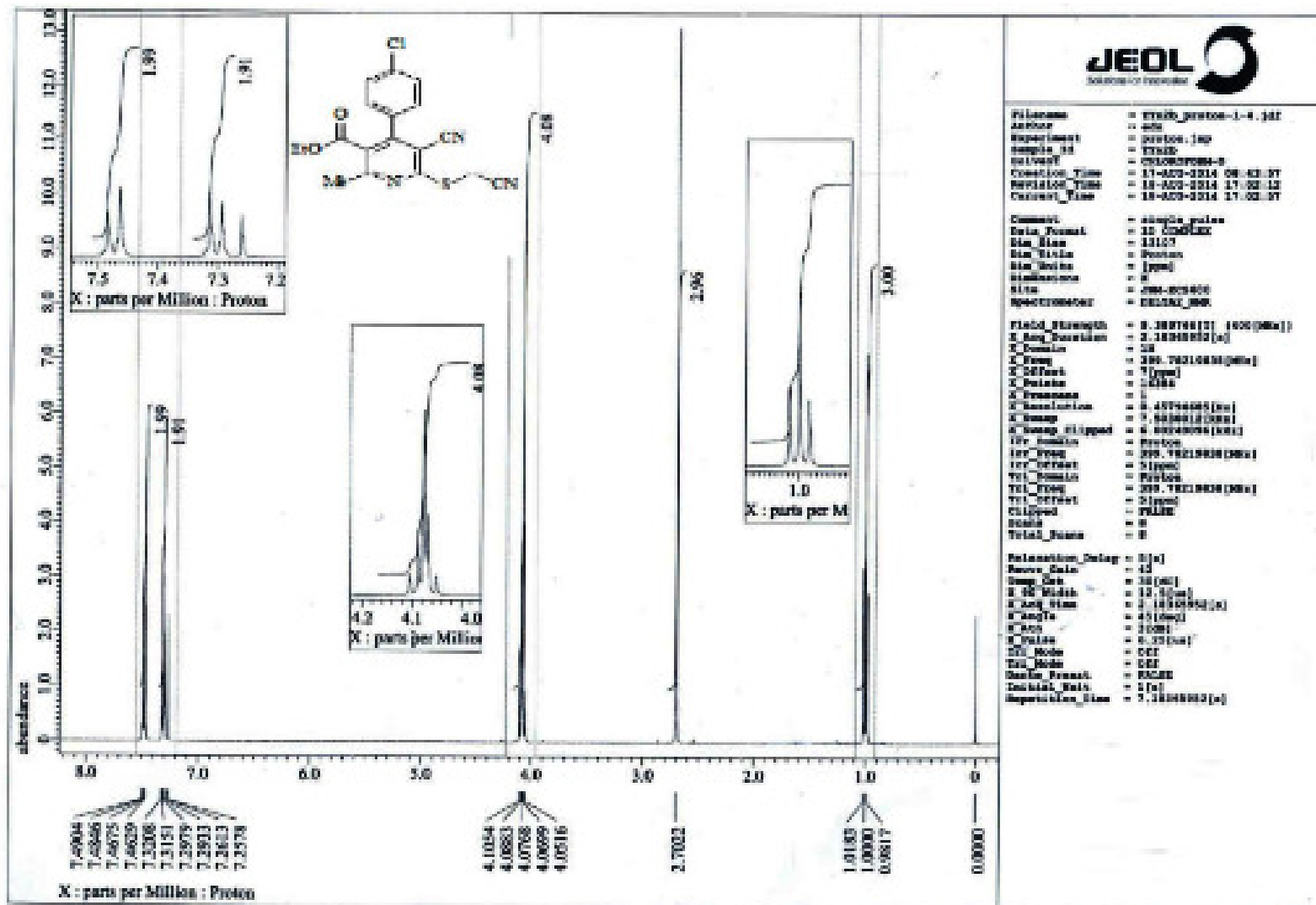
S2

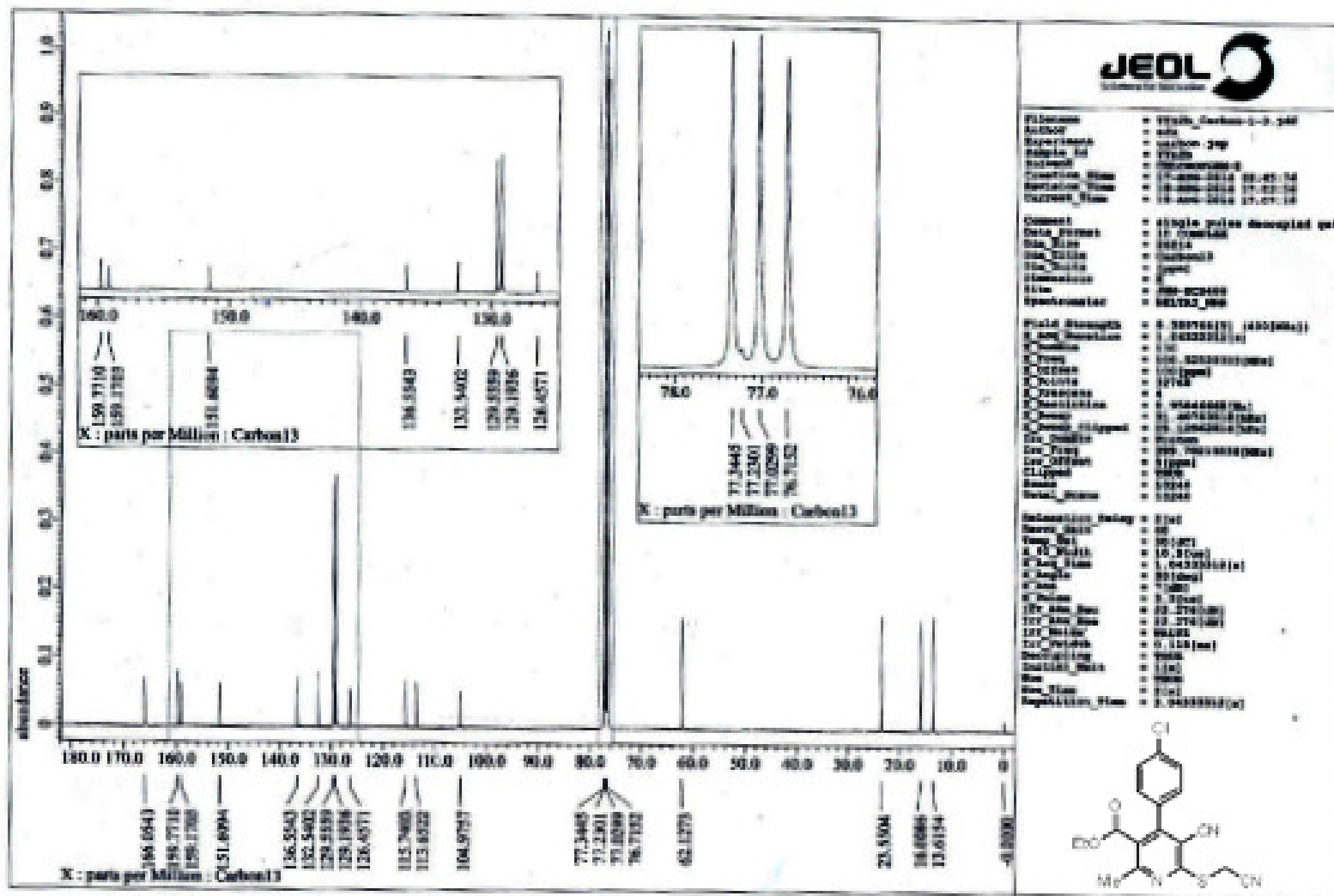
## General information

The IR spectra were recorded on a Shimadzu 470 IR-spectrophotometer (KBr;  $\nu_{\max}$  in  $\text{cm}^{-1}$ ). The NMR spectra were taken on a Varian EM-390, 90 MHz spectrometer or on a JEOL LA 400 MHz FT-NMR spectrometer using TMS as an internal standard. Chemical shifts are given in  $\delta$  ppm and coupling constant ( $J$ ) is given in Hz. Electron impact (EI) MS spectra were carried out on a JEOL JMS-600 spectrometer. Elemental analyses (C, H, N and S) were performed on an Elemental Analyses system GmbH vario EL V2.3 1998 CHNS Mode (Assiut University).

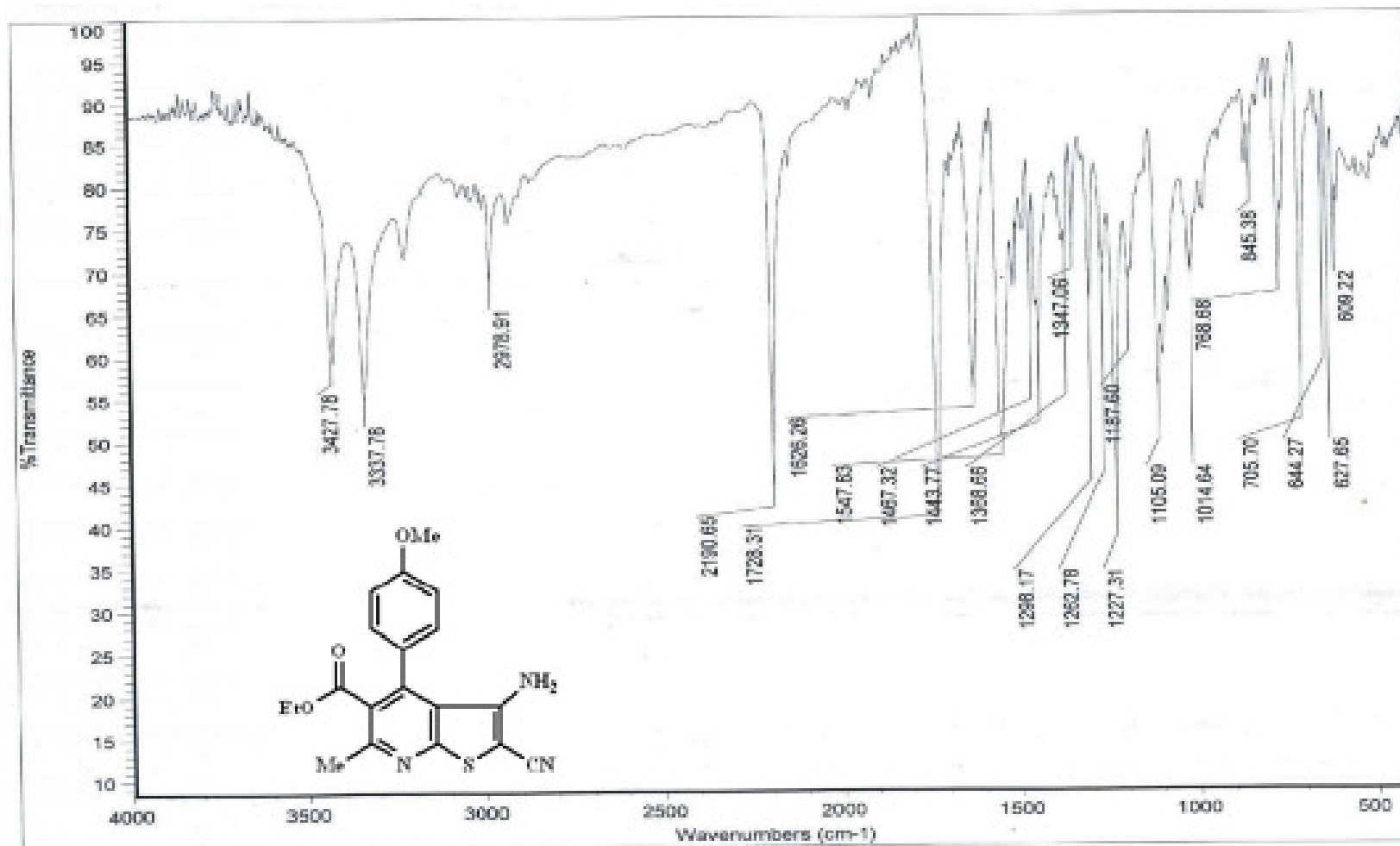




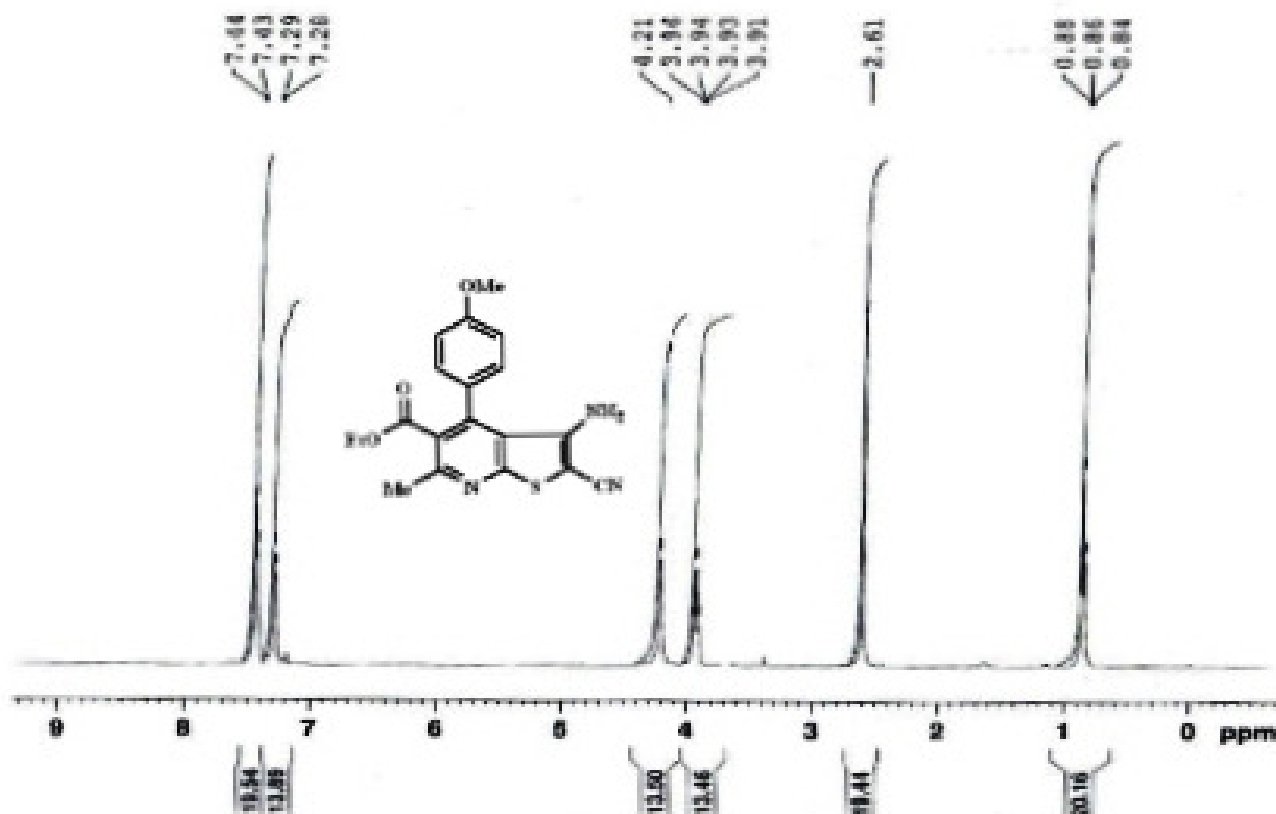




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O-11  
 proton\_nu CDCl3 (C:\nmr-data) Student 17



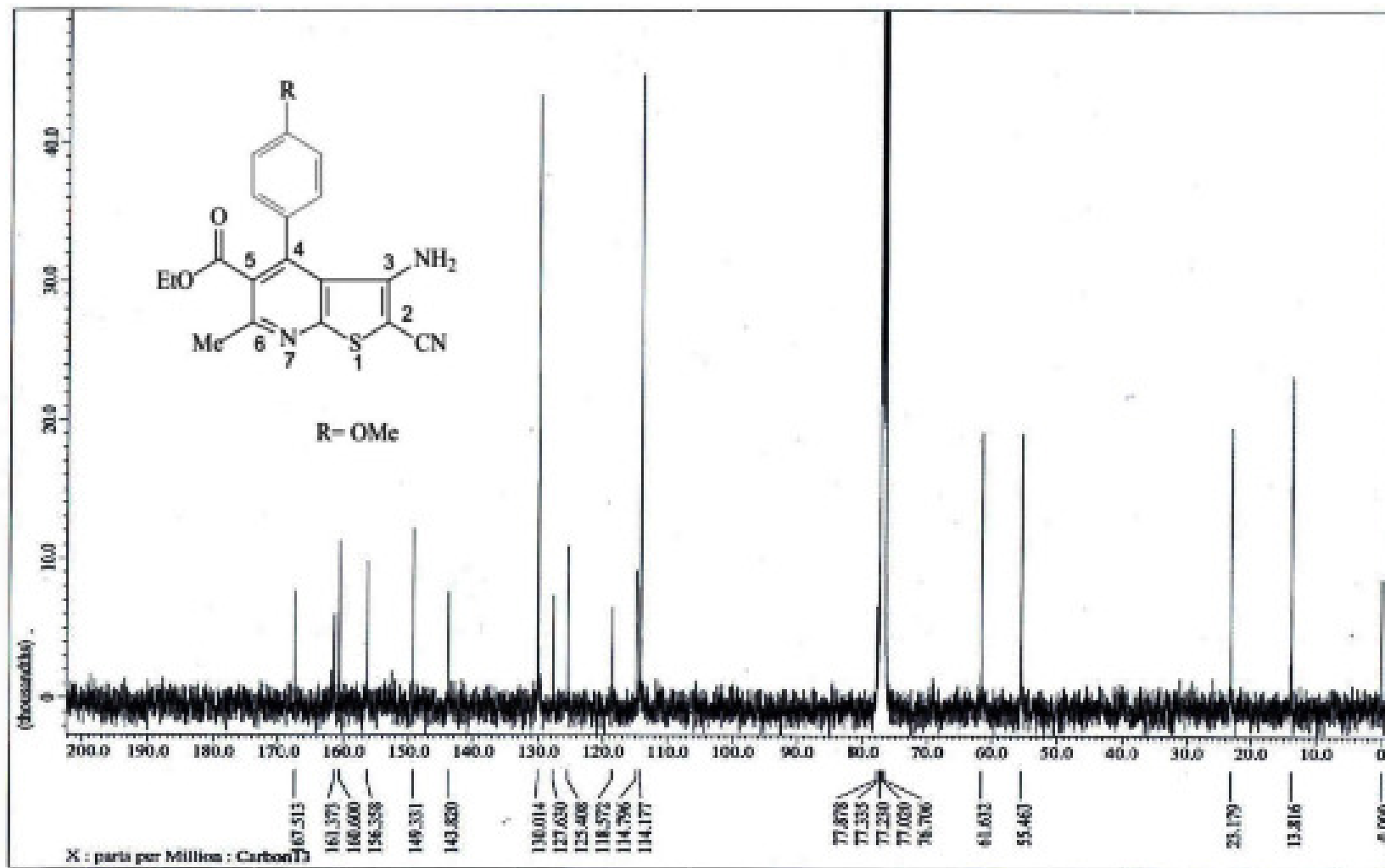
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PROCNO   1

