

10. ANEXOS

10.1. ESPECTROS DE INFRARROJO DE LOS MONÓMEROS

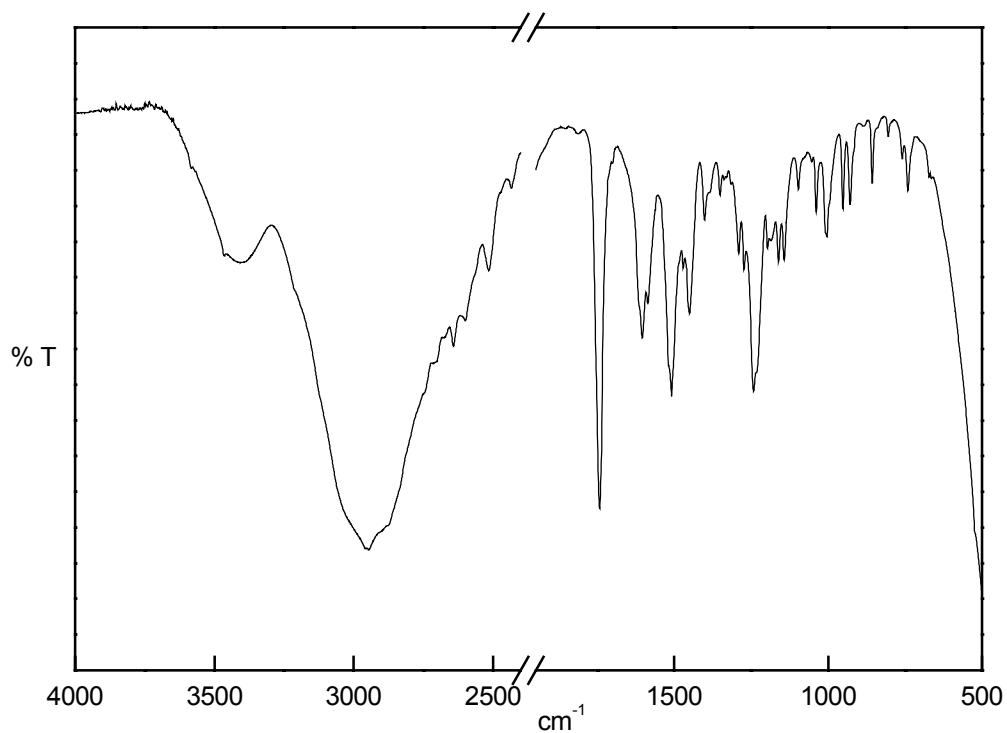


Figura 10.1. Espectro de infrarrojo del compuesto I.

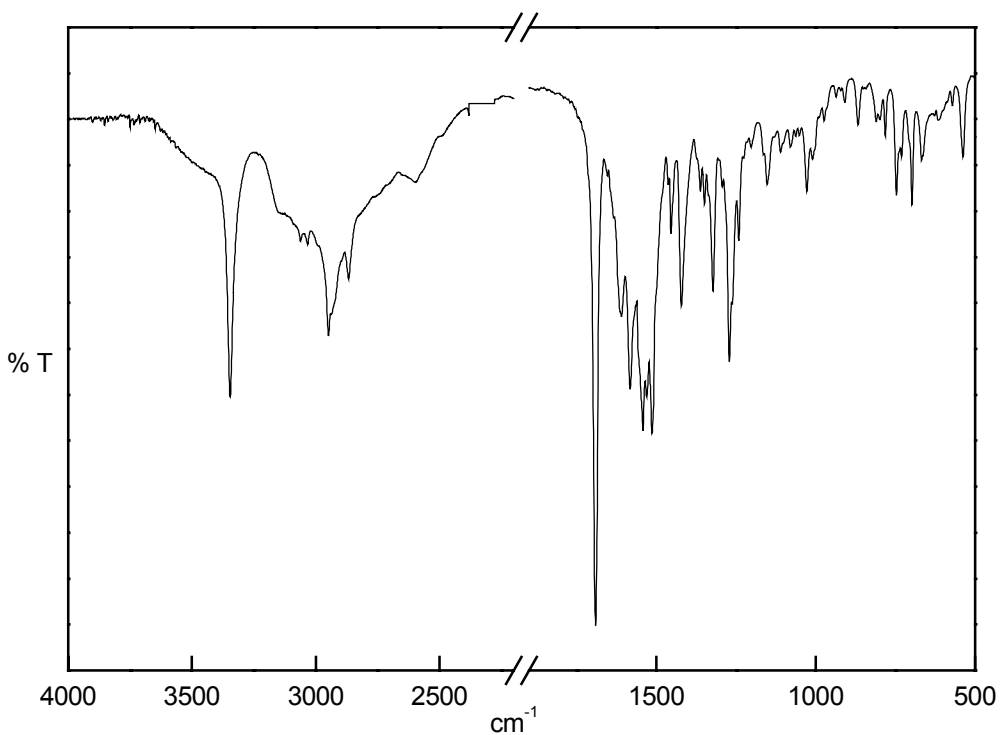


Figura 10.2. Espectro de infrarrojo del compuesto V.

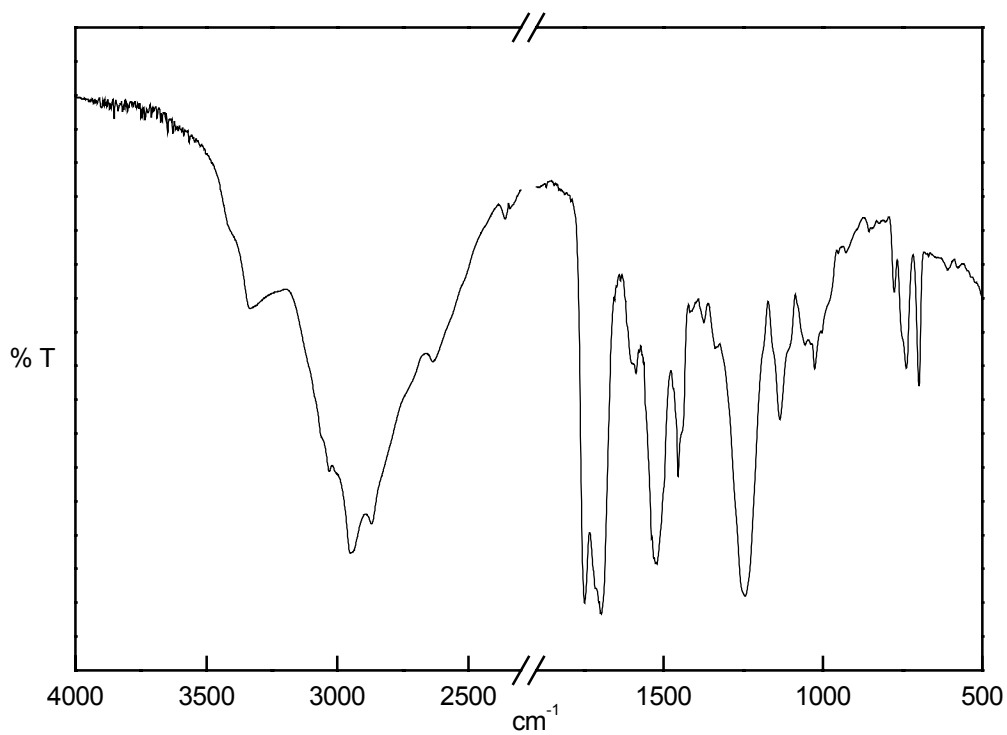


Figura 10.3. Espectro de infrarrojo del compuesto VI.

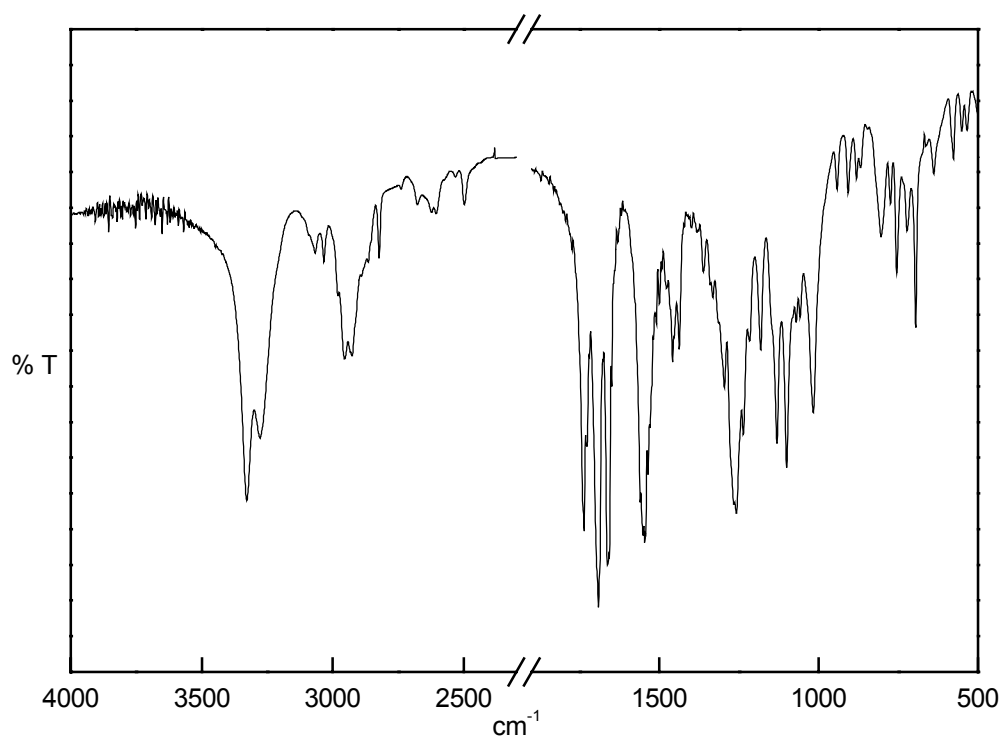


Figura 10.4. Espectro de infrarrojo del compuesto VII-L.

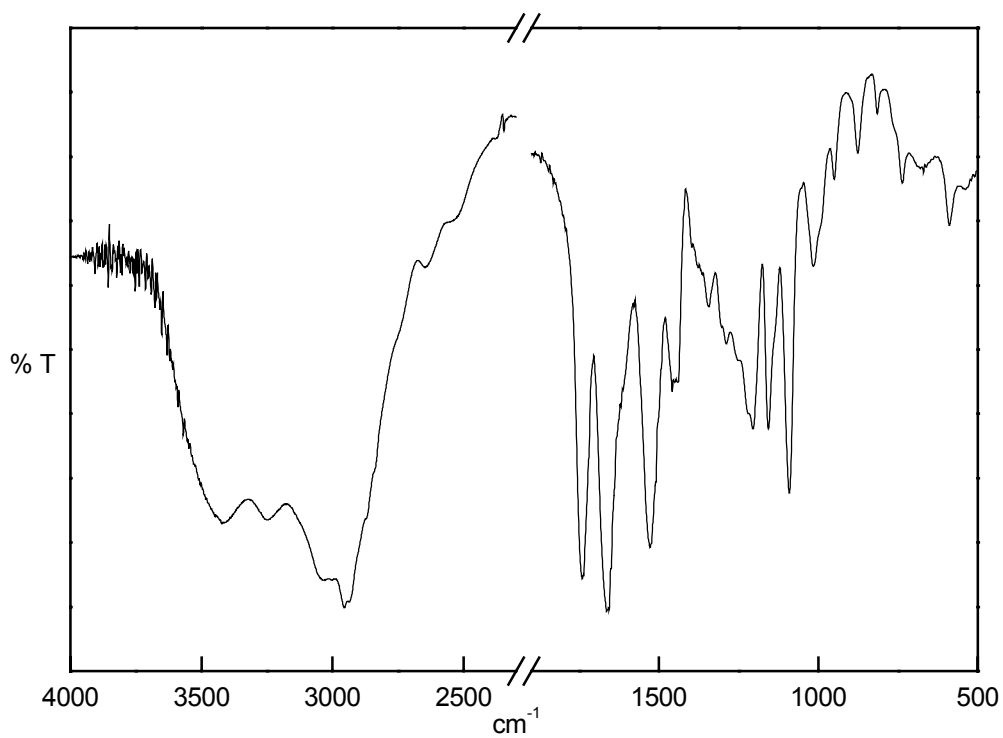


Figura 10.5. Espectro de infrarrojo del compuesto VIII-L.

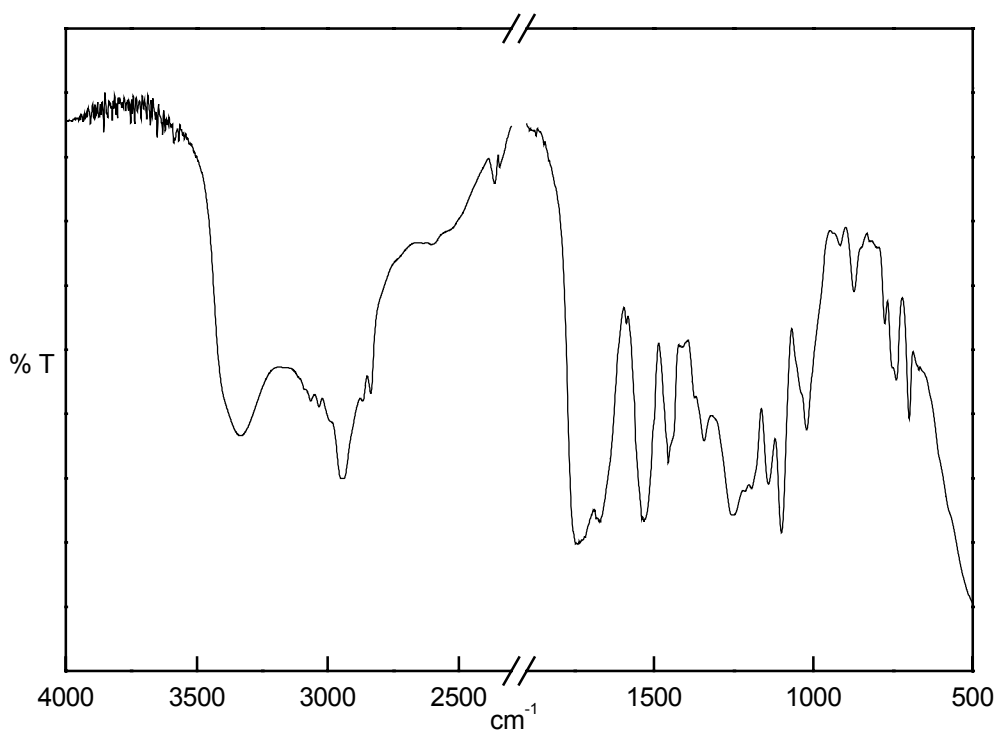


Figura 10.6. Espectro de infrarrojo del compuesto X-L.

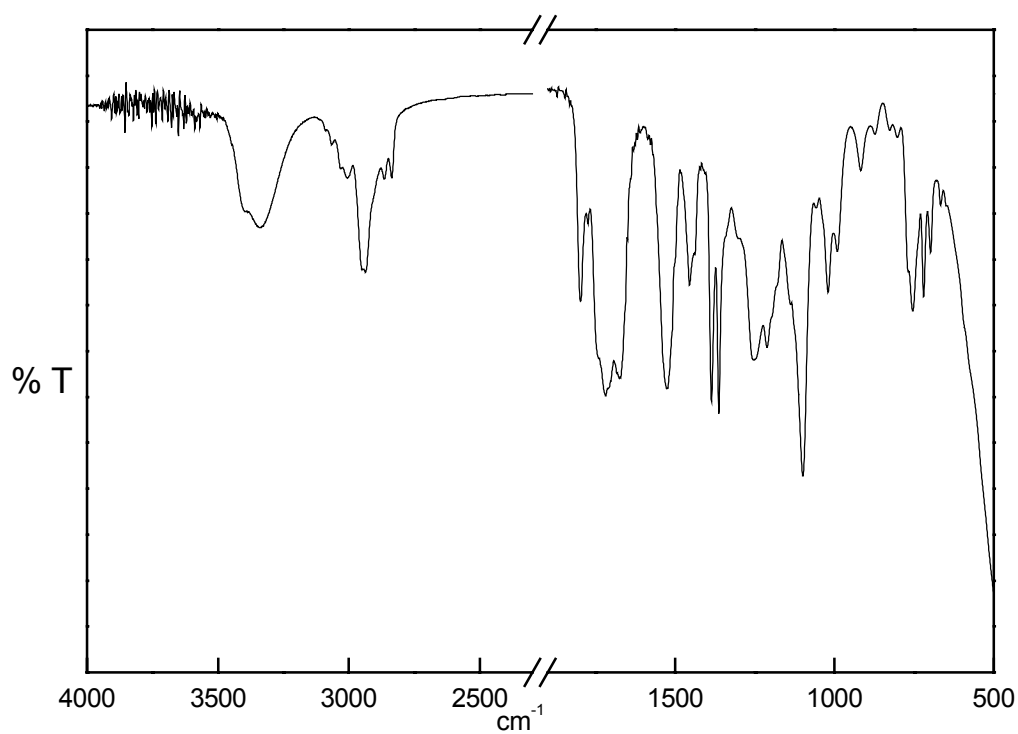


Figura 10.7. Espectro de infrarrojo del compuesto XI-L.

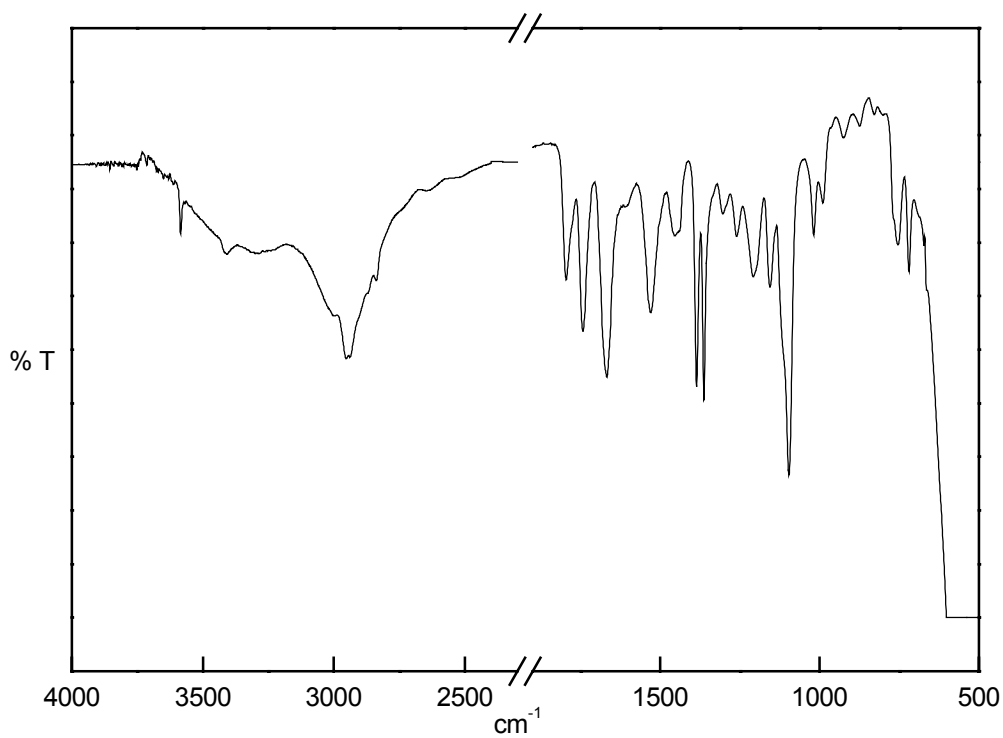


Figura 10.8. Espectro de infrarrojo del compuesto XII-L.

