

ESPERIENZA 1

Gli acetilacetionato complessi sintetizzati

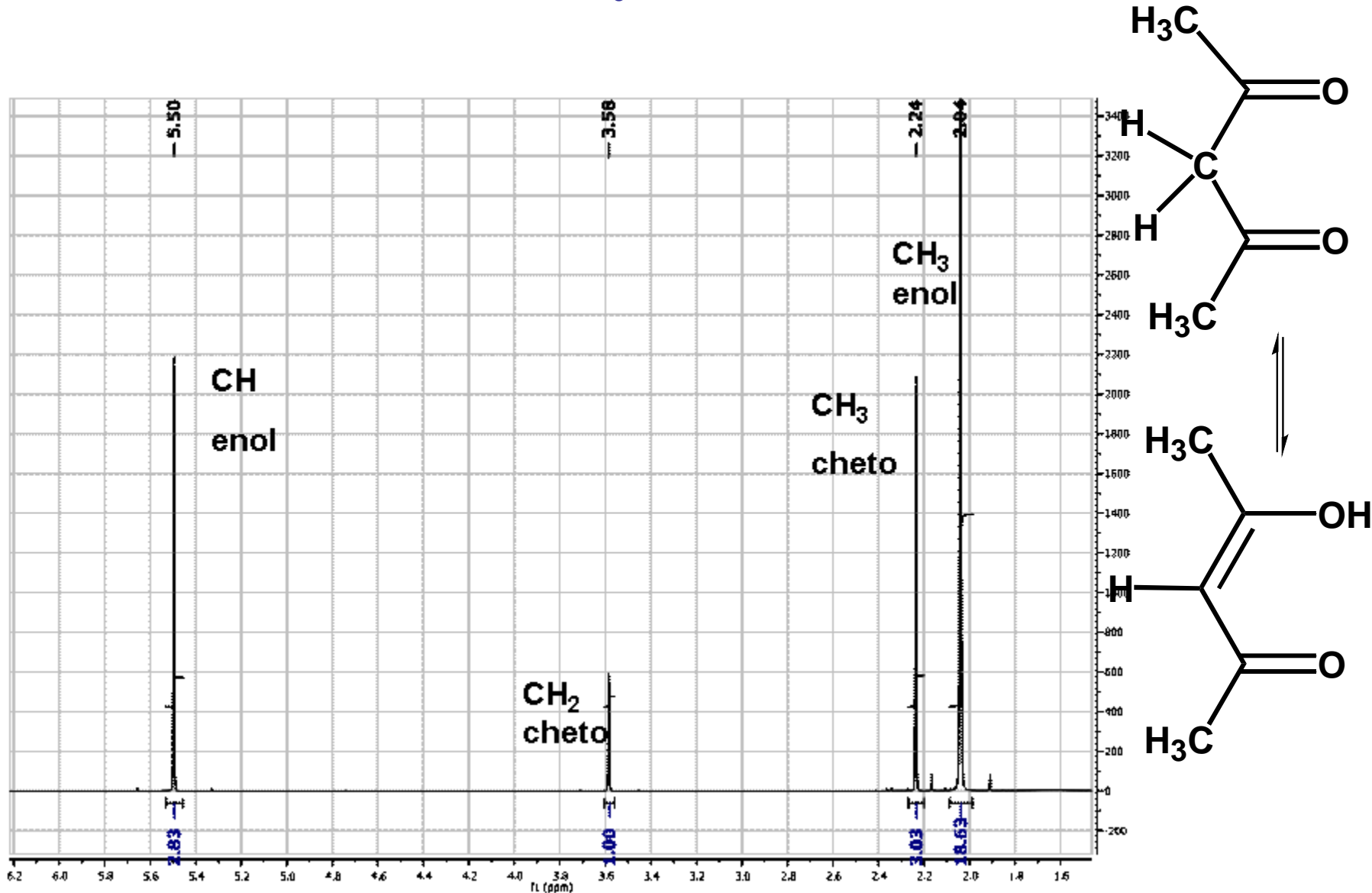
Complesso	[Cr(acac)₃]	[Fe(acac)₃]	[Cu(acac)₂]	[Al(acac) ₃]
Stato di ox	+ 3	+ 3	+ 2	+ 3
Config. Elettr.	d^3	d^5	d^9	d^0
Geometria	Ottaedr.	Ottaedr.	Plan. Quadr.	Ottaedr.
Magnetismo	Param.	Param.	Param.	Diam.
Colore	Viola	Rosso	Azzurro	Bianco

