

**Cyclopentyl-linked *N*-Acylthioureas as Promising Urease Inhibitors: Insights from *in vitro*
Bioassay, Structure-activity Relationships and Computational Analysis**

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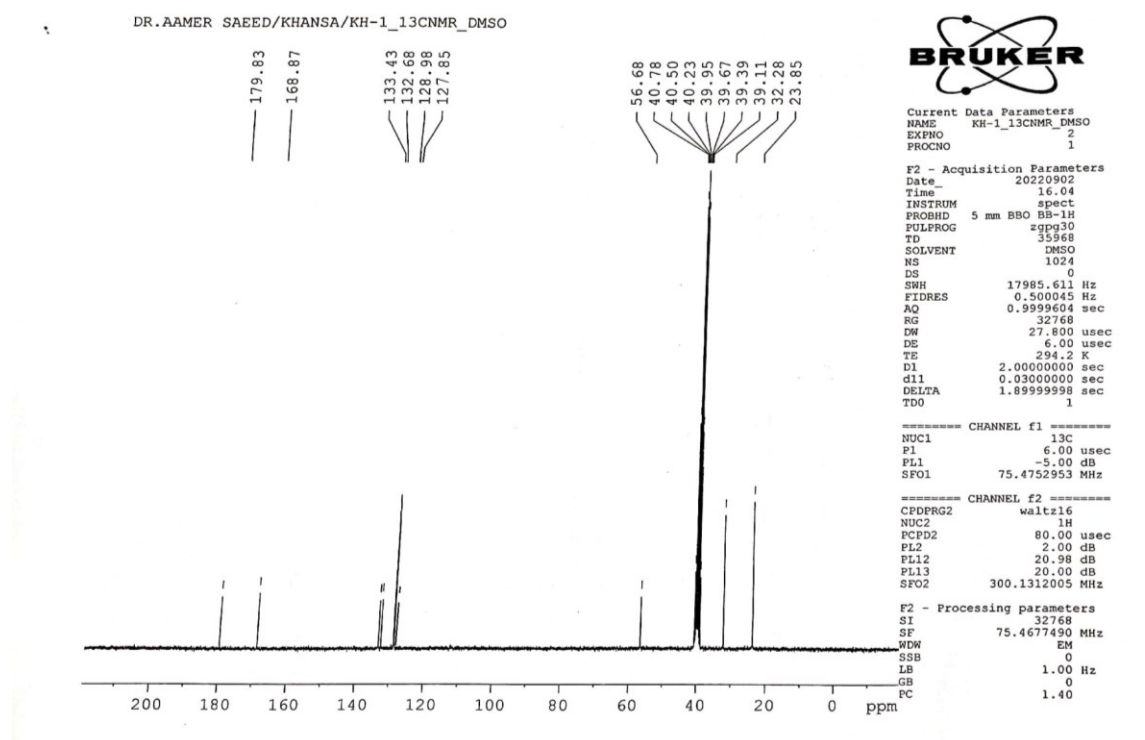
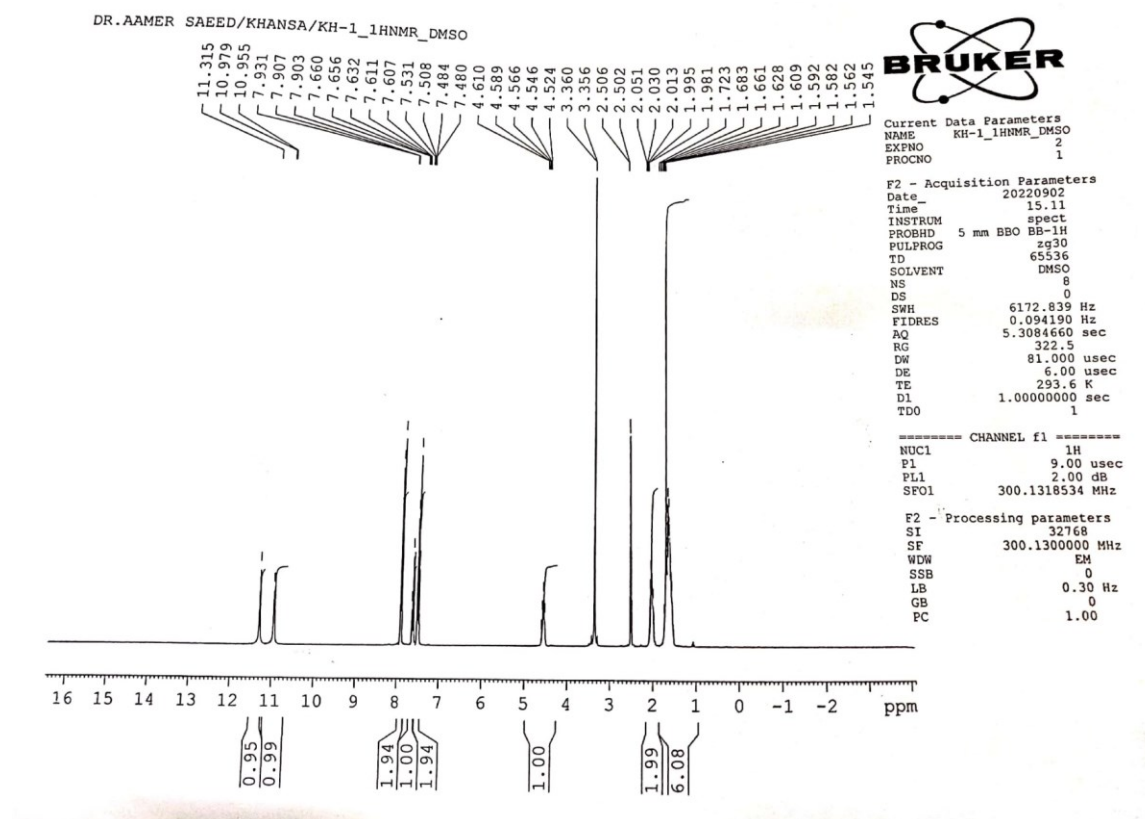
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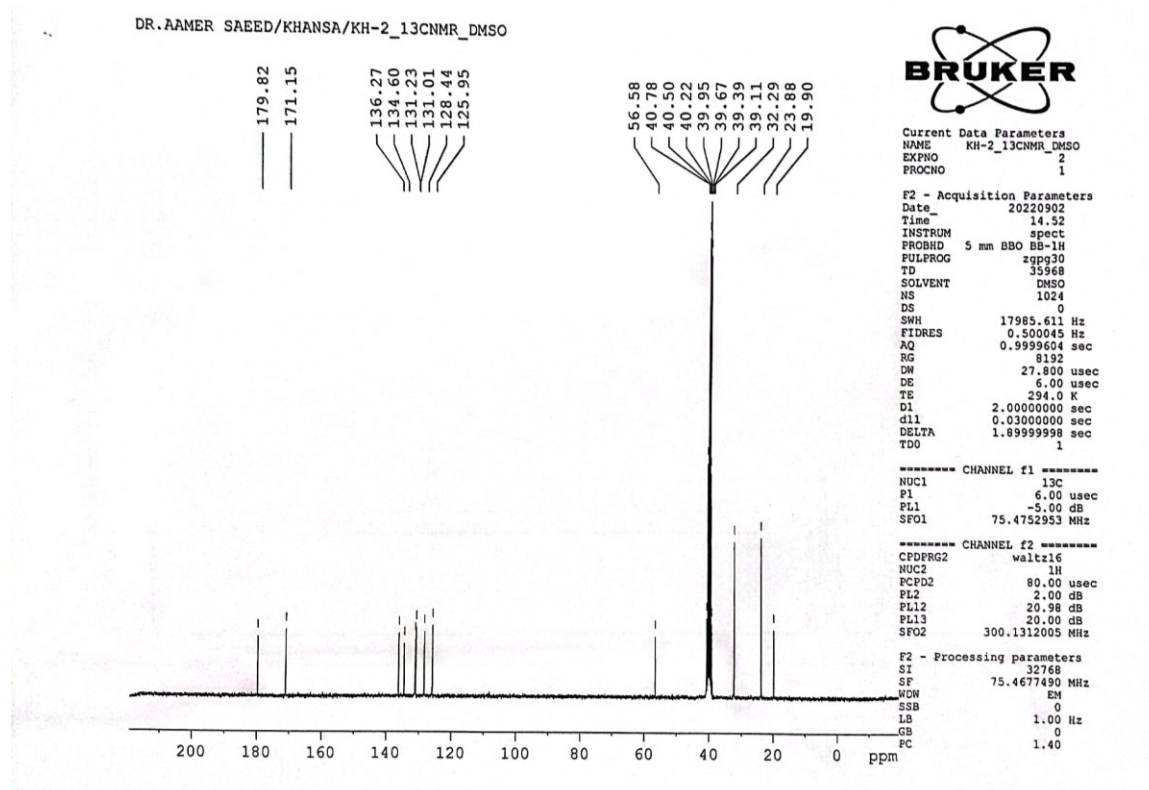
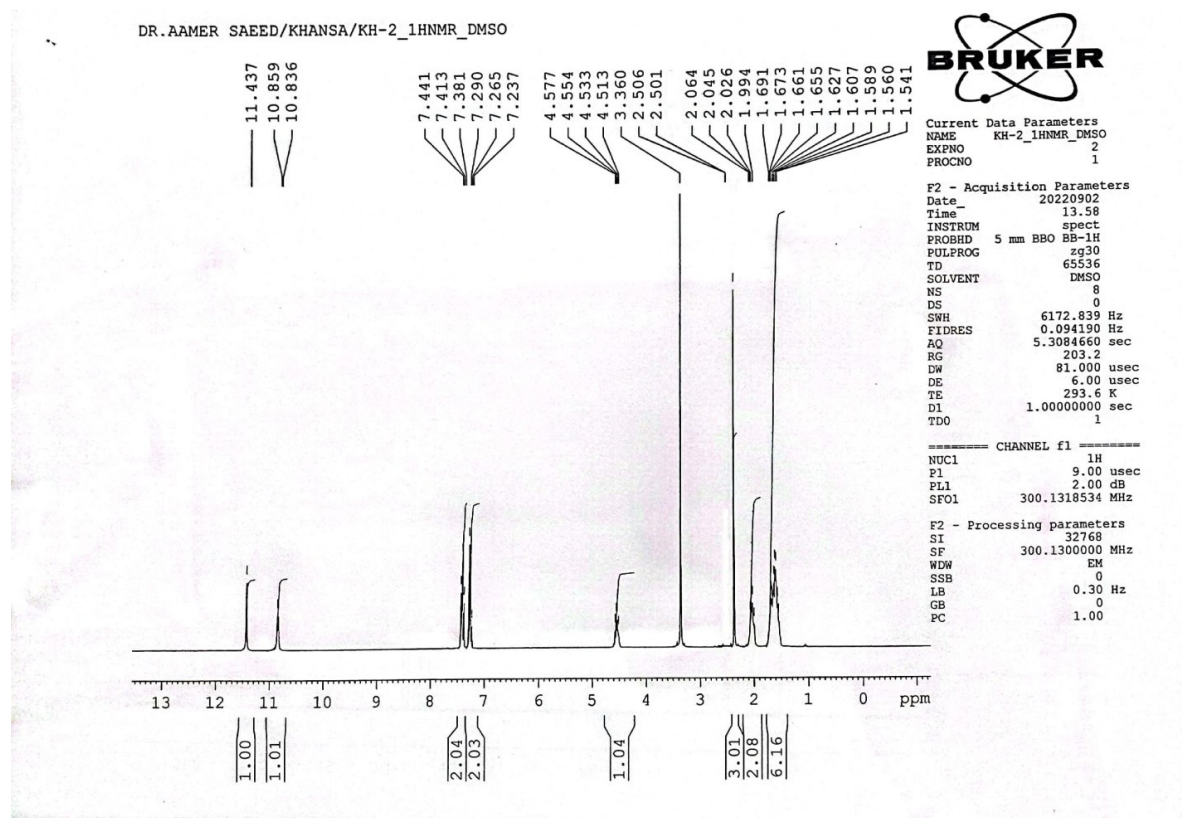
