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Appendices

Wet-pick up Calculation

The percentage wet pick-up value of fabric can be determined by the following method:

1. The initial weight of each sample was measured before padding by electronic balance (± 0.01 g).
2. After padding, each sample was re-weighed.

Then the percentage wet pick-up can be calculated by the equation expressed below:

$$\% \text{wet pick-up} = \frac{\text{weight of wet fabric} - \text{initial weight}}{\text{initial weight}} \times 100$$

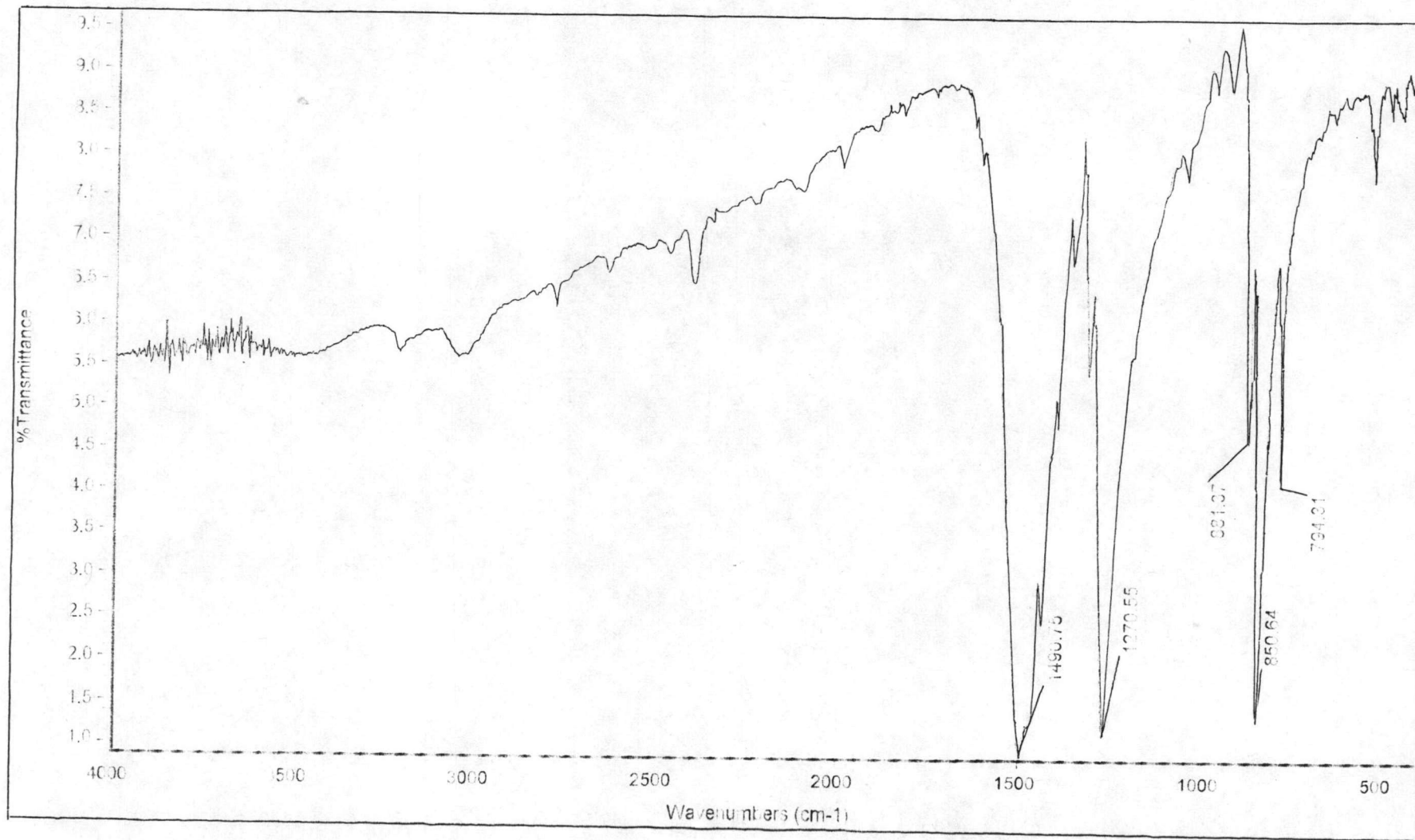


Figure A1 FT-IR Spectra of cyanuric chloride.