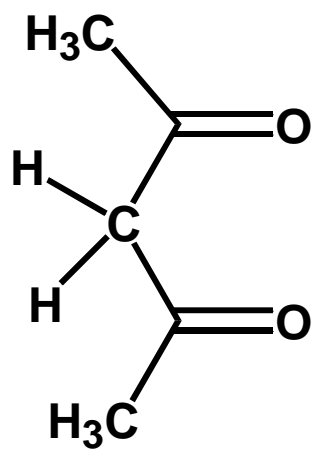
ESPERIENZA 1

Cromatografia su strato sottile degli acetilacetonato complessi

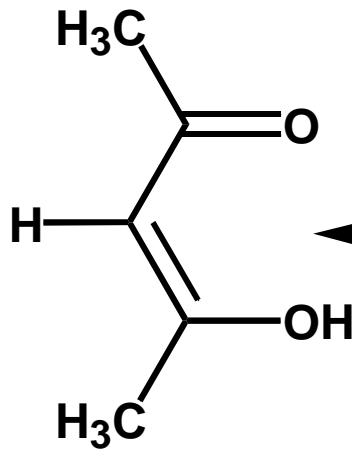
Complesso	Colore	r_F
$[\text{Cr}(\text{acac})_3]$	viola
$[\text{Fe}(\text{acac})_3]$	Rosso
$[\text{Cu}(\text{acac})_2]$	Azzurro verde
$[\text{Al}(\text{acac})_3]$	Bianco