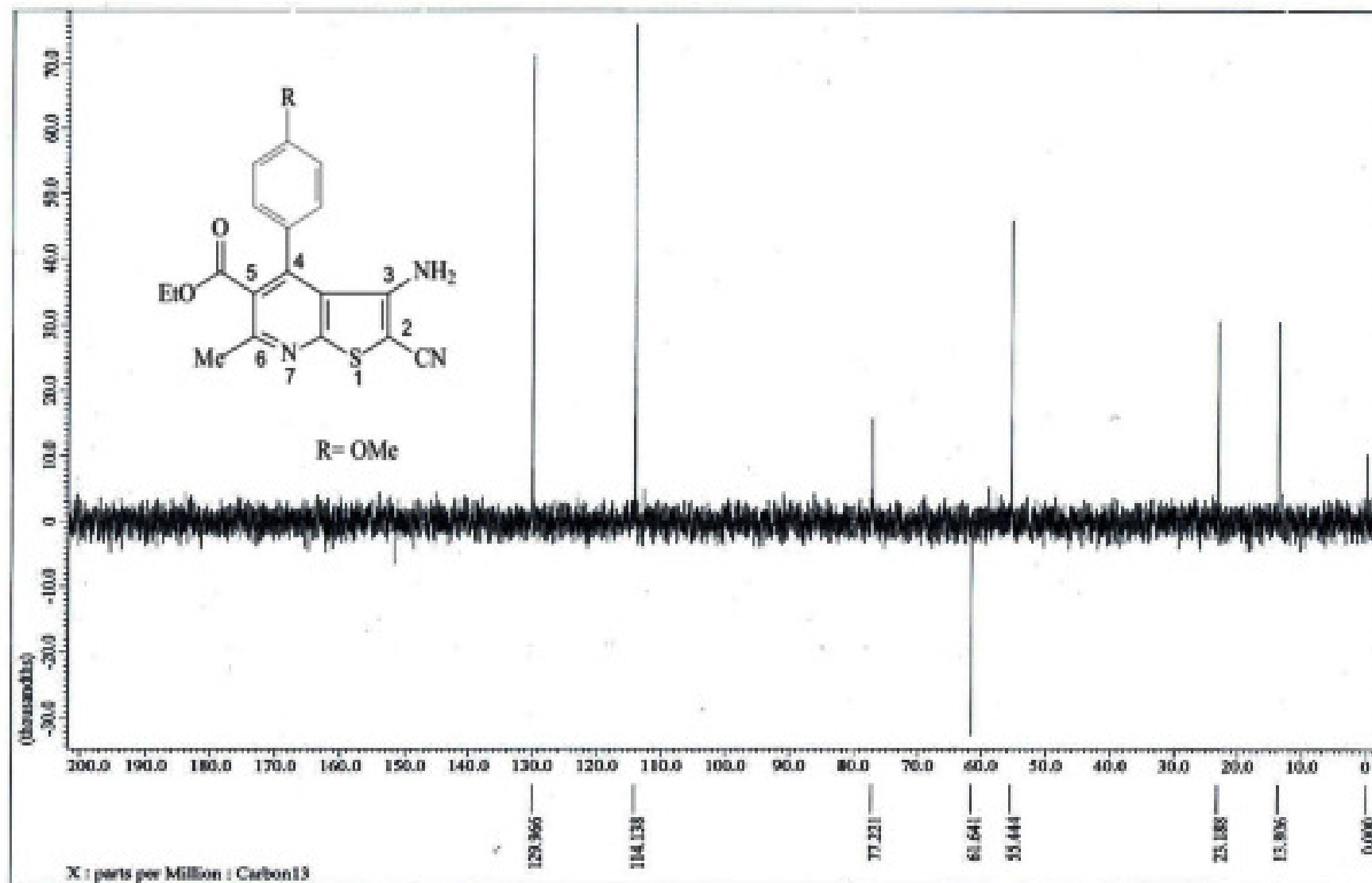
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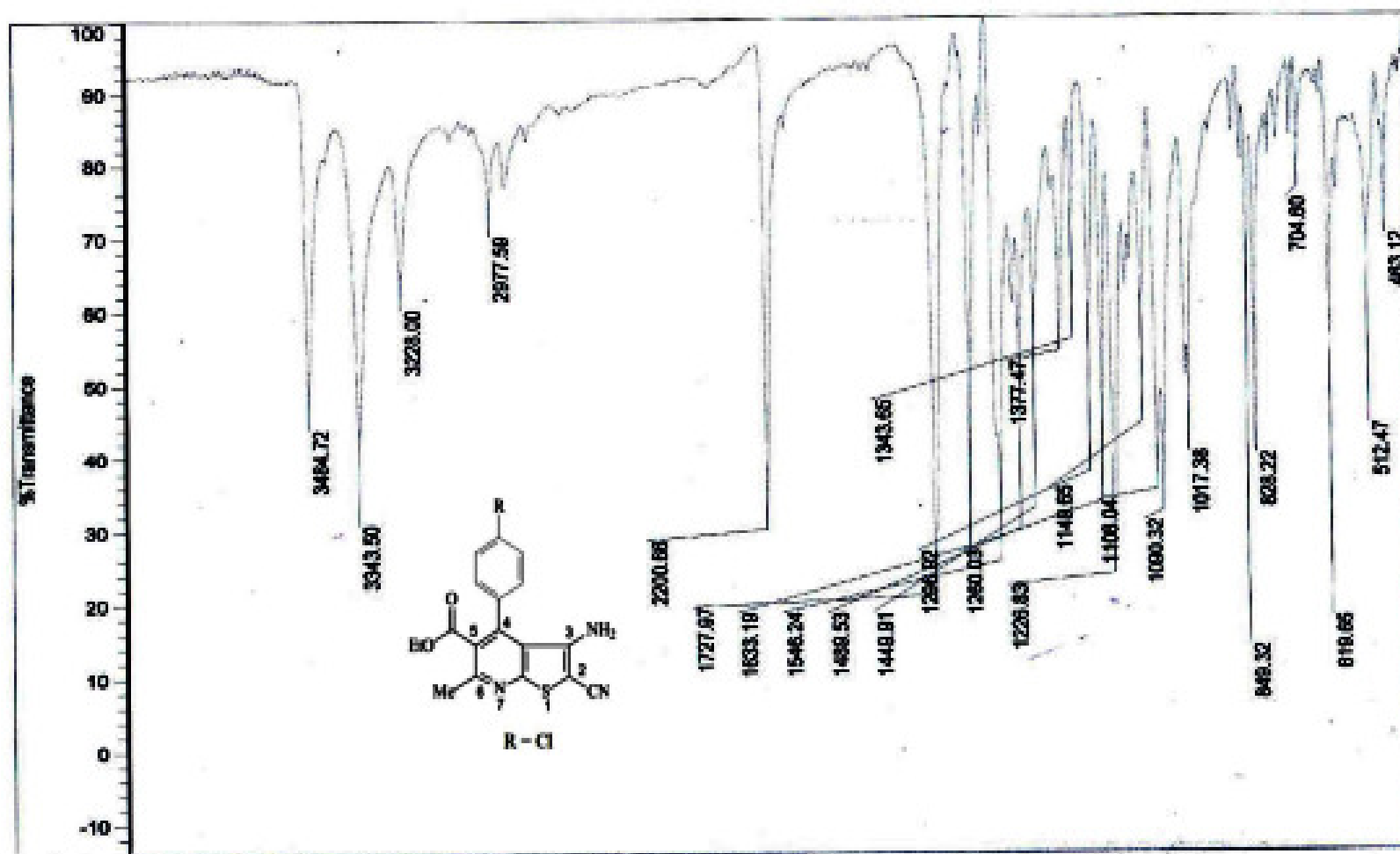
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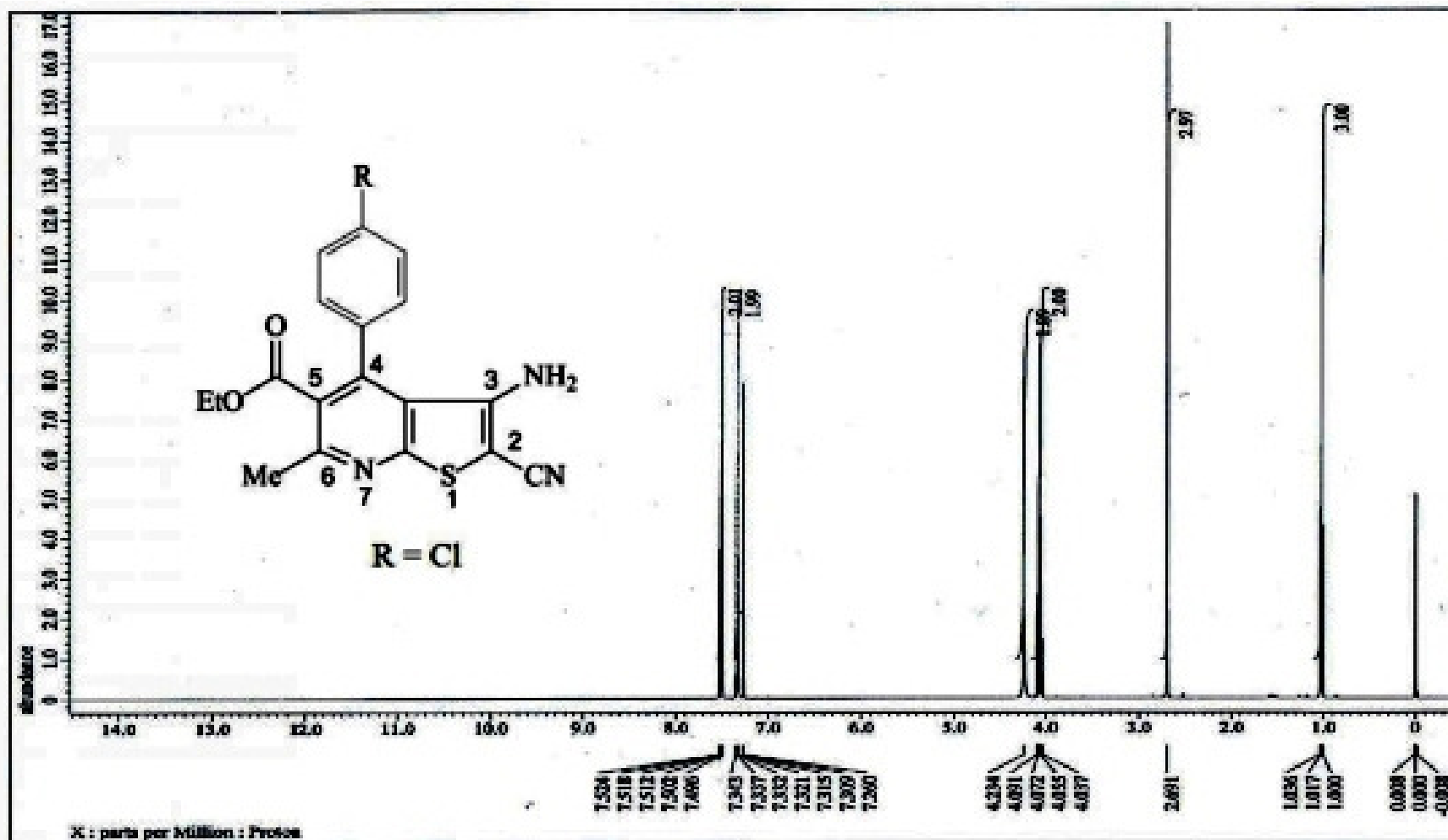
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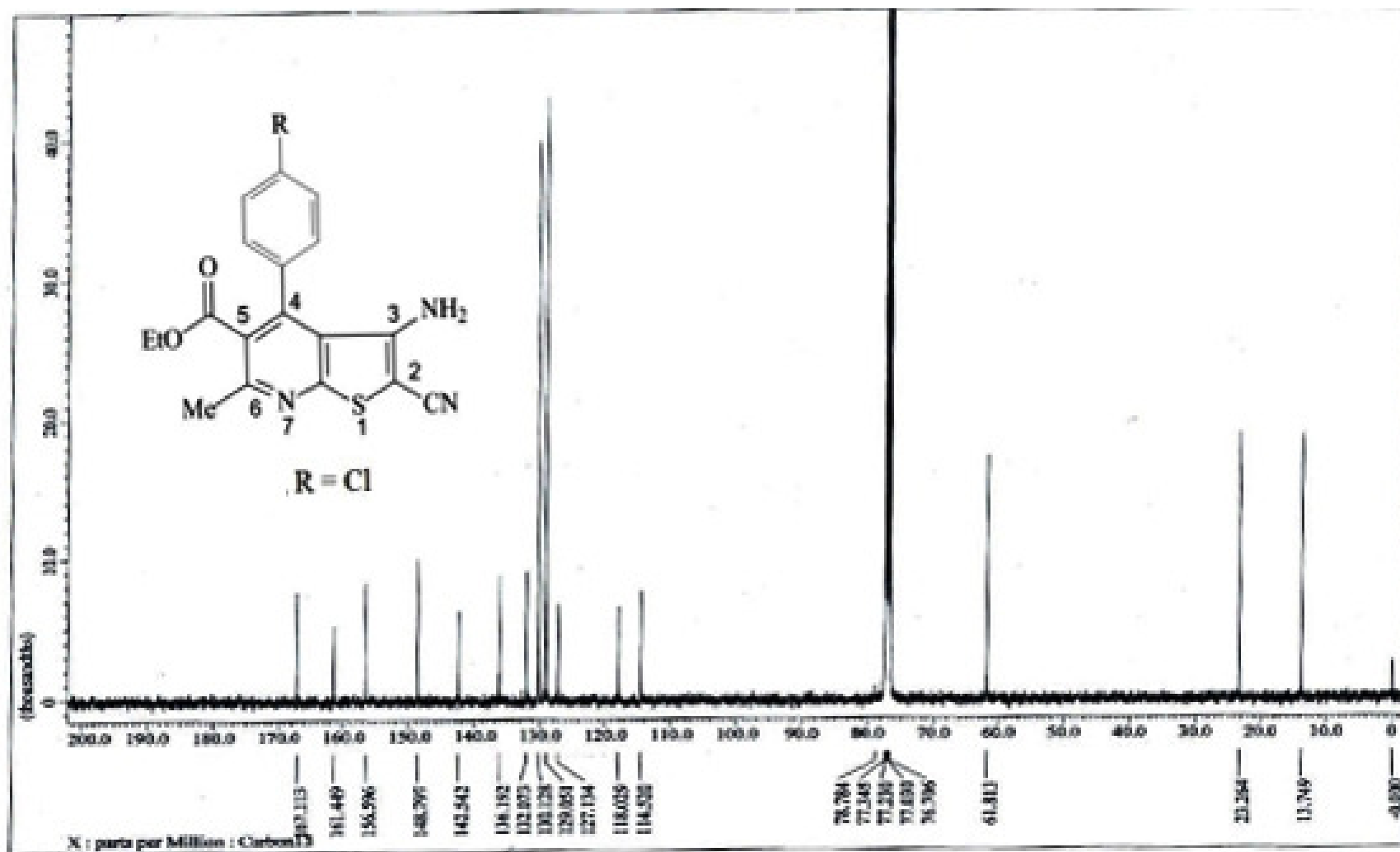


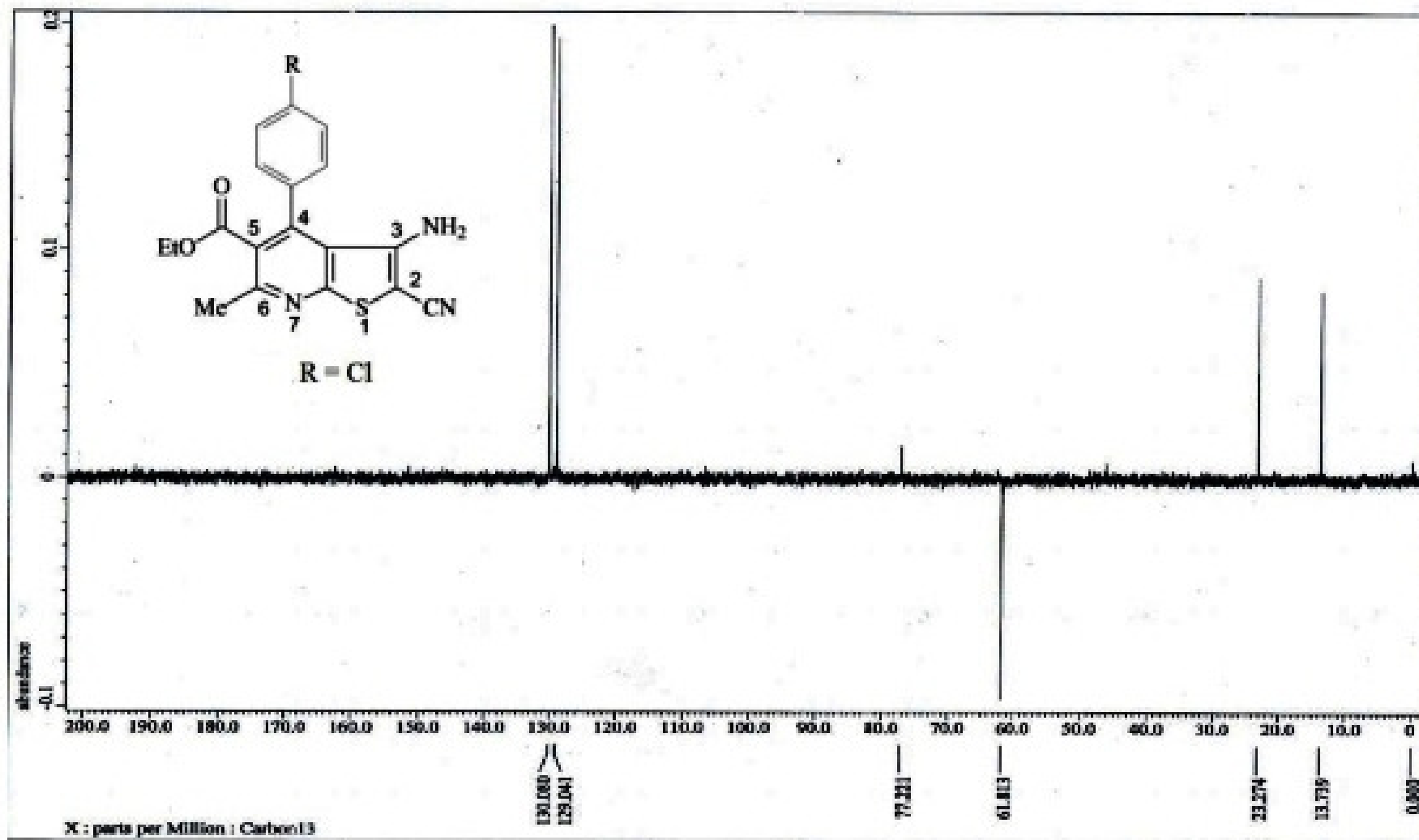


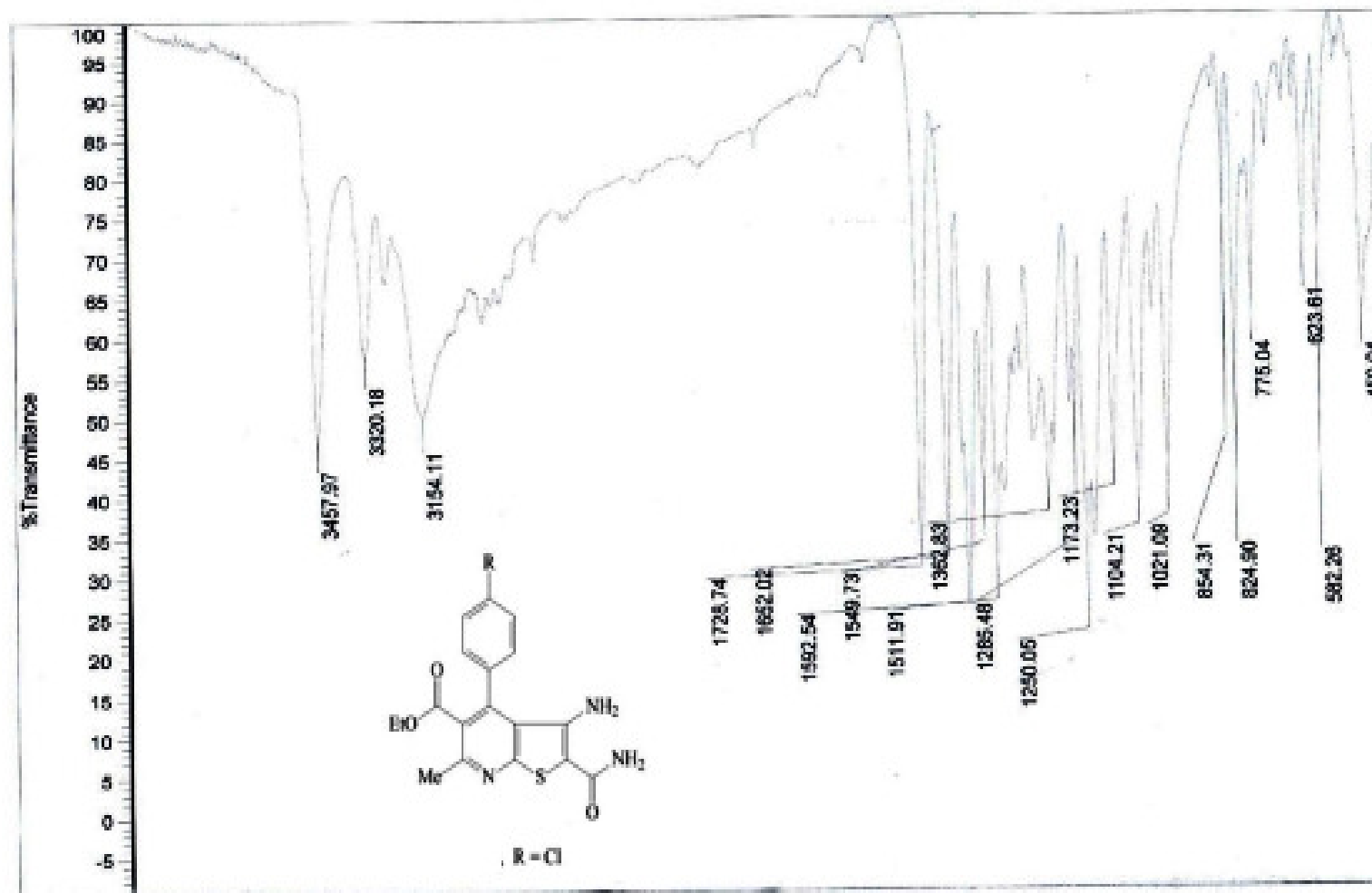












Date: Wed Feb 8, 2017

42007901  
STANDARD IN OBSERVE

Pulse Sequence: zgpg30

solvent: cdcl3  
Subst. Temp: 25.00

Sample #31

File: 42007901

NAME: 4-CHLORO-5-ETHOXY-2-METHYL-6-NITRO-1,2,4-TRIAZIN-3(2H)-ONE

Pulse program

Pulse delay 3.000 sec

Pulse 90.0 degree

Acq. time 1.500 sec

Width 6582.0 Hz

16 repetitions

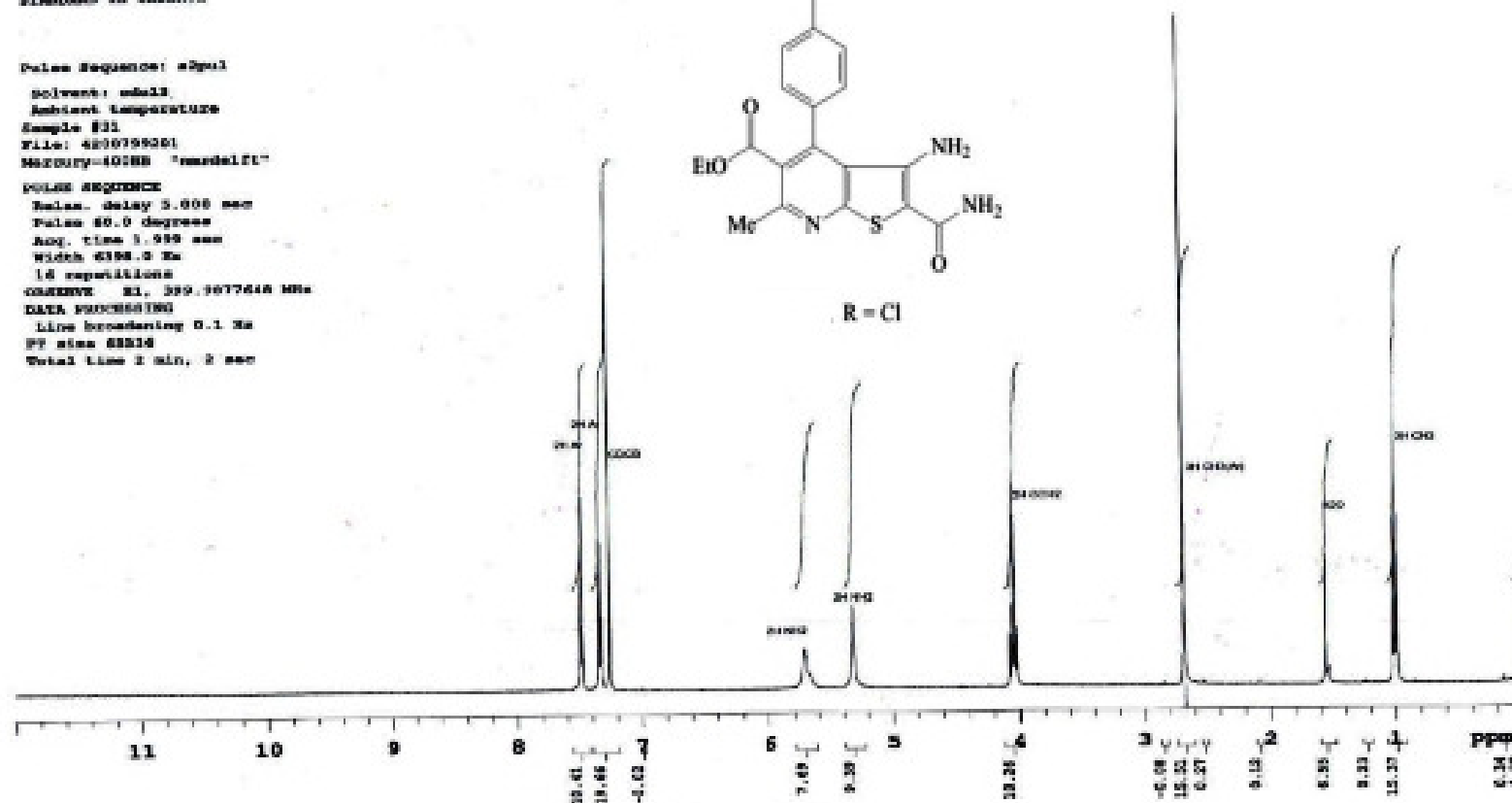
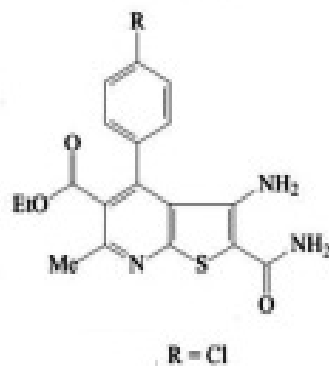
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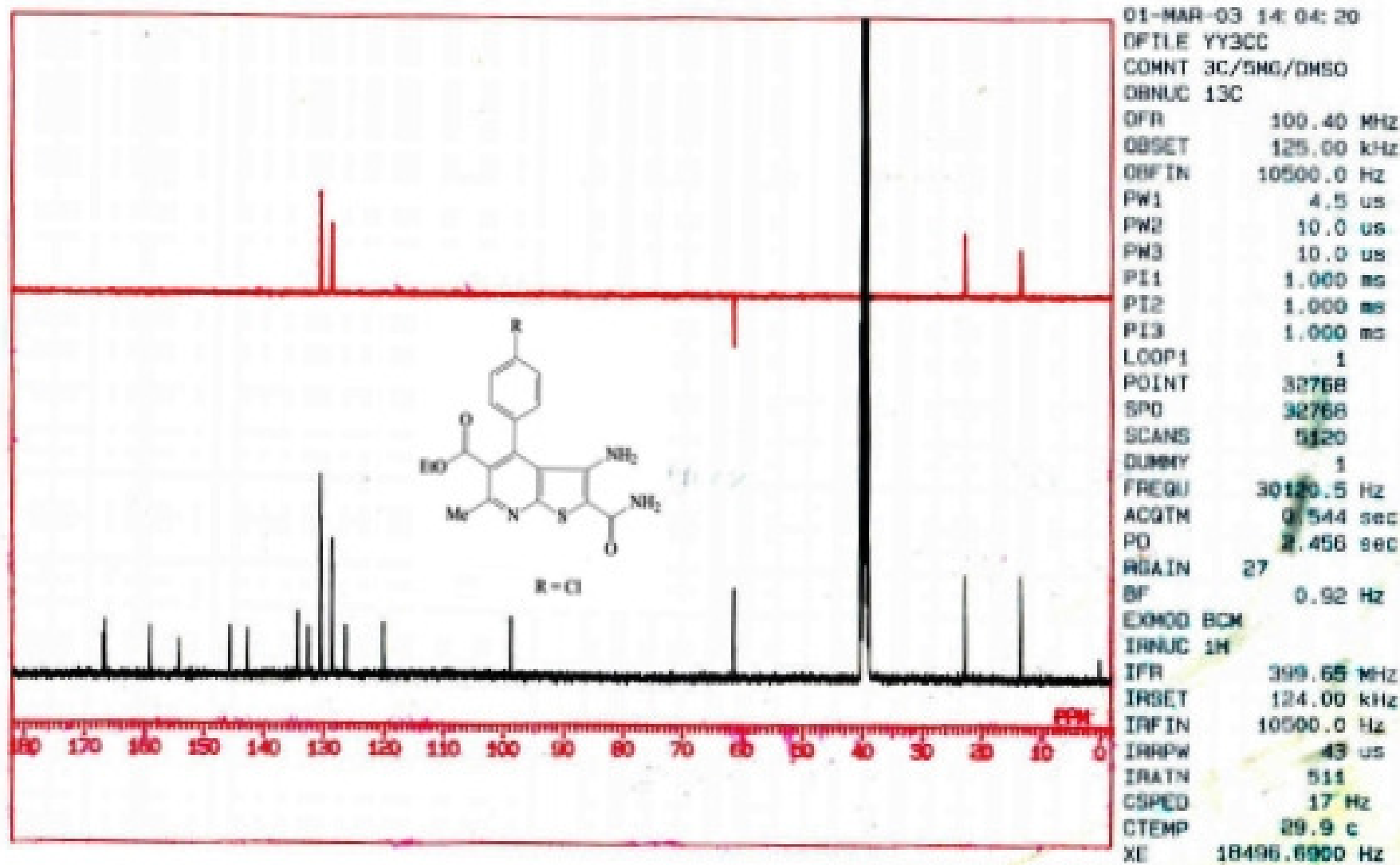
DATA PROCESSING