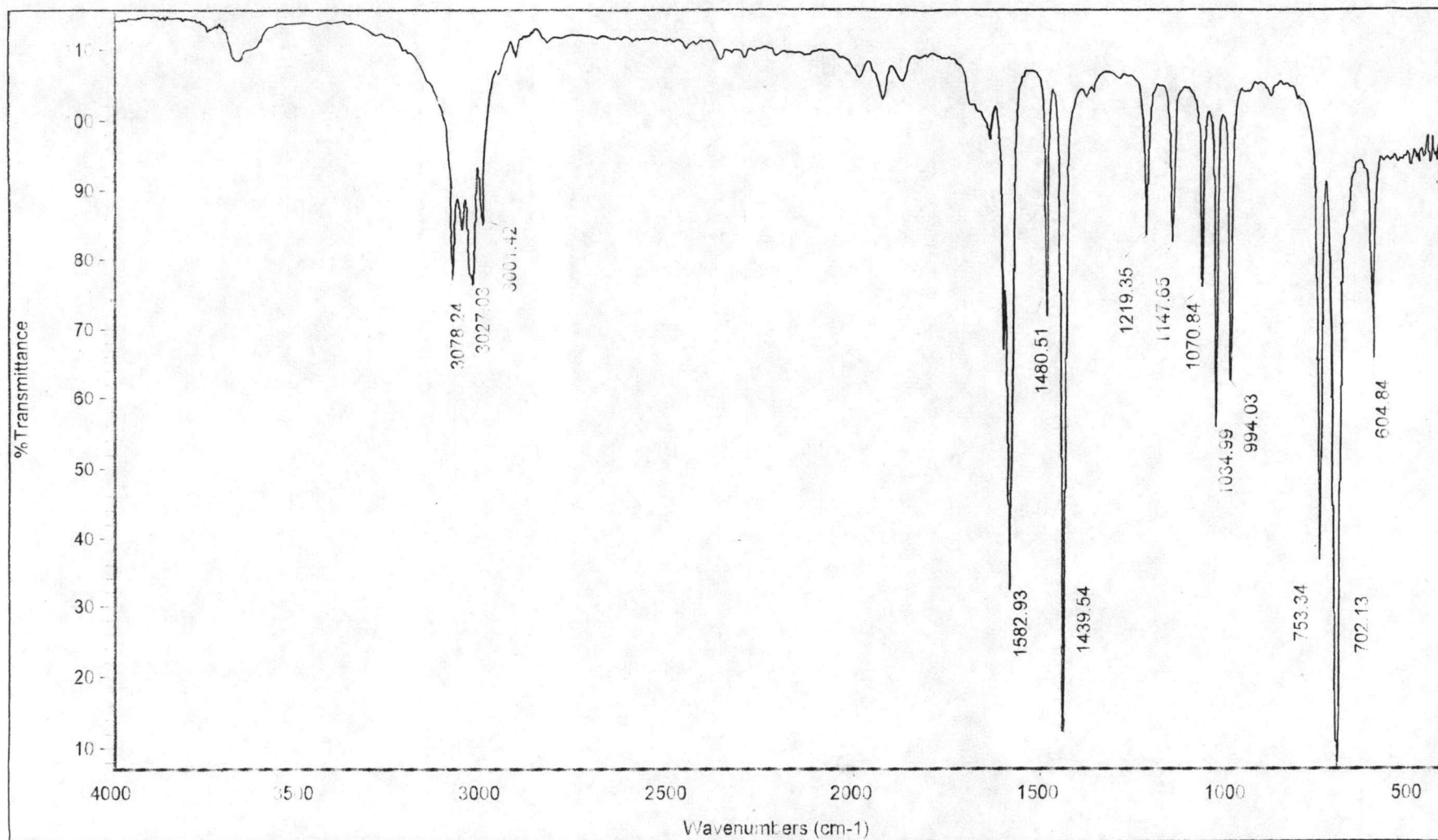


Figure A2 FT-IR spectra of pyridine.