Spettro ^1H NMR in CDCl_3 , a t.a. di 2,4-pentandione

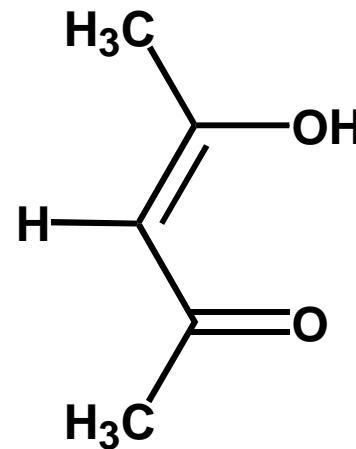




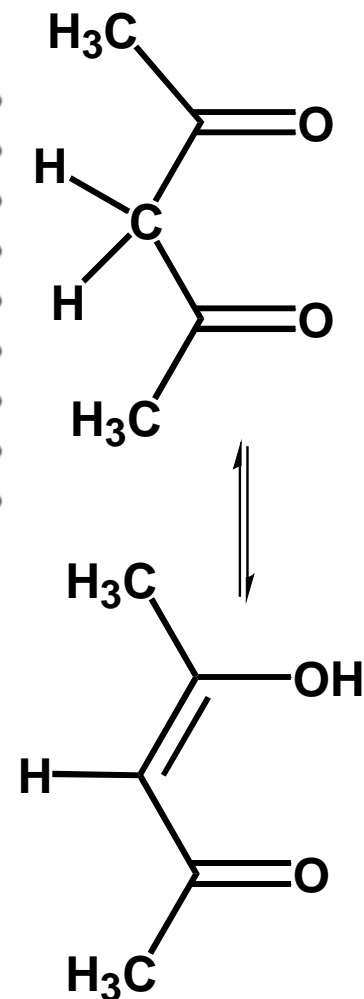
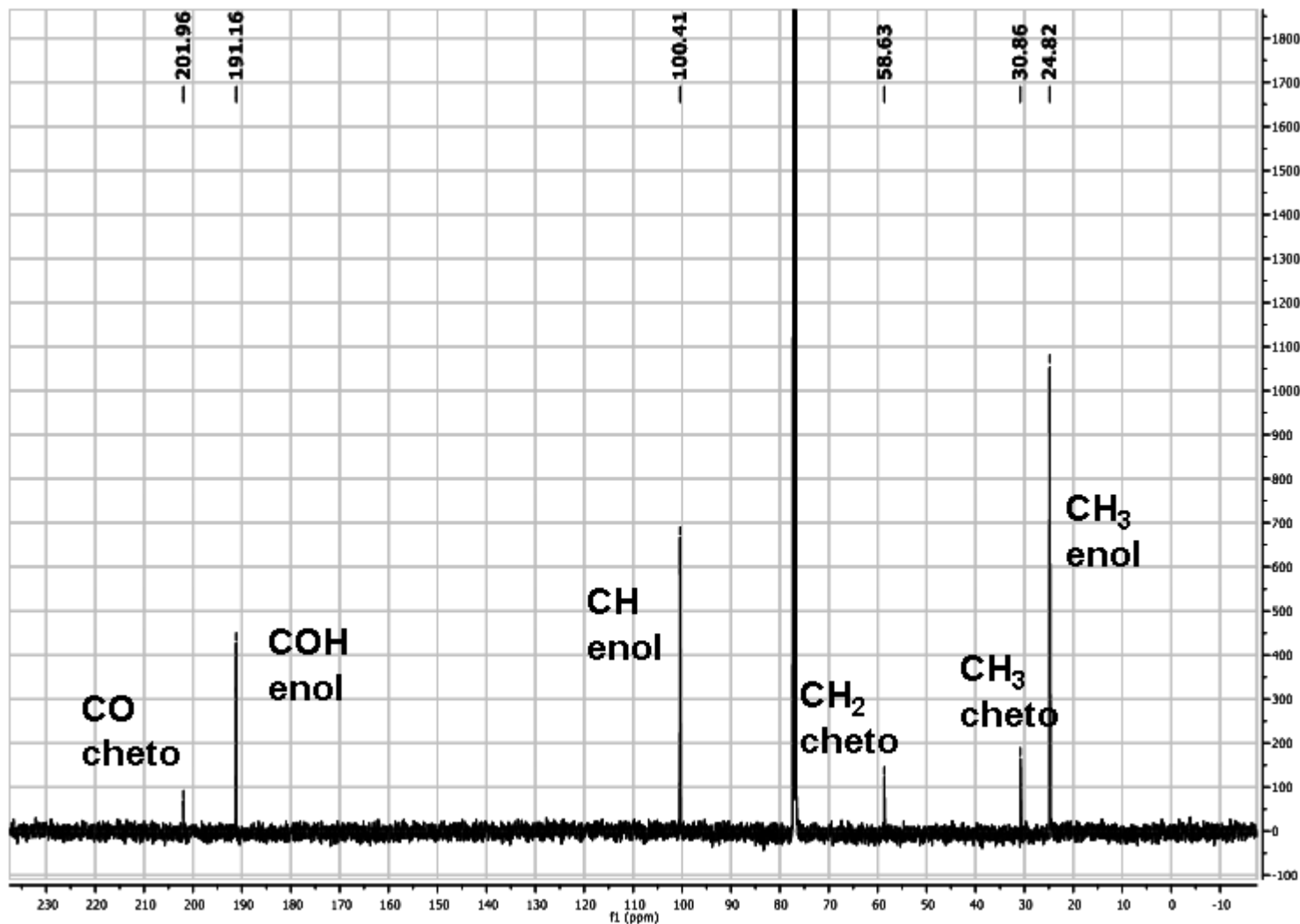
forma cheto