Line broadening 0.1 Hz

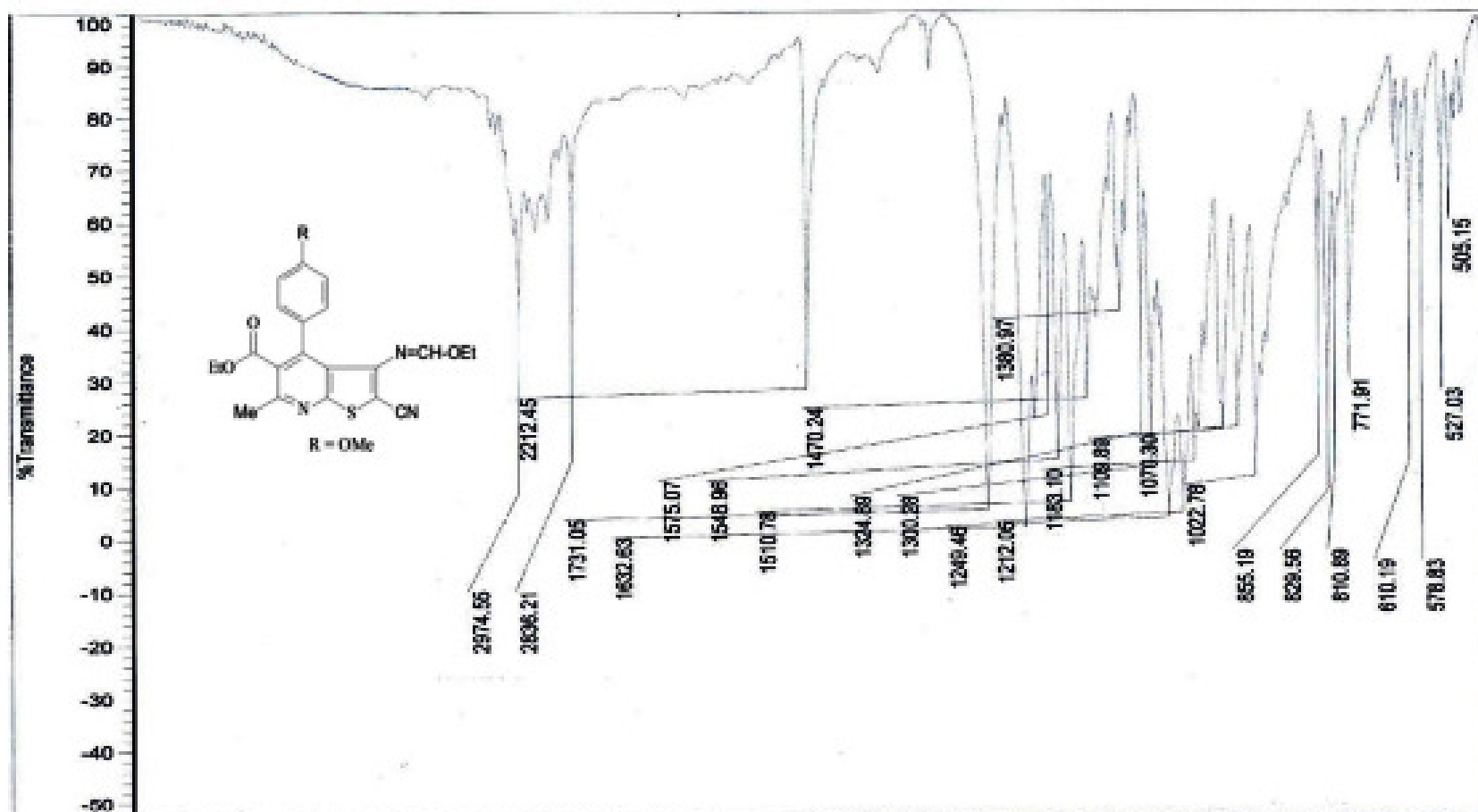
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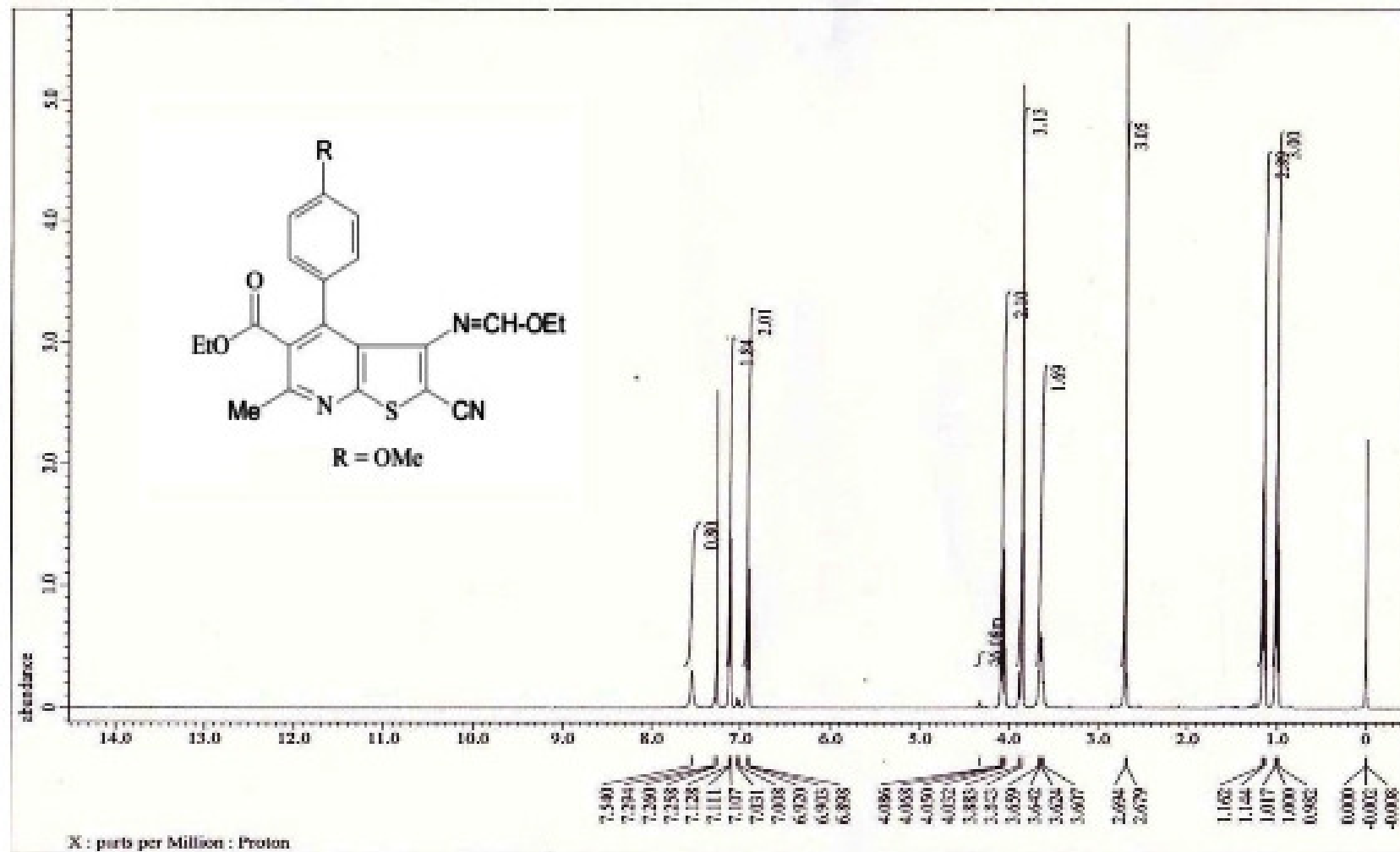
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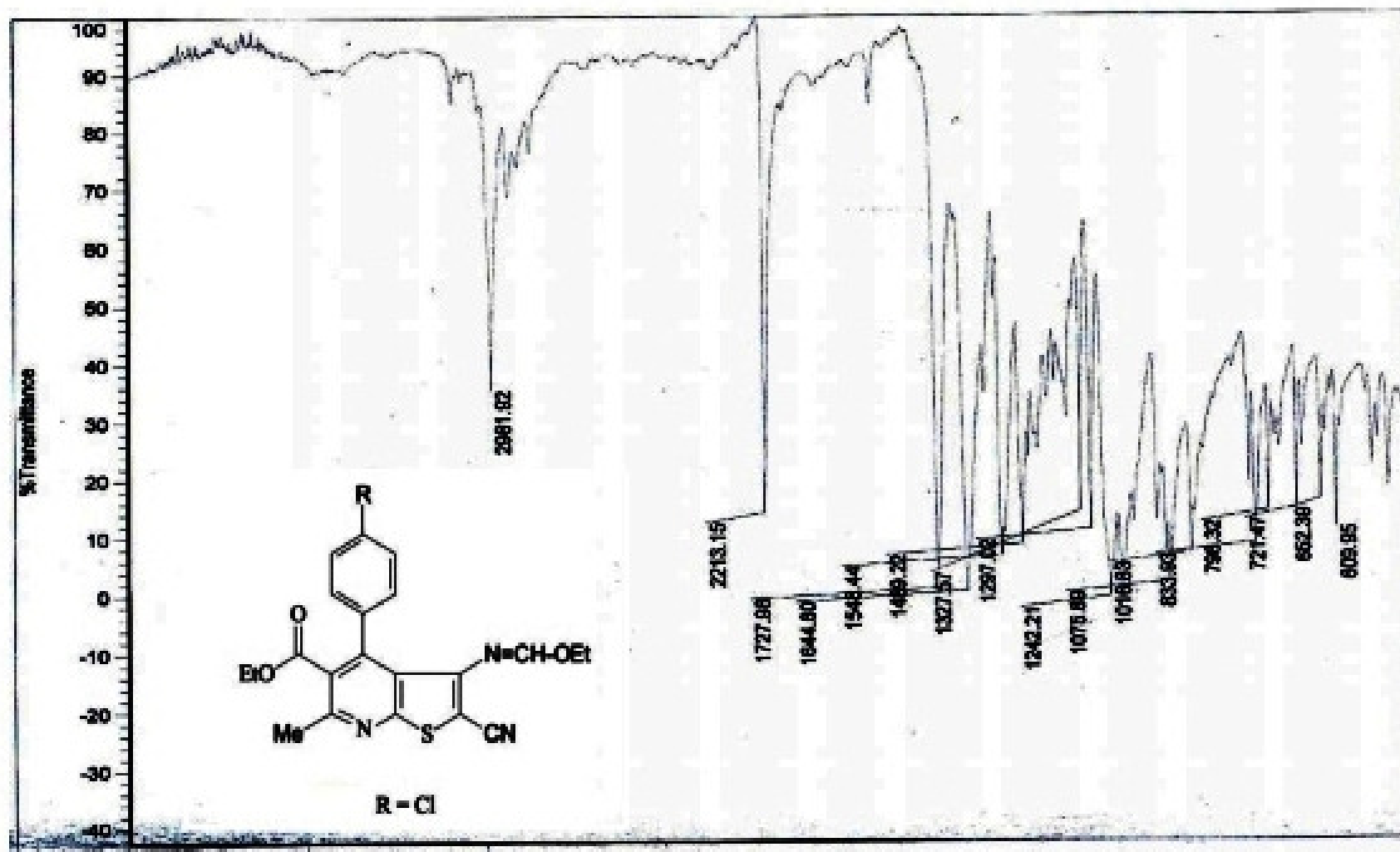