FDT-H2O-13C

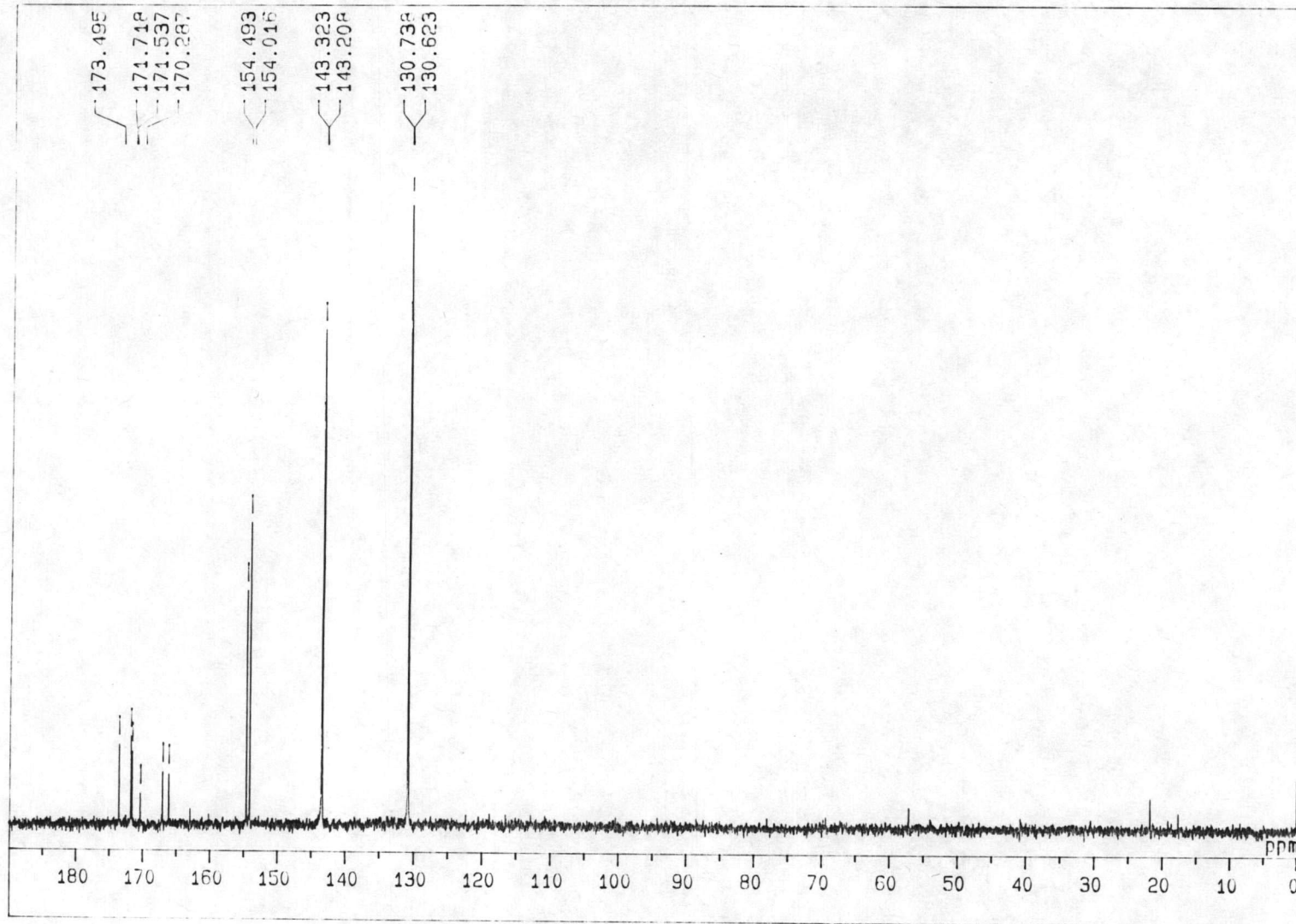