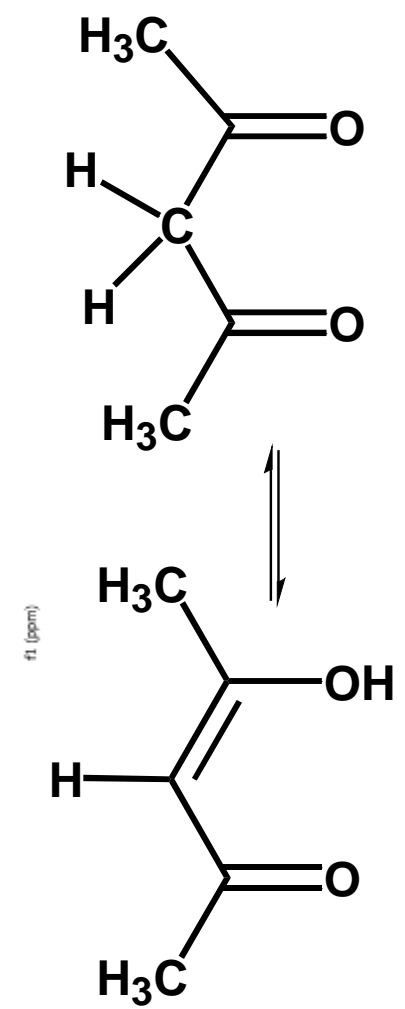
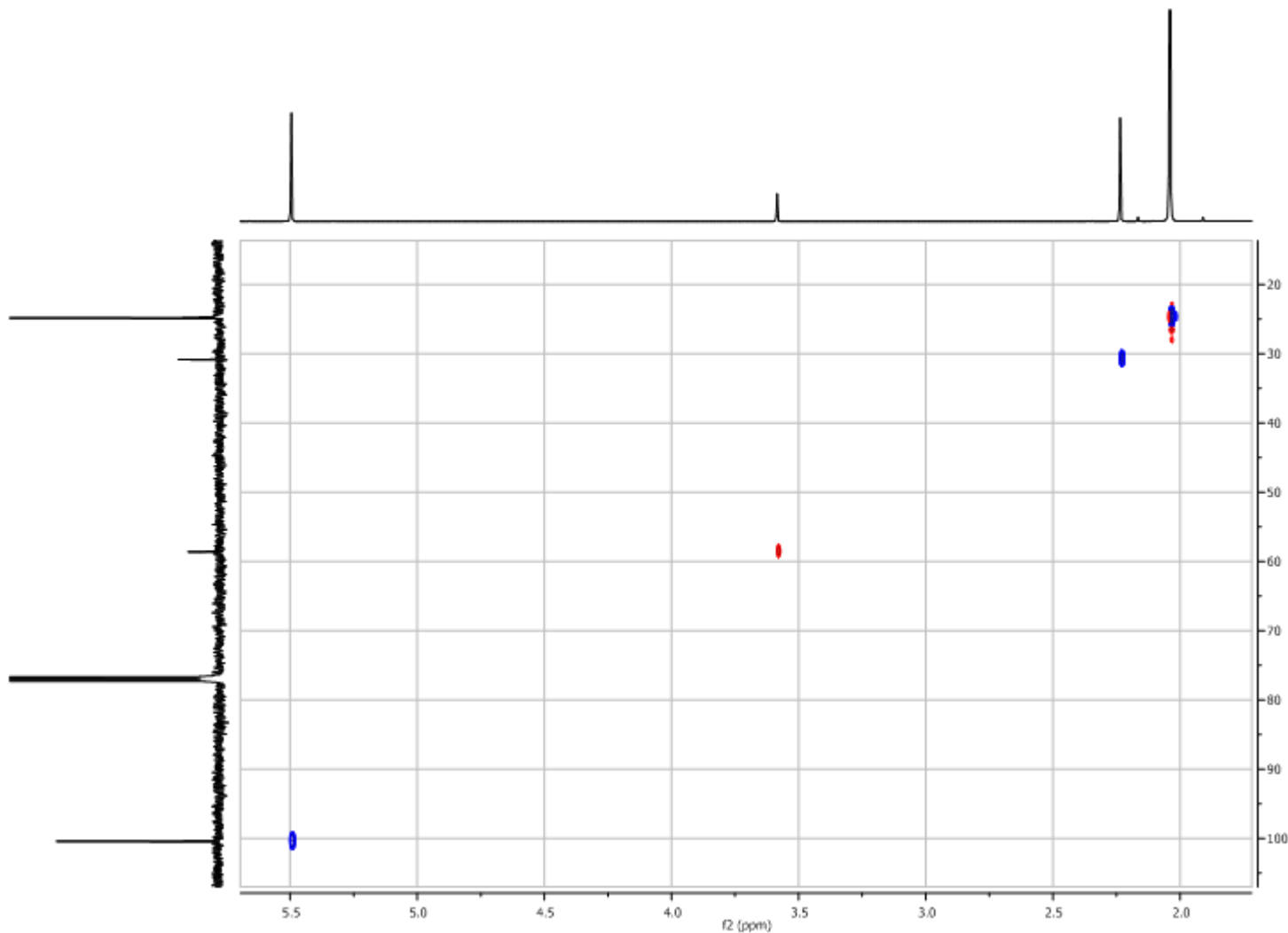
forma enolica