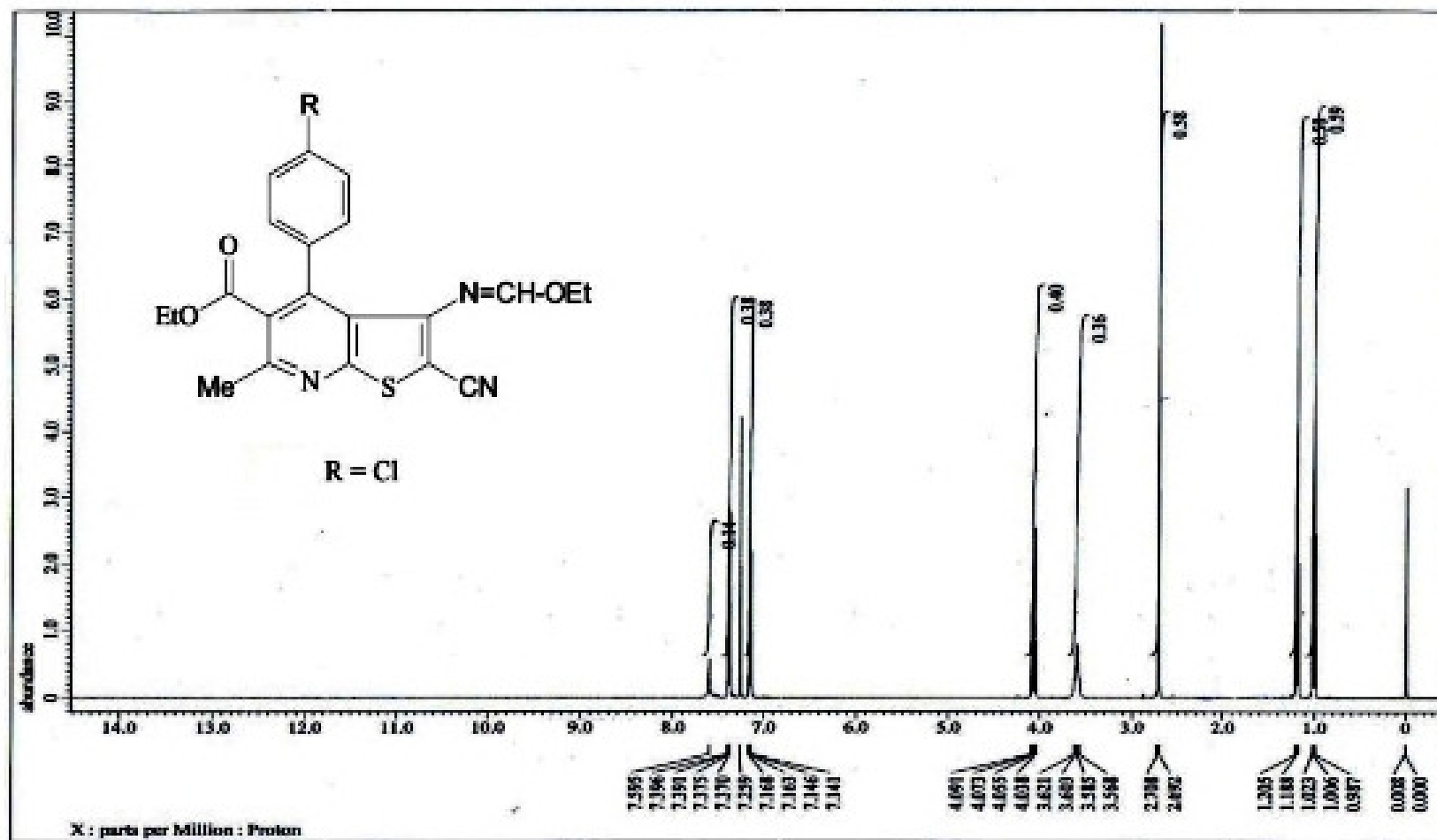


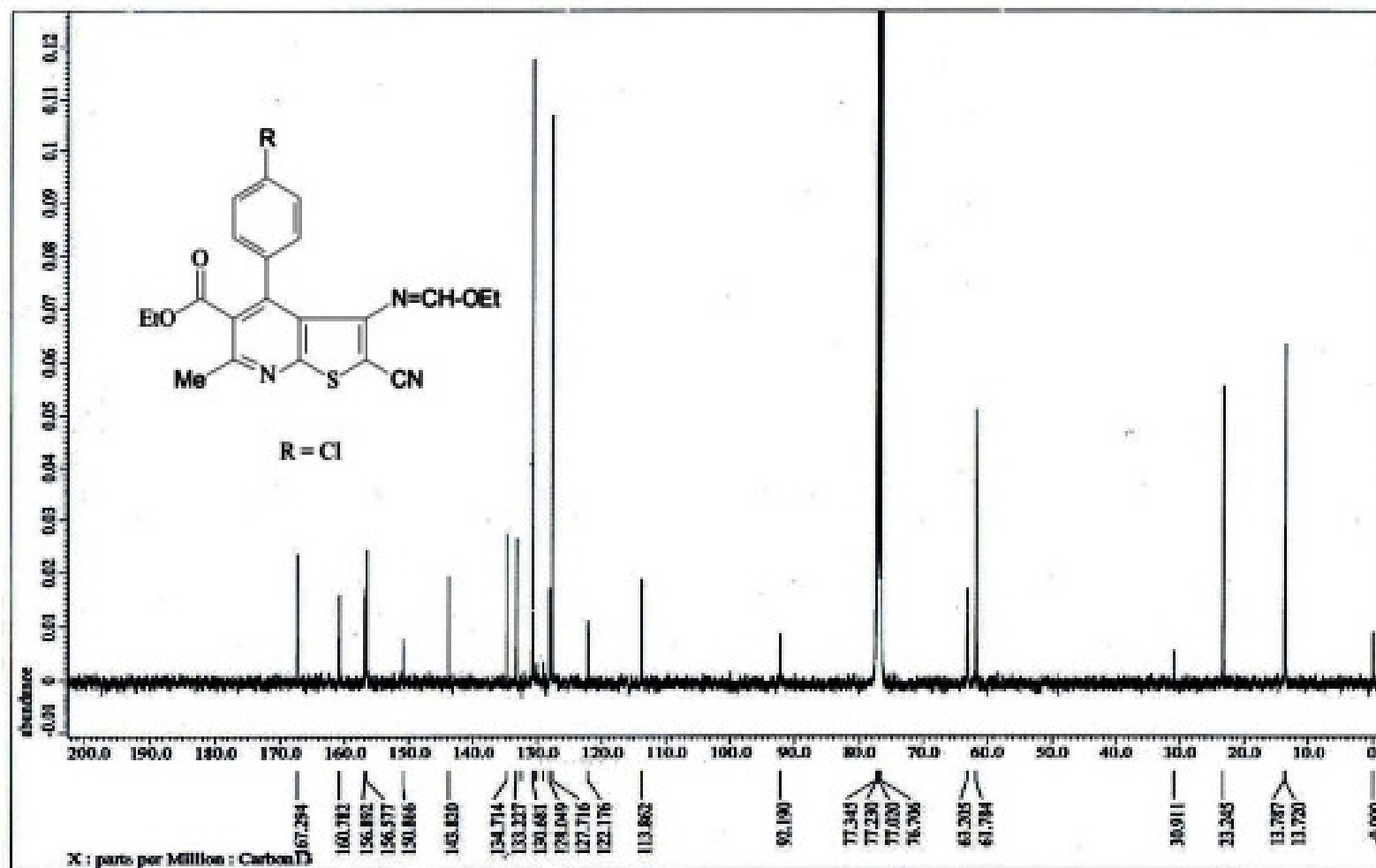


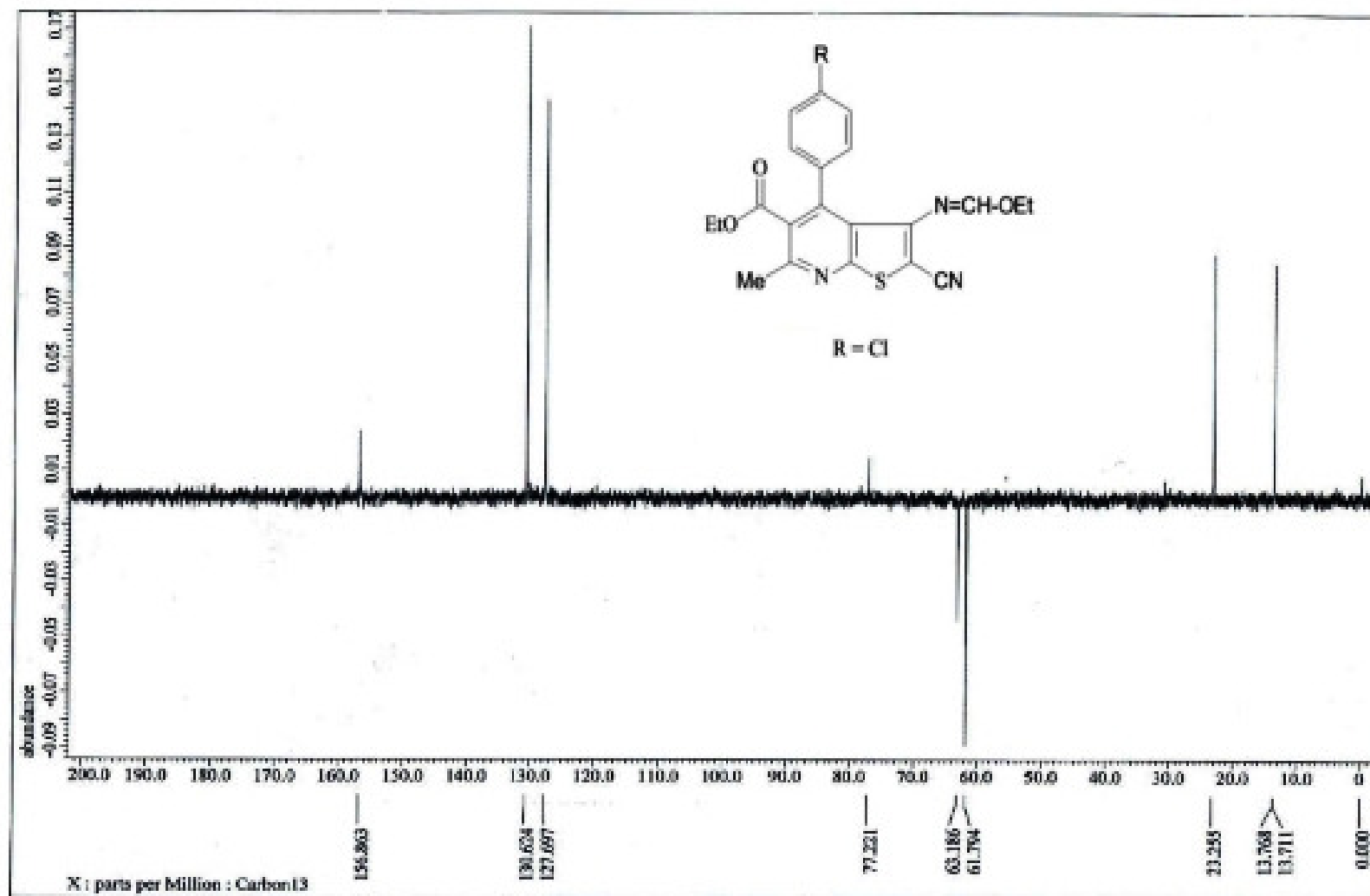


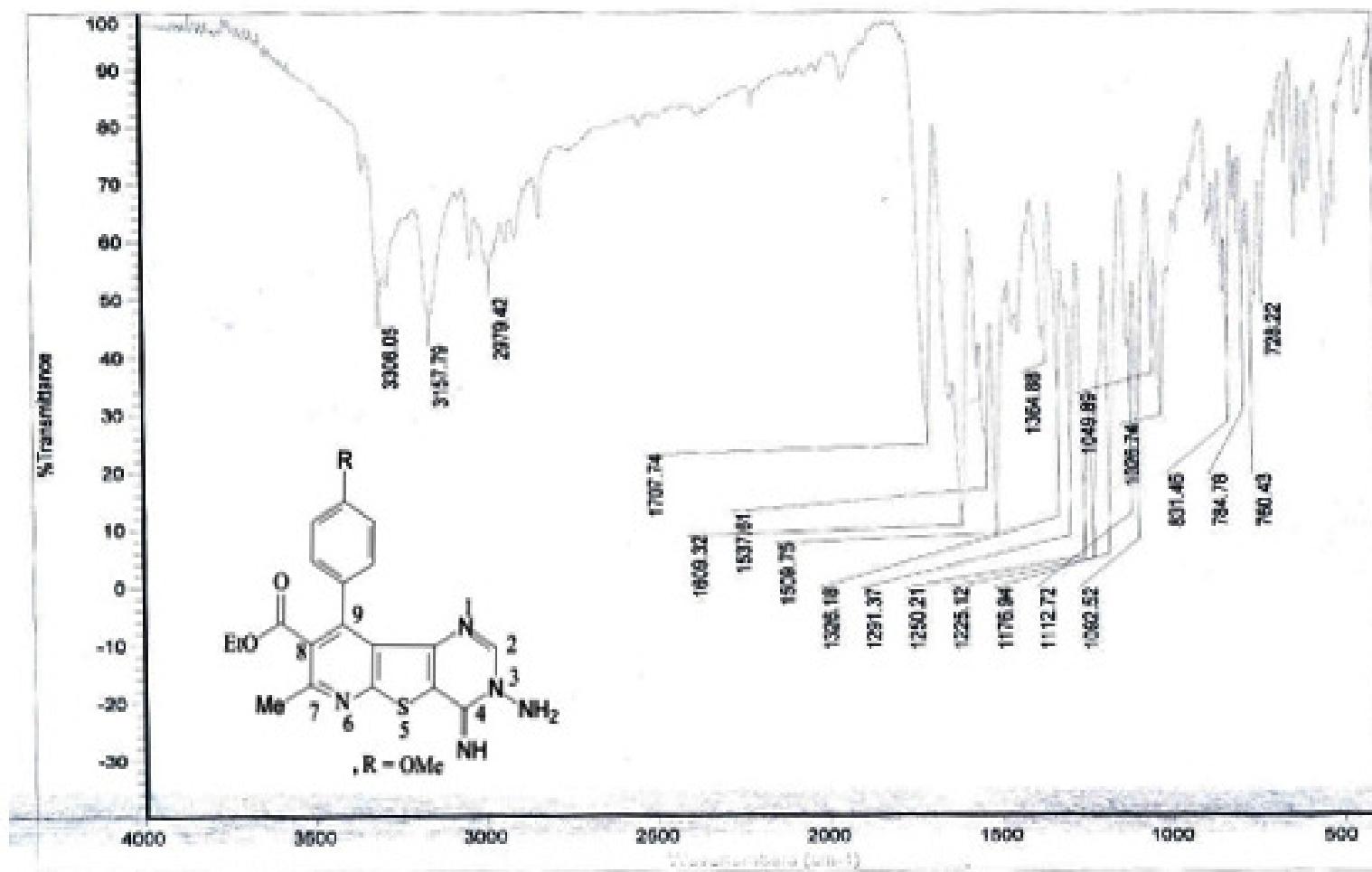


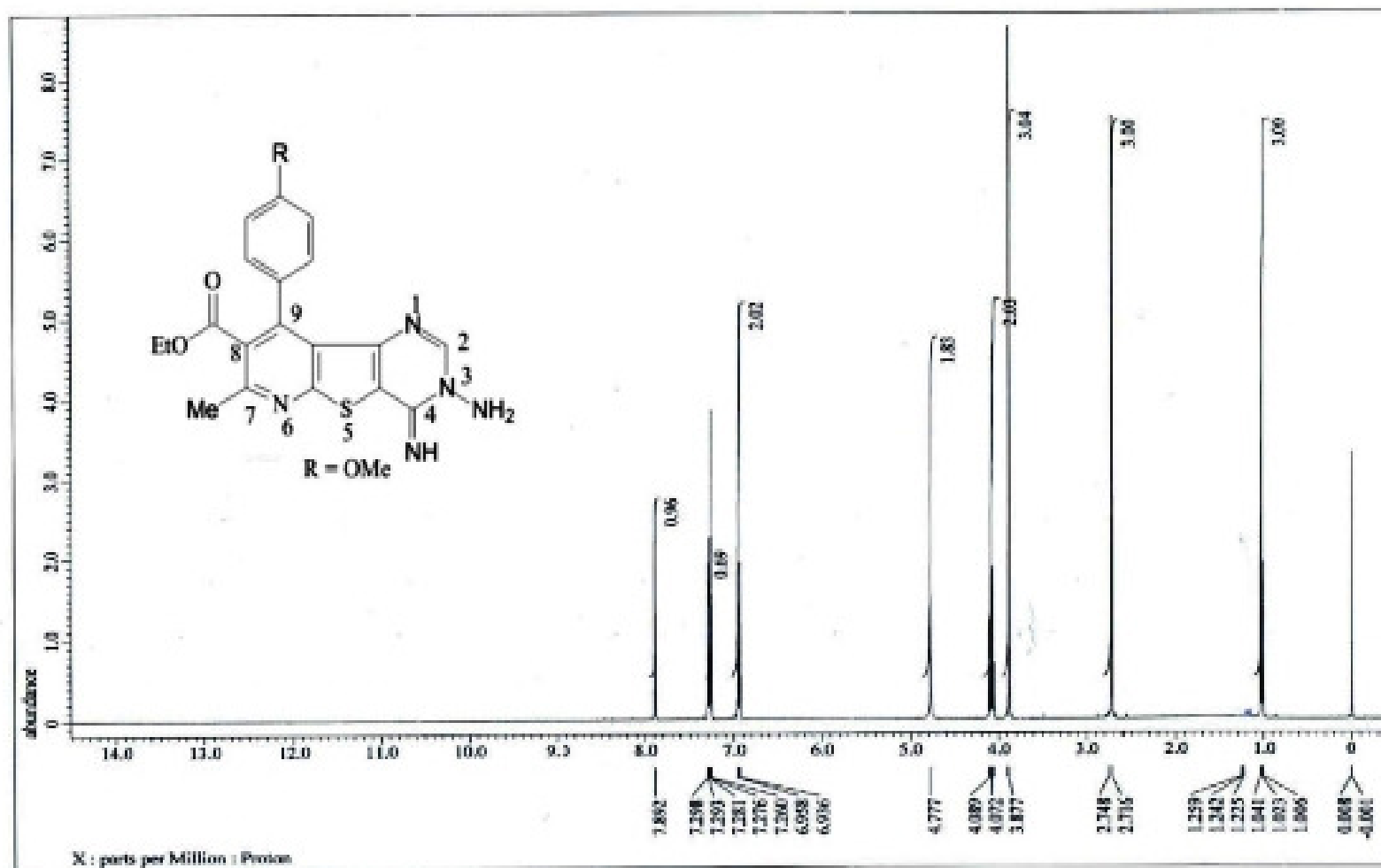




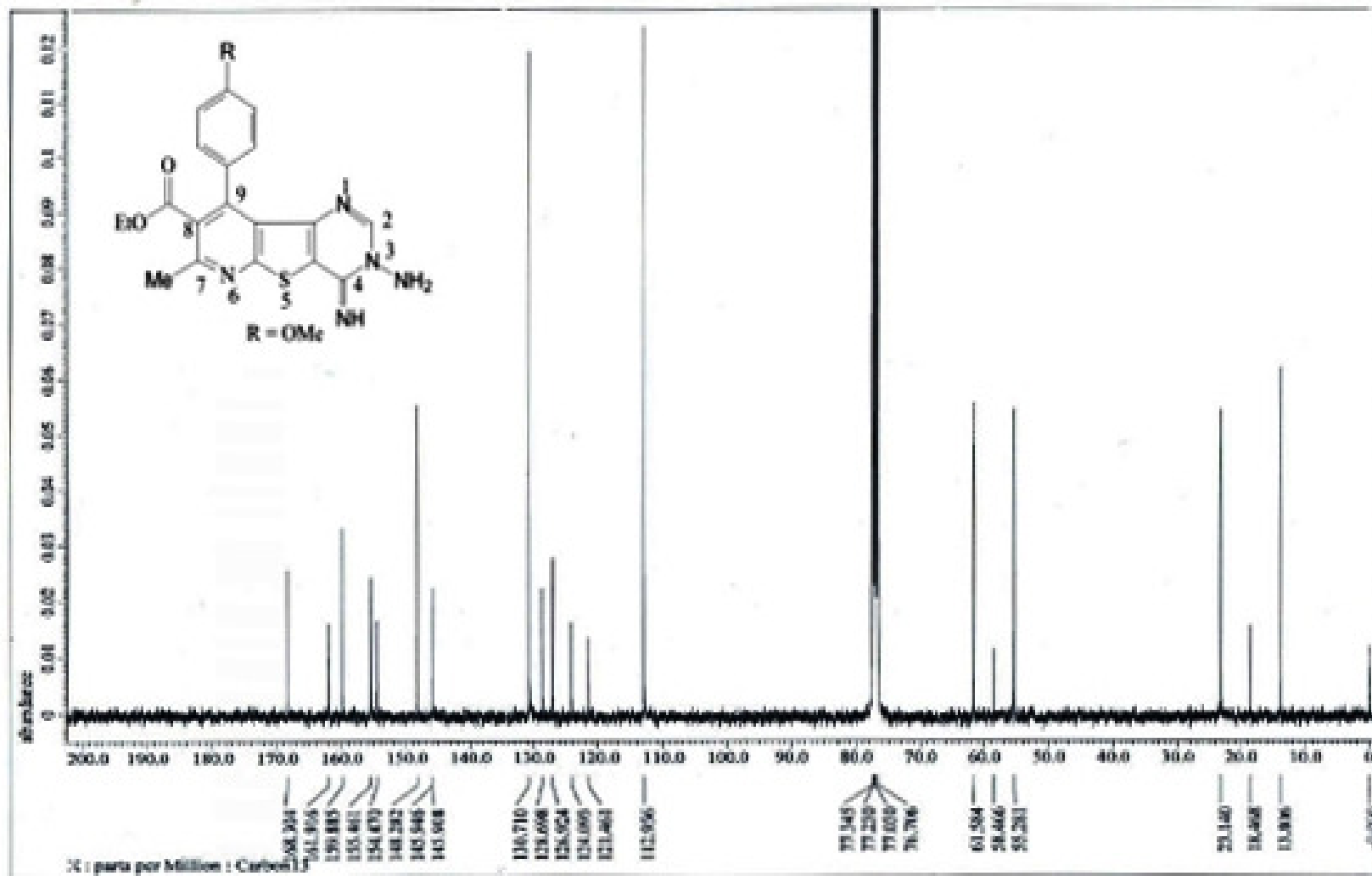


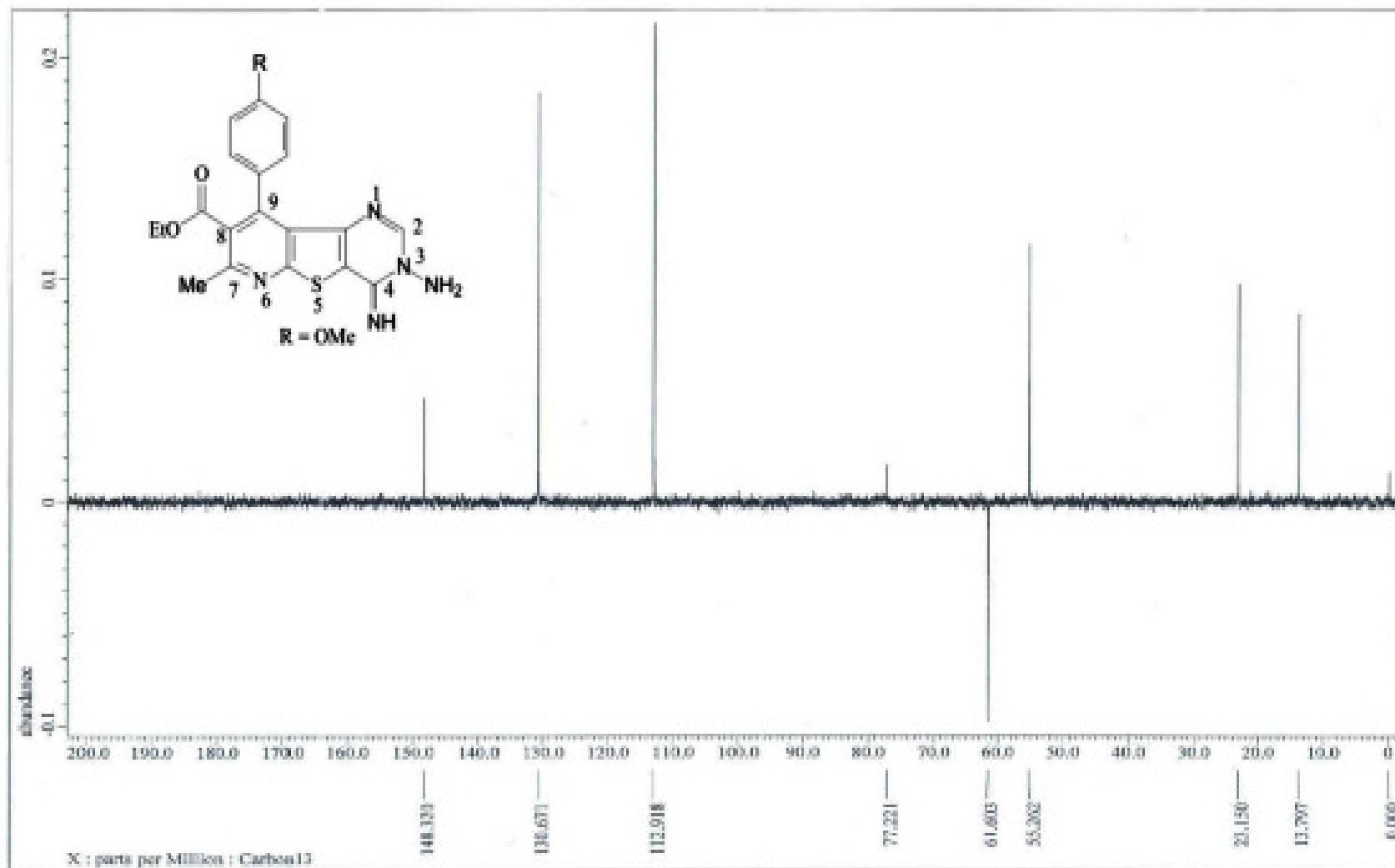


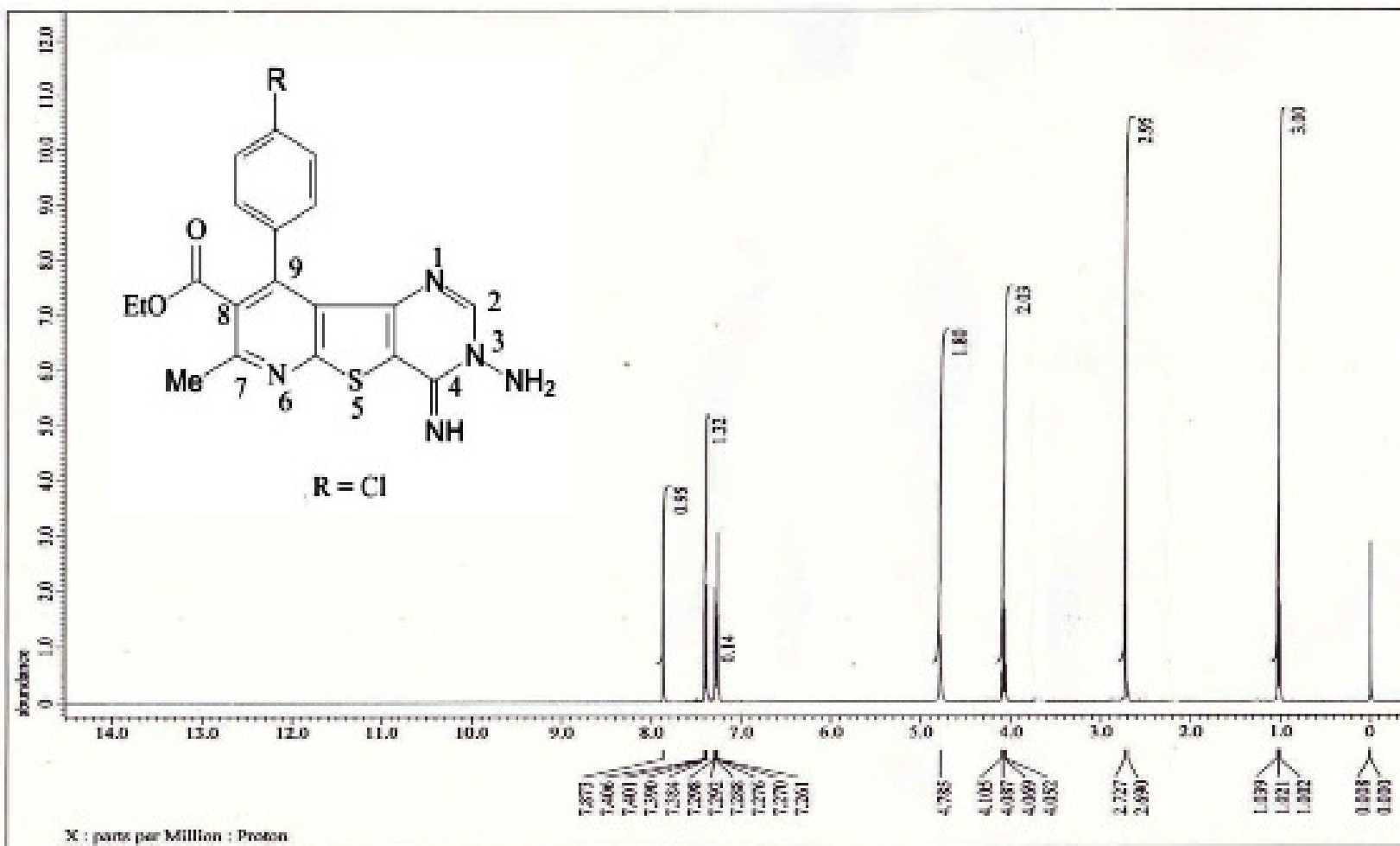


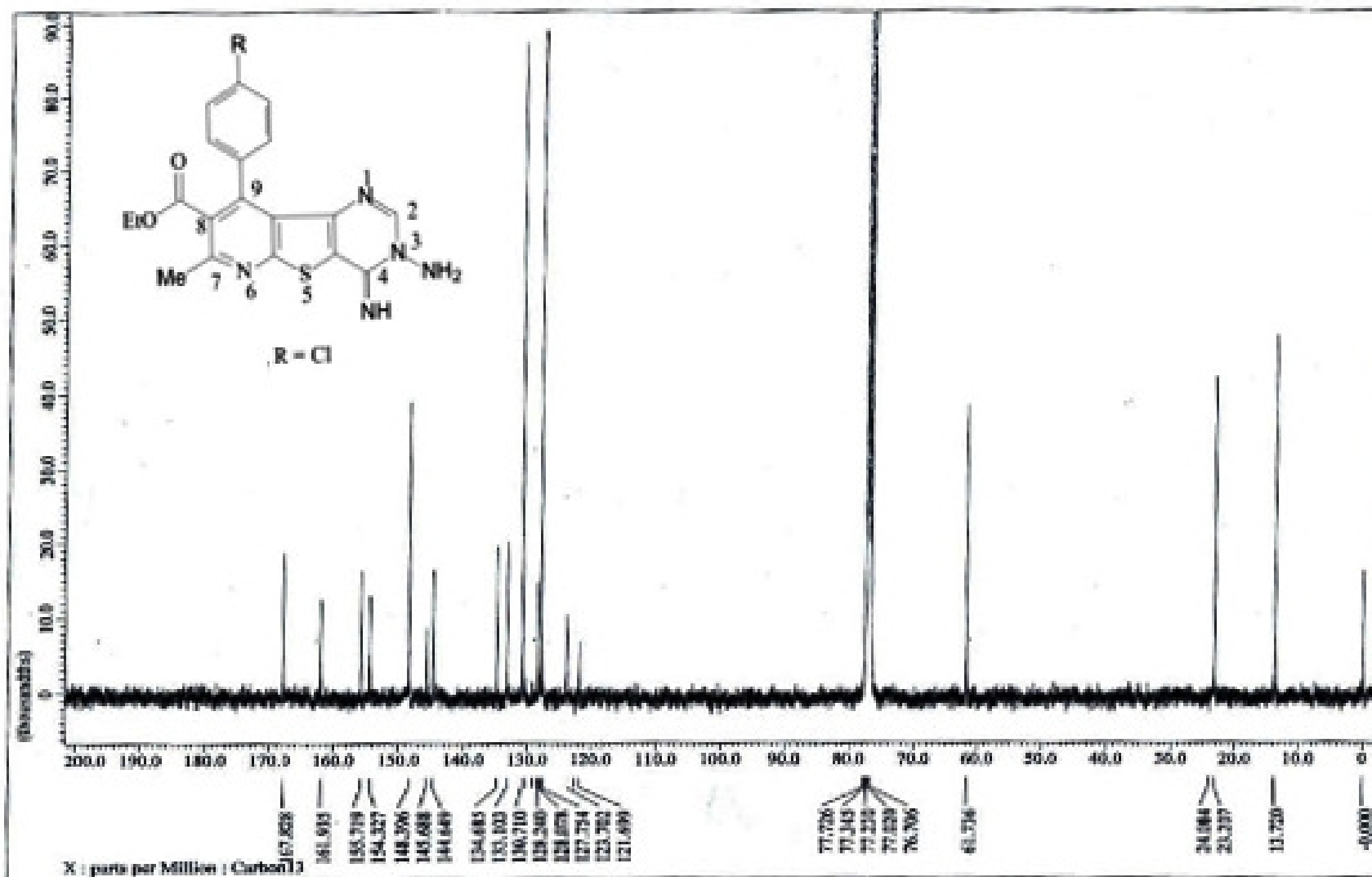


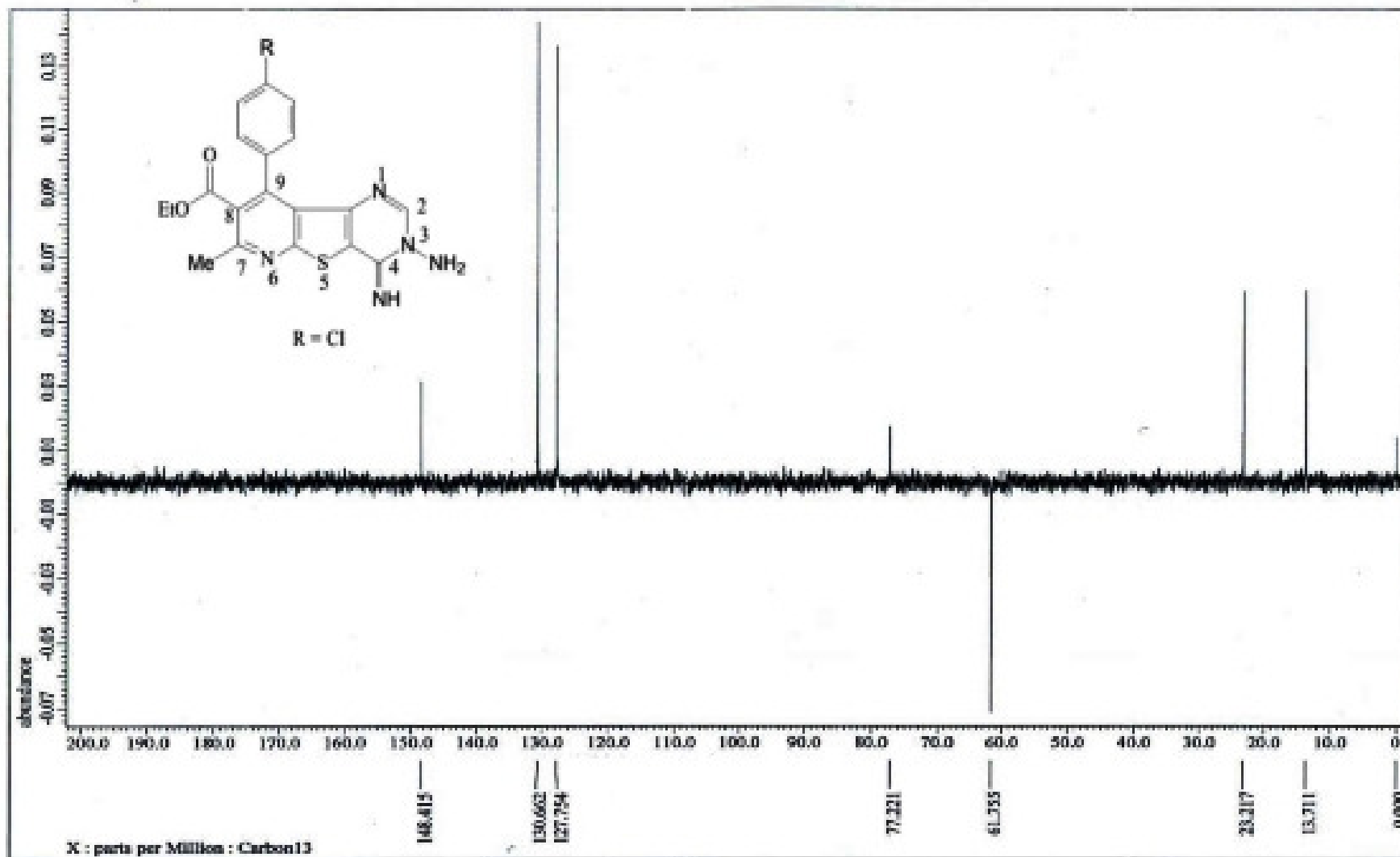


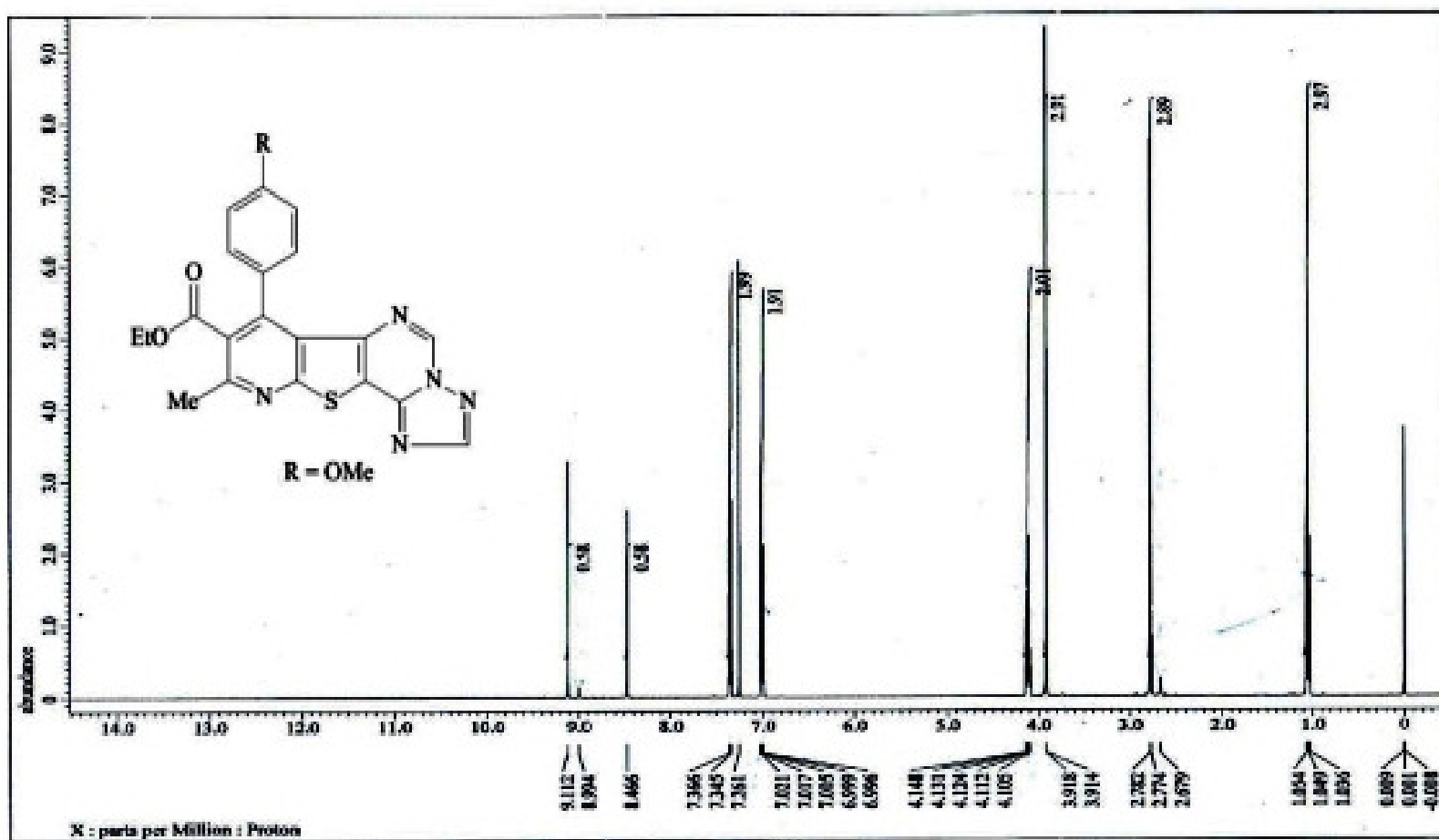