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N-(cyclopentylcarbamothioyl)benzamide (4a)



N-(cyclopentylcarbamothioyl)-2-methylbenzamide (4b)



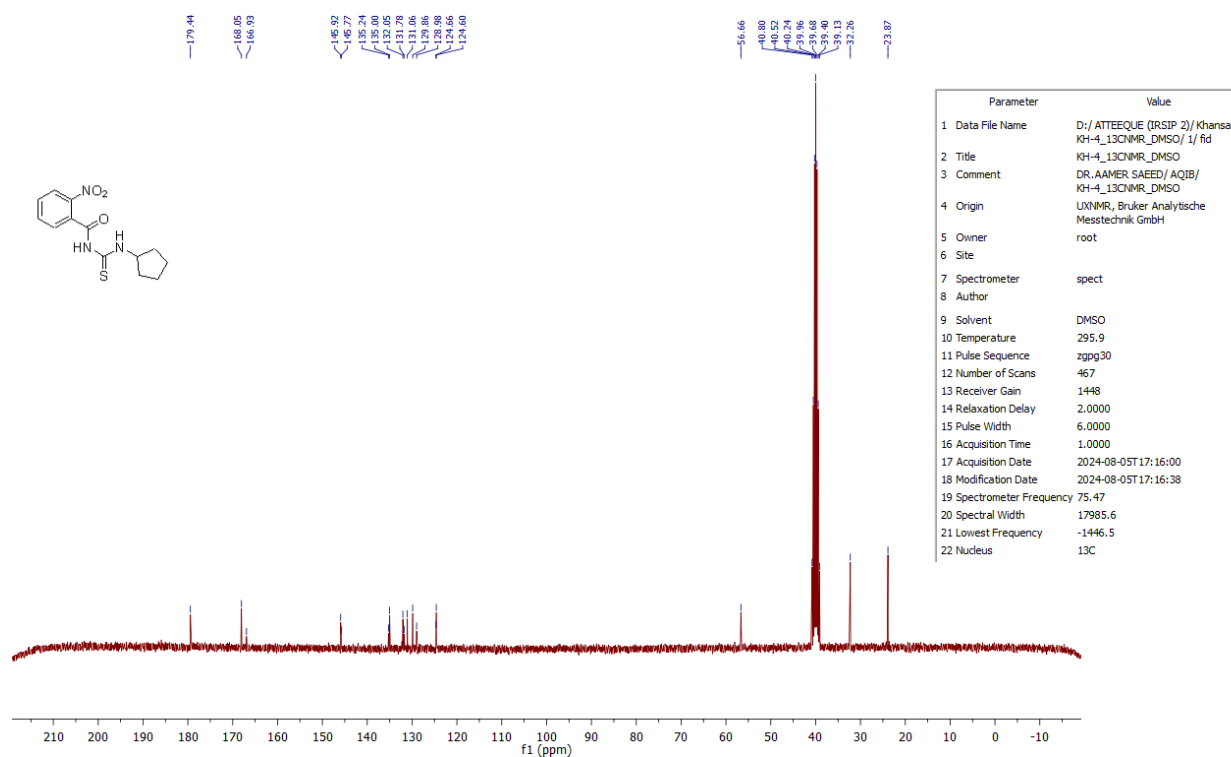