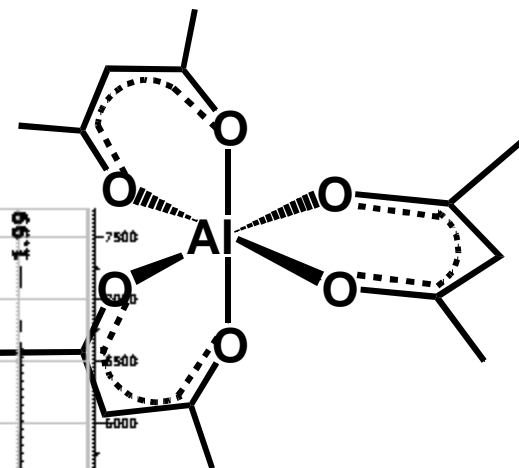
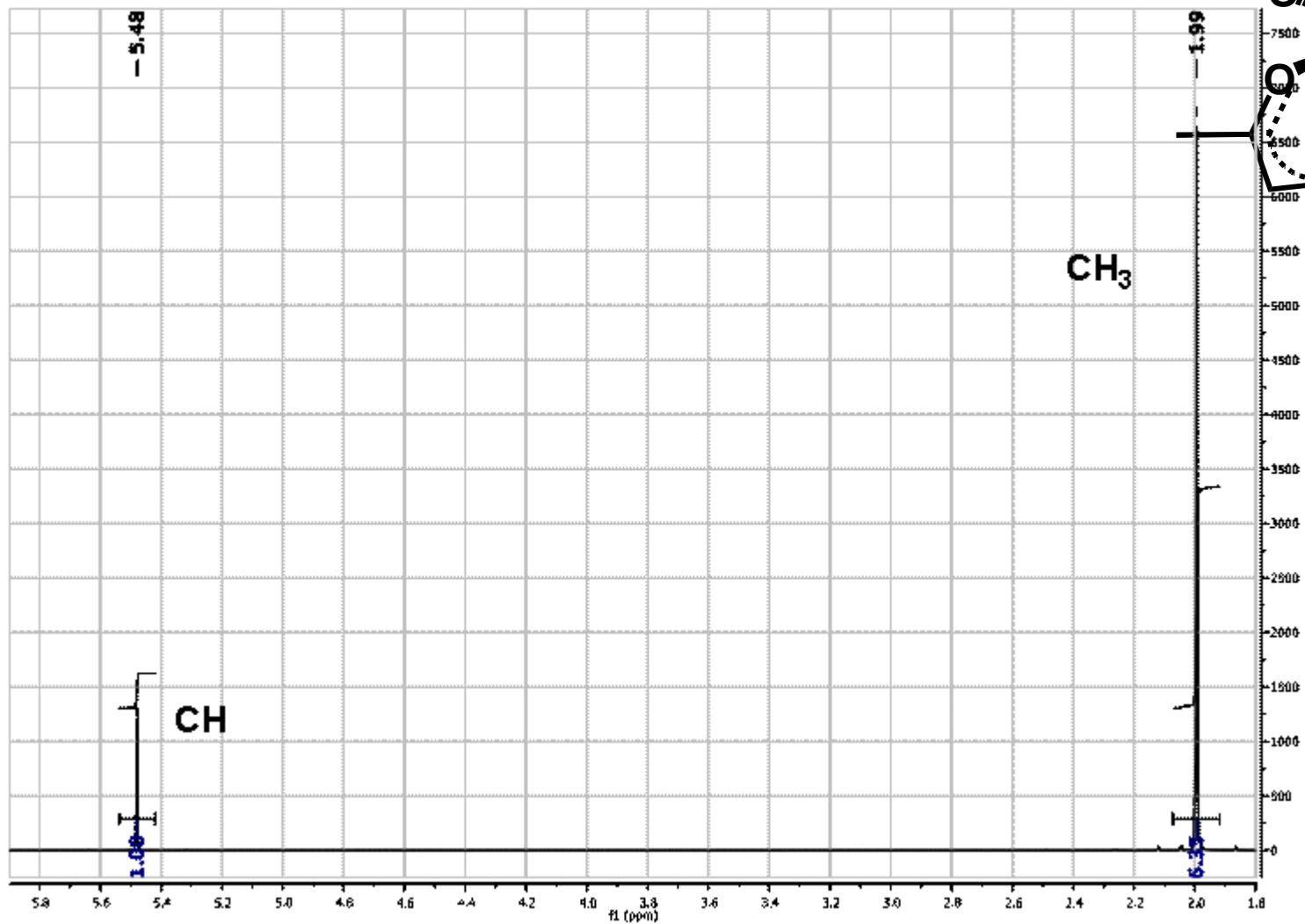
Spettro ^{13}C NMR in CDCl_3 , a t.a. di 2,4-pentandione