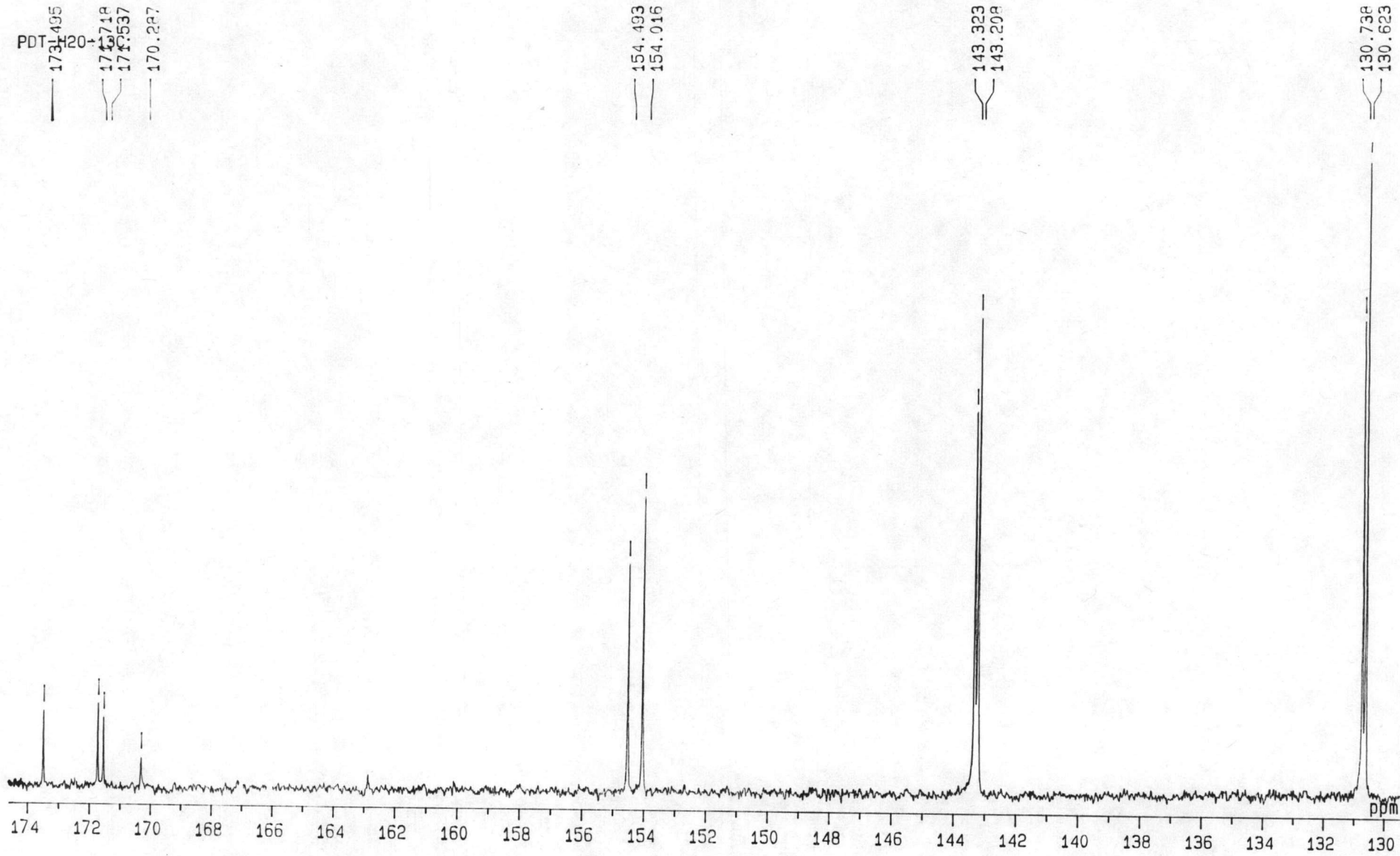