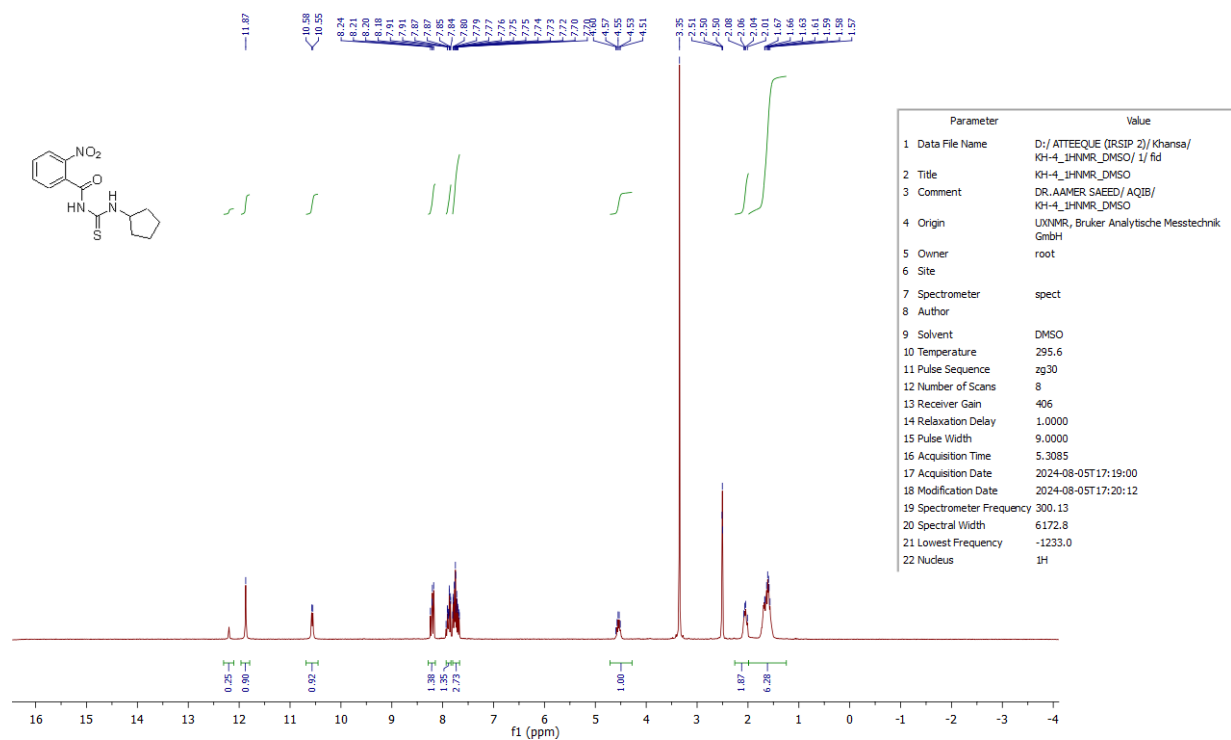
¹H NMR Spectrum (DMSO-d₆)

Chemical Shift (ppm)	Integration
~11.73	0.95
~10.69 / ~10.66	0.96
~7.57 - ~7.41	3.93
~4.59 - ~4.51	1.00
~2.52 - ~1.52	3.83 / 4.10