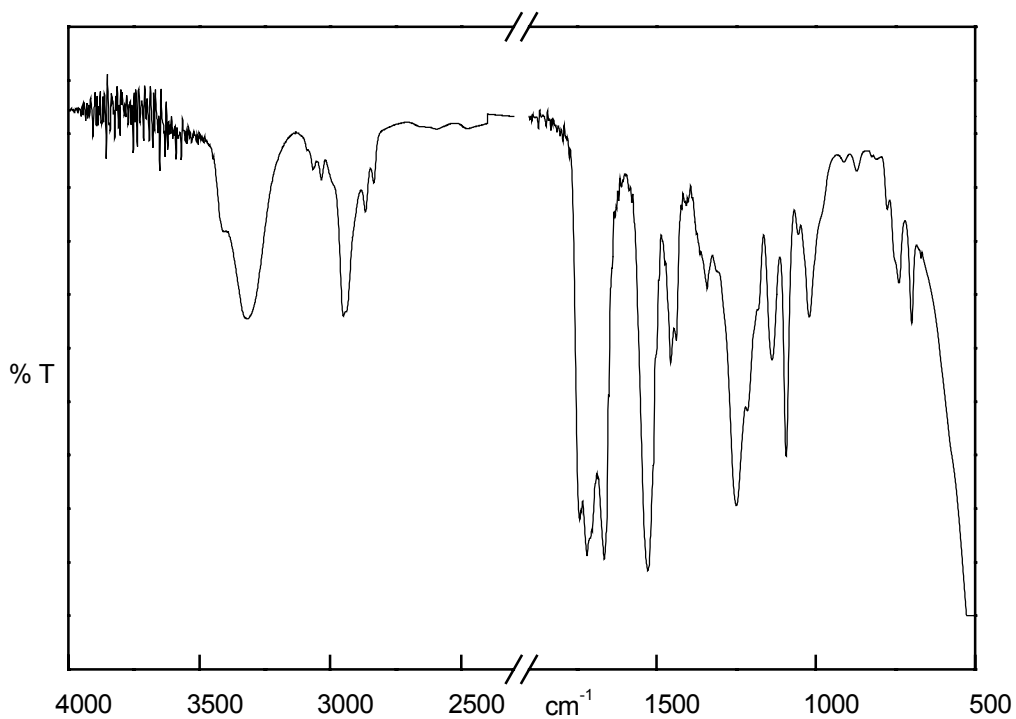


Figura 10.9. Espectro de infrarrojo del compuesto VII-D.

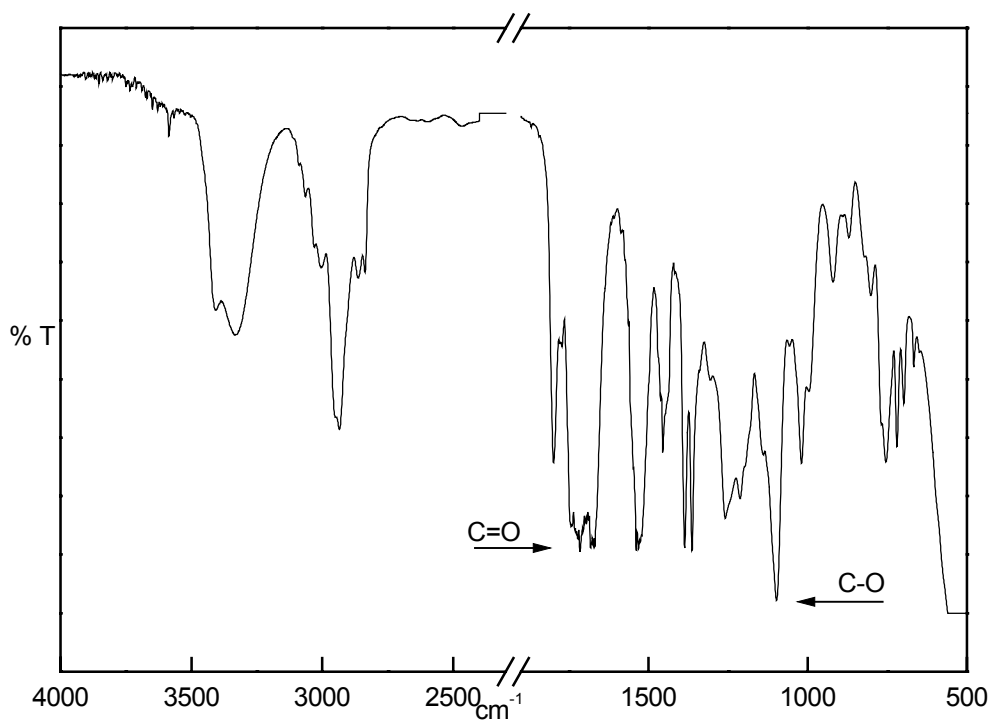


Figura 10.10. Espectro de infrarrojo del compuesto XI-D.

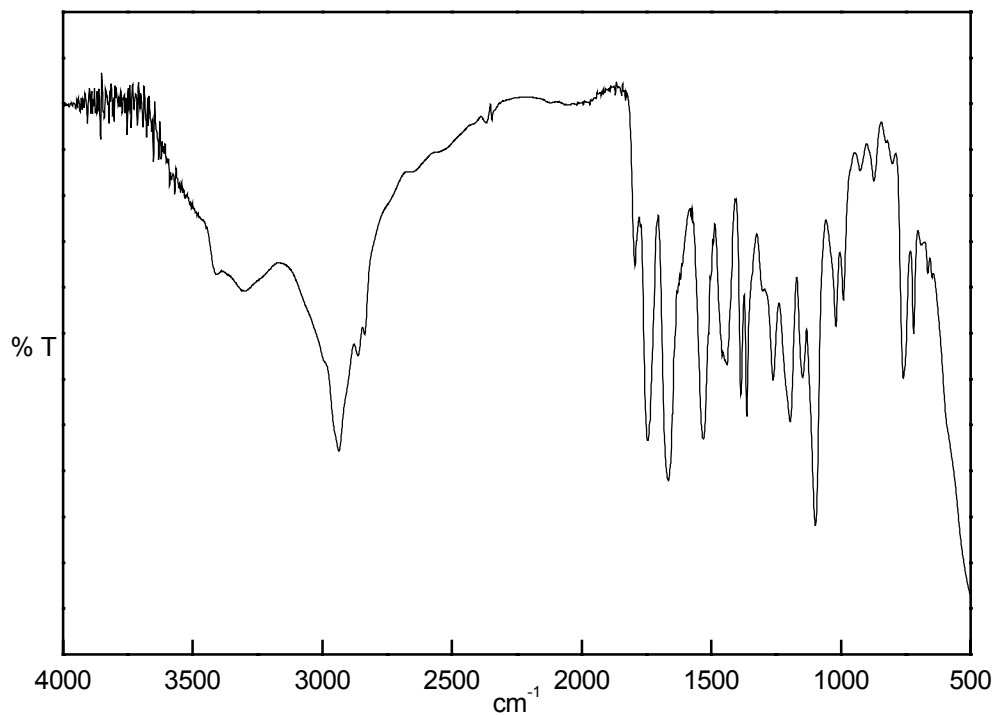


Figura 10.11. Espectro de infrarrojo del compuesto XII-D.

10.2. ESPECTROS DE IR DE LAS POLITARTARAMIDAS *ar*-PLL_T, *sr*-PLL_T, *ir*-PLL_TD, *ar*-PLD_T, *sr*-PLD_T e *ir*-PLD_T

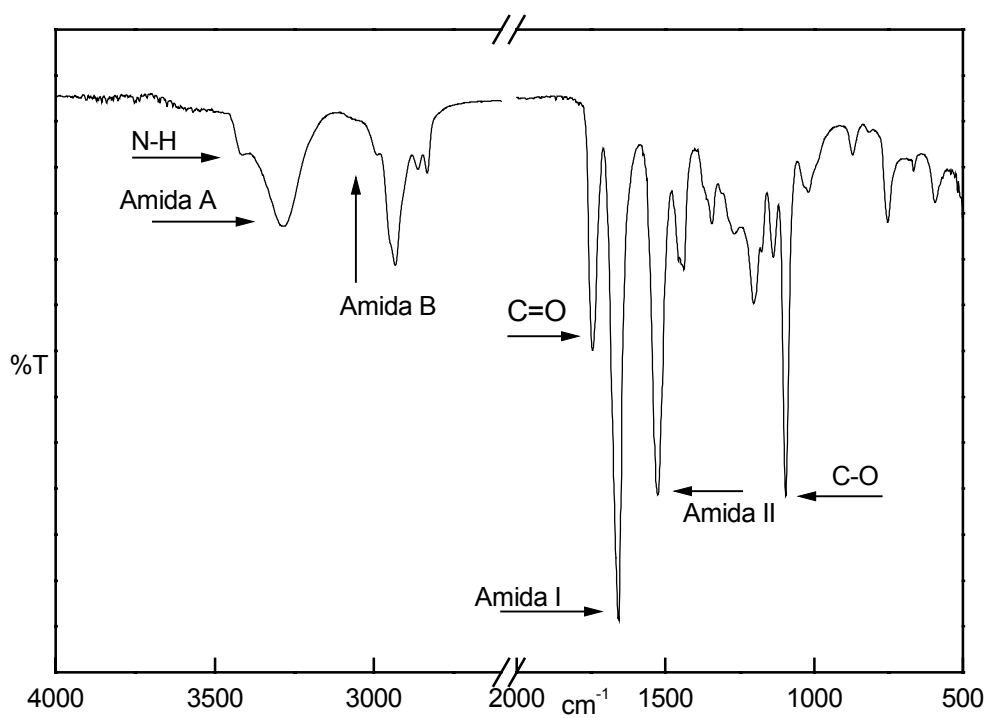


Figura 10.12. Espectro de infrarrojo de la poliamida *ar*-PLL_T.

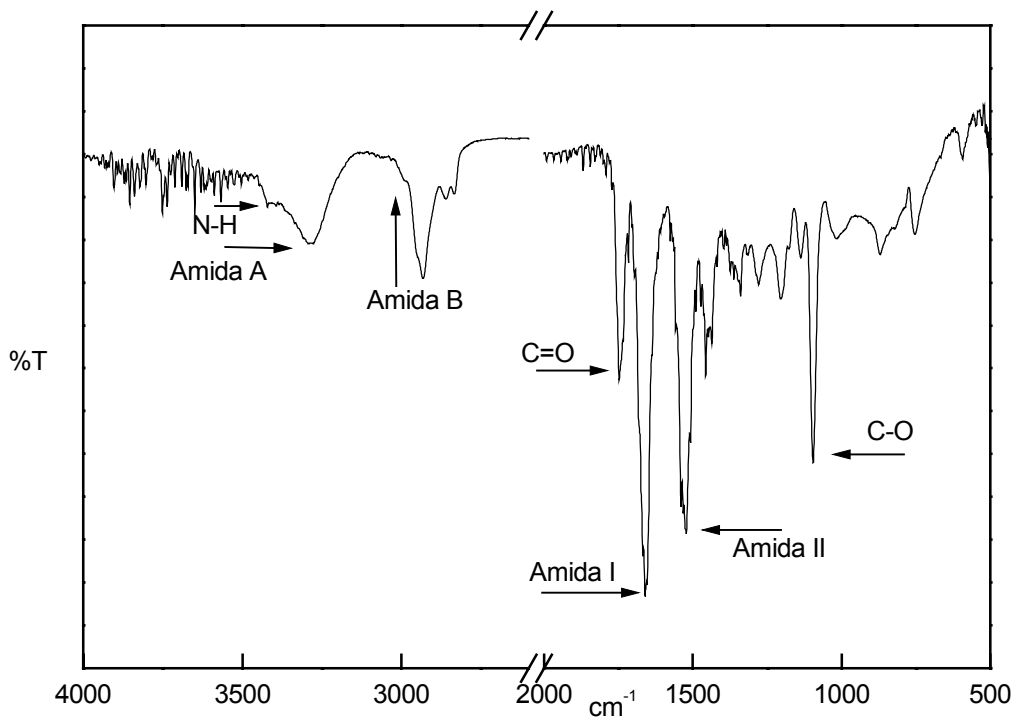


Figura 10.13. Espectro de infrarrojo de la poliamida sr-PLLT.

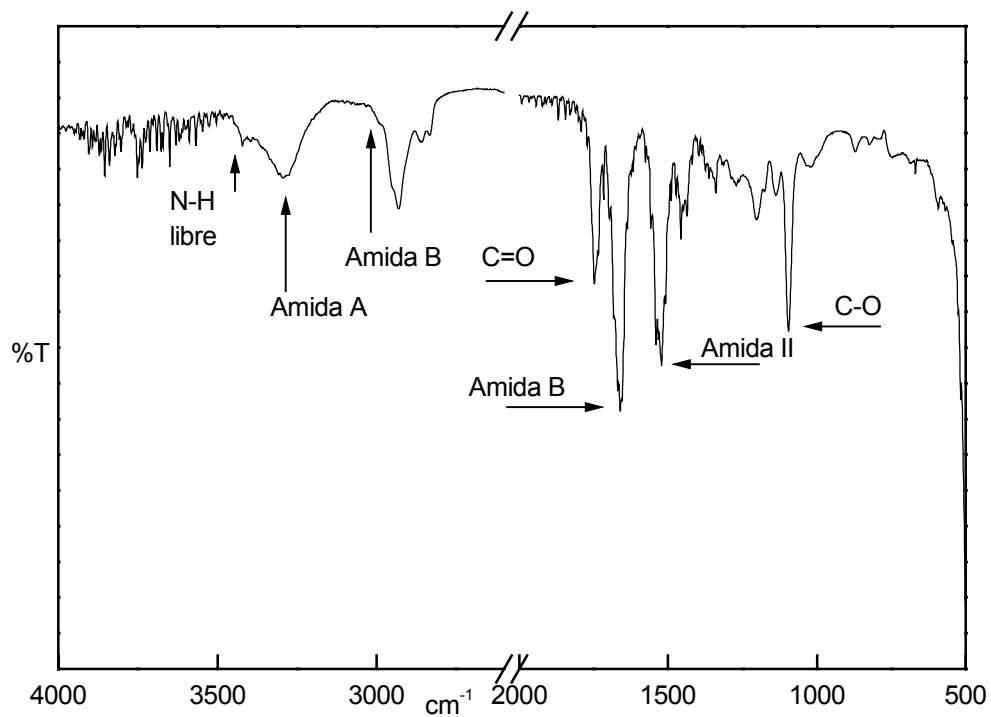


Figura 10.14. Espectro de infrarrojo de la poliamida ir-PLLT.

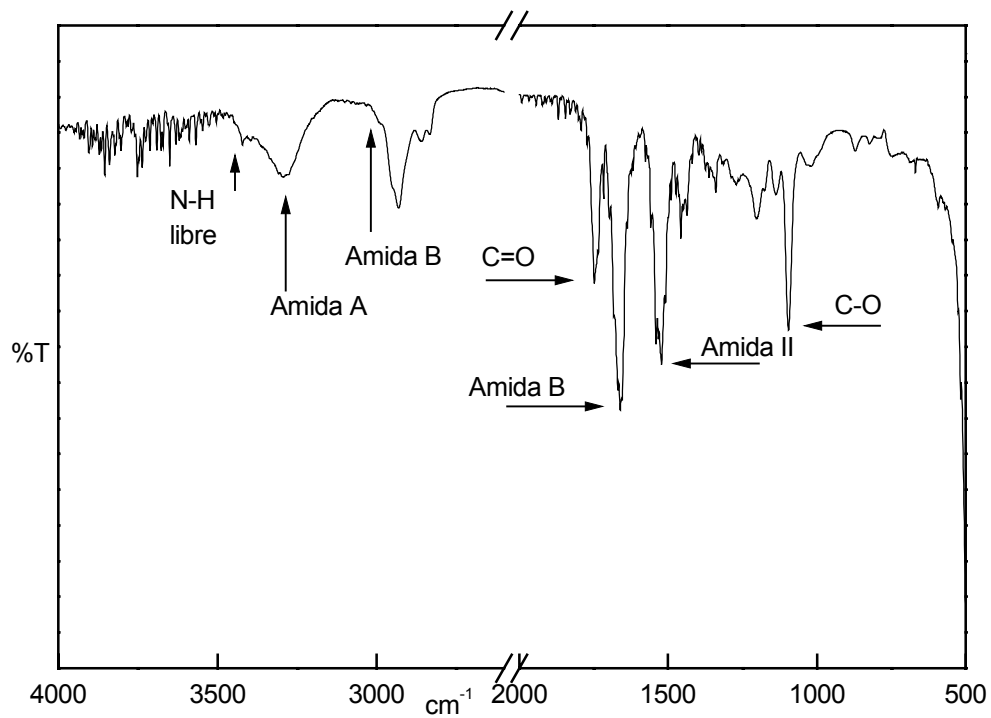


Figura 10.15. Espectro de infrarrojo de la poliamida ar-PLDT.

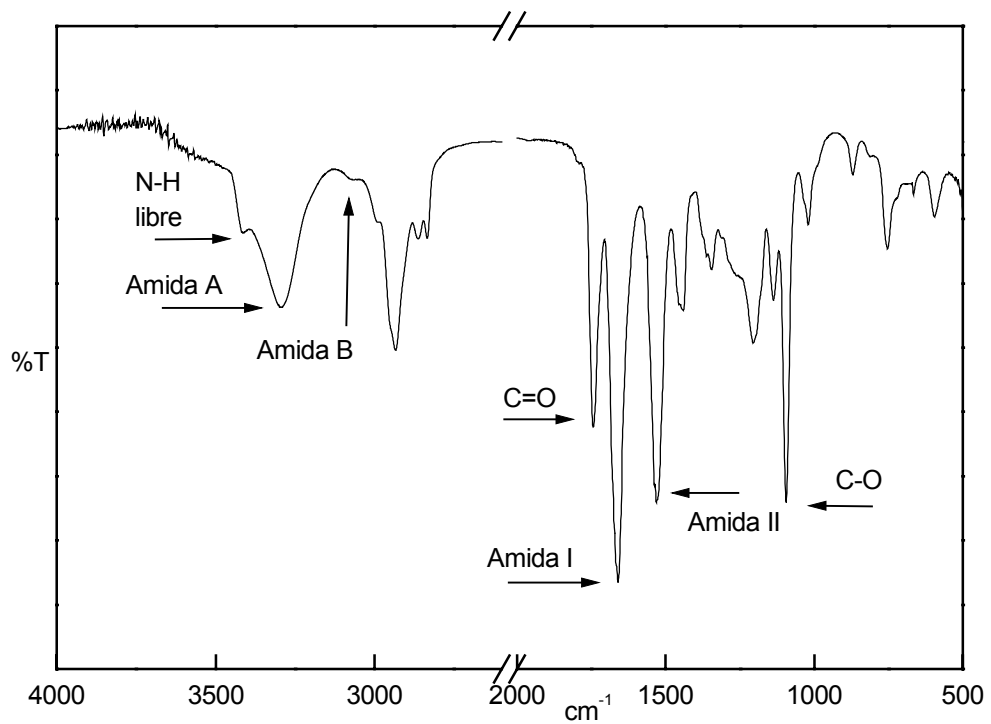


Figura 10.16. Espectro de infrarrojo de la poliamida sr-PLDT.