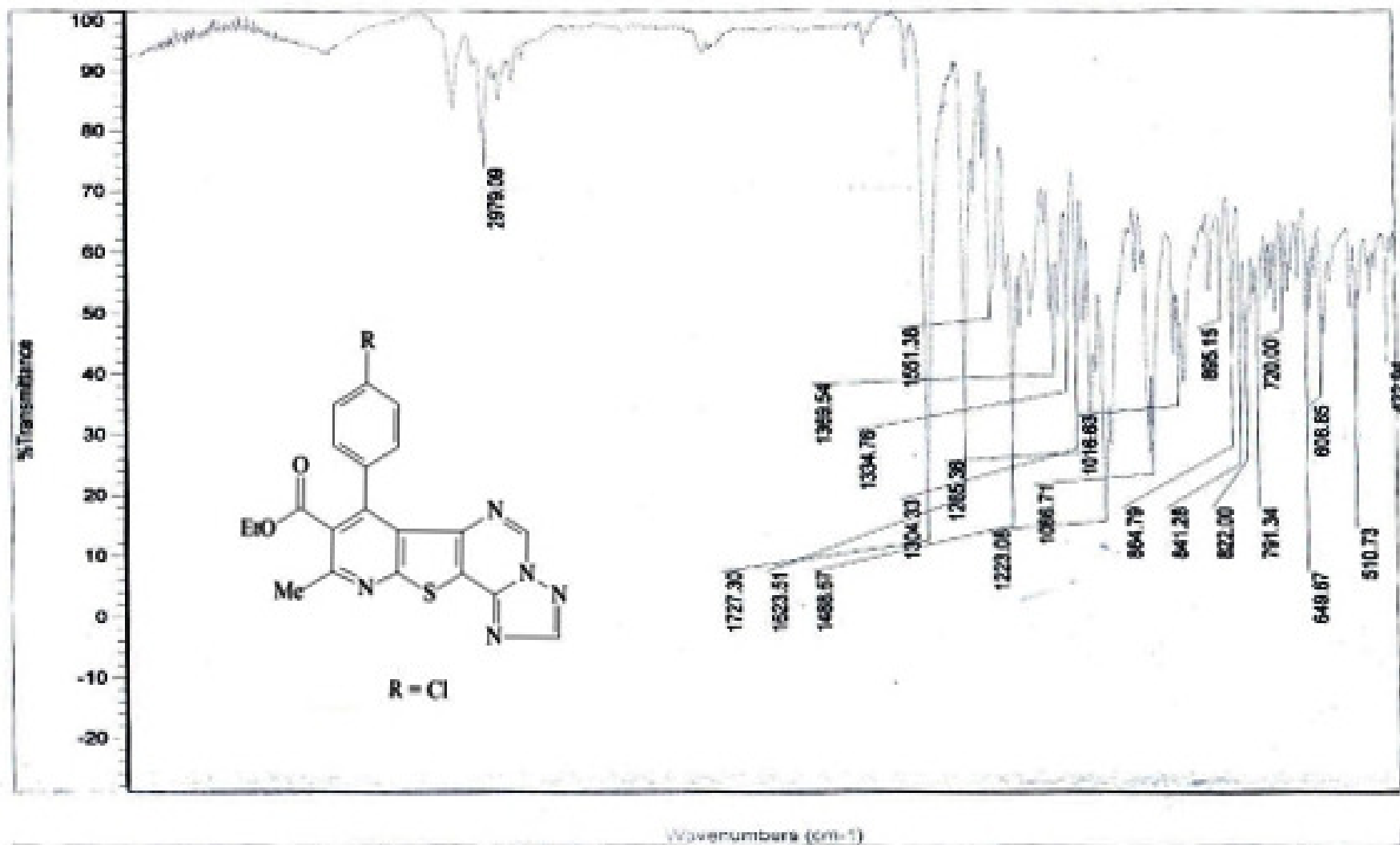


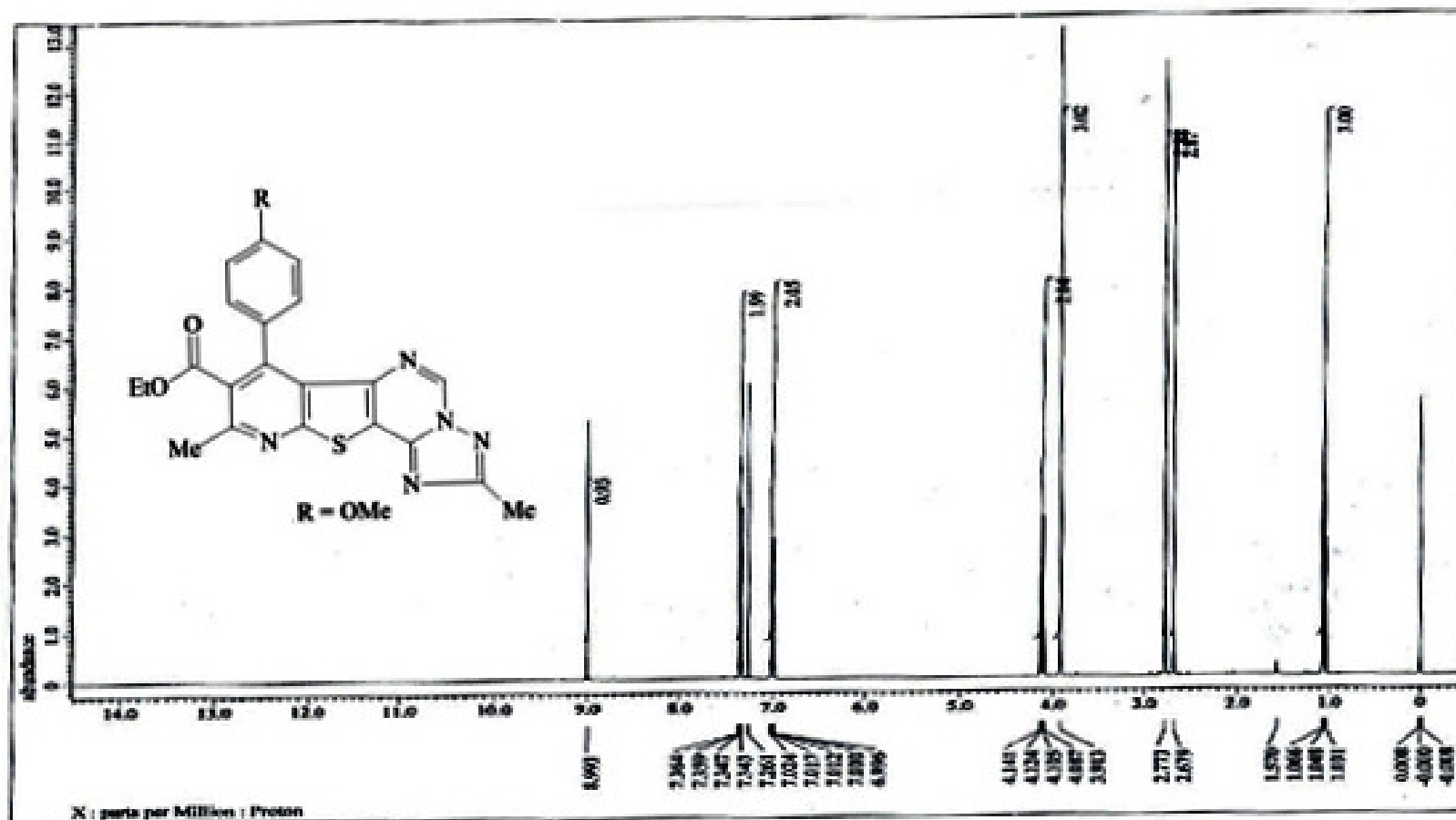




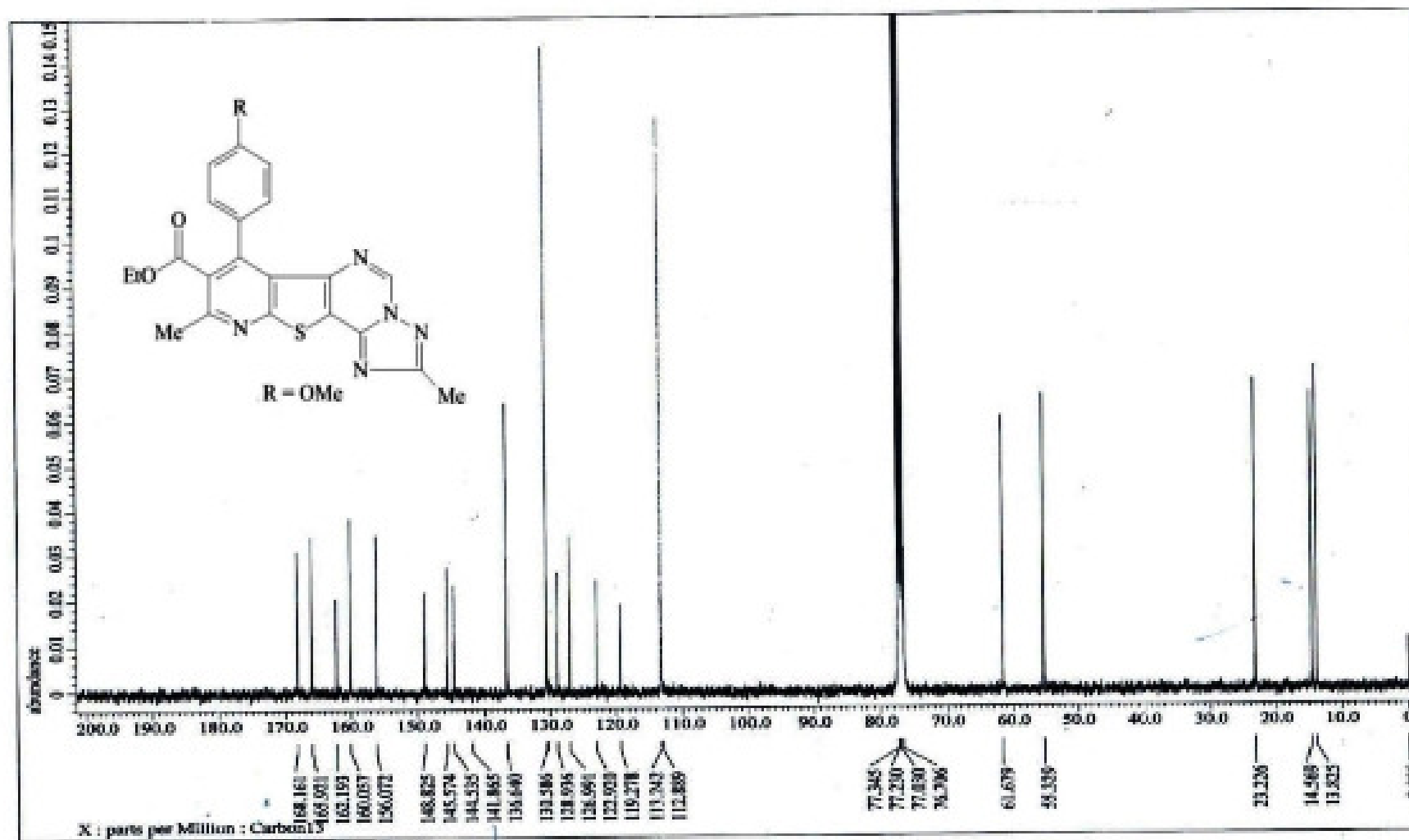


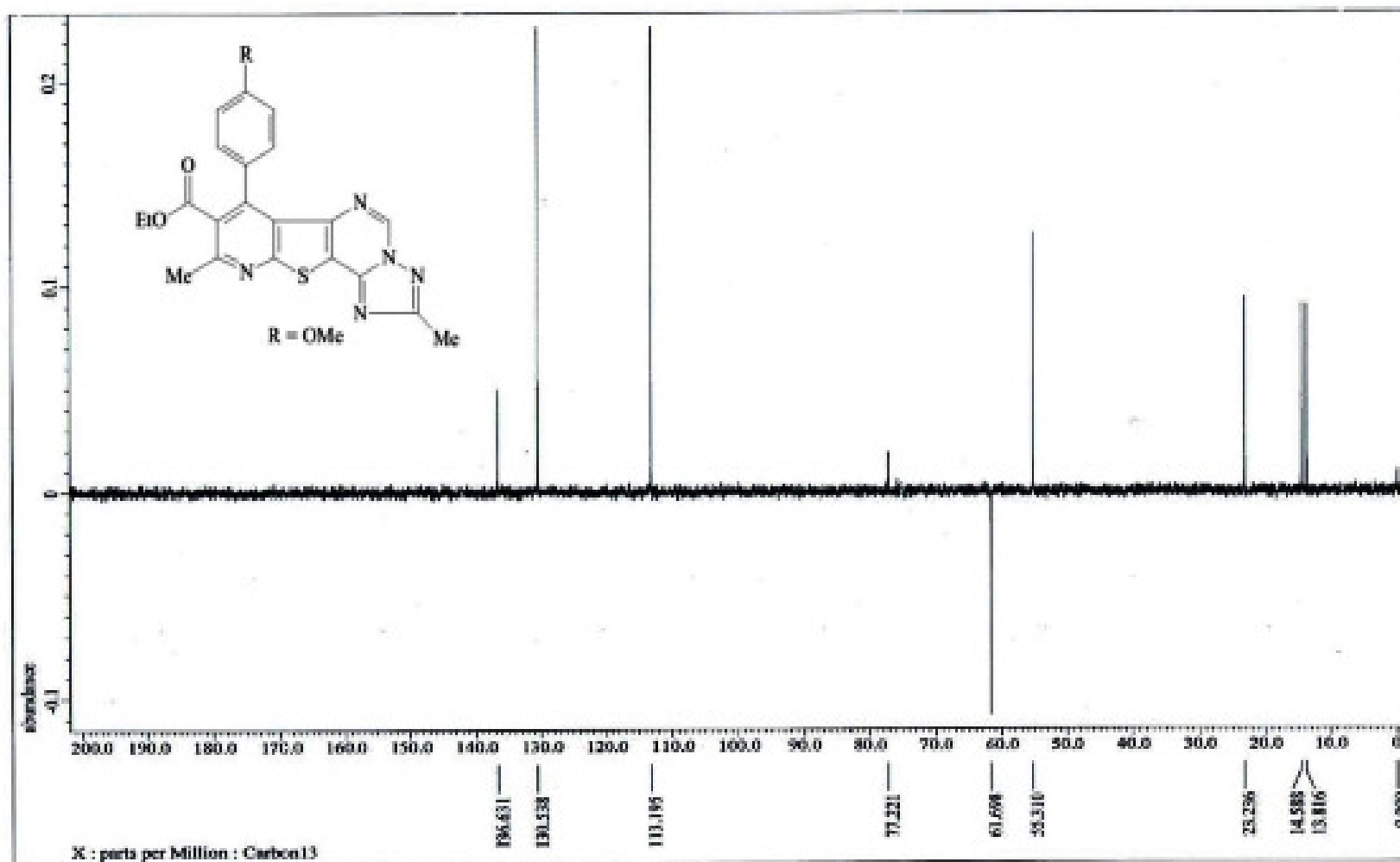


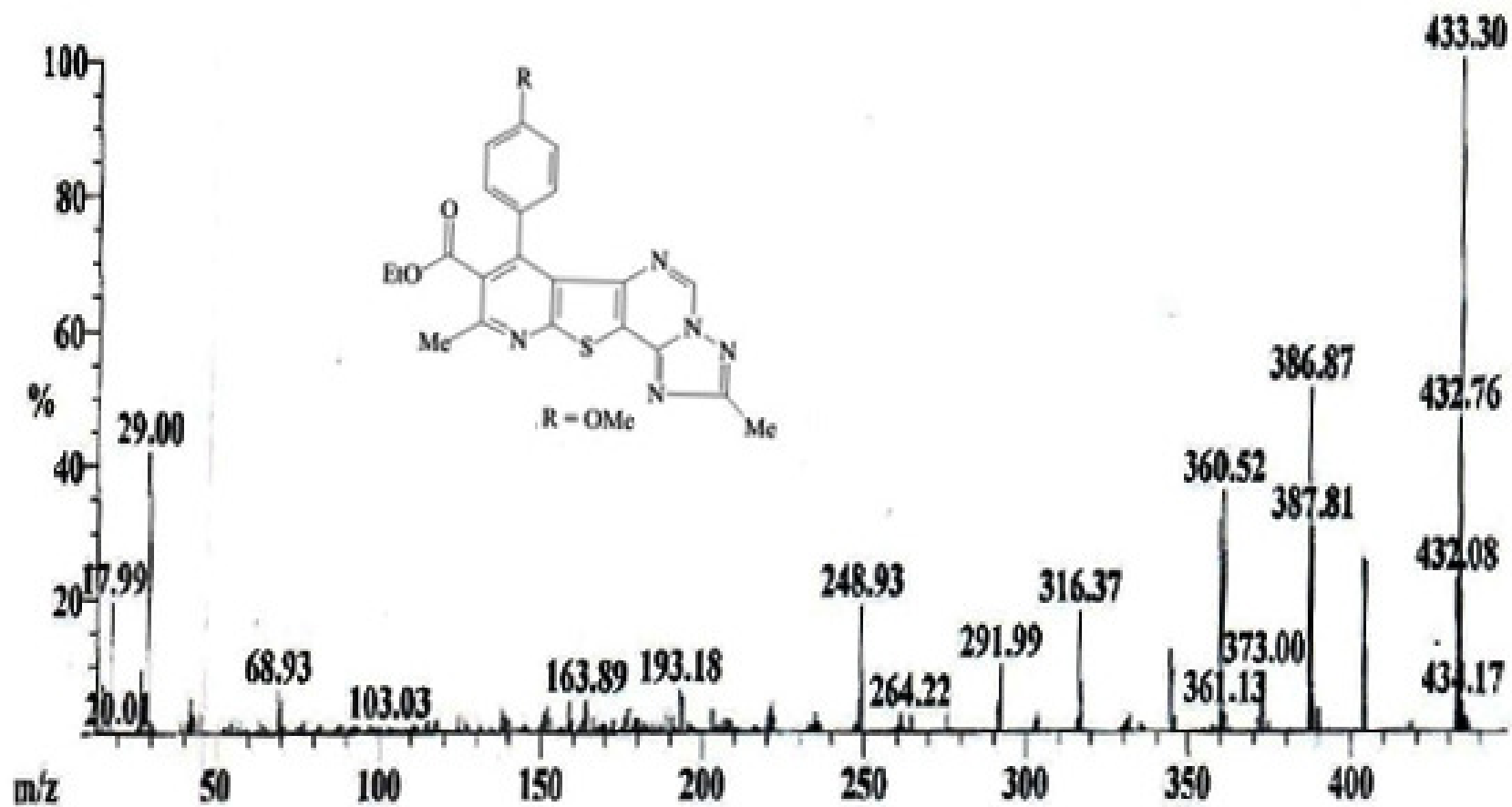


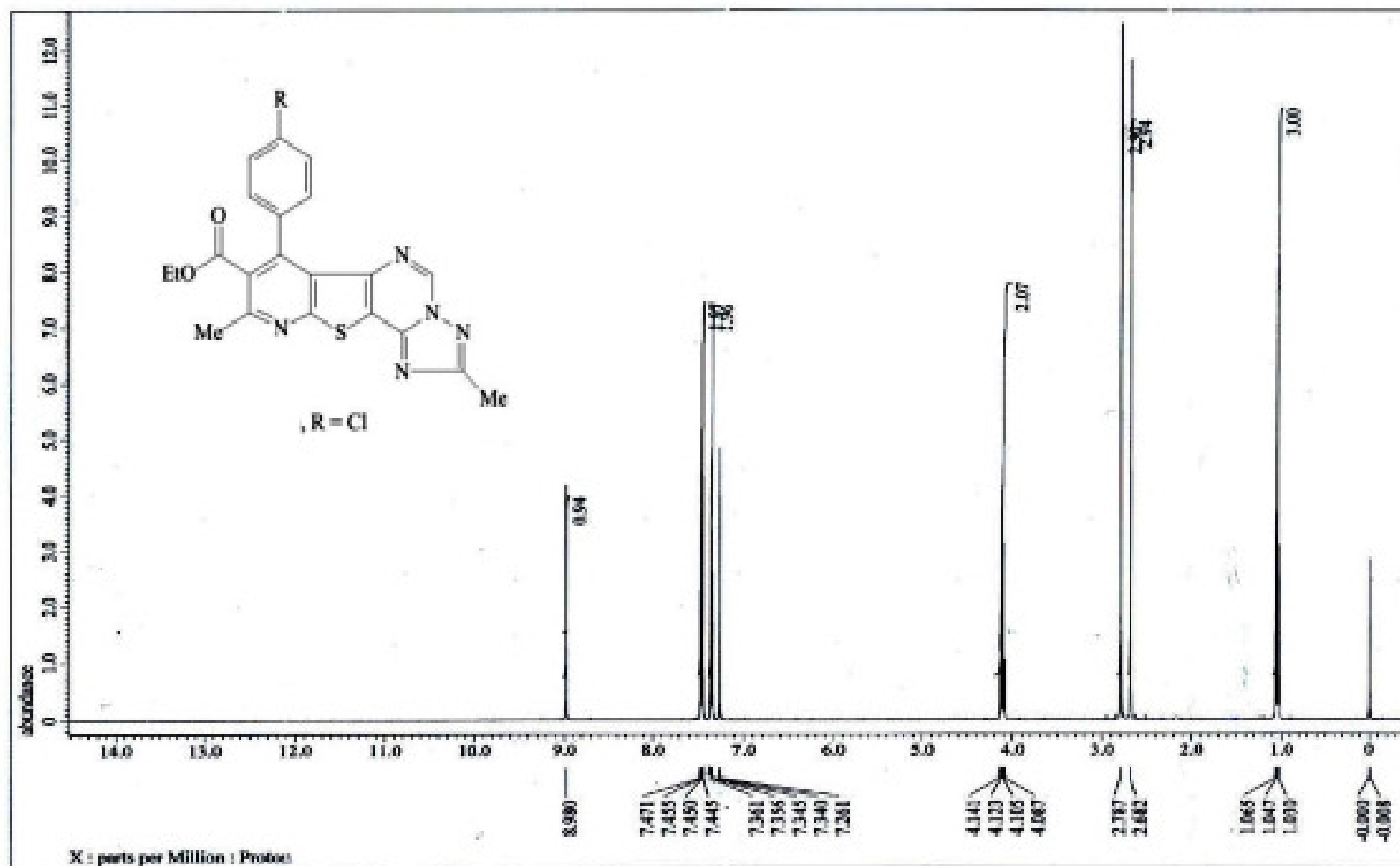


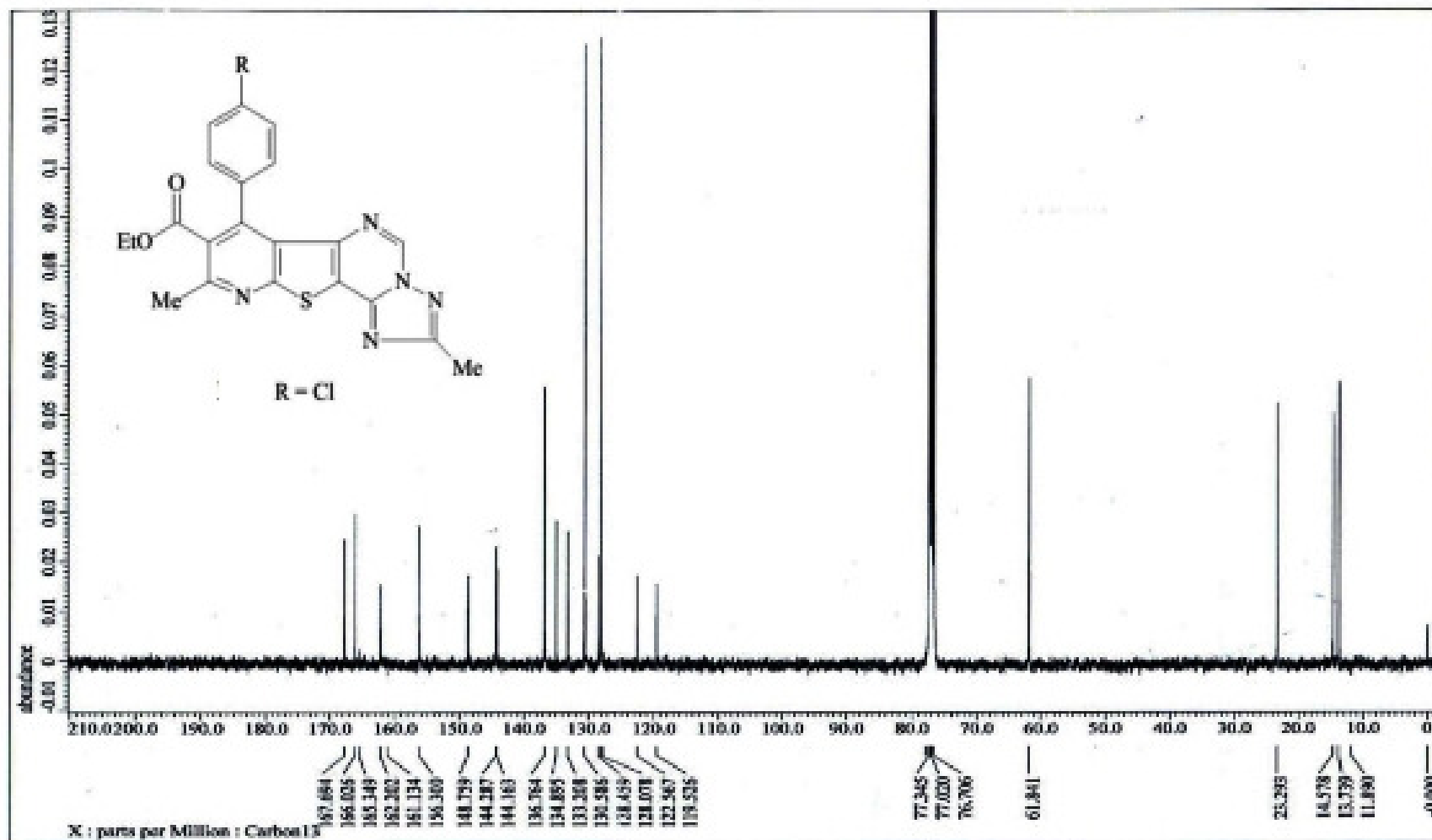


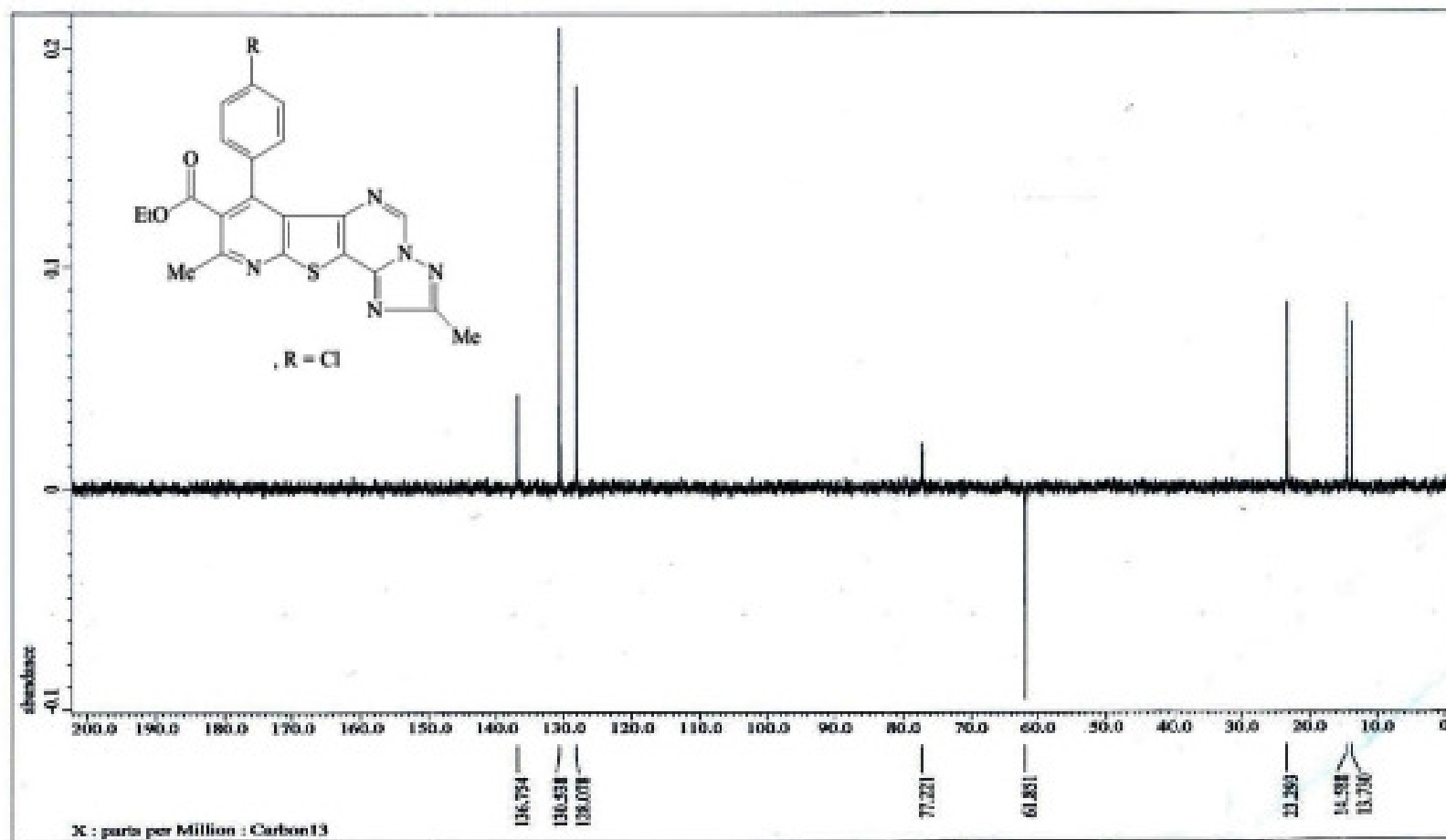


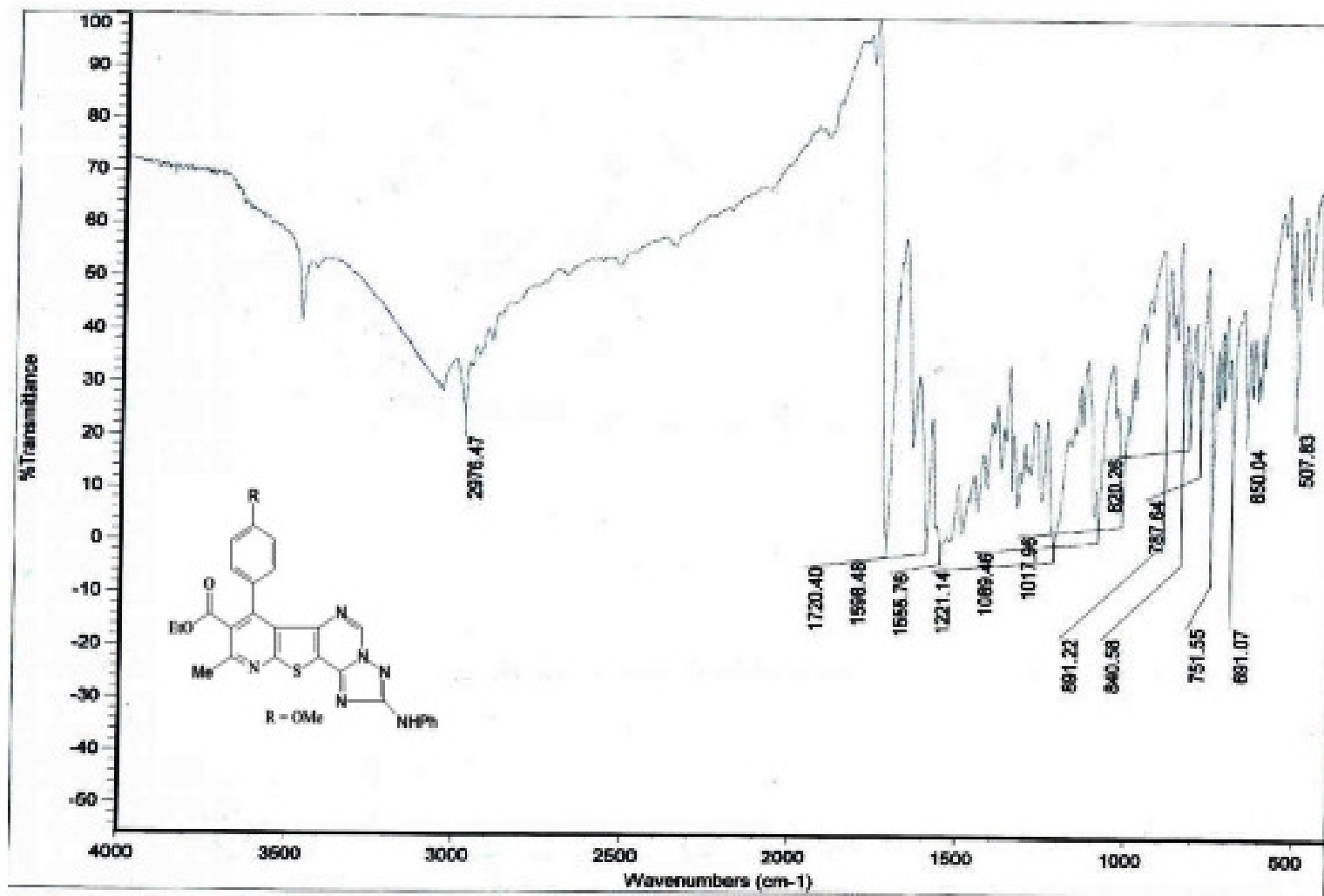




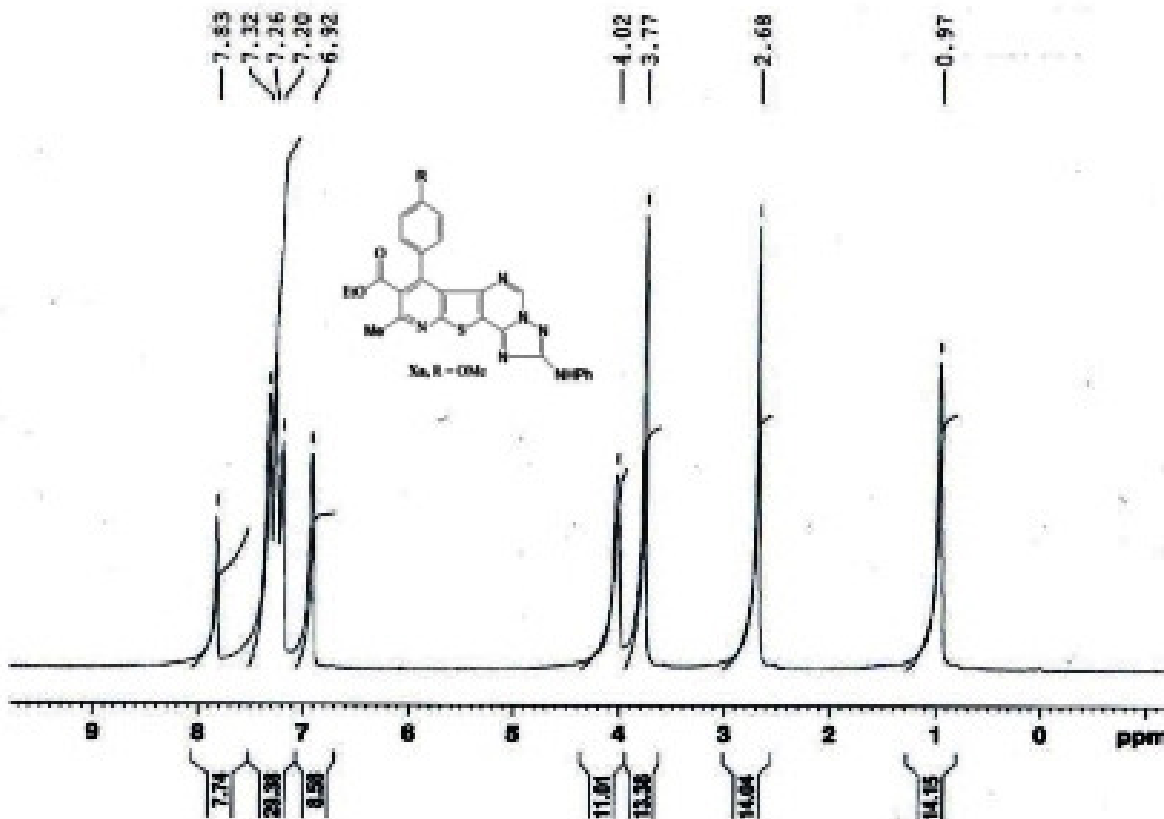