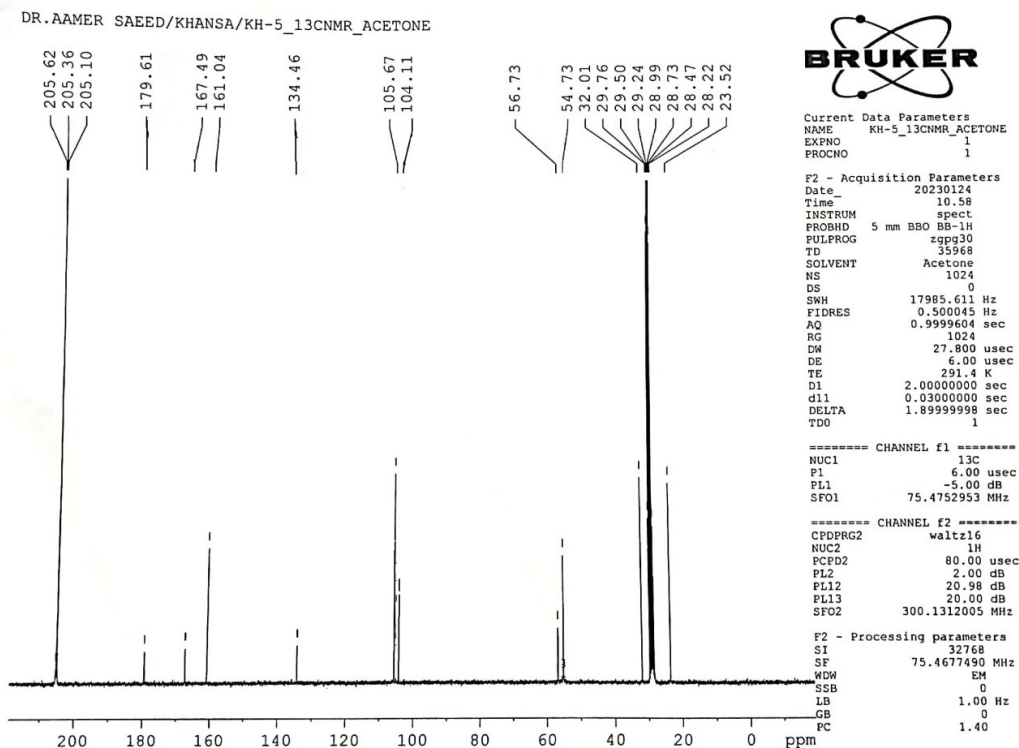
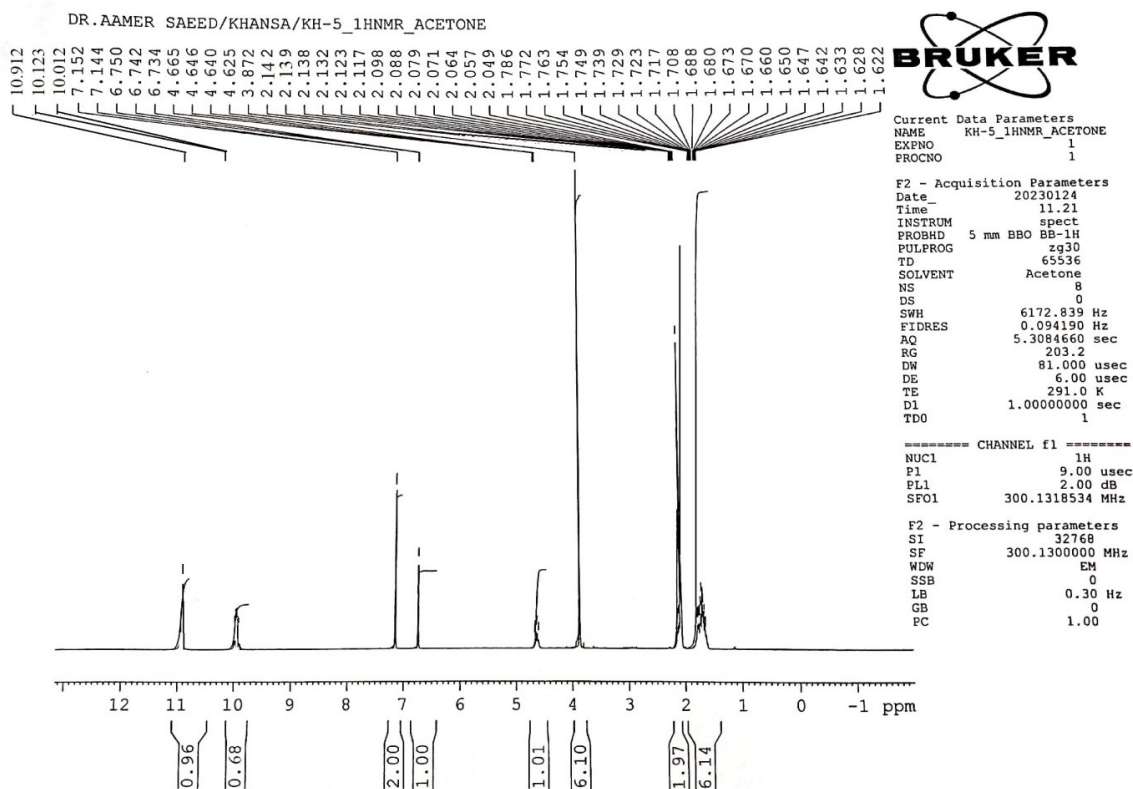
¹³C NMR Spectrum (DMSO-d₆)

Chemical Shift (ppm)
179.50
168.34
134.85
130.81
129.95
129.64
127.52
56.66
40.79
40.51
39.82
39.65
39.48
39.40