Figure A3 ^{13}C -NMR spectra of DCPT solution.



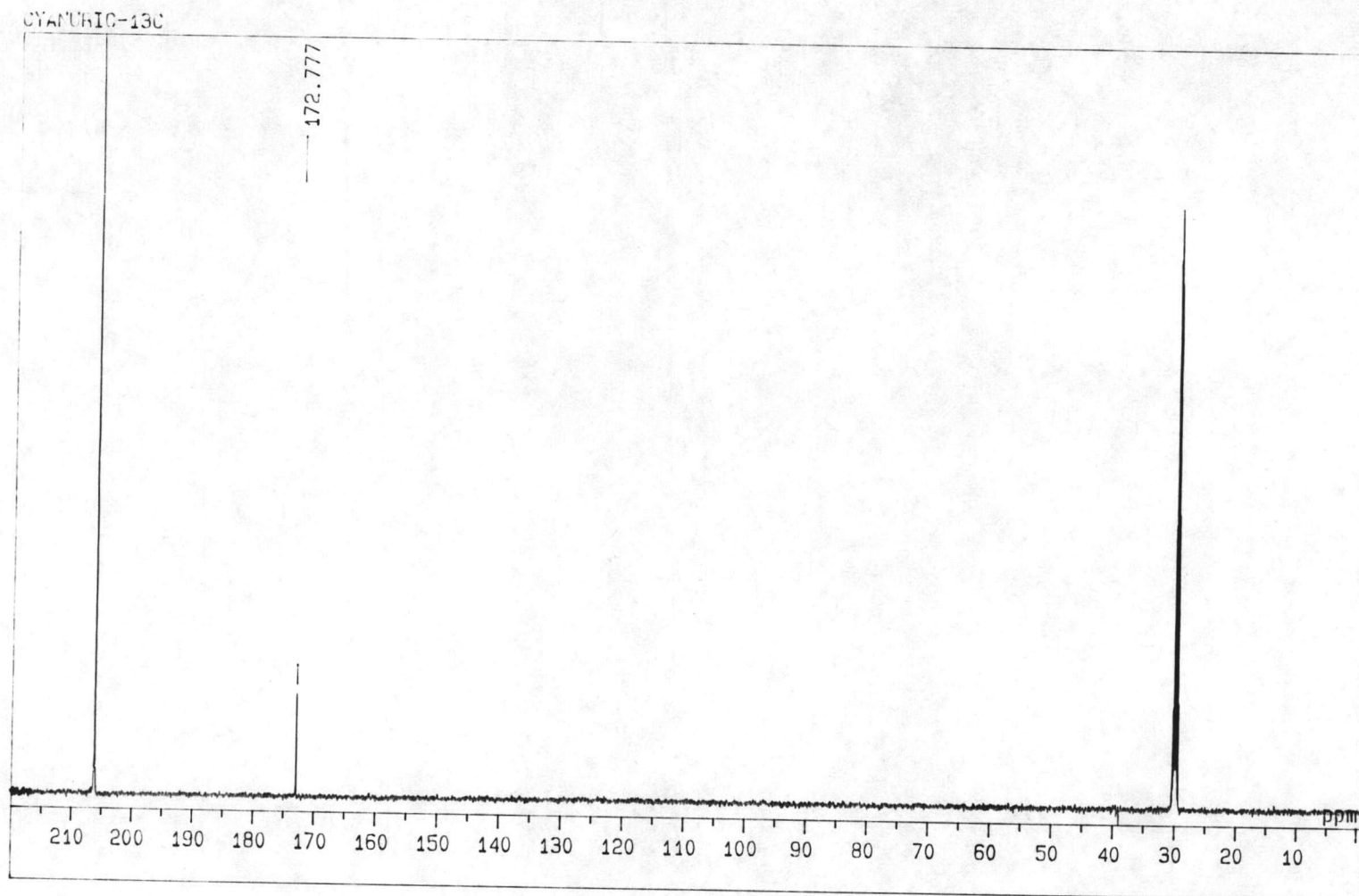


Figure A4 ^{13}C -NMR spectra of cyanuric chloride.