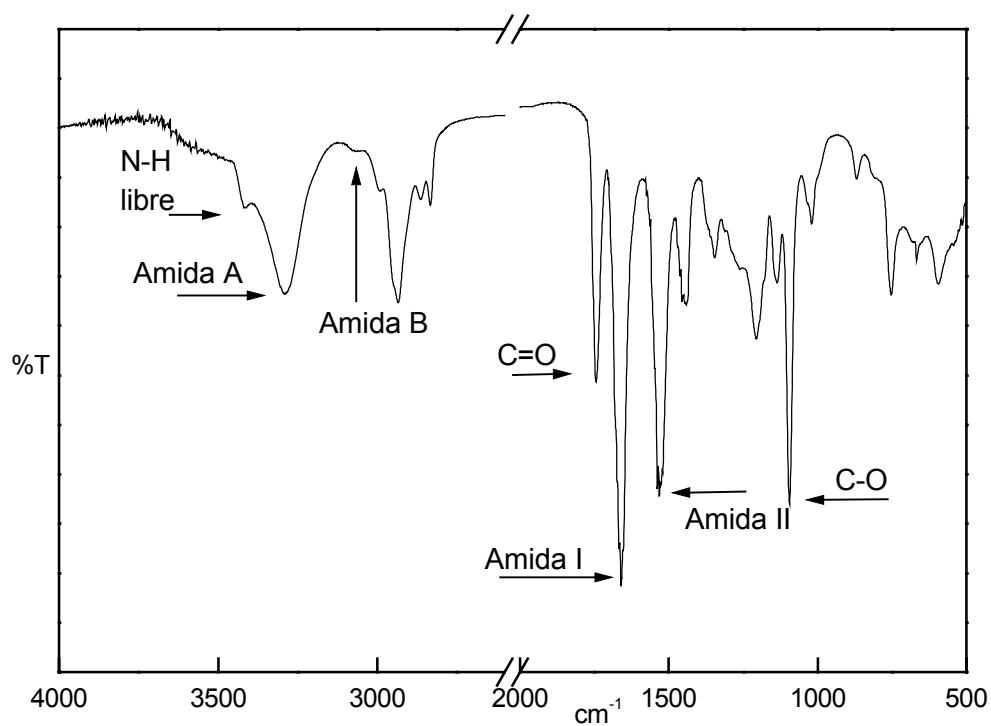
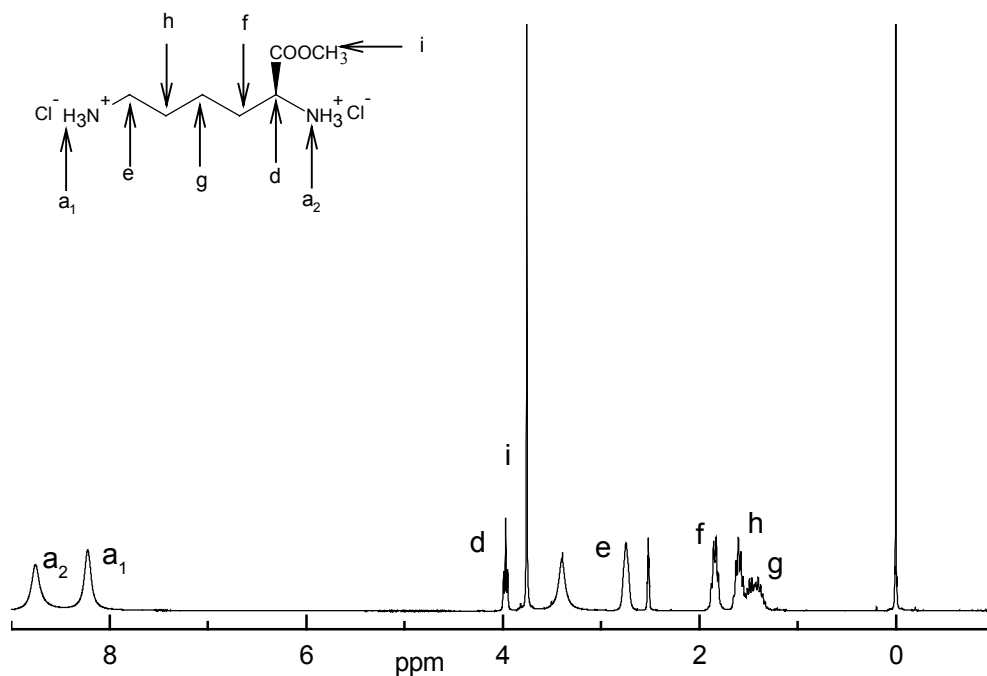
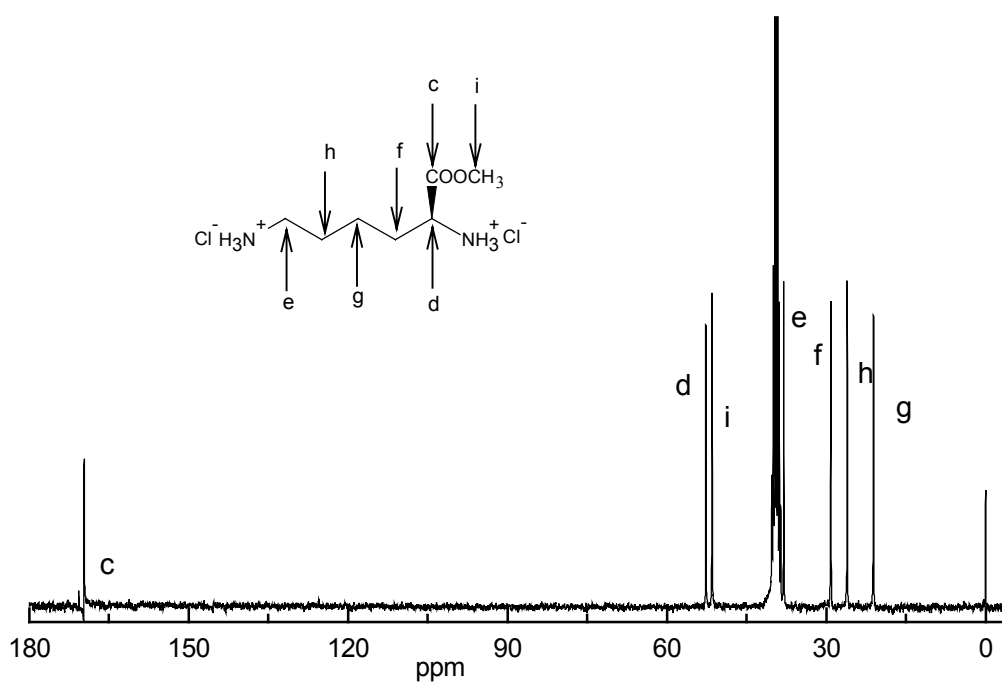


Figura 10.17. Espectro de infrarrojo de la poliamida ir-PLDT.

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10.3. ESPECTROS DE ^1H -RMN Y ^{13}C -RMN DE LOS MONÓMEROSFigura 10.18. Espectro de ^1H -RMN en DMSO-d_6 del compuesto I.Figura 10.19. Espectro de ^{13}C -RMN en DMSO-d_6 del compuesto I.

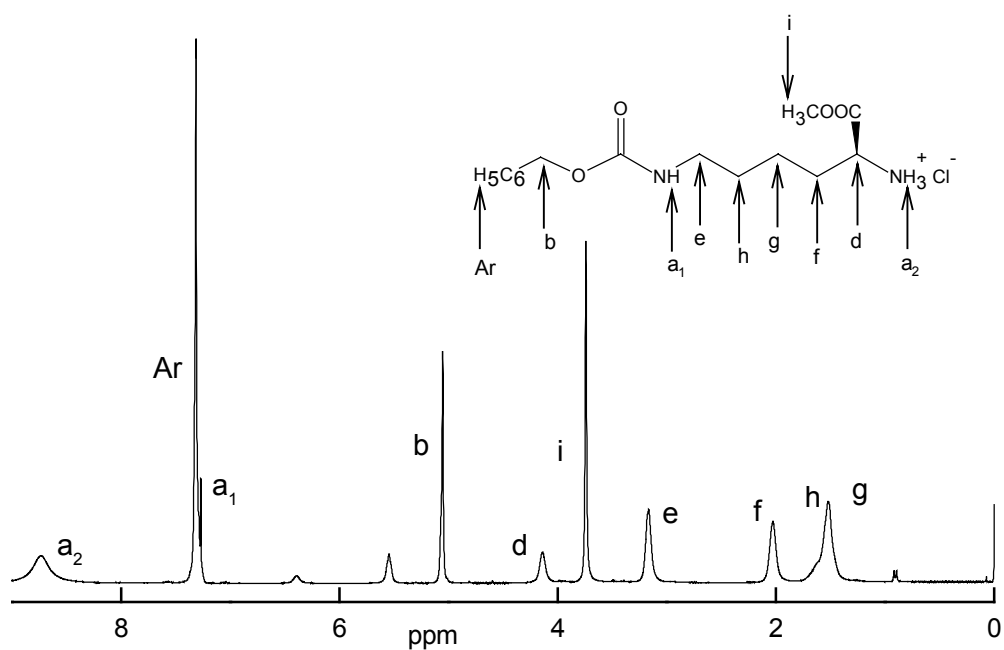


Figura.10.20. Espectro de ^1H -RMN en CDCl_3 del compuesto VI.

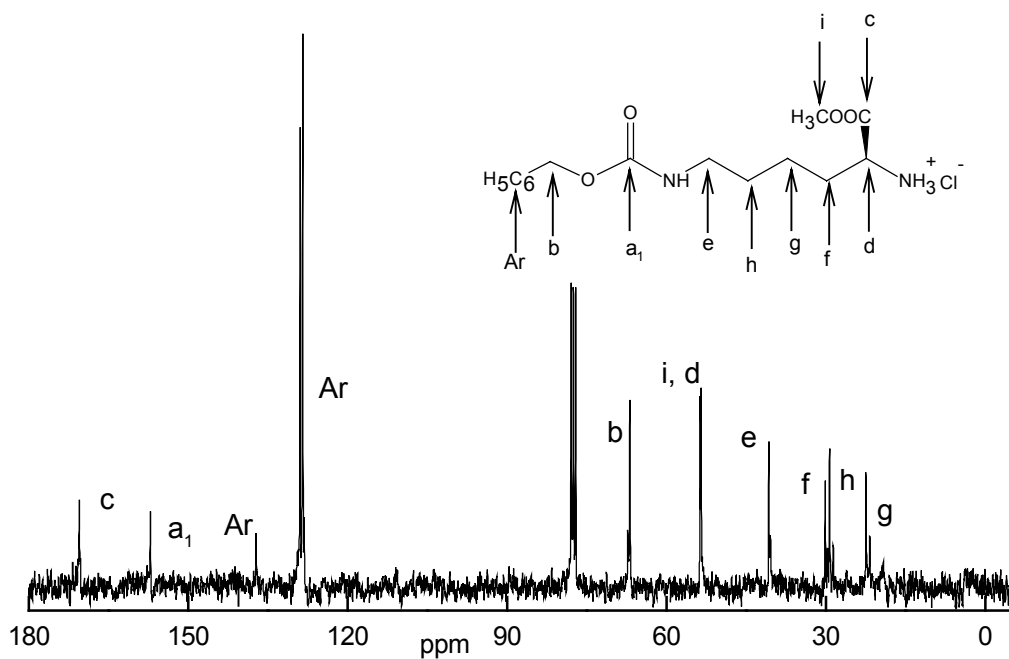


Figura 10.21. Espectro de ^{13}C -RMN en CDCl_3 del compuesto VI-L.

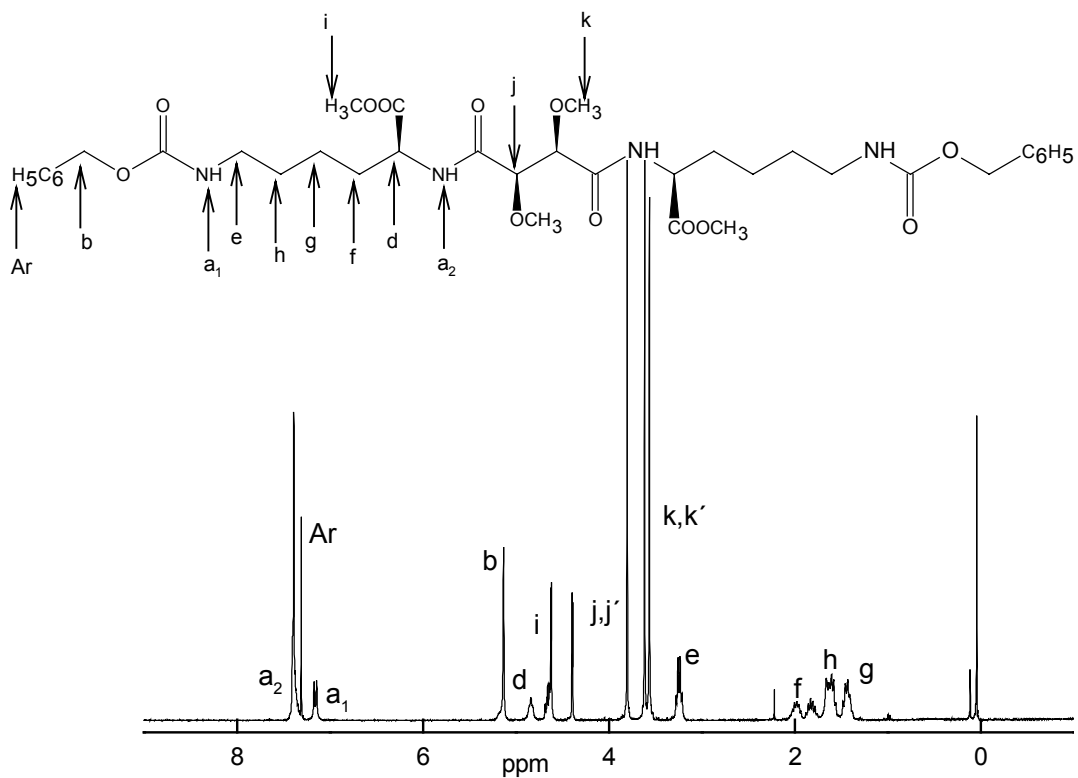


Figura 10.22. Espectro de ^1H -RMN en DMSO-d_6 del compuesto. VII.-L.

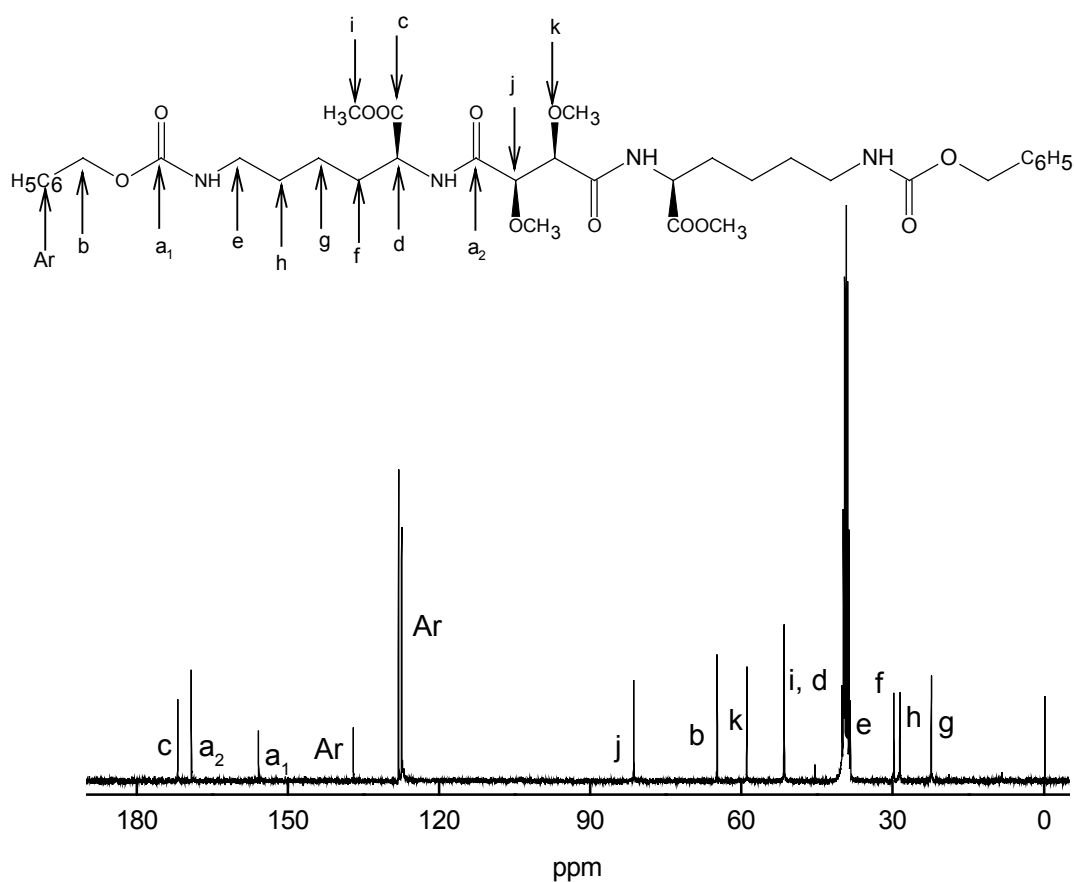


Figura 10.23. Espectro de ^{13}C -RMN en DMSO-d_6 del compuesto VII.-L.