37.15
32.25
23.82

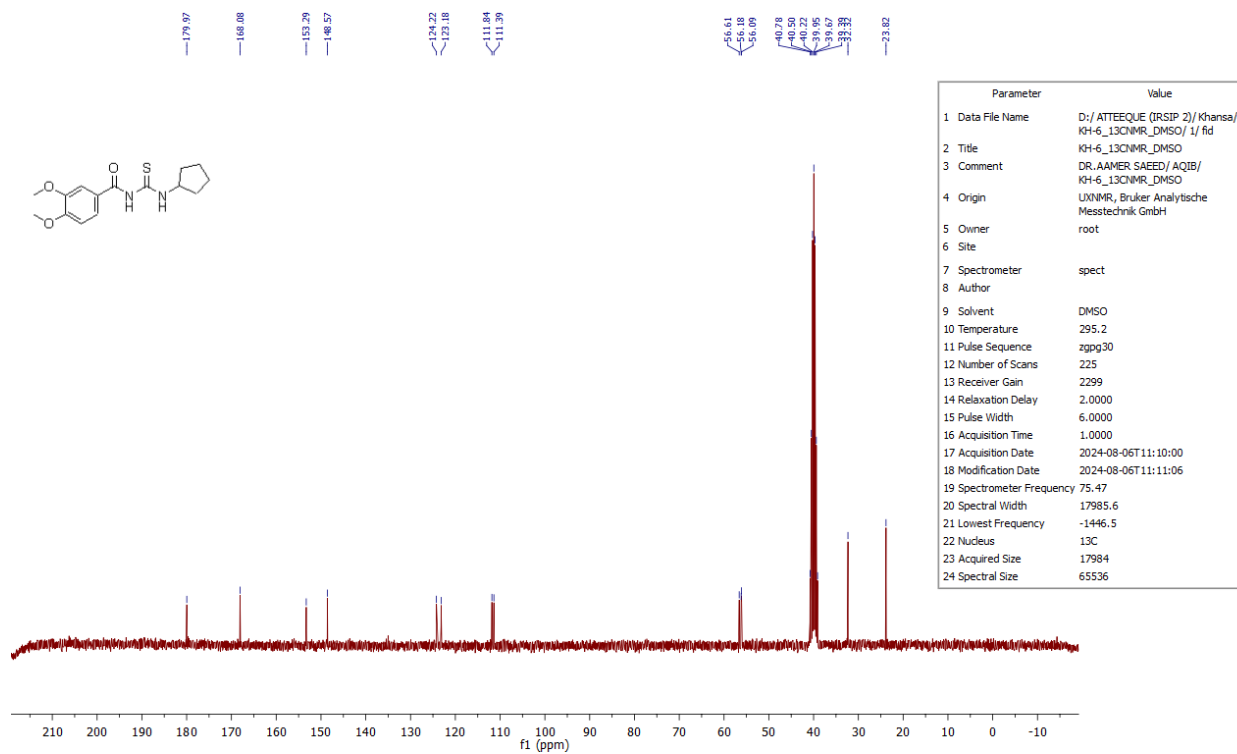
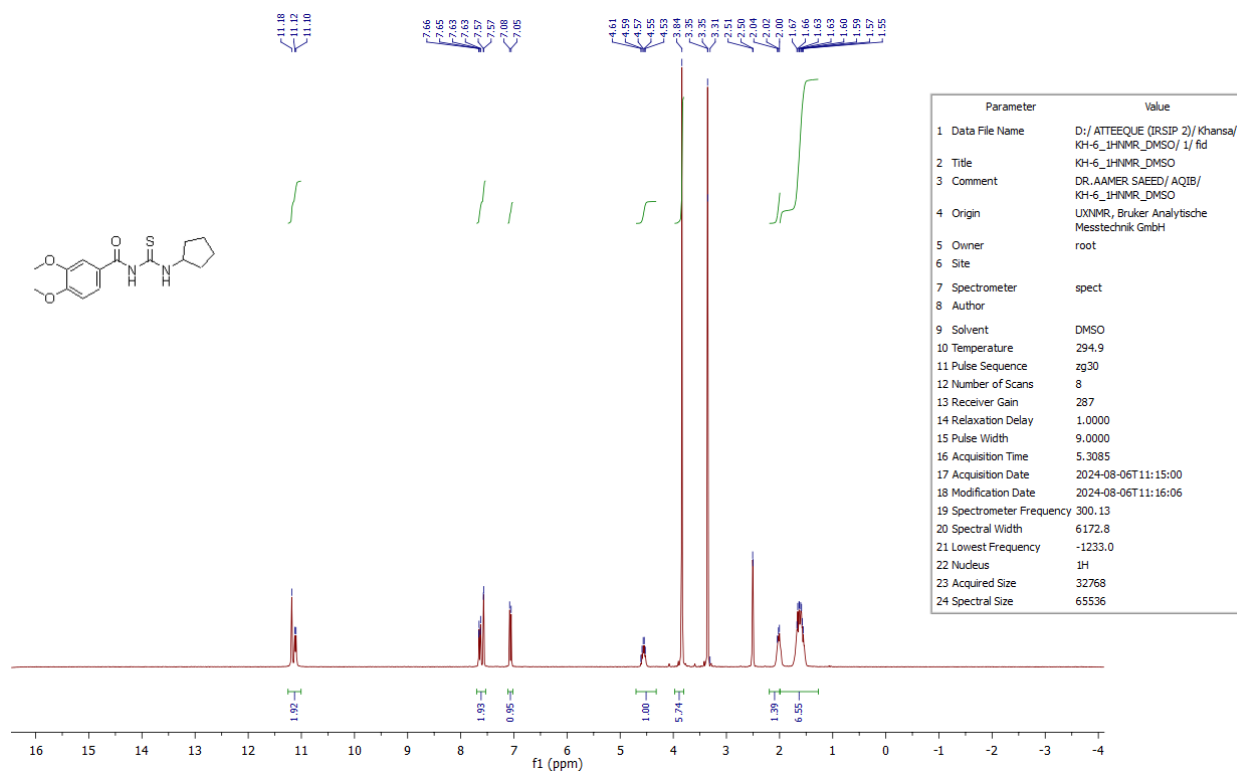
***N*-(cyclopentylcarbamothioyl)-2-nitrobenzamide (4d)**



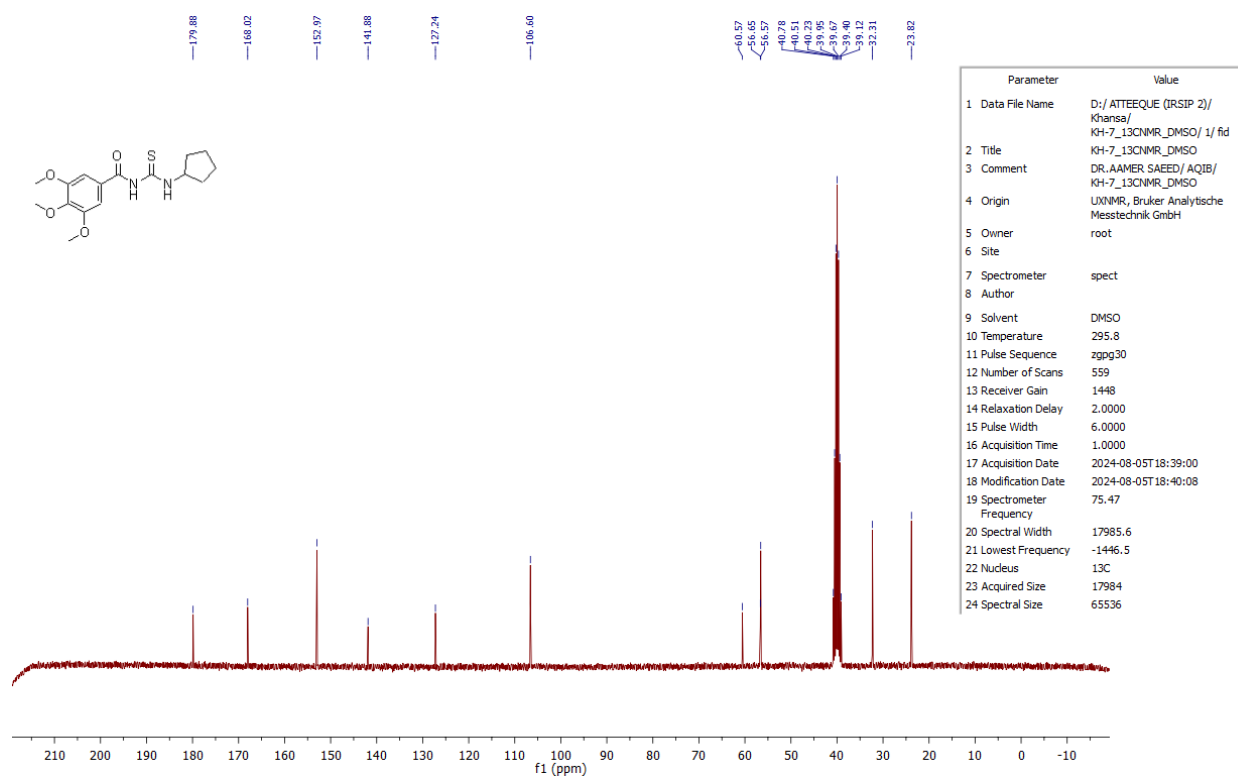