0-2  
proton\_au CDCl3 (C:\nmr-data) Student 11



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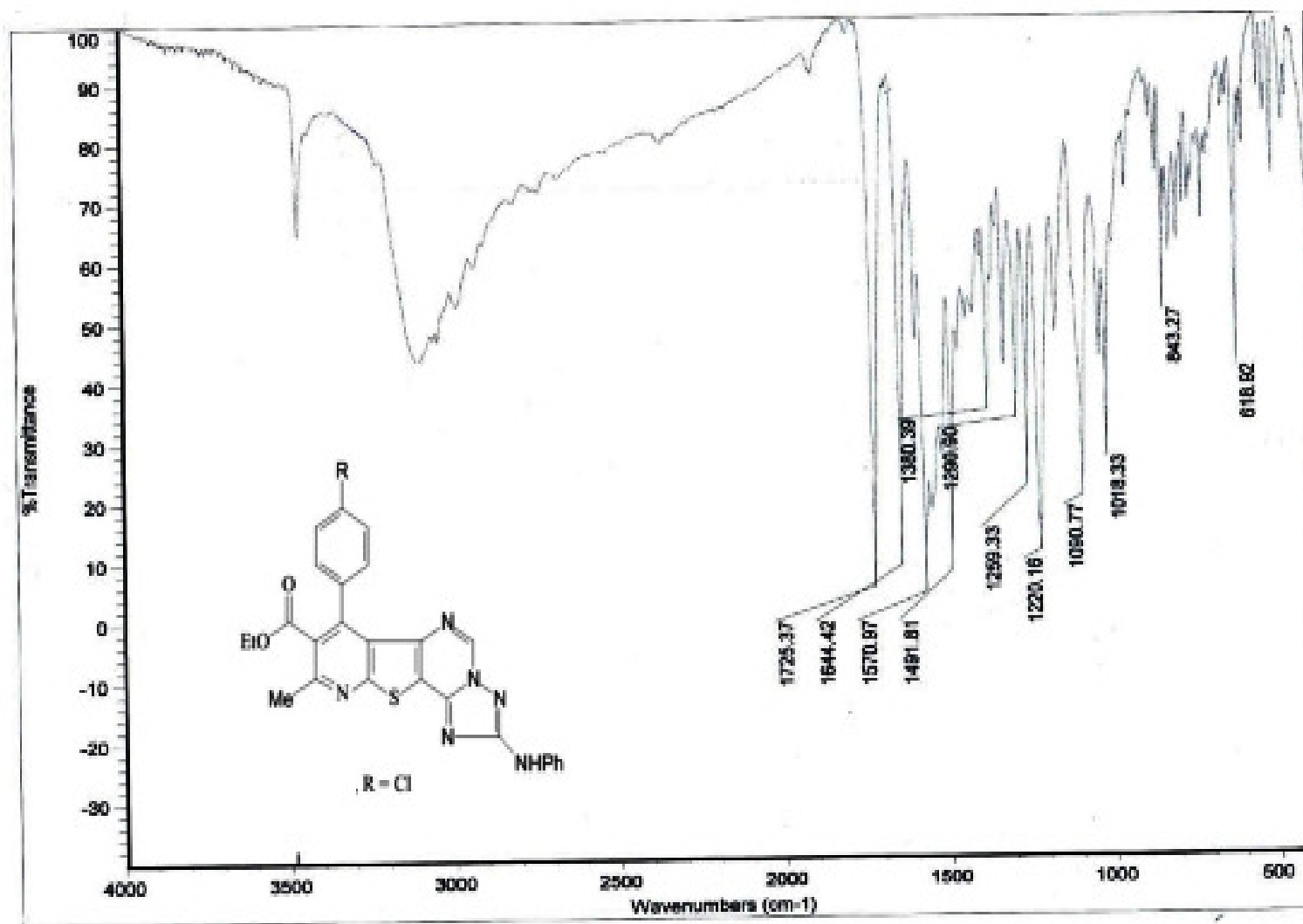
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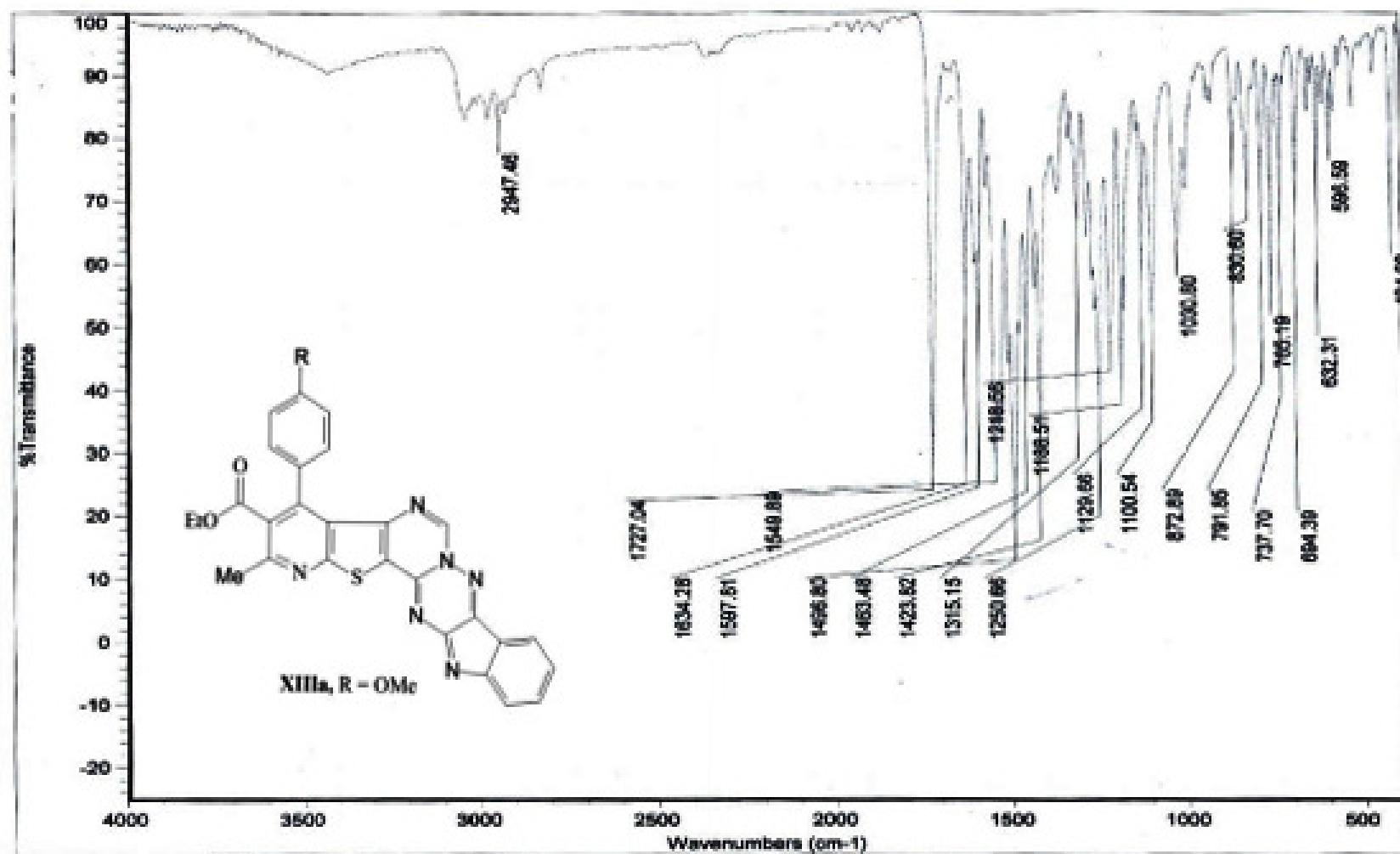
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SOLVENT   CDCl3
NS        20
DS        2
SWH        8012.420 Hz
FIDRES    0.122266 Hz
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RG        135