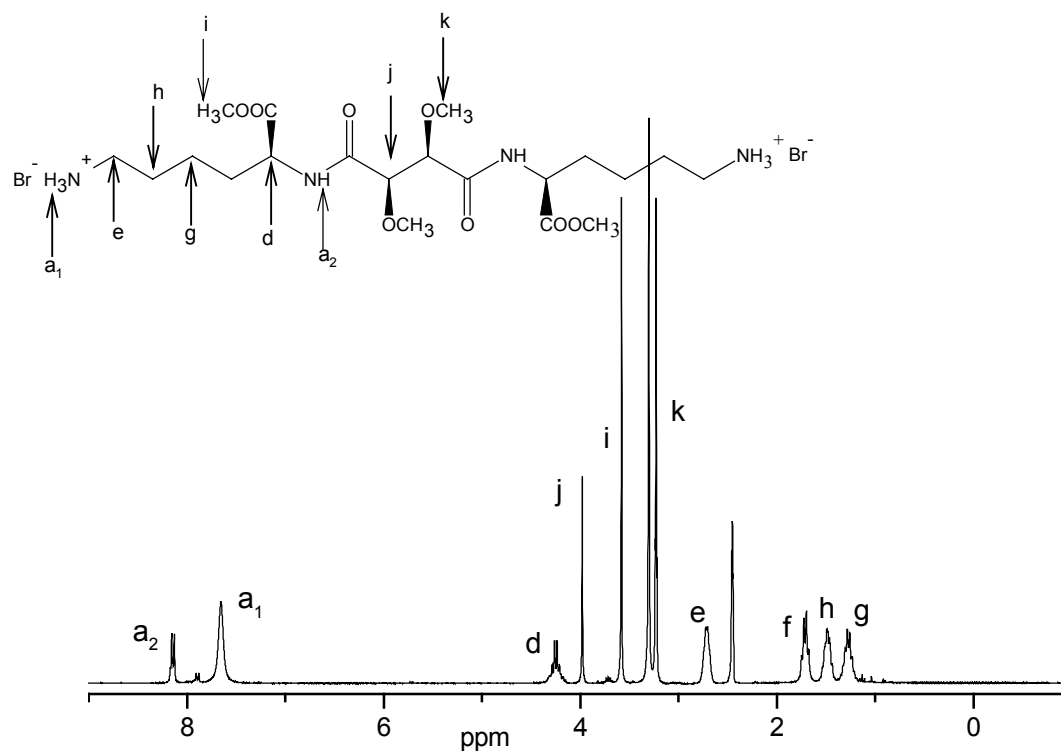


Figura 10.24. Espectro de ^1H -RMN en DMSO-d_6 del compuesto VIII-L.

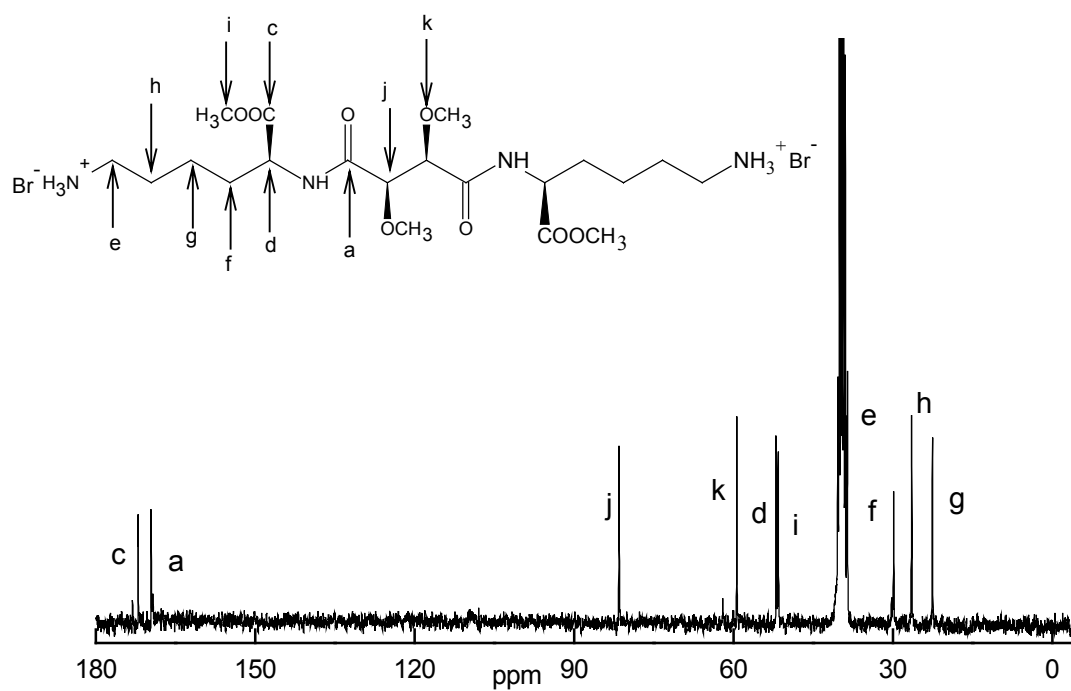


Figura 10.25. Espectro de ^{13}C -RMN en DMSO-d_6 del compuesto VIII-L.

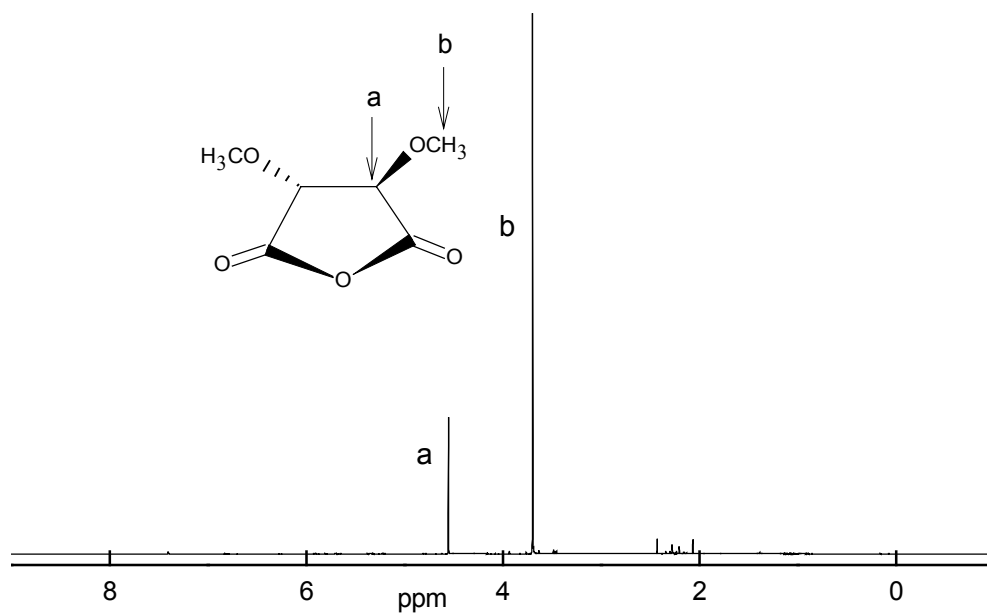


Figura 10.26. Espectro de ^1H -RMN del compuesto IX-L.

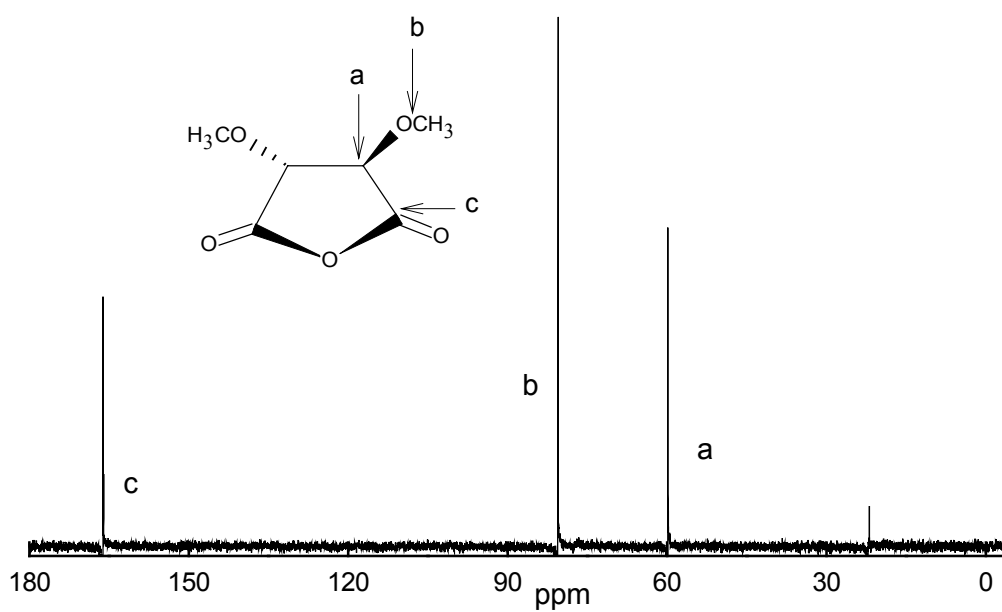


Figura 10.27. Espectro de ^{13}C -RMN del compuesto IX-L.

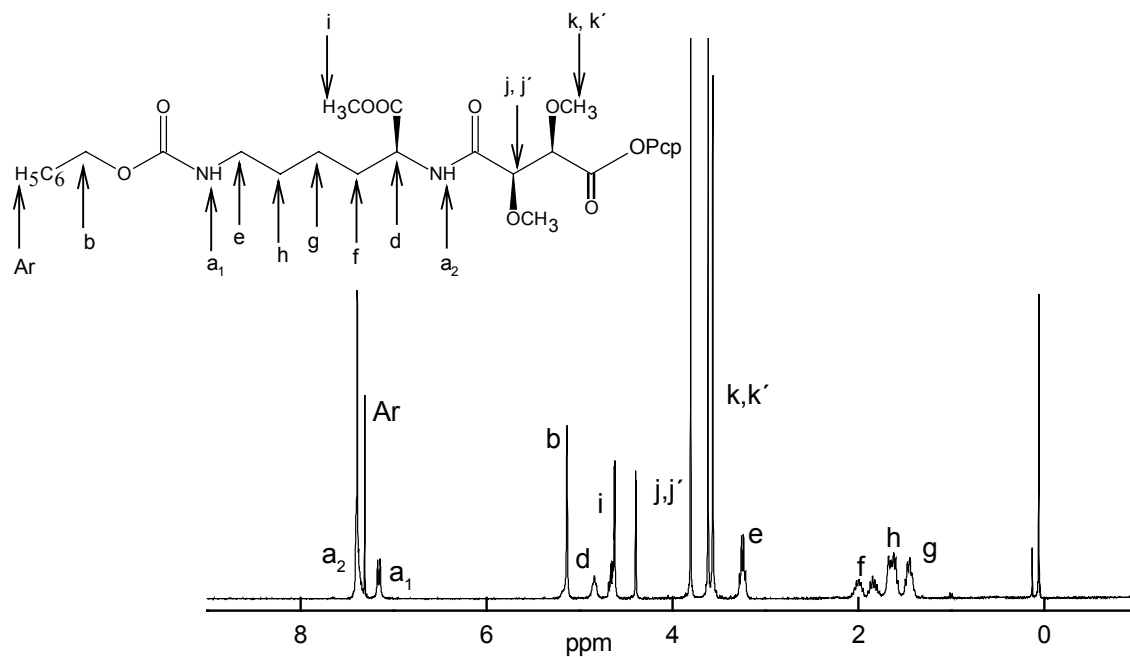


Figura 10.28. Espectro de ^1H -RMN en CDCl_3 del compuesto XI-L.

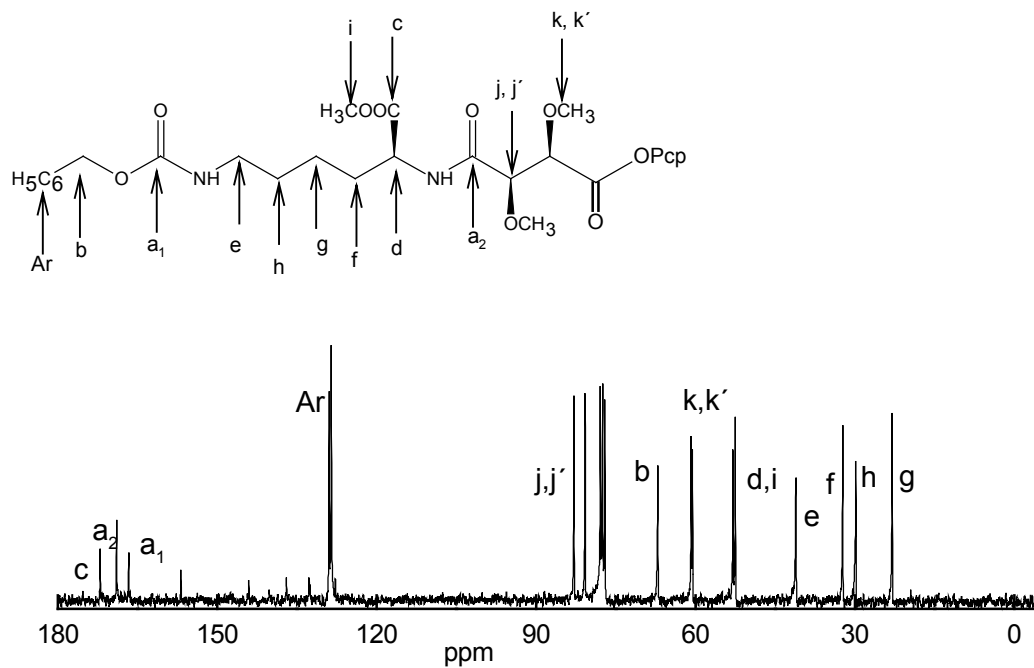


Figura 10.29. Espectro de ^{13}C -RMN en CDCl_3 del compuesto XI-L.

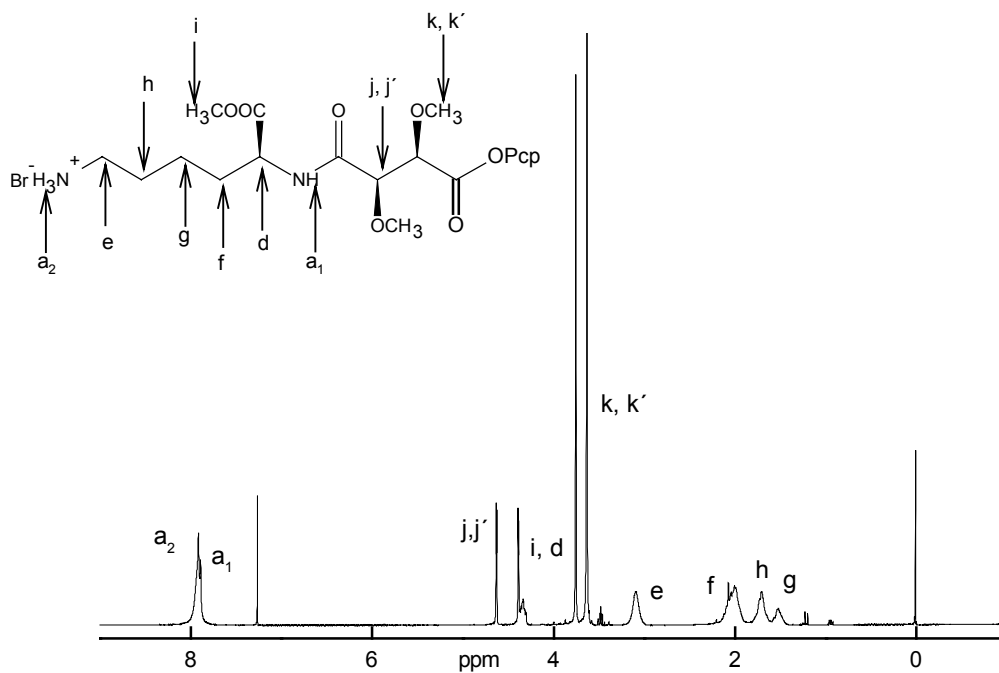


Figura 10.30. Espectro de ^1H -RMN en CDCl_3 del compuesto XII-L.

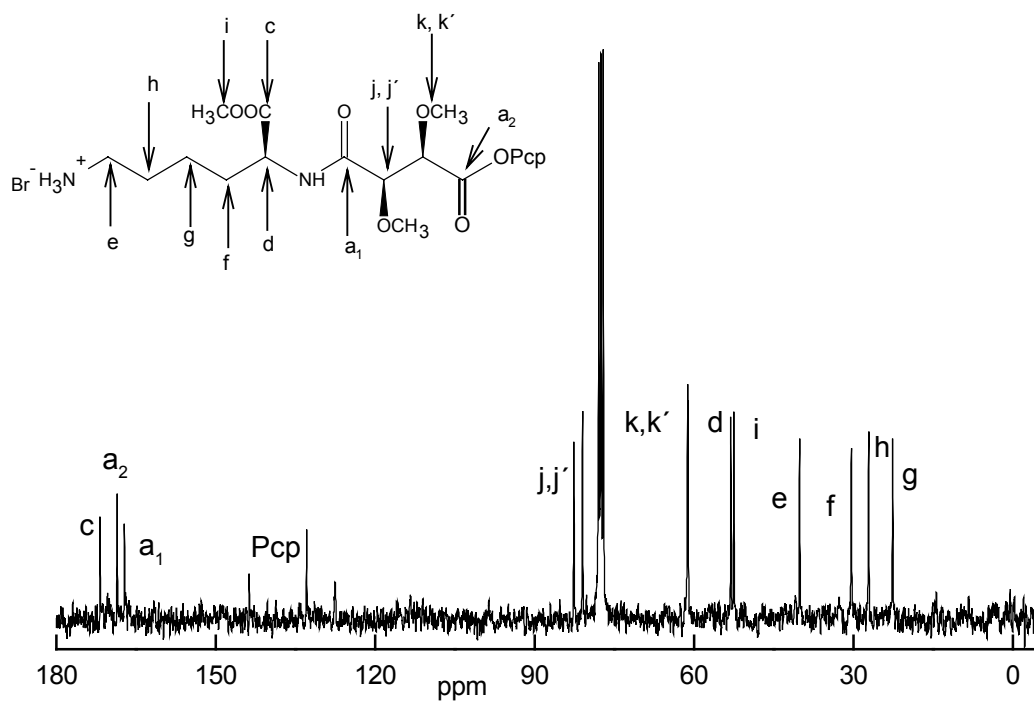


Figura 10.31. Espectro de ^{13}C -RMN en CDCl_3 del compuesto XII-L.