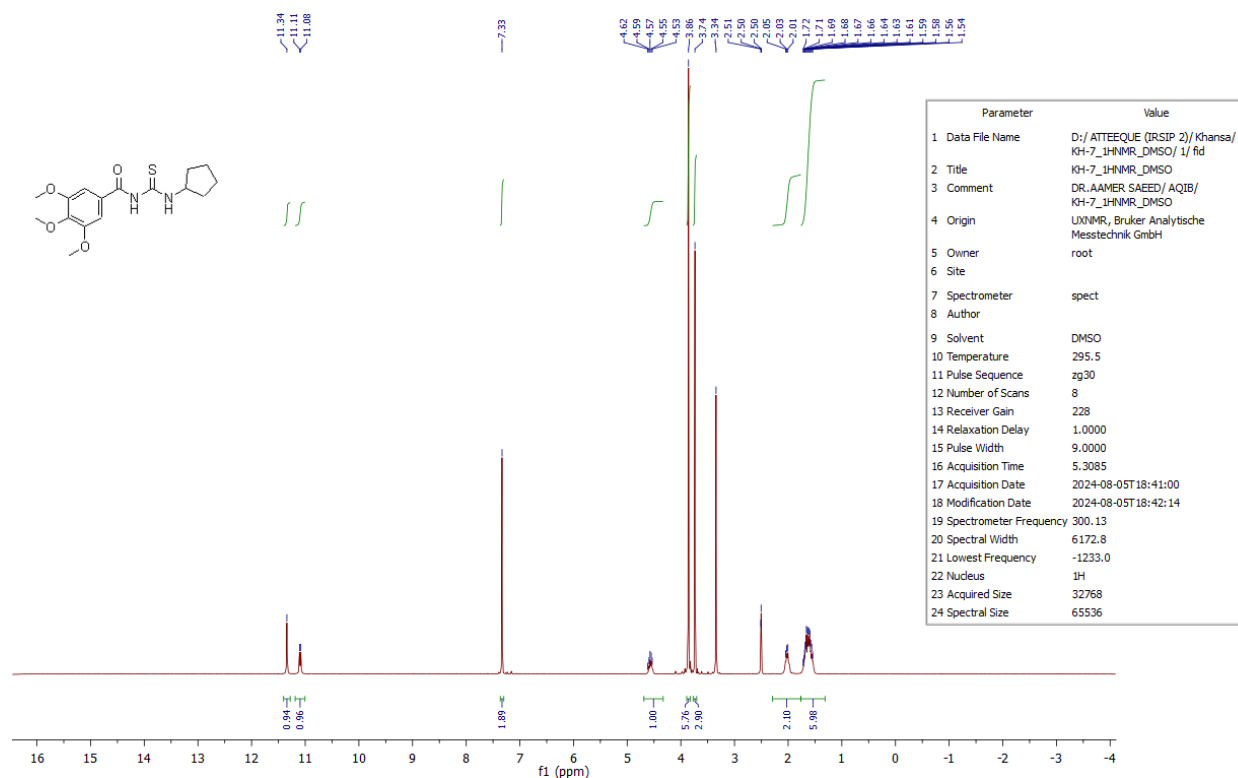
***N*-(cyclopentylcarbamothioyl)-3,5-dimethoxybenzamide (4e)**



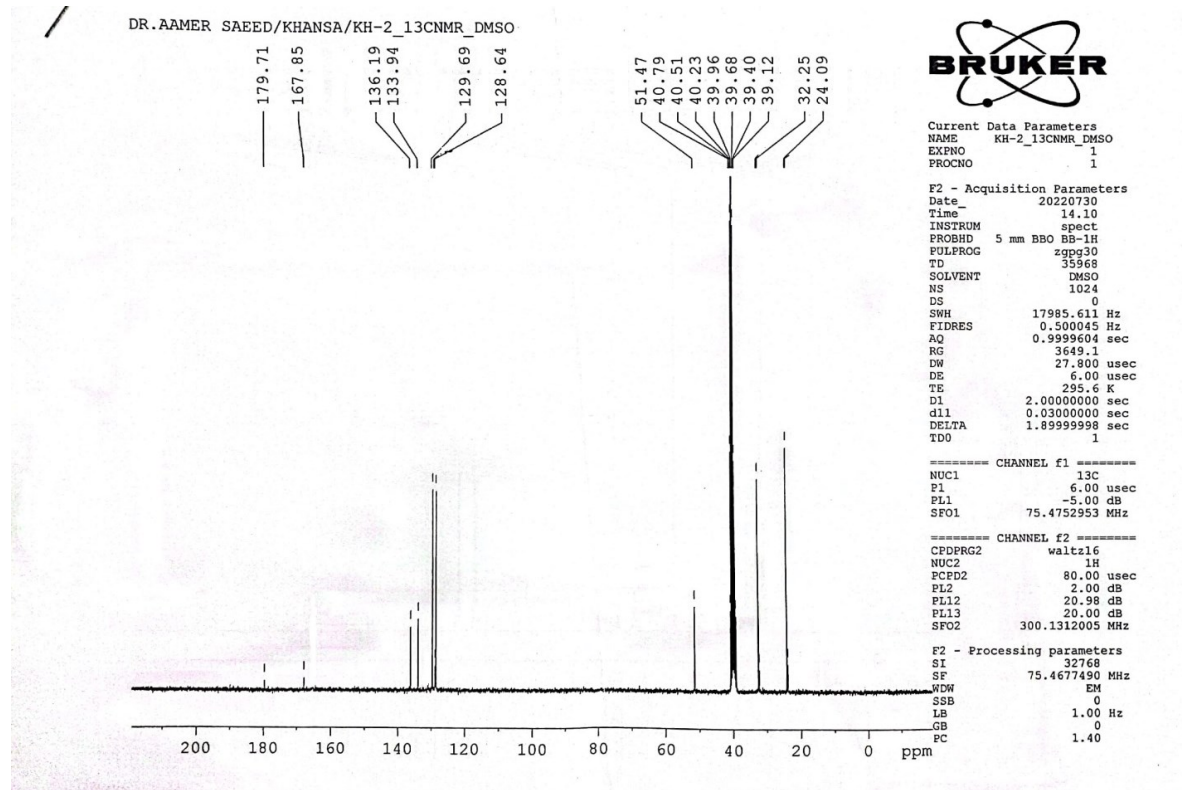
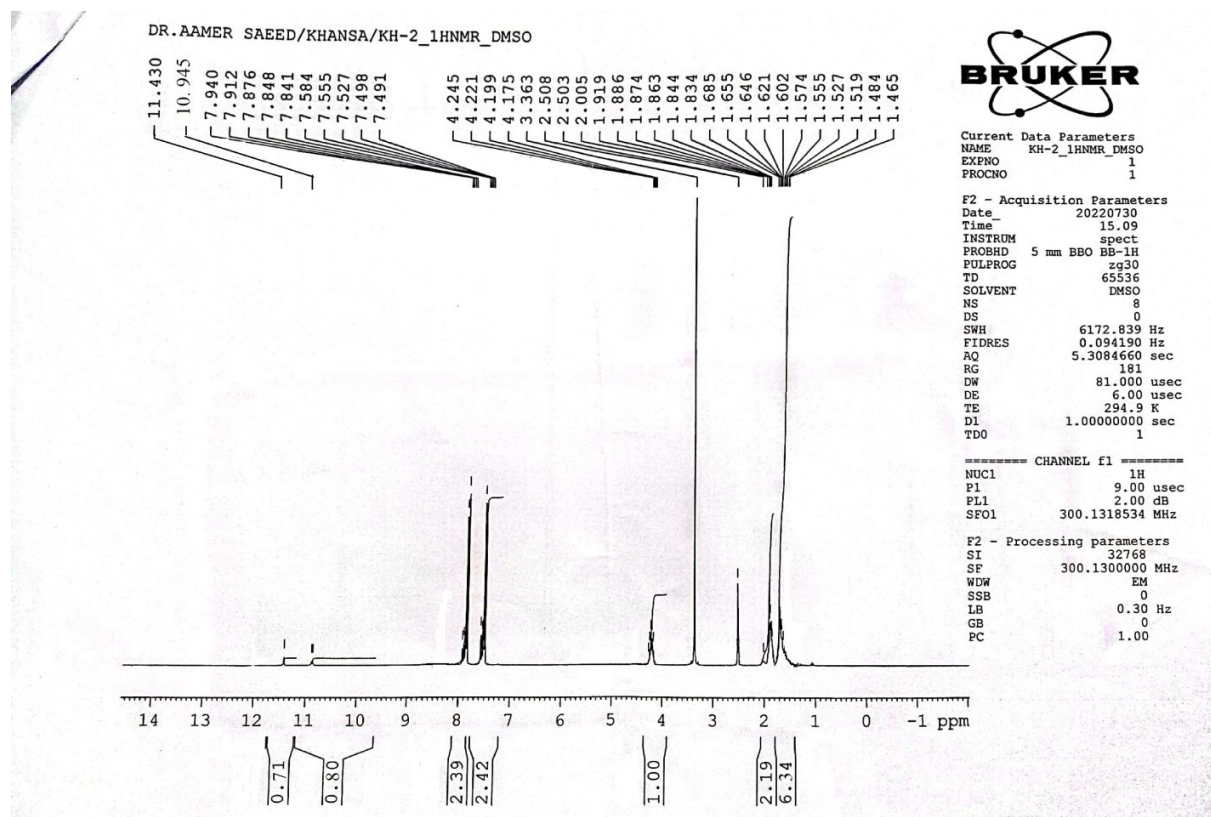
N-(cyclopentylcarbamothioyl)-3,4-dimethoxybenzamide (4f)



***N*-(cyclopentylcarbamothioyl)-3,4,5-trimethoxybenzamide (4g)**



4-chloro-N-(cyclopentylcarbamothioyl)benzamide (4h)



***N*-(cyclopentylcarbamothioyl)-1-naphthamide (4i)**

