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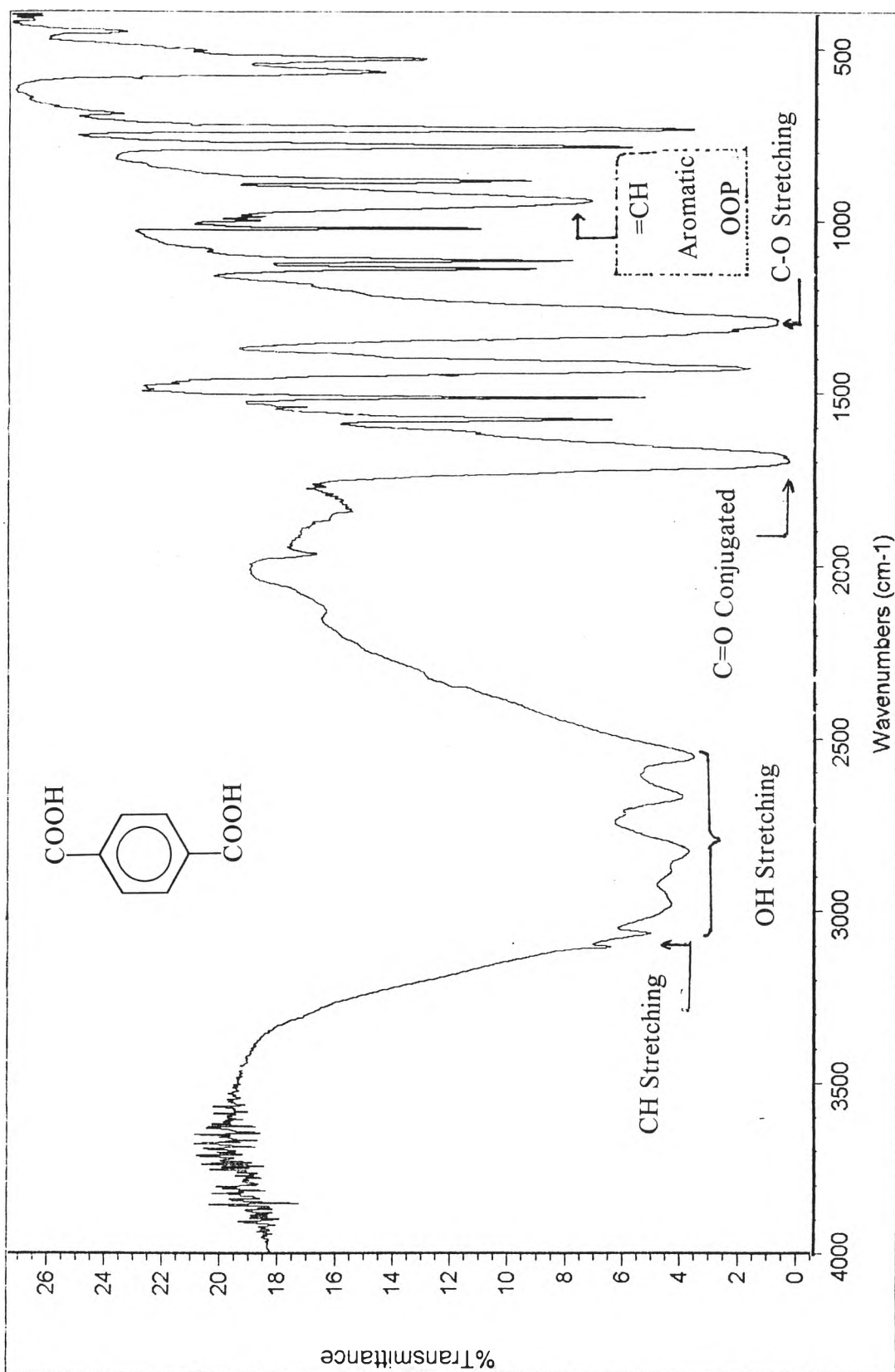
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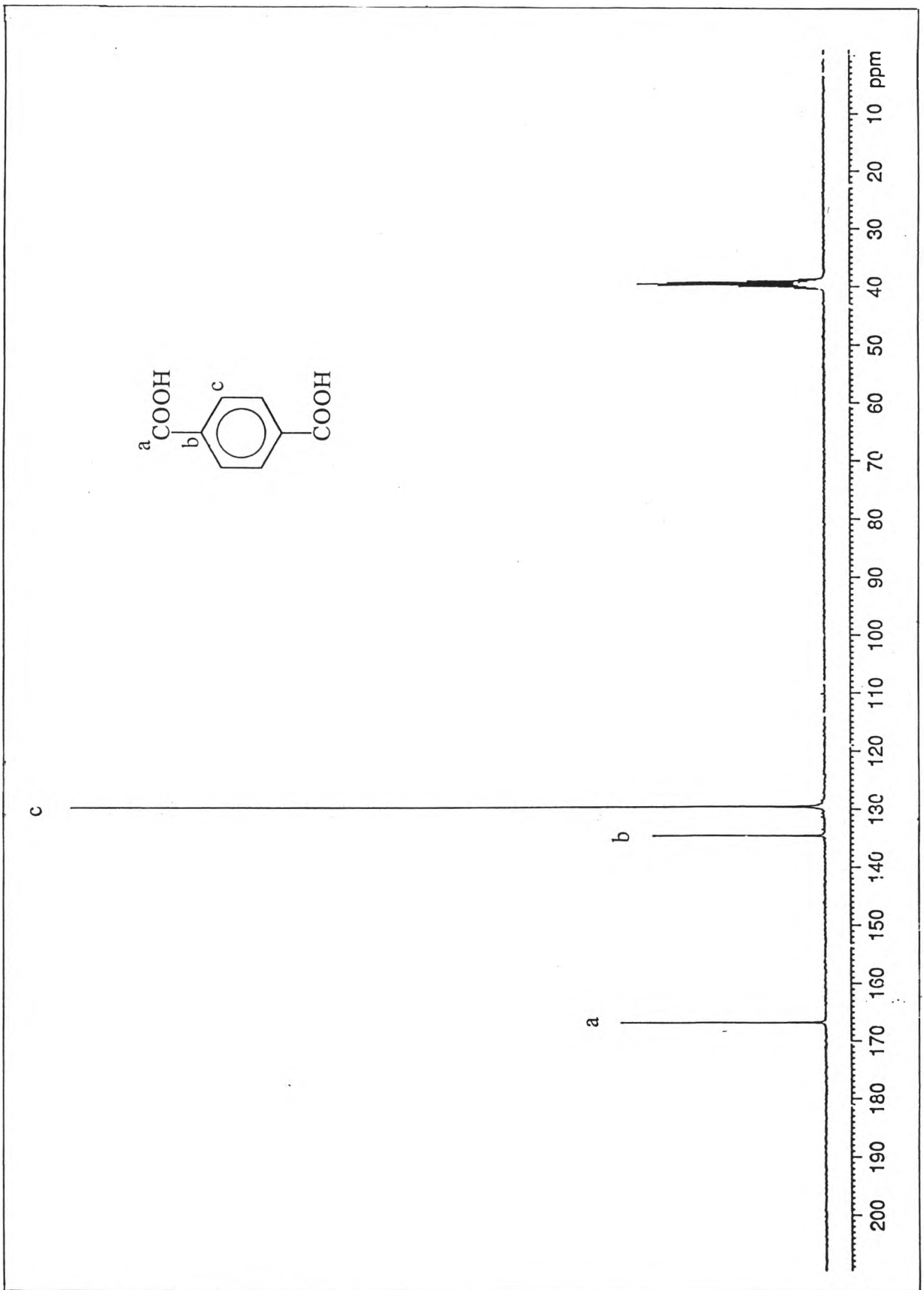
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## **APPENDICES**