10.4. ESPECTROS DE ^1H -RMN, ^{13}C -RMN DE POLITARTARAMIDAS *ar*-PLLT, *sr*-PLLT, *ir*-PLLT, *ar*-PLDT, *sr*-PLDT e *ir*-PLDT

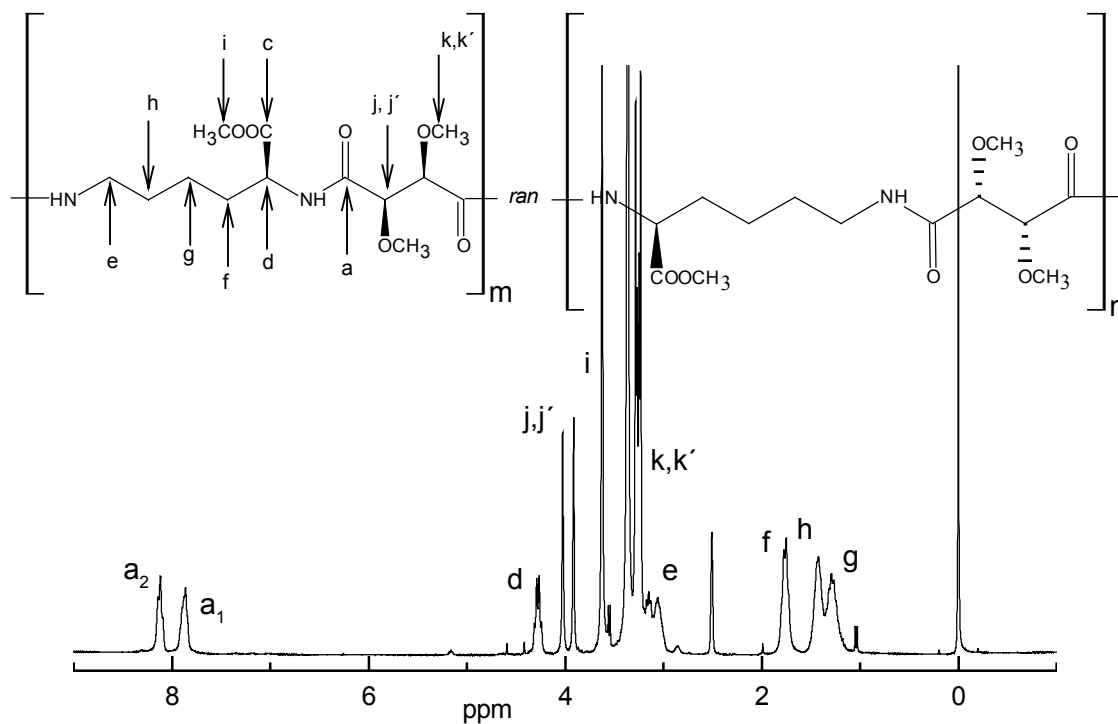


Figura 10.32. Espectro de ^1H -RMN de la poliamida *ar*-PLLT en DMSO-d_6 .

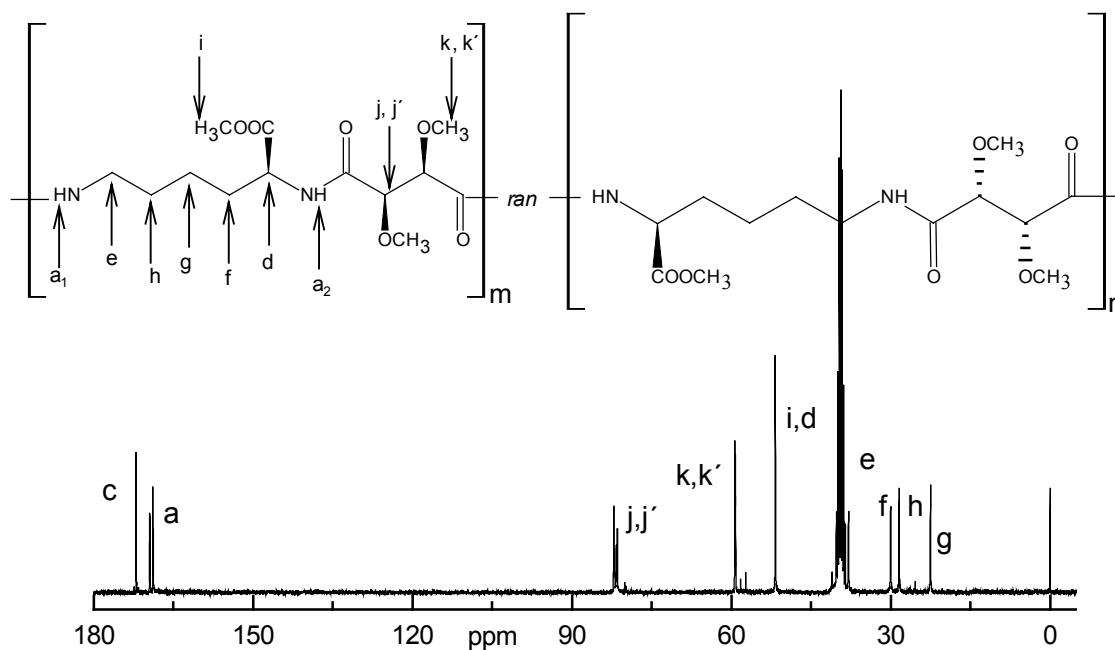


Figura 10.33. Espectro de ^{13}C -RMN de la poliamida *ar*-PLLT en DMSO-d_6 .

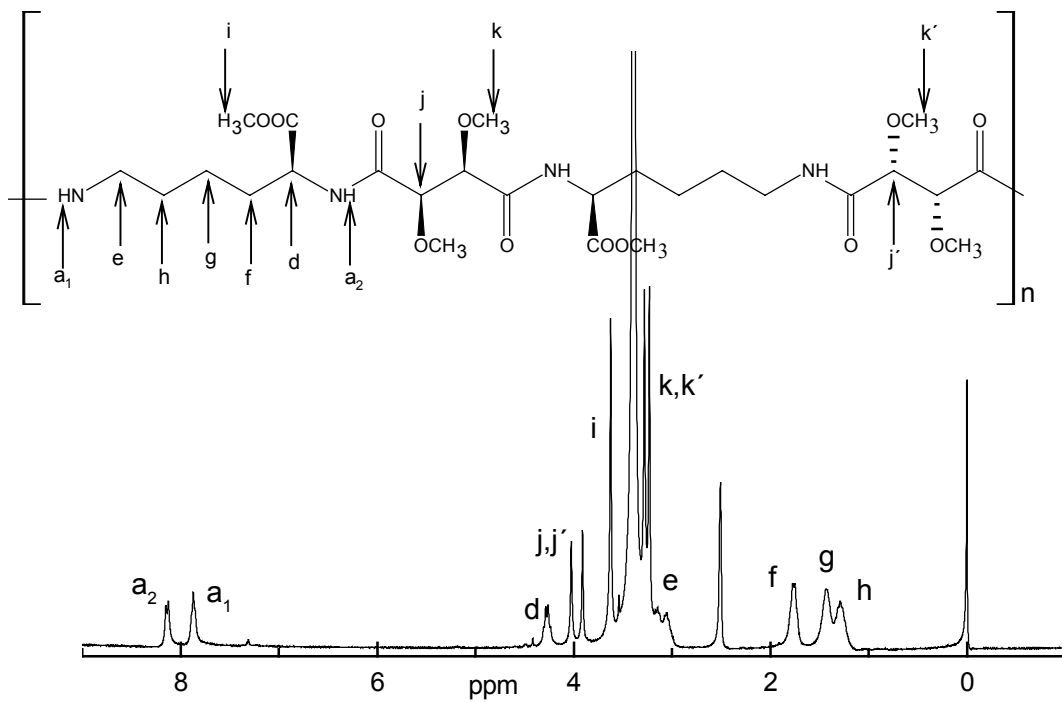


Figura 10.34. Espectro de ^1H -RMN de la poliamida sr-PLLT en DMSO-d_6

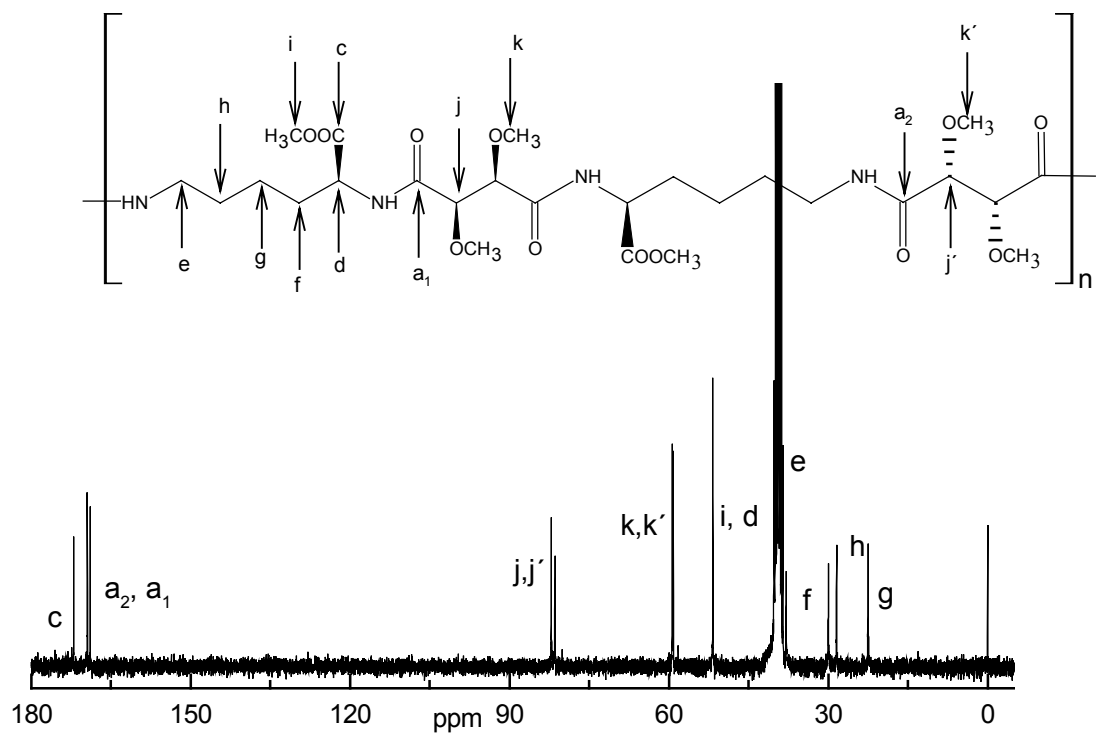


Figura 10.35. Espectro de ^{13}C -RMN de la poliamida sr-PLLT en DMSO-d_6 .

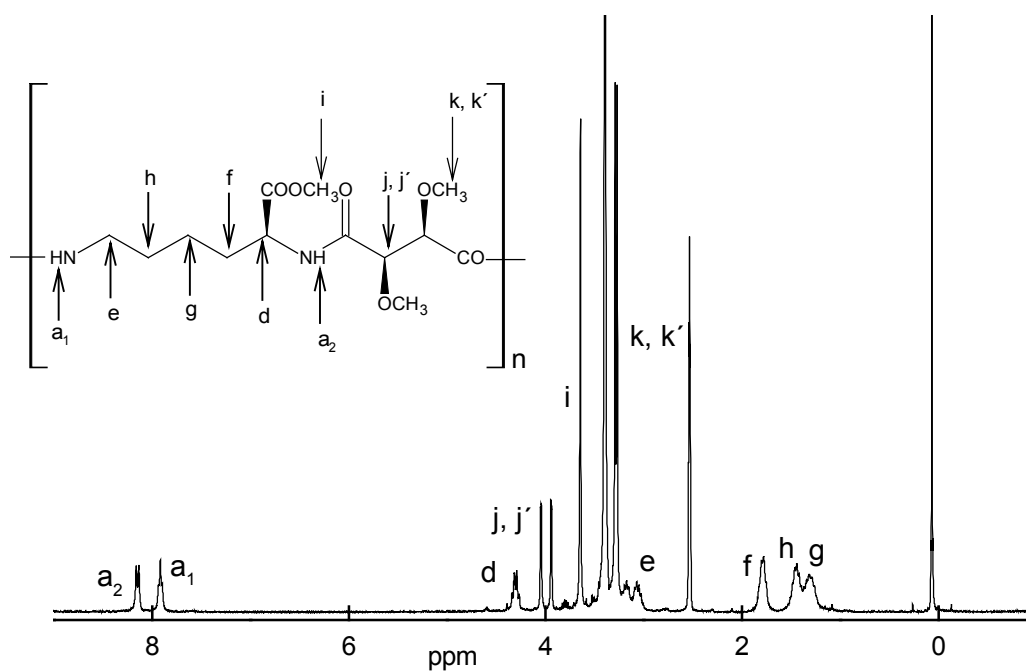


Figura 10.36. Espectro de ^1H -RMN de la poliamida ir-PLLT en DMSO- d_6 .

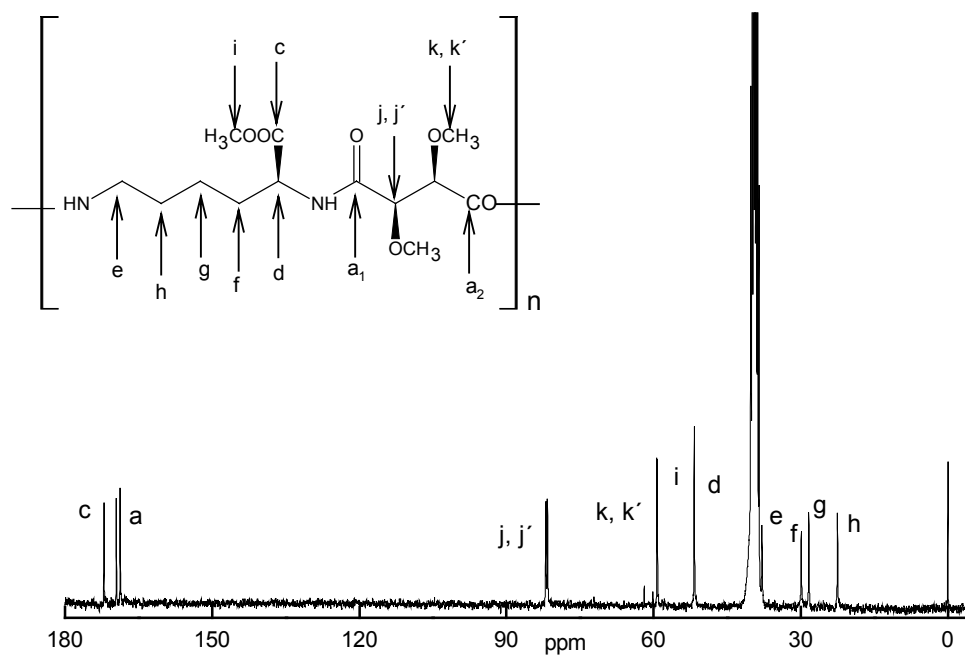


Figura 10.37. Espectro de ^{13}C -RMN de la poliamida ir-PLLT regular en DMSO- d_6 .

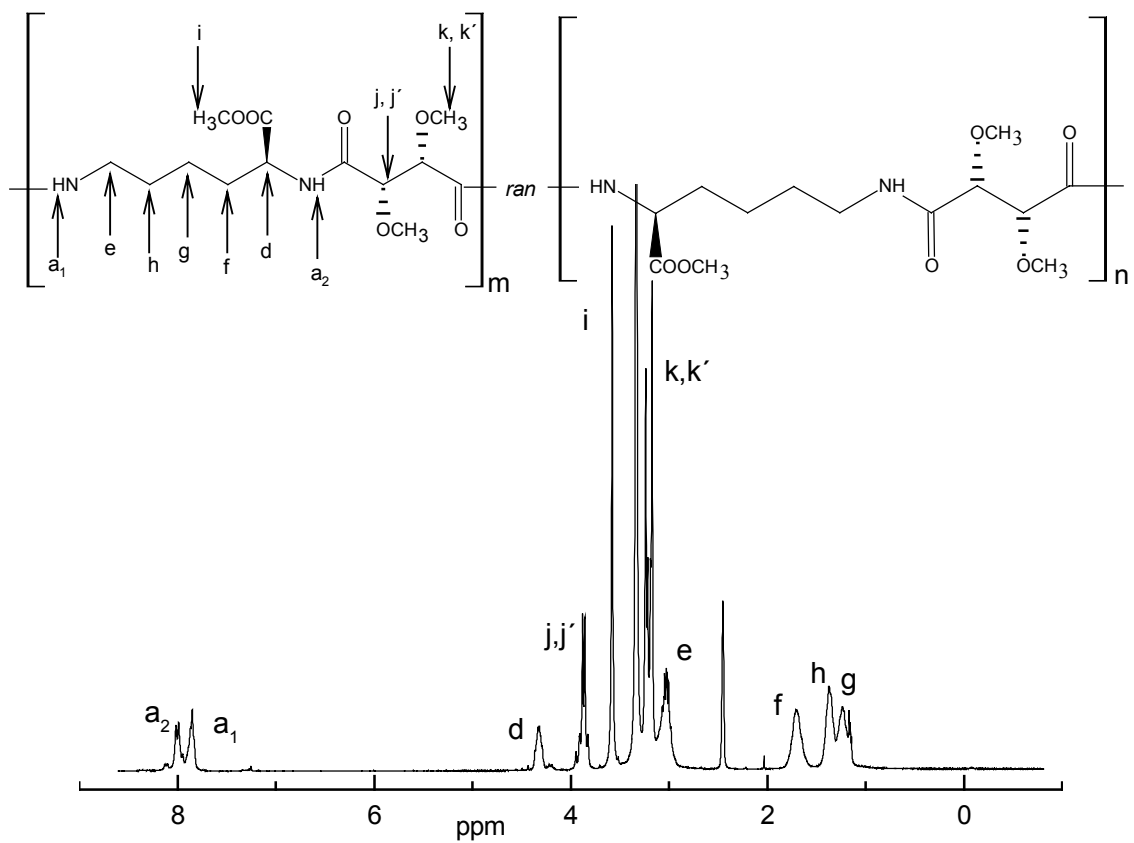


Figura 10.38. Espectro de protón de la poliamida ar-PLDT en DMSO-d_6 .