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SC        9.50 uMhz
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TPO       1

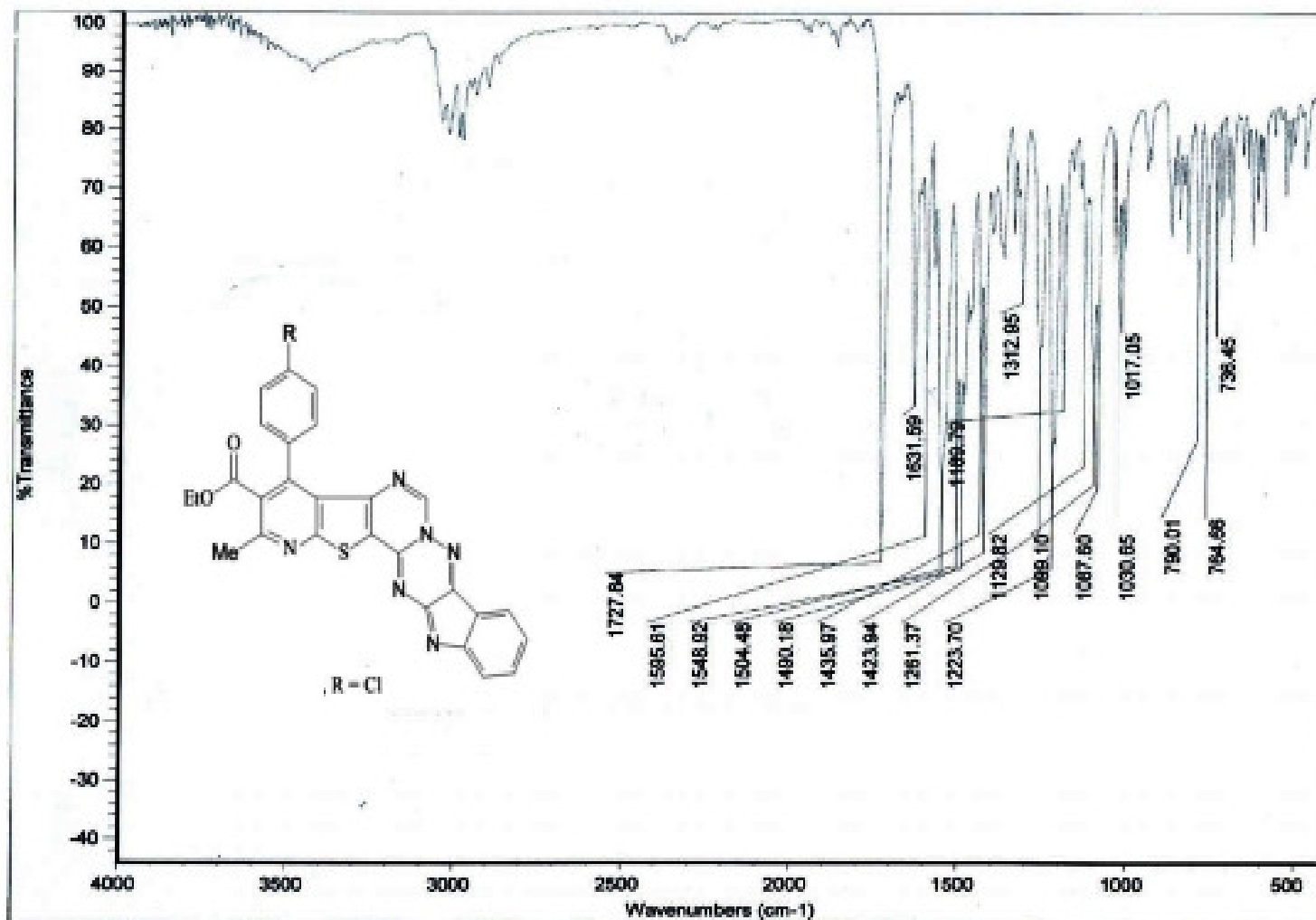
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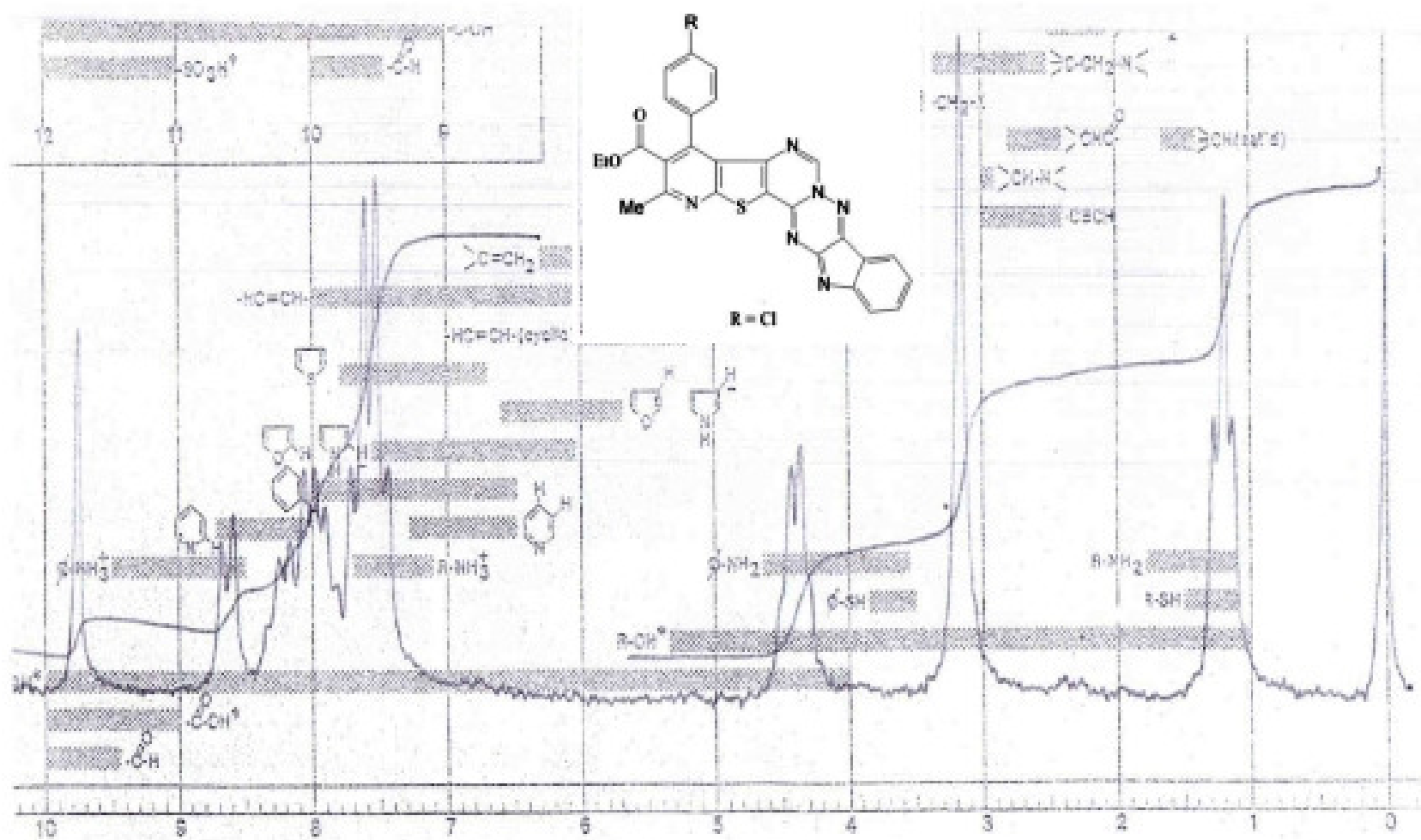
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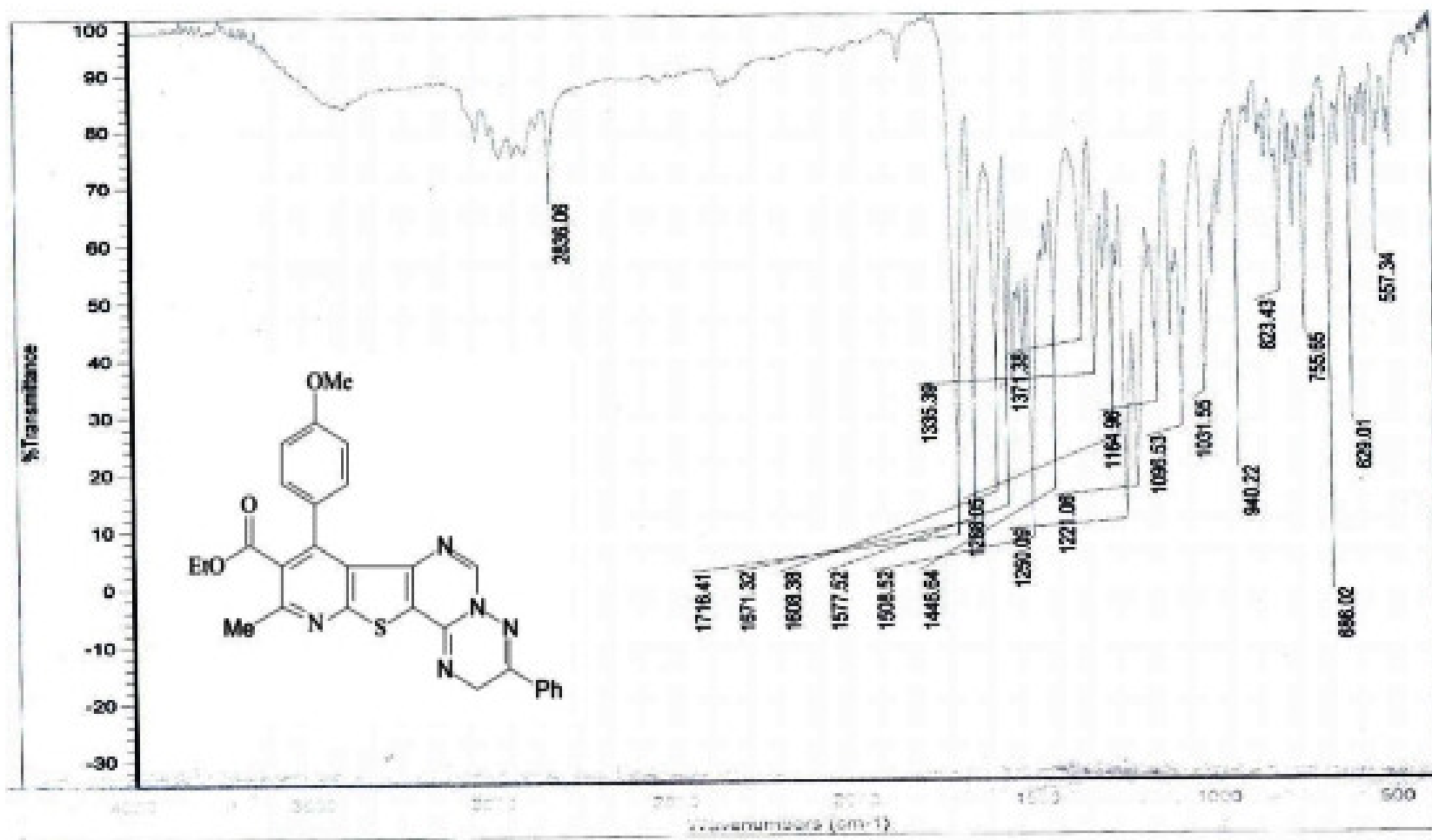




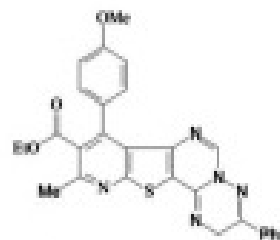
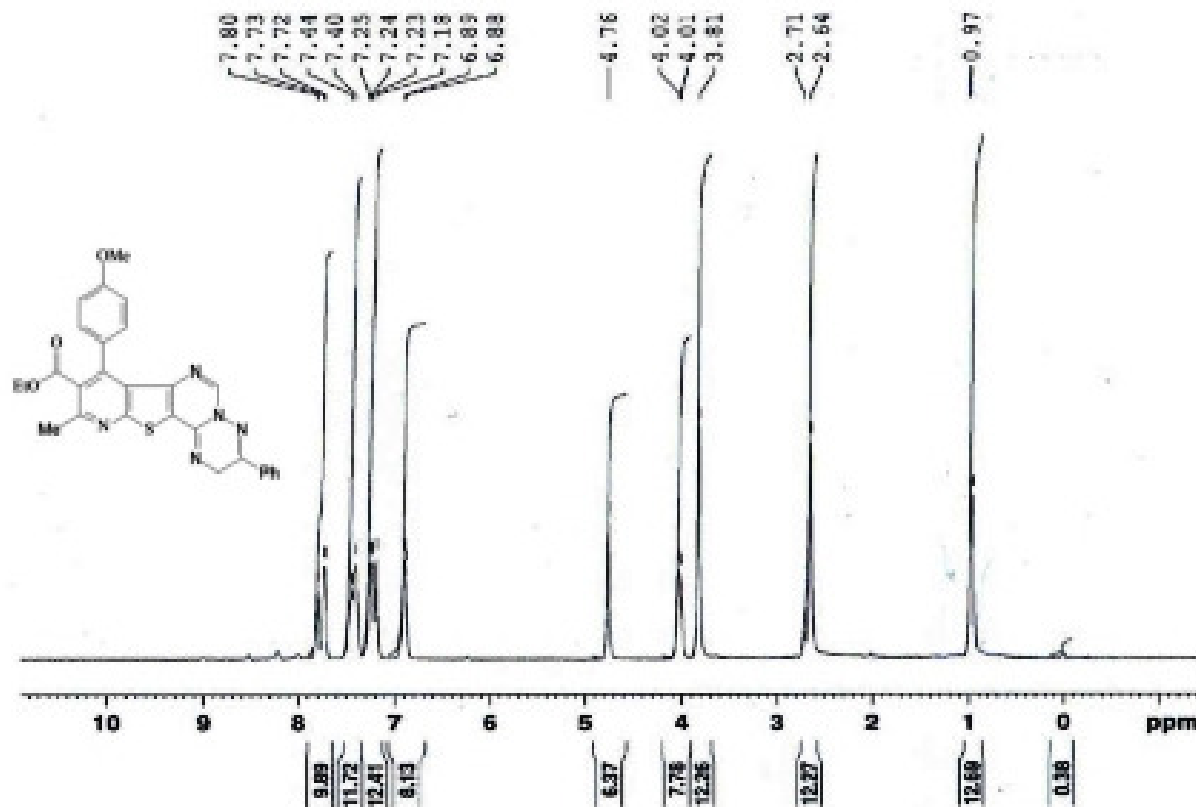