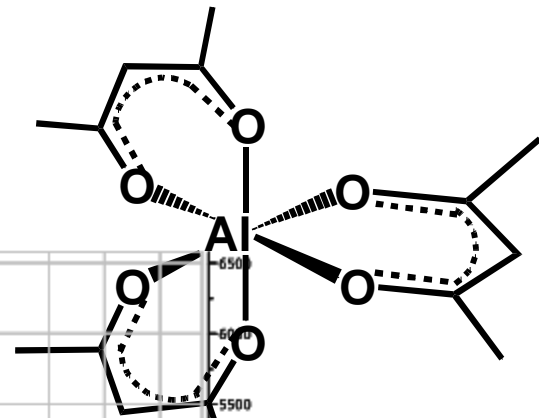
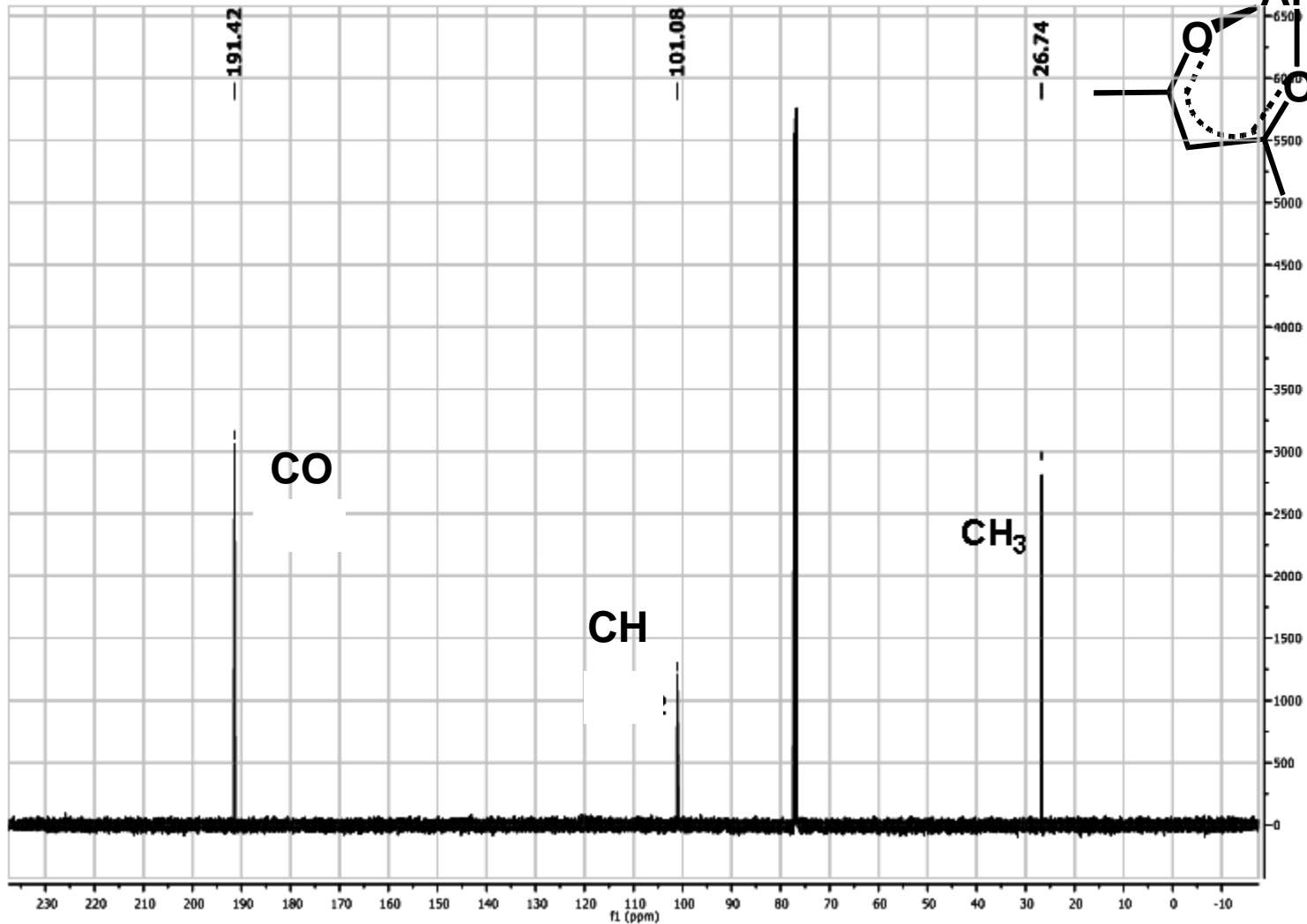
Spettro HC COSY (HSQC) NMR in CDCl_3 , a t.a. di 2,4-pentandione