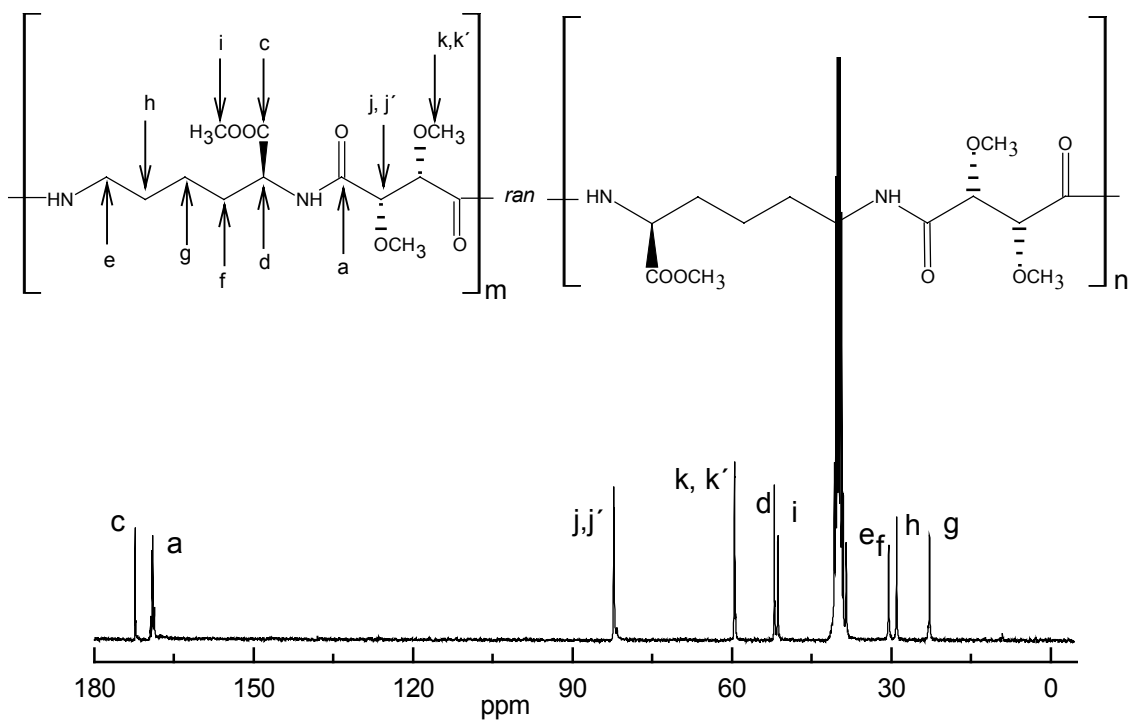


Figura 10.39. Espectro de ^{13}C -RMN de la poliamida ar-PLDT en DMSO-d_6 .

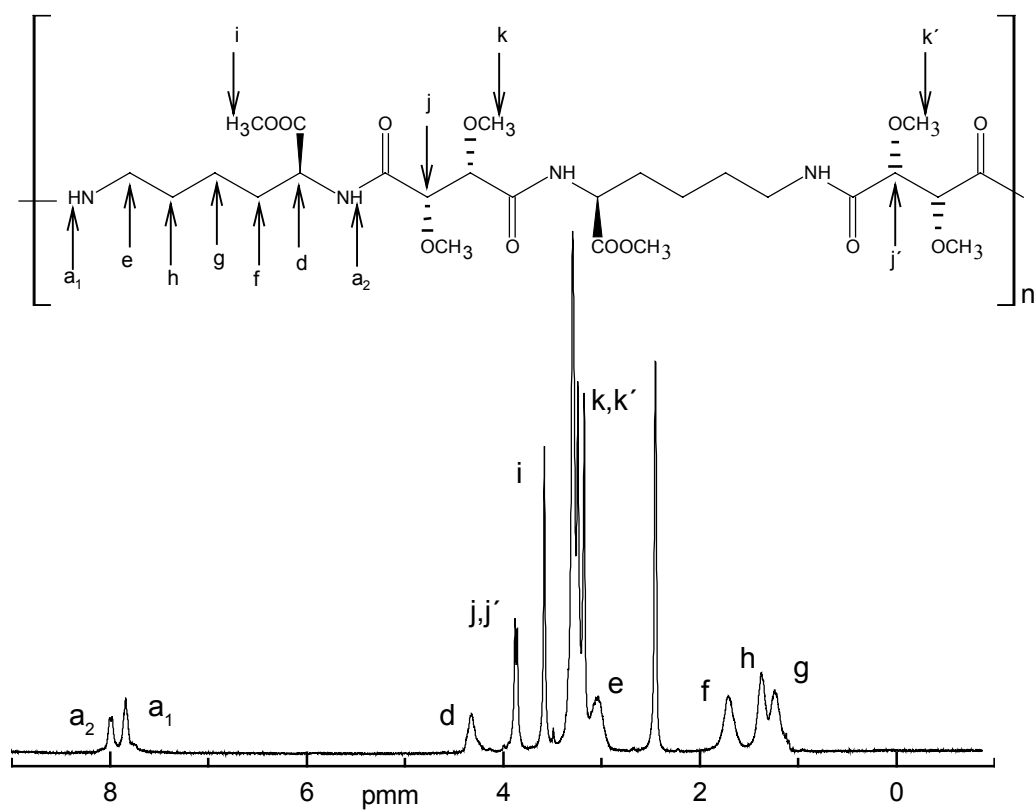


Figura 10.40. Espectro de ^1H -RMN de la poliamida sr-PLDT en $\text{DMSO}-d_6$

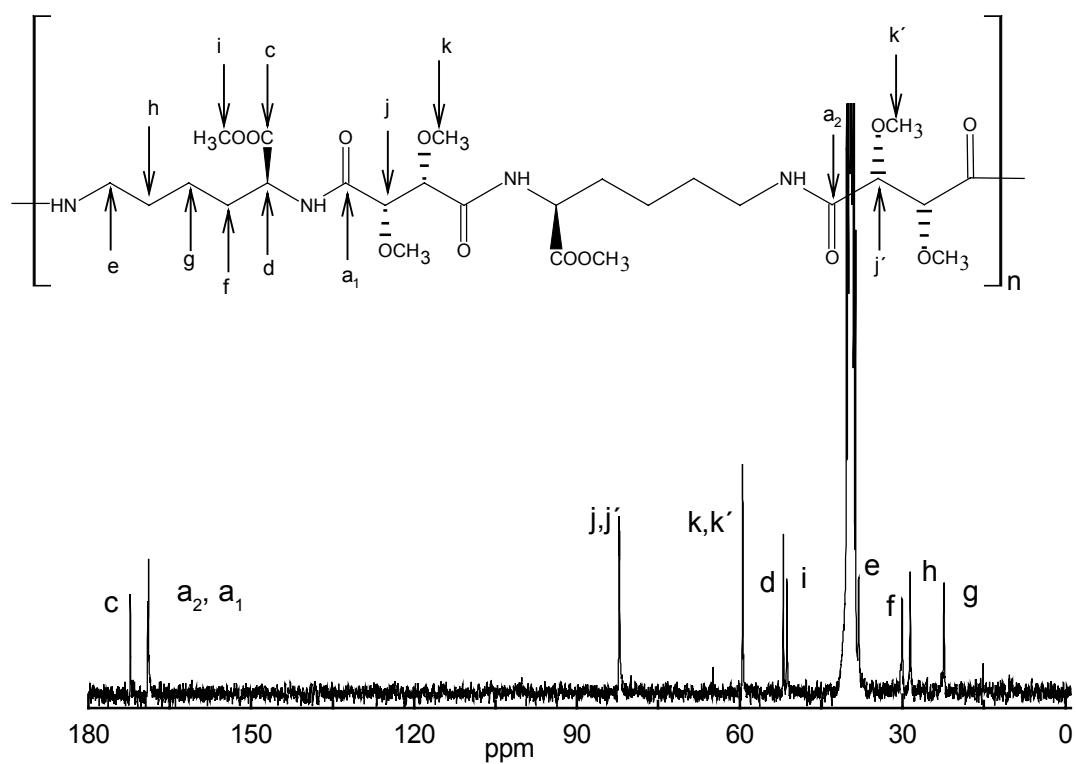


Figura 10.41. Espectro de ^{13}C -RMN de la poliamida sr-PLDT en $\text{DMSO}-d_6$.

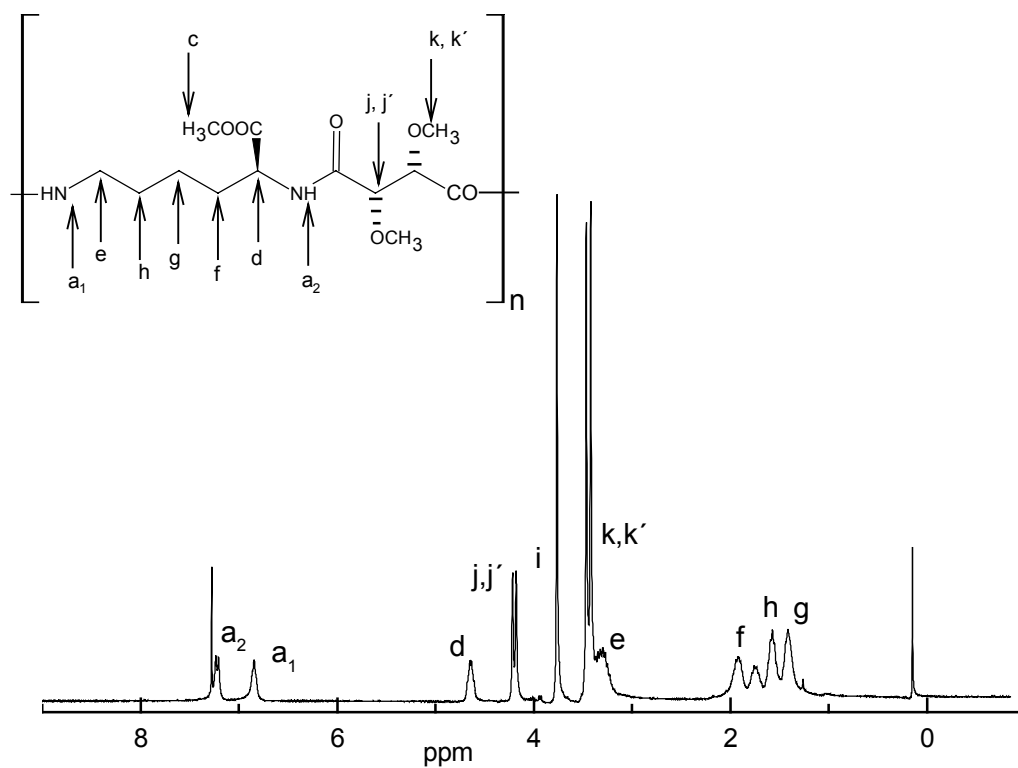


Figura. 10.42. Espectro de ^1H -RMN de la poliamida *ir*-PLDT en CDCl_3 .

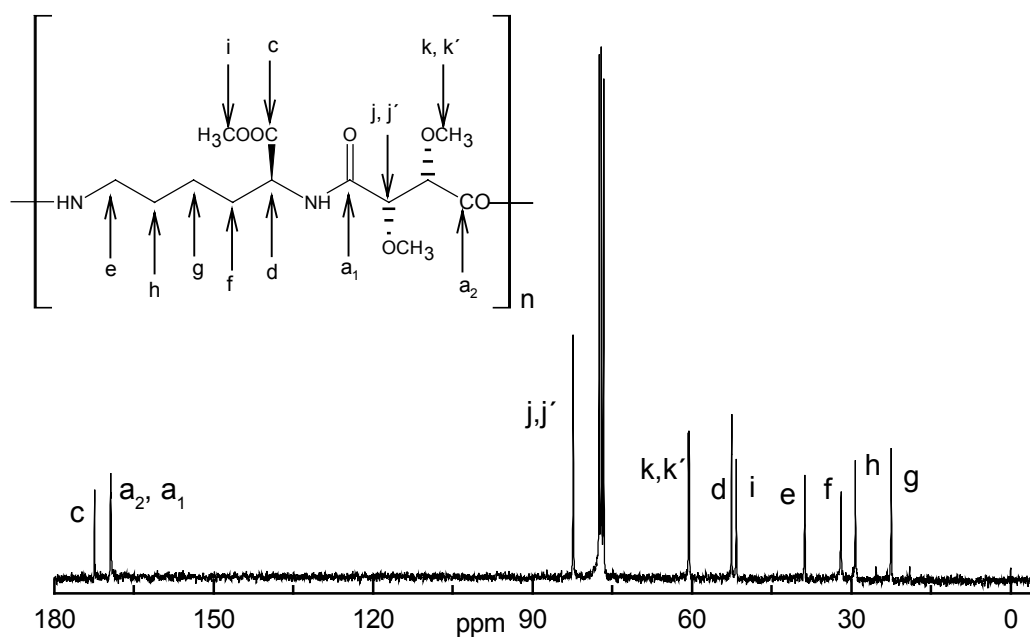


Figura 10.43. Espectro de ^{13}C -RMN de la poliamida *ir*-PLDT en CDCl_3 .

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10.5. ESPECTROS DE IR DE COMPUESTOS DERIVADOS DE LA 2,5-DICETOPIPERACINA

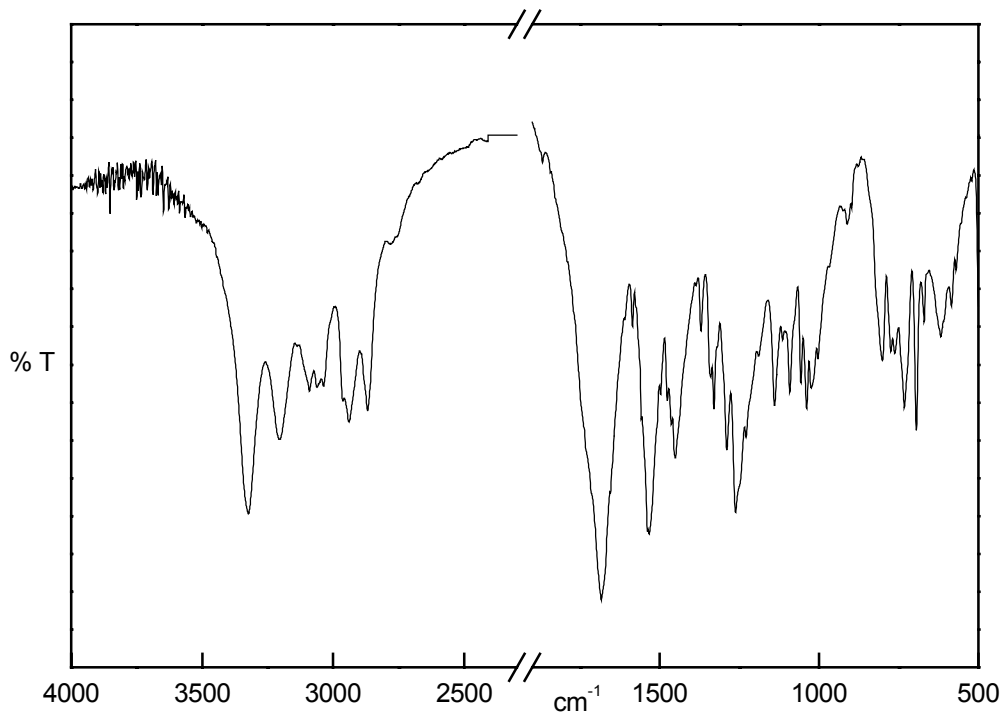


Figura 10.44. Espectro de infrarrojo del compuesto XIII.

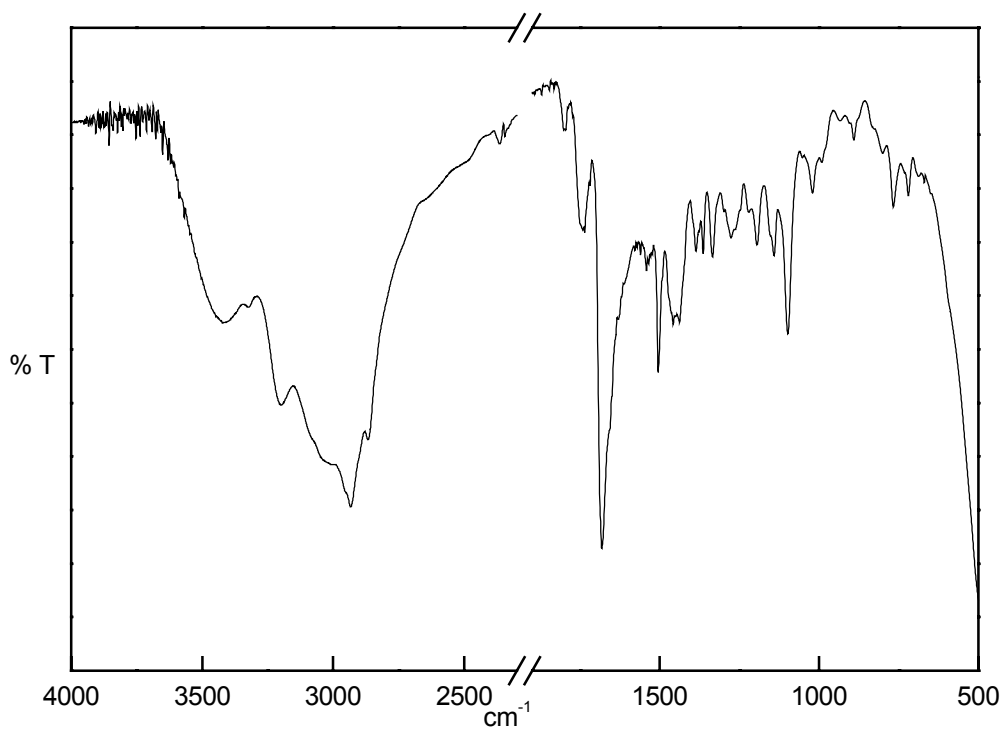


Figura 10.45. Espectro de infrarrojo del compuesto XIV.

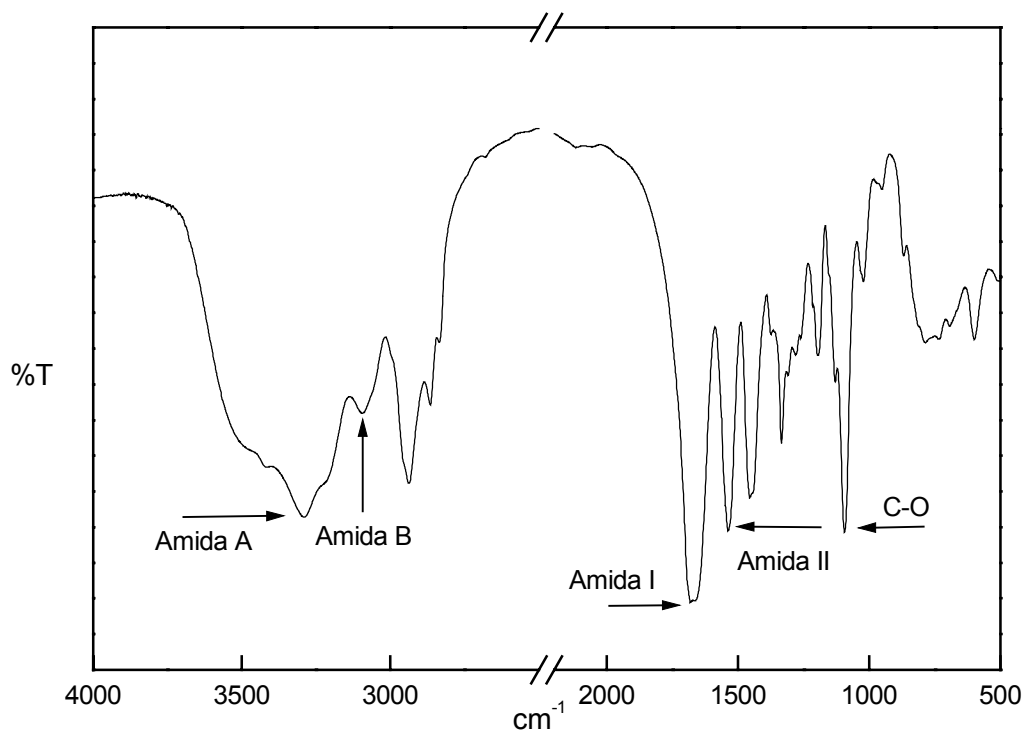
10.6. ESPECTROS DE IR DE LOS POLÍMEROS PDK-LL y PDK-LD

Figura 10.46. Espectro de infrarrojo de la poliamida PDK-LL.