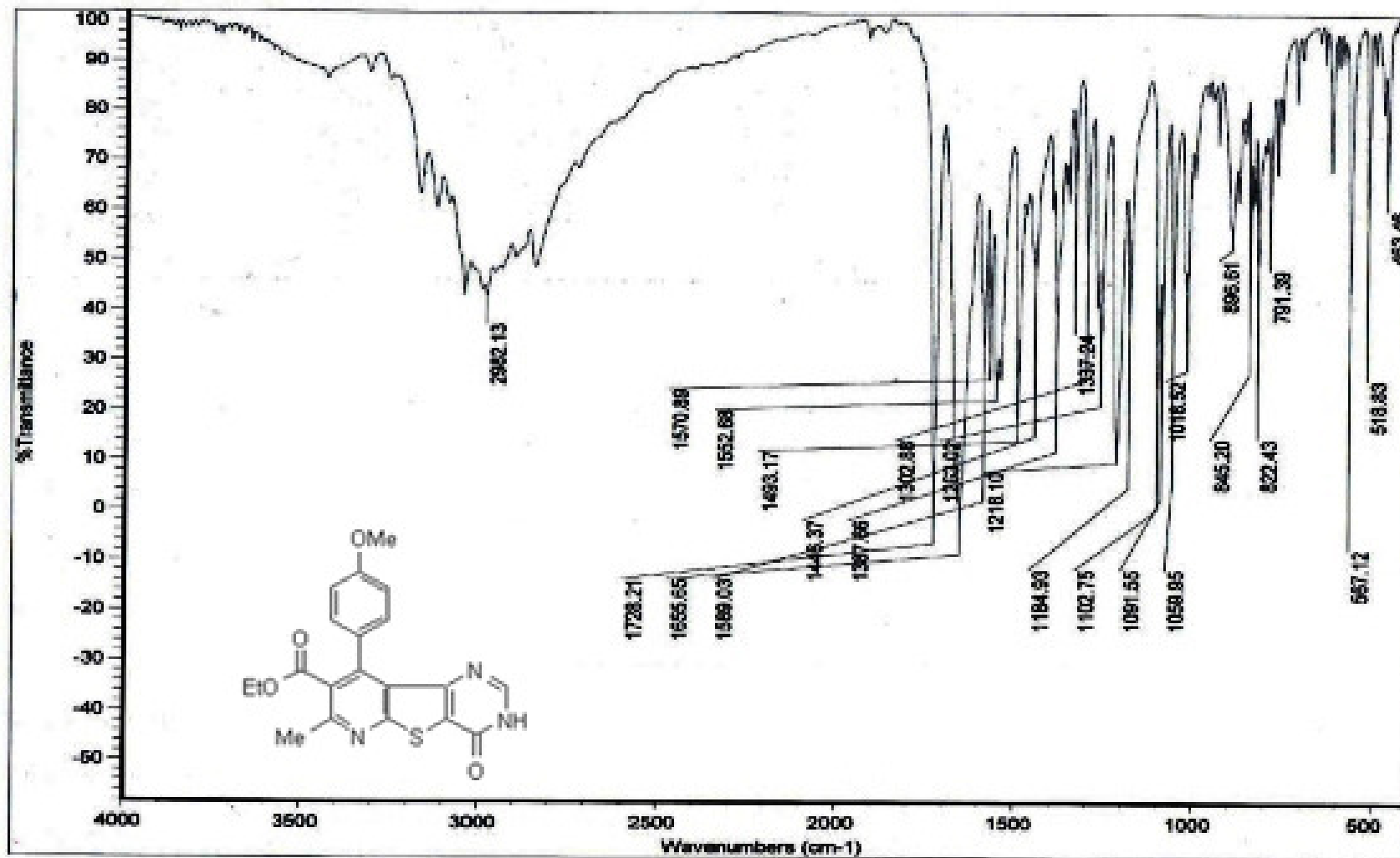
0-6  
 proton\_eu CDCl3 (C:\nmr-data) Student 8



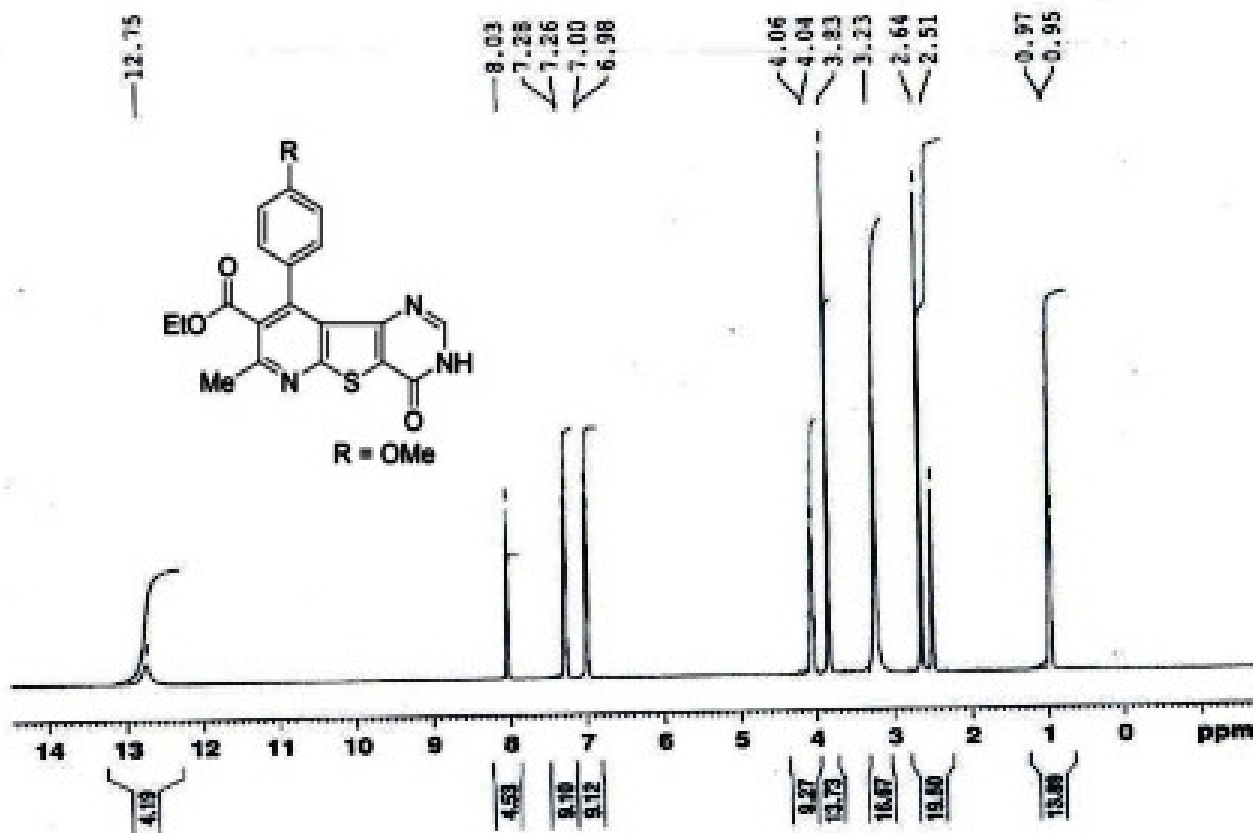
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 SOLVENT cdcl3  
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 DS 2  
 SWH 8012.800 Hz  
 FIDRES 0.122204 Hz  
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 RG 109.04  
 CW 43.400 usec  
 DE 4.50 usec  
 TE 300.2 K  
 D1 1.00000000 sec  
 TD 1

===== CHANNEL f1 =====  
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 P1 18  
 PL 12.00 usec  
 PRW1 10.00000000 sec

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0-11  
proton\_su DMSO (C:\nmr-data) student 13



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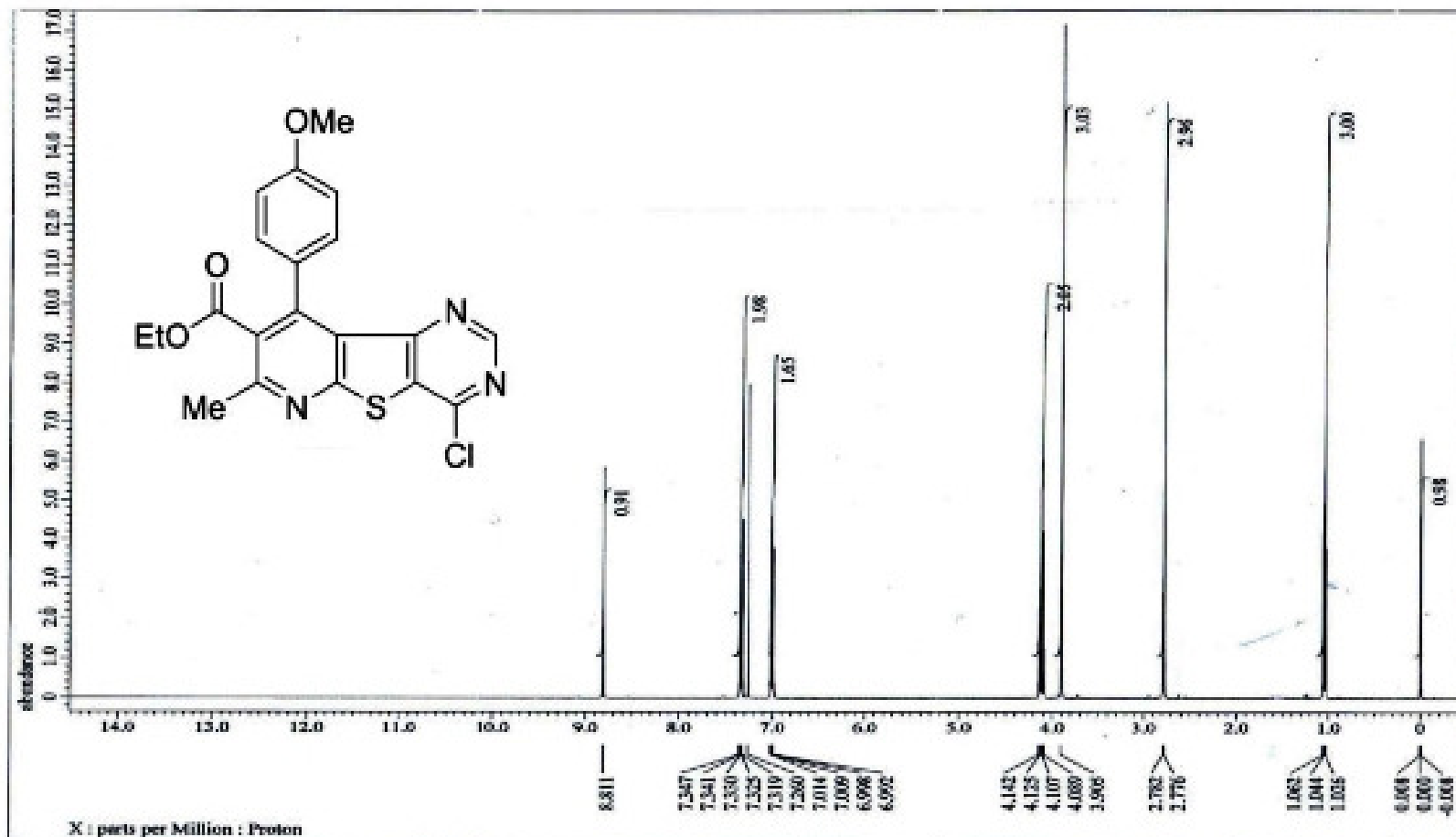
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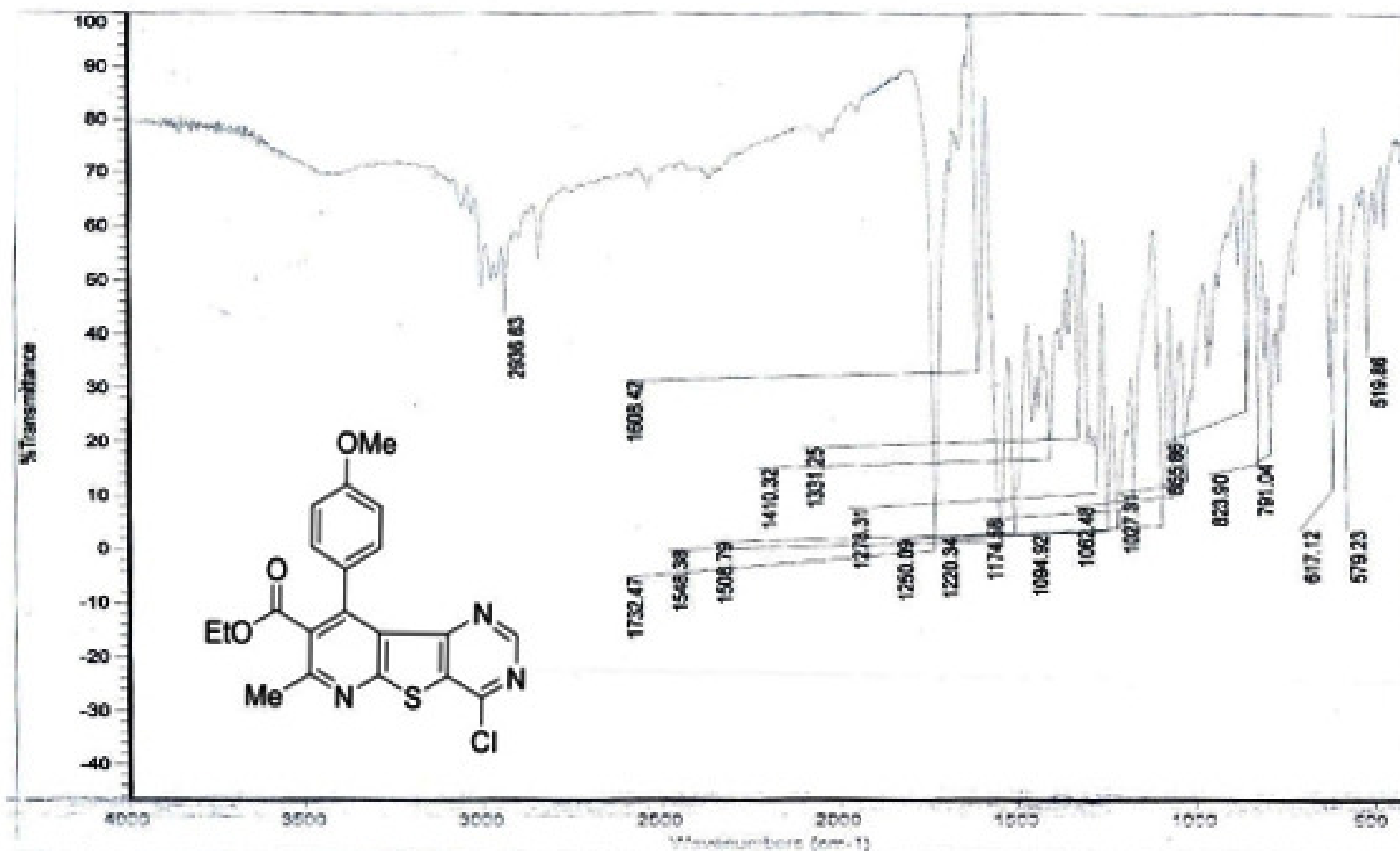
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SOLVENT   DMSO
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DS        4
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FIDRES    0.122244 Hz
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SQ         22.400 cm
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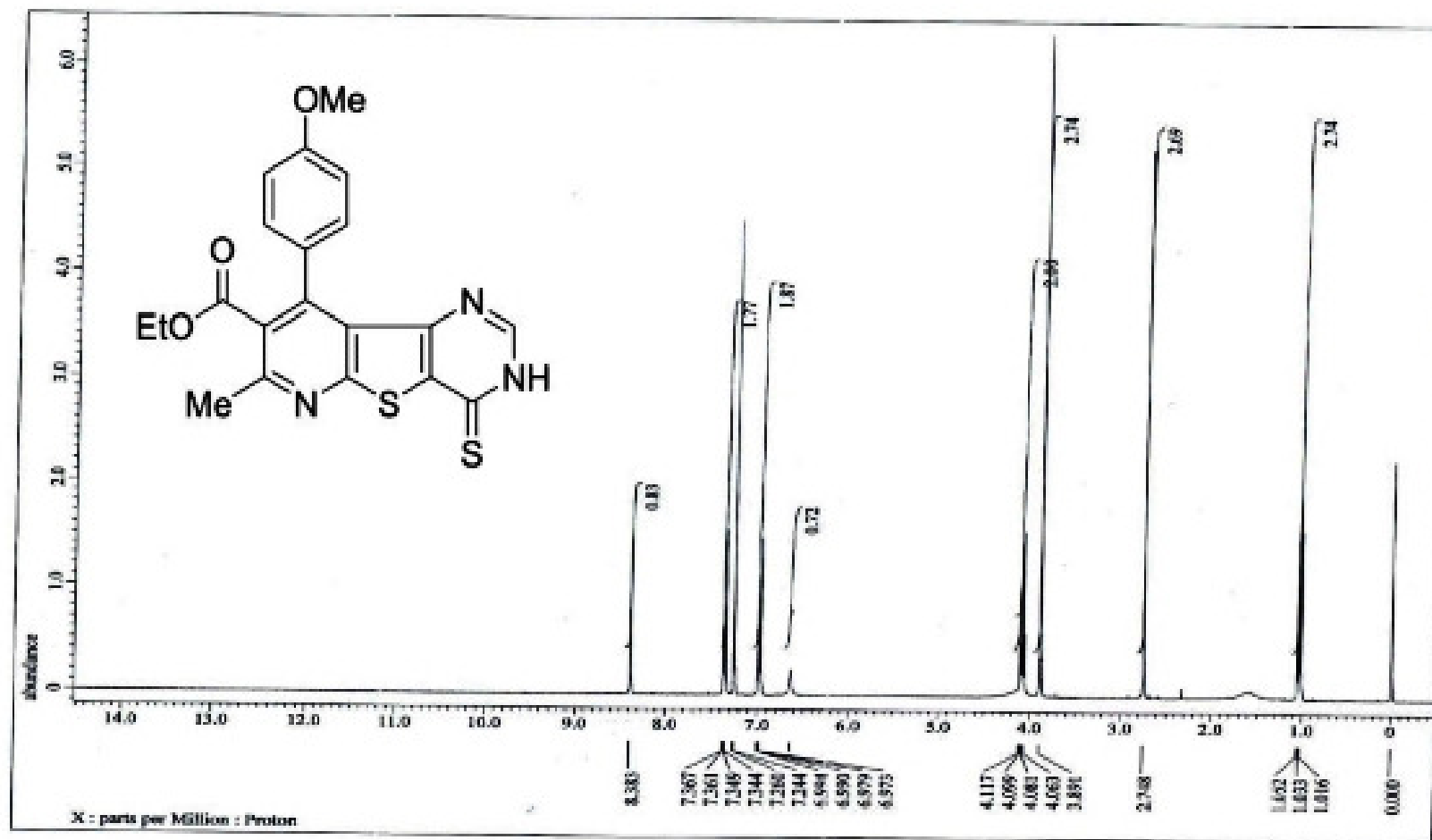
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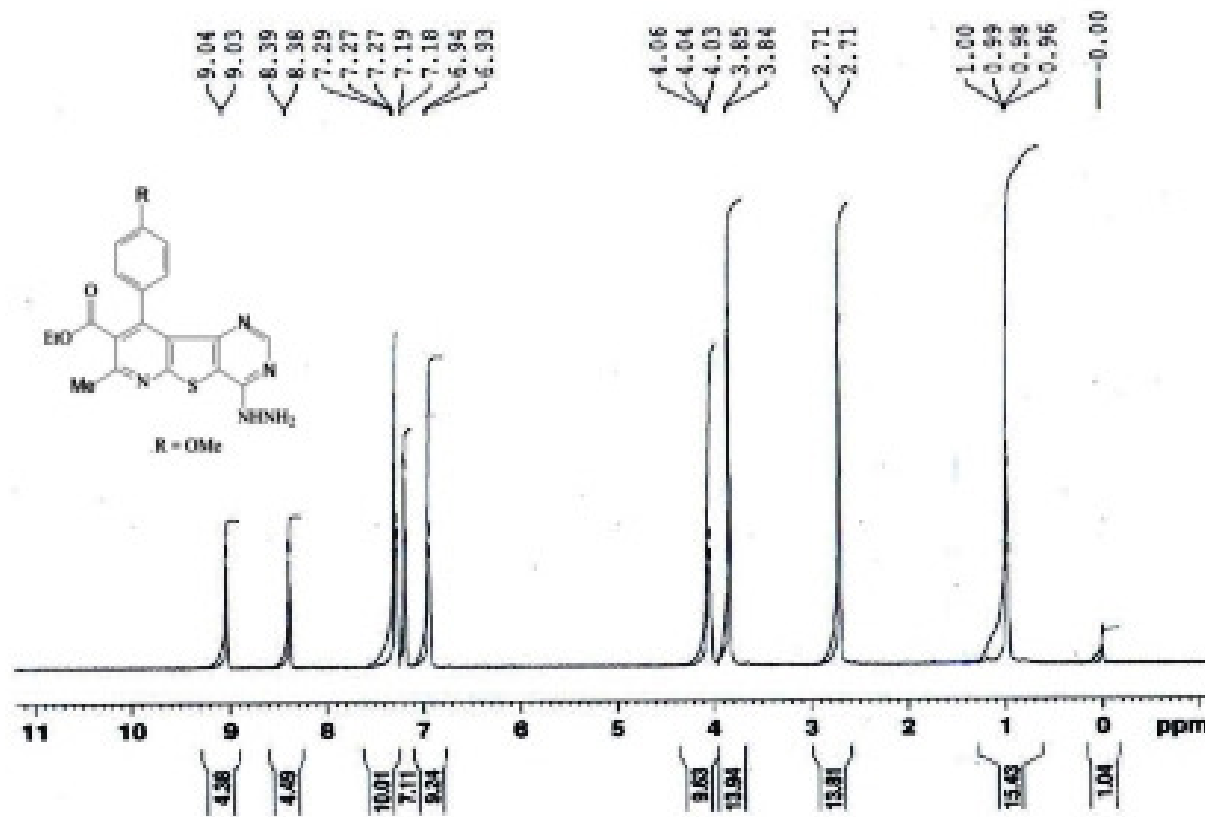








0-9  
 proton\_ru CDC13 (C:\nmr-data) Student 15



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PROCNO   1

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PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        20
DS        3
SWH       8012.000  Hz
FIDRES    0.122284  Hz
AQ        4.0894880  sec
RG         129.64
DA        62.400  usec
DE        6.50  usec
TE        300.1  K
DQ        1.00000000  sec
SFO       100
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NUC1      100.1304710  MHz
P1        18
PL        19.00  usec
PCWD      22.00000000  Hz

F2 - Processing parameters
SI
SF        100.1300000  MHz
WDW       EM
SSB       0
GB        0.20  Hz
GC        0
PC        1.00
    
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