Spettro ^1H NMR in CDCl_3 , a t.a. di $[\text{Al}(\text{acac})_3]$

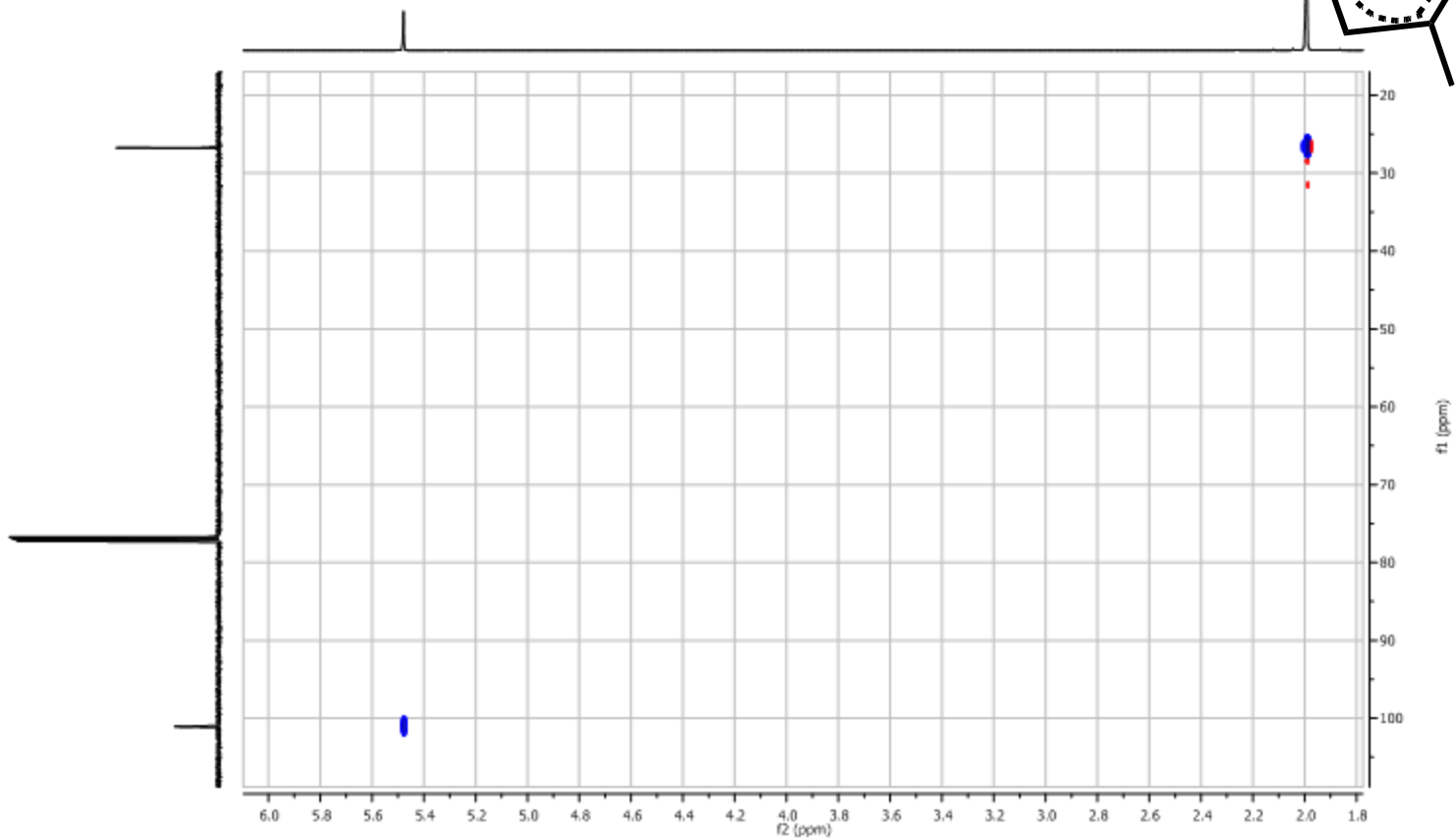
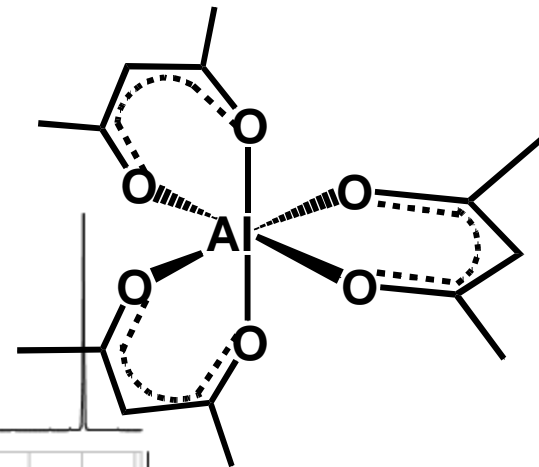