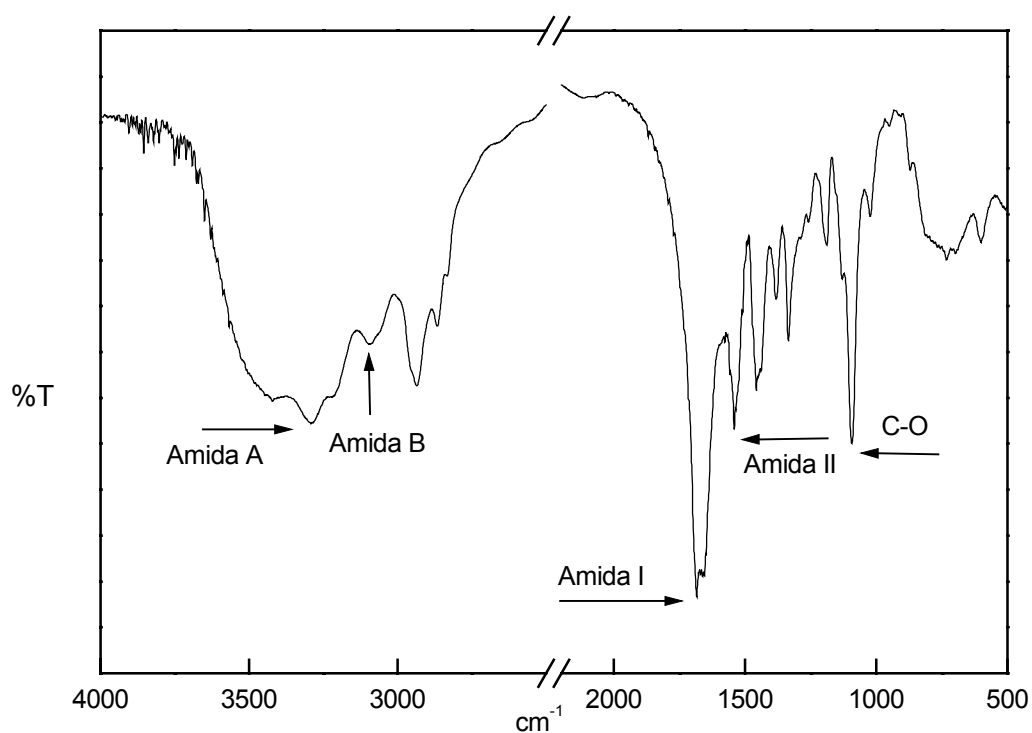


Figura 10.47. Espectro de infrarrojo de la poliamida PDK-LD.

10.7. ESPECTROS DE ^1H -RMN Y ^{13}C -RMN DE COMPUESTOS DERIVADOS DE LA 2,5 DICETOPIPERACINA

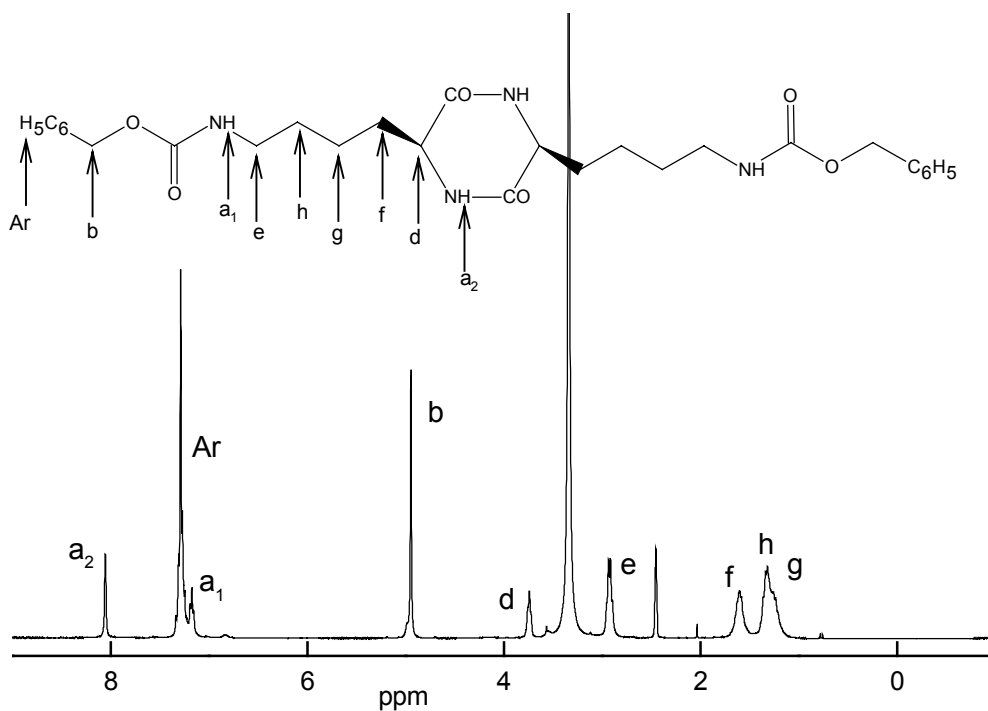


Figura 10.48. Espectro de ^1H -RMN en DMSO-d₆ del compuesto XIII

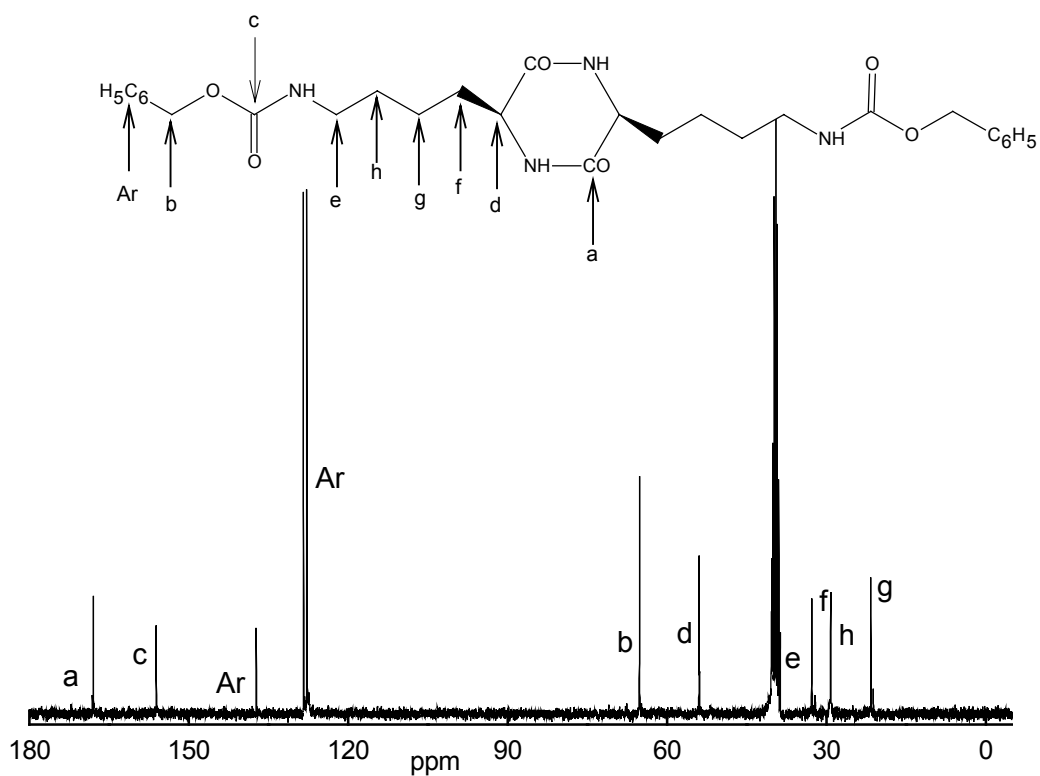


Figura 10.49. Espectro de ^{13}C -RMN en DMSO-d₆ del compuesto XIII.

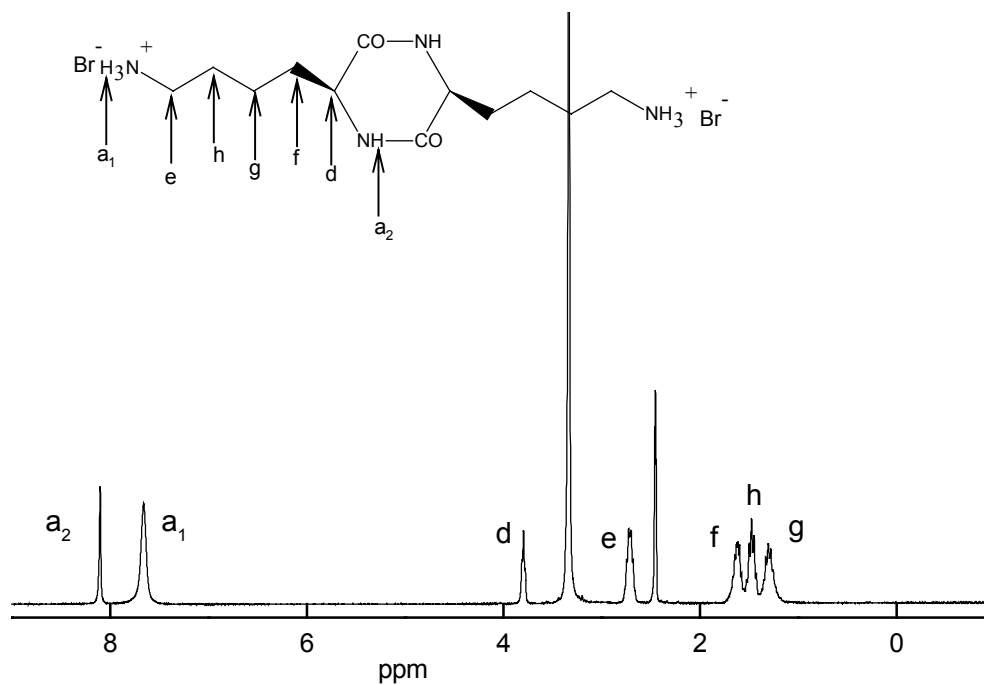


Figura 10.50. Espectro de ¹H-RMN en DMSO-d₆ del compuesto XIV.

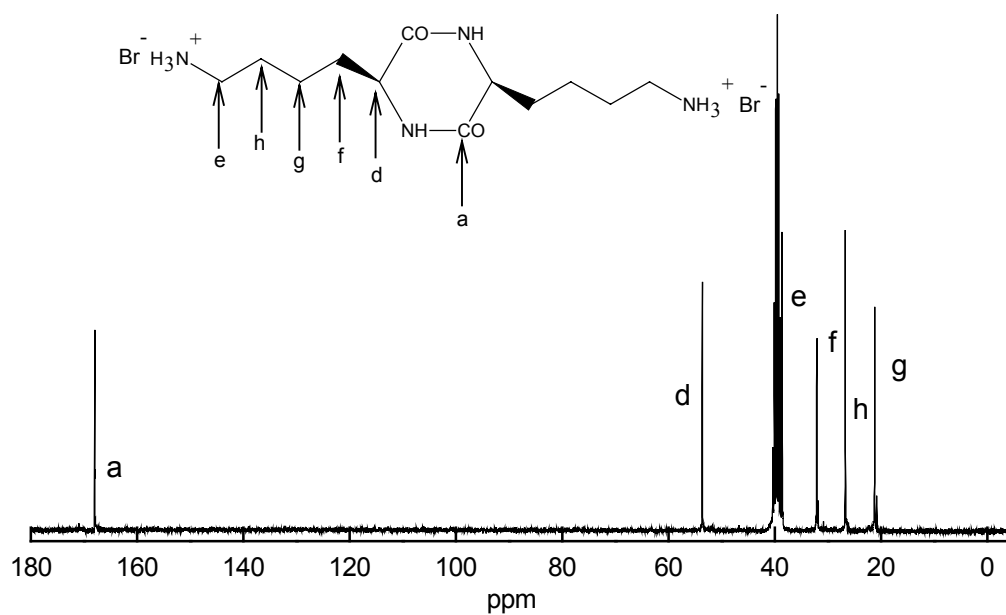


Figura 10.51. Espectro de ¹³C-RMN en DMSO-d₆ del compuesto XIV.

10.8. ESPECTROS DE ^1H -RMN Y DE ^{13}C -RMN DE LOS POLÍMEROS PDK-LL Y PDK-DL

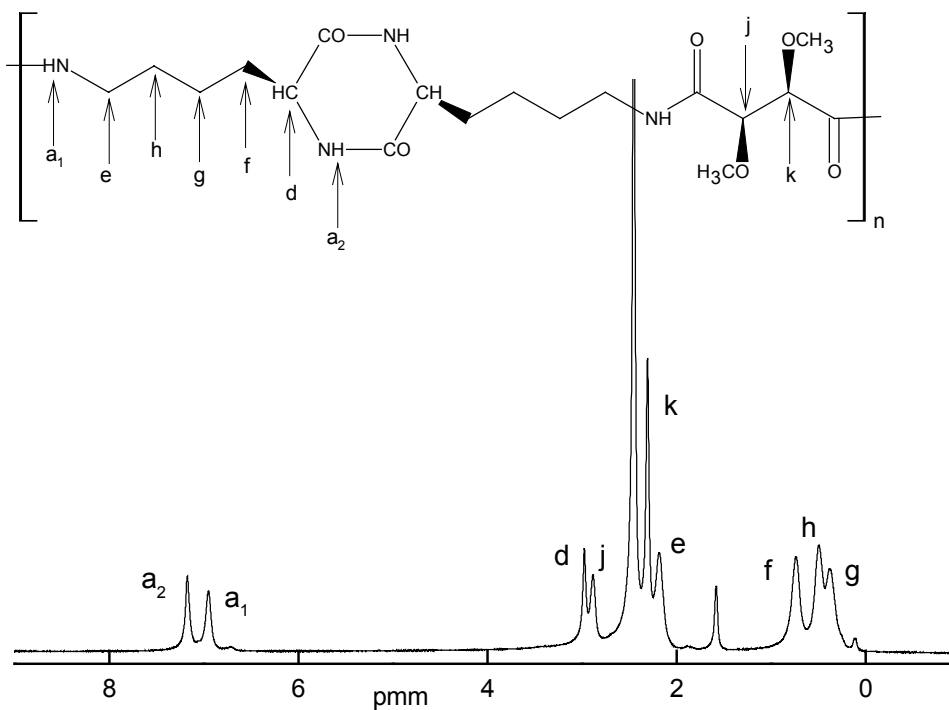


Figura 10.52. Espectro de ^1H -RMN de la poliamida PDK-LL con DMSO- d_6 .

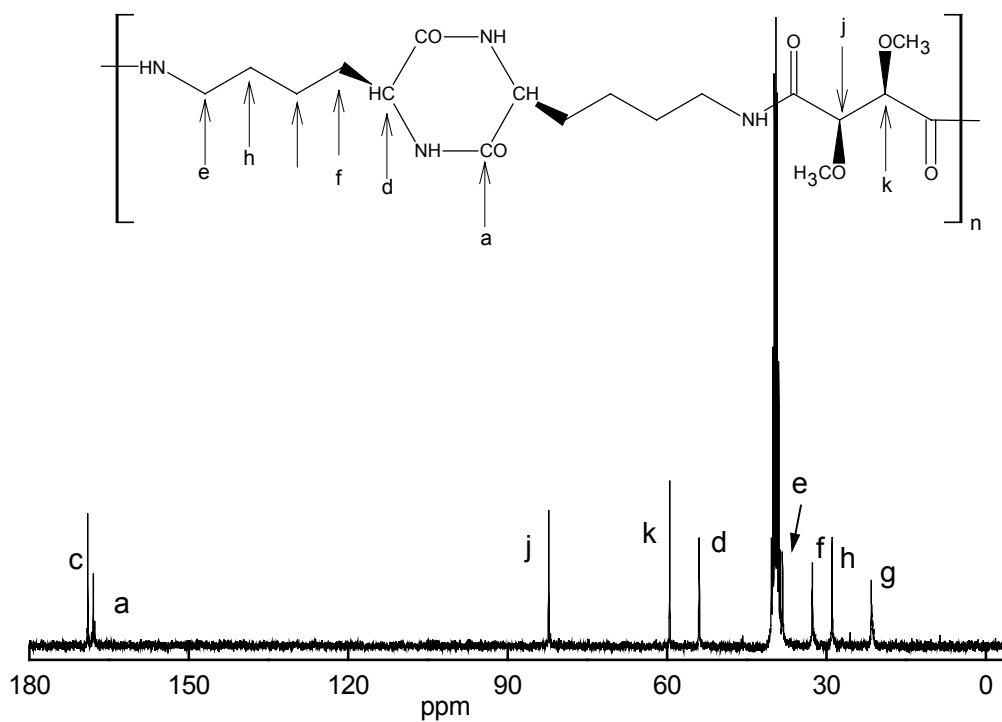


Figura 10.53. Espectro de ^{13}C -RMN de la poliamida PDK-LL con DMSO- d_6 .

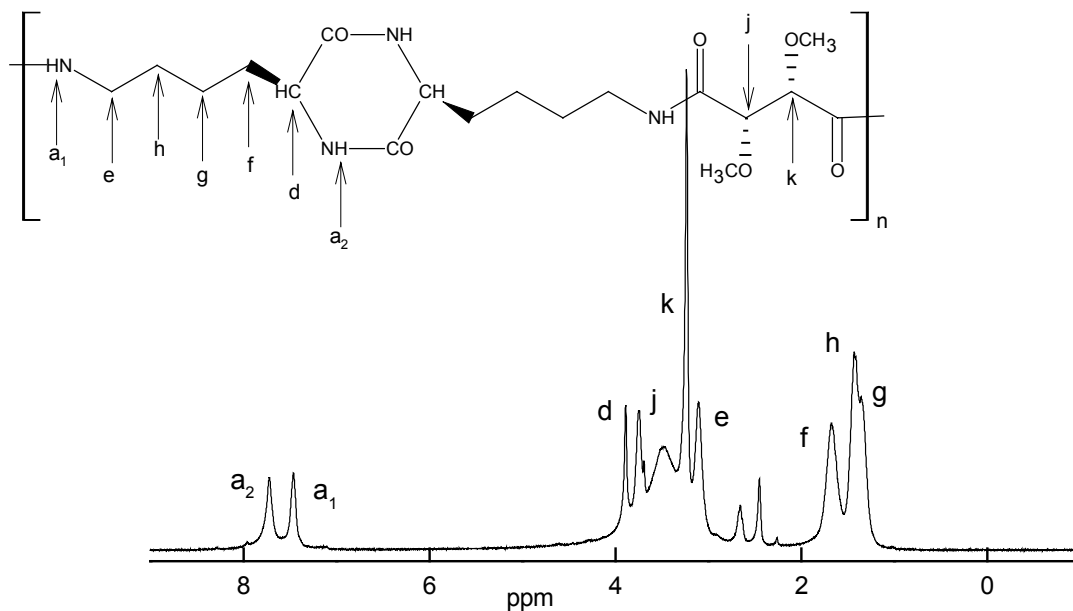


Figura 10.54. Espectro de ¹H-RMN de la poliamida PDK-LD con DMSO-d₆.