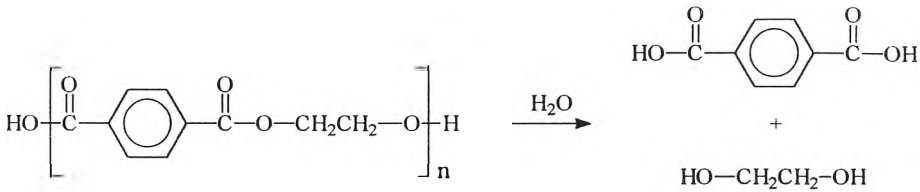
## APPENDIX A1 FT-IR Spectrum of Terephthalic acid



### APPENDIX A2 <sup>13</sup>C-NMR Spectrum of Terephthalic acid



**APPENDIX B** Calculation of Theoretical weight of terephthalic acid from the PET depolymerization.



**Figure B** Schematic of the PET depolymerization

$$\begin{aligned} \text{MW of repeating unit of polymer} &= 192 \\ \text{MW of terephthalic acid (TPA)} &= 166 \end{aligned}$$

$$\begin{aligned} \text{Theoretical weight of TPA} &= (\text{g. of PET})(\text{MW of TPA}) / (\text{MW of repeat unit}) \\ &= (15)(166) / (192) \\ &= 12.97 \text{ g.} \end{aligned}$$



## VITA

Mr. Jessada Chenrukmatupoom was born on May 25, 1972 in Bangkok. He received his Bachelor of Science degree in Industrial Chemistry from the Department of Chemistry, Faculty of Science, King Mongkut's Institute of Technology, Ladkrabang in 1994. He began his graduate studies in the Multidisciplinary program of Petrochemistry and Polymer, Graduate School, Chulalongkorn University in 1994 and completed the program in 1997.