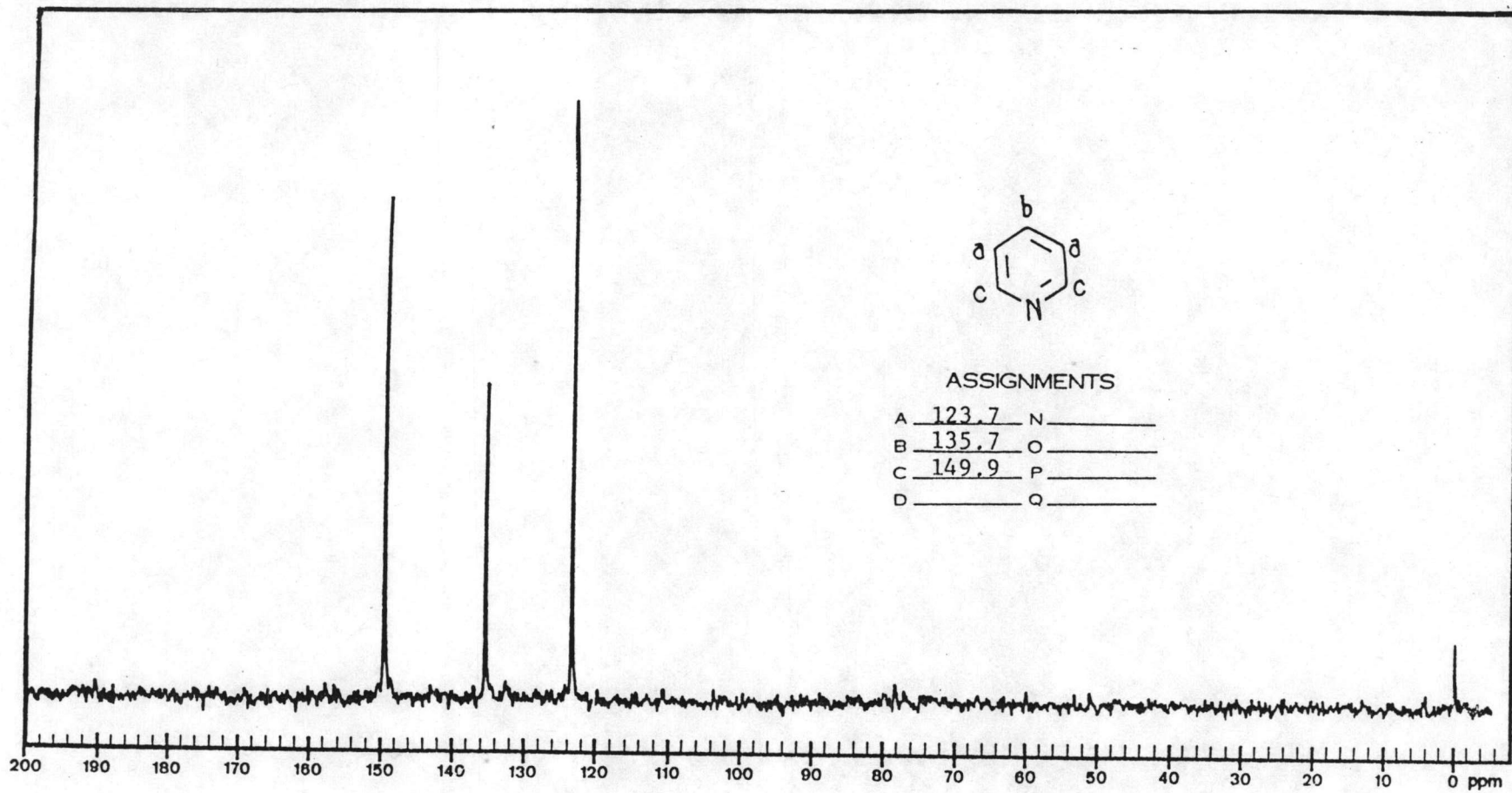
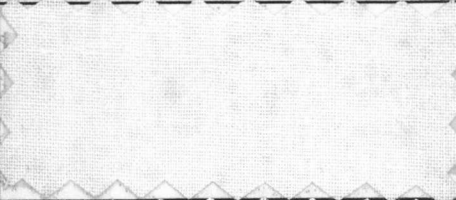

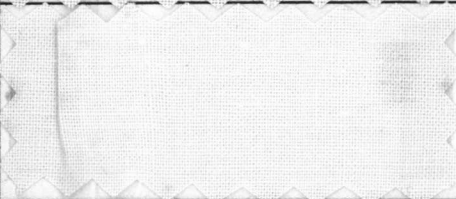
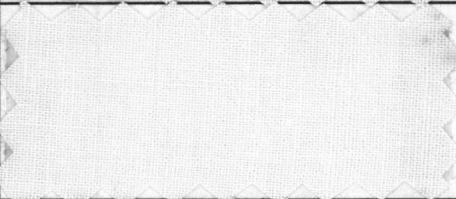
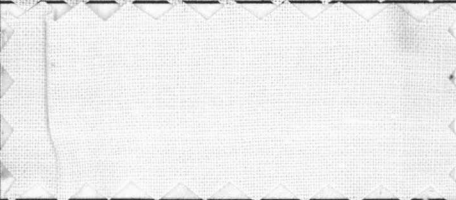
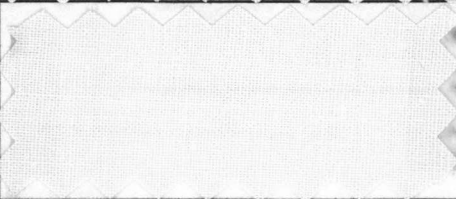
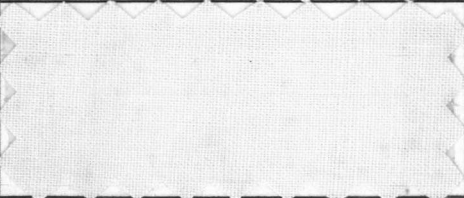