Spettro ^{13}C NMR in CDCl_3 , a t.a. di $[\text{Al}(\text{acac})_3]$

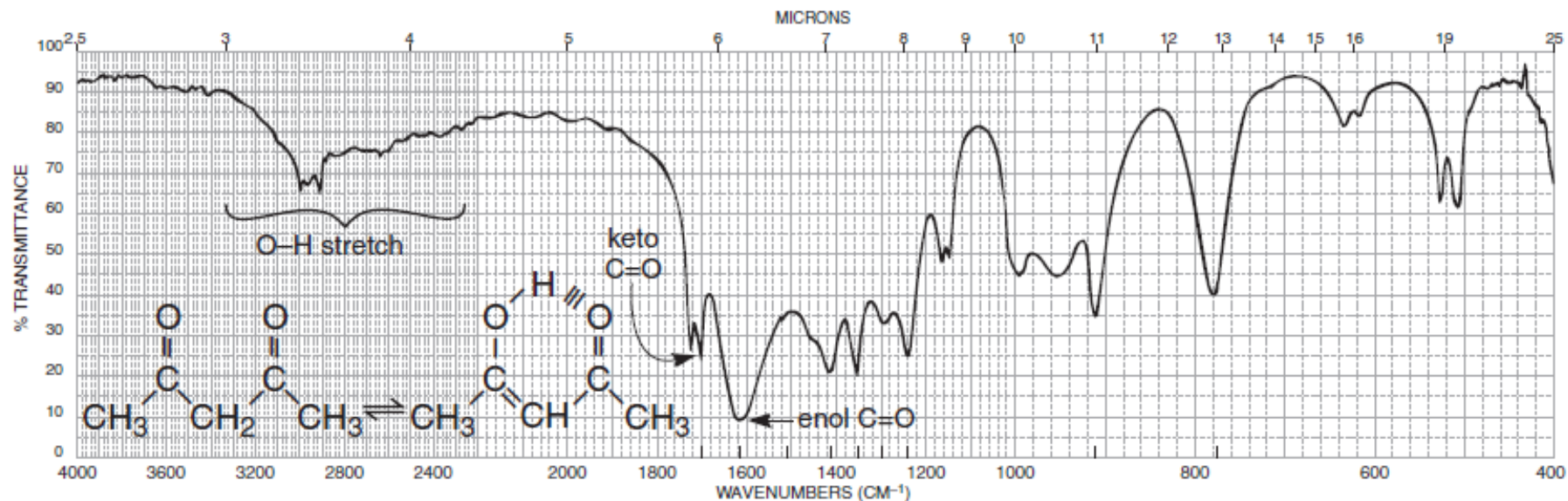


Spettro HC COSY (HSQC) NMR in CDCl_3 , a t.a.

di $[\text{Al}(\text{acac})_3]$



Spettro IR di 2,4-pentandione



From *Introduction to Spectroscopy*, D. L. Pavia, G. M. Lampman, G. S. Kriz, J. R. Vyvyan, 5th Ed.

Spettri IR dei complessi metallo-acac

K. Nakamoto, et al. *J. Am. Chem. Soc.* **1961**, 83 (5), 1066–1069.