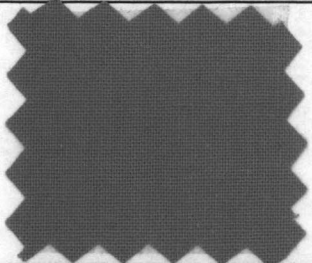
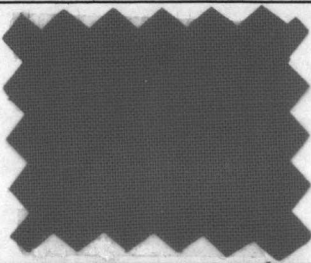
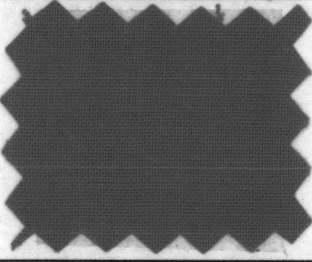
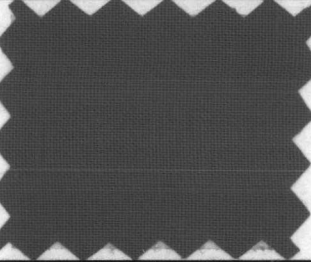
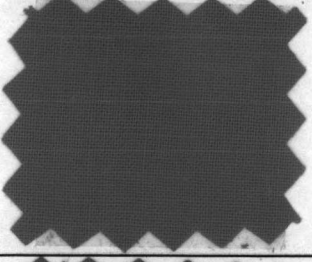
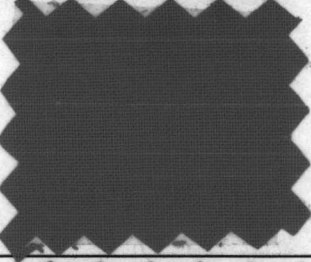
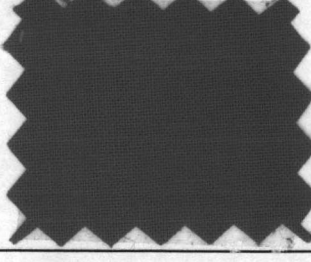
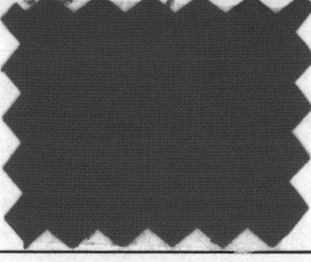
Figure A5 ^{13}C -NMR spectra of pyridine.

Unmodified and modified cotton fabric

Concentrations Of DCPT (g/l)	Cotton-DCPT
0 (unmodified cotton)	
5	
10	
15	
20	
25	
30	

Example of unmodified and modified cotton fabric obtained from two-step exhaust treatment process.

Thermofixation Dyeing

Modified cotton fabric (in the absence of alkali)	g/l	Unmodified cotton fabric (in the presence of alkali)
	10	
	20	
	30	
	40	

Example of dyed cotton fabrics obtained from thermofixation dyeing.

BIOGRAGHY

Miss Papapida Pornsuriyasak was born in Bangkok, Thailand, on June 4, 1976. She received a Bachelor of Science degree with a major in Chemistry from Chulalongkorn University in 1996. She started as a graduate student in the Department of Materials Science with a major in Applied Polymer Science and Textile Technology, Chulalongkorn University in June 1996, and completed the programme in march 1998.