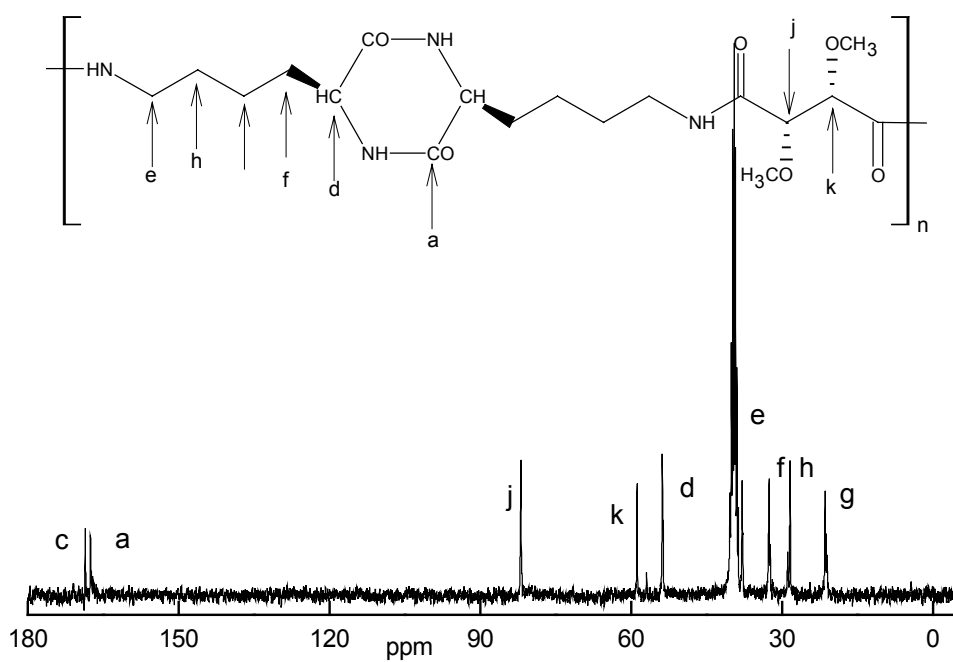
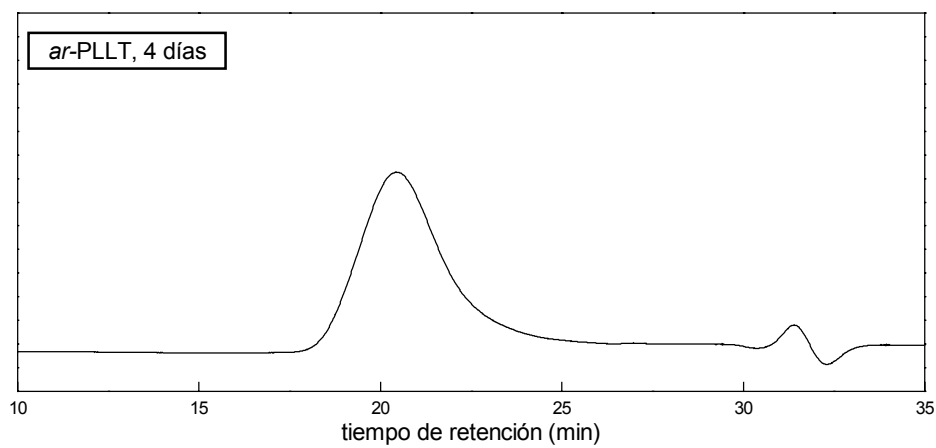
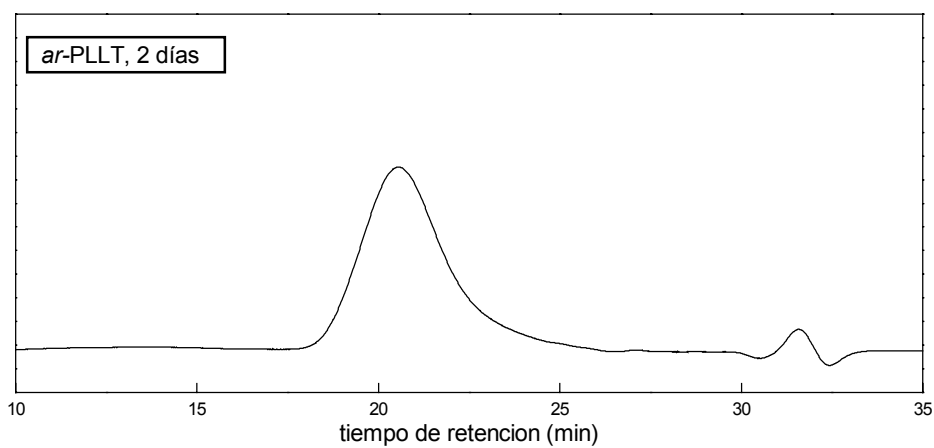
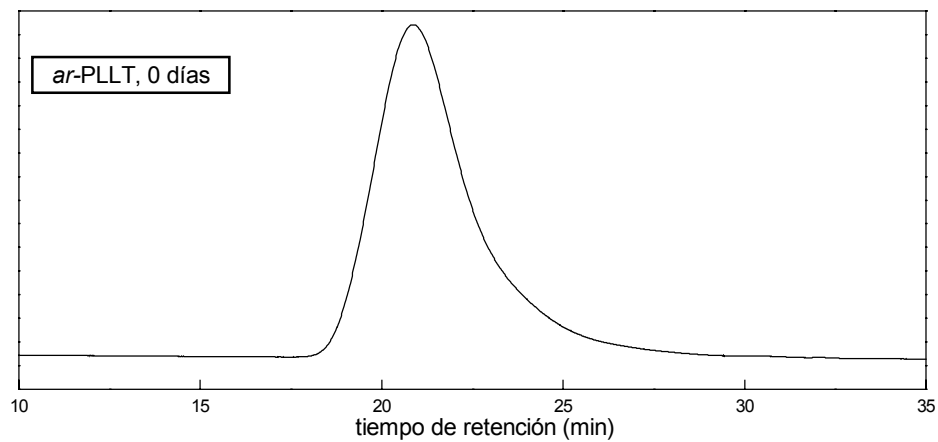
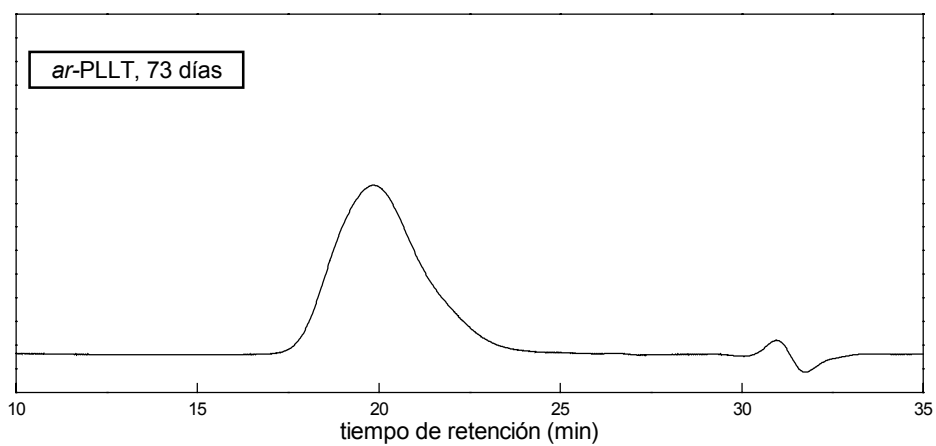
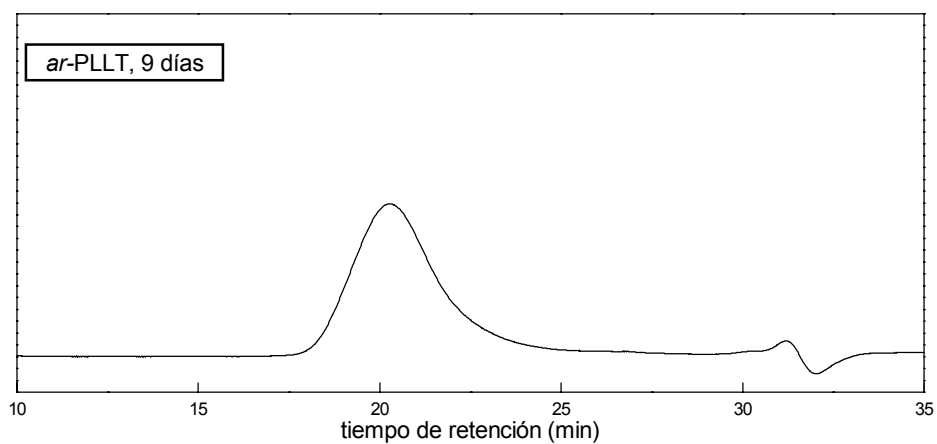


Figura 10.55. Espectro de ¹³C-RMN de la poliamida PDK-LD con DMSO-d₆.

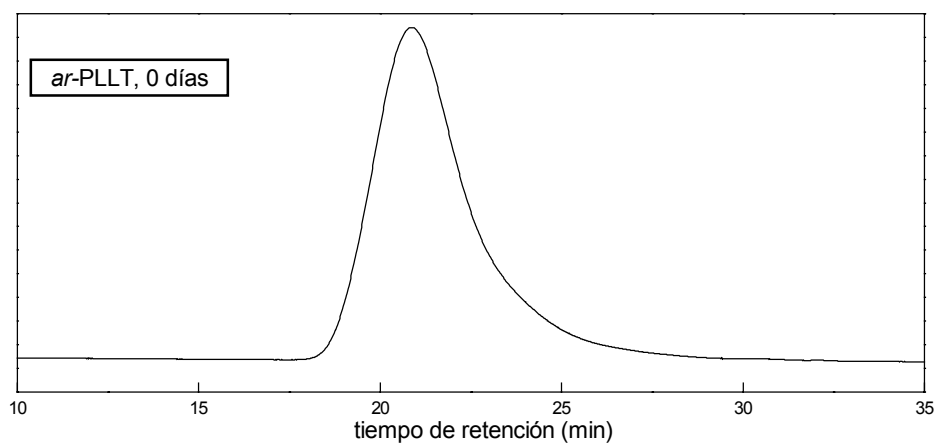
10.9 CROMATOGRAMAS

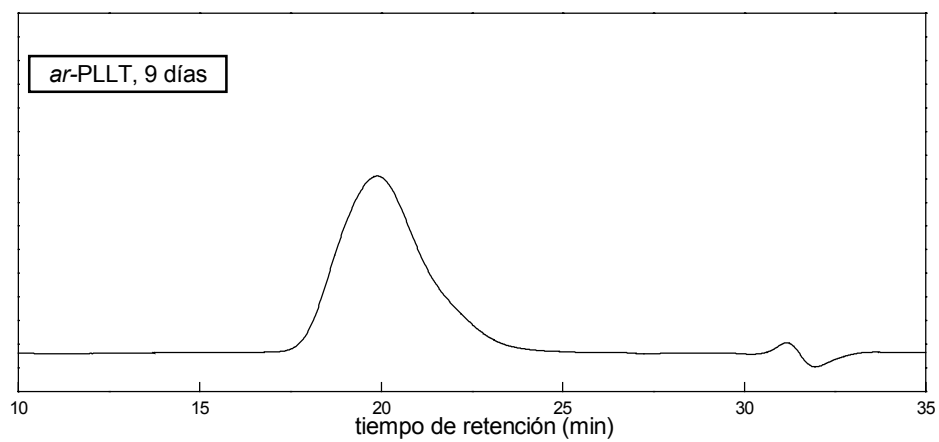
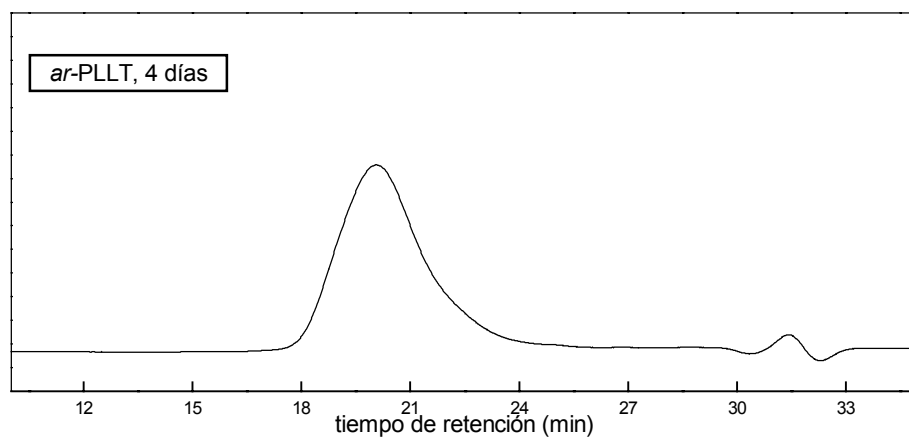
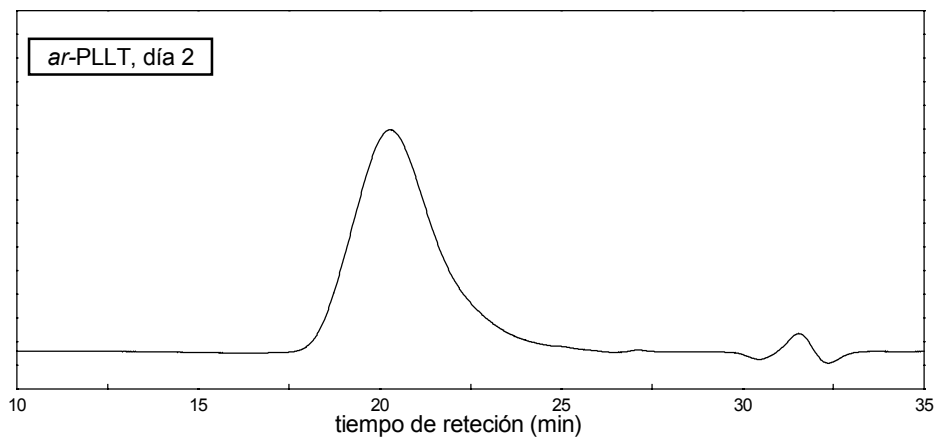
DEGRADACIÓN POLIAMIDA *ar*-PLL

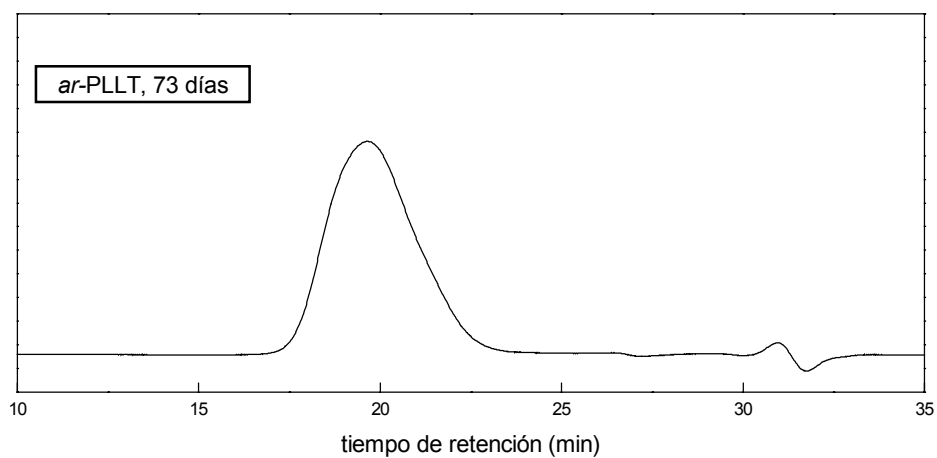
Cromatograma degradación de poliamida *ar*-PLL T A 25 °C.



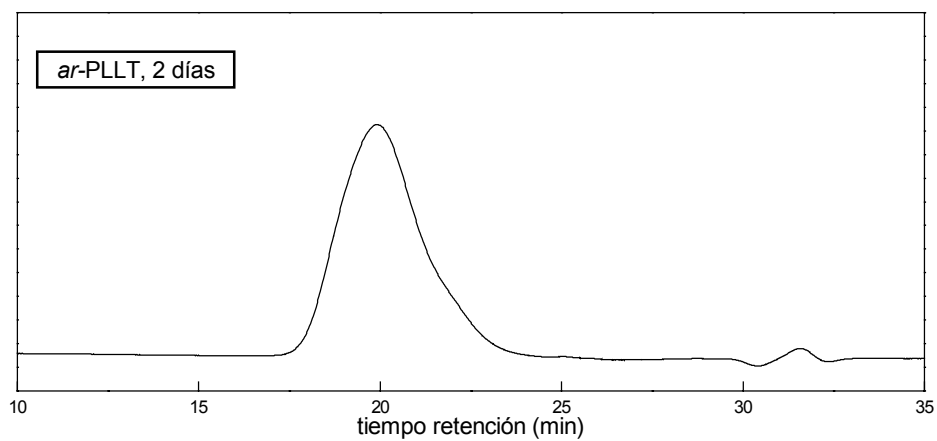
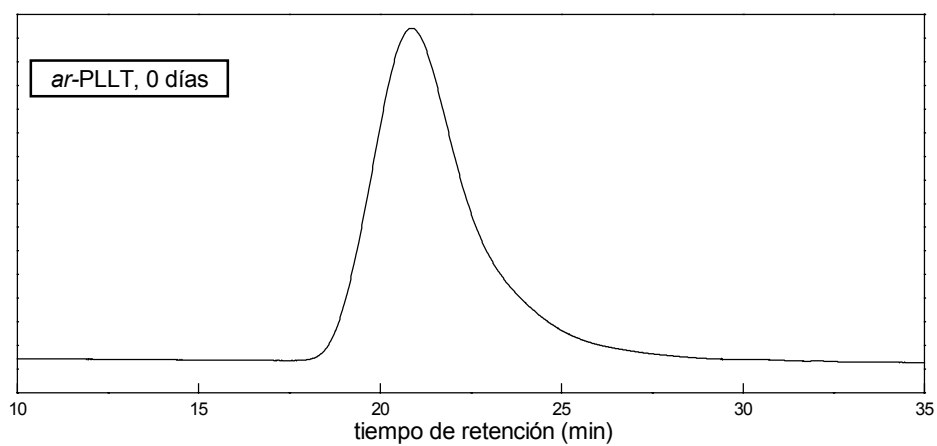
Cromatograma de degradación de poliamida *ar*-PLLT a 37 °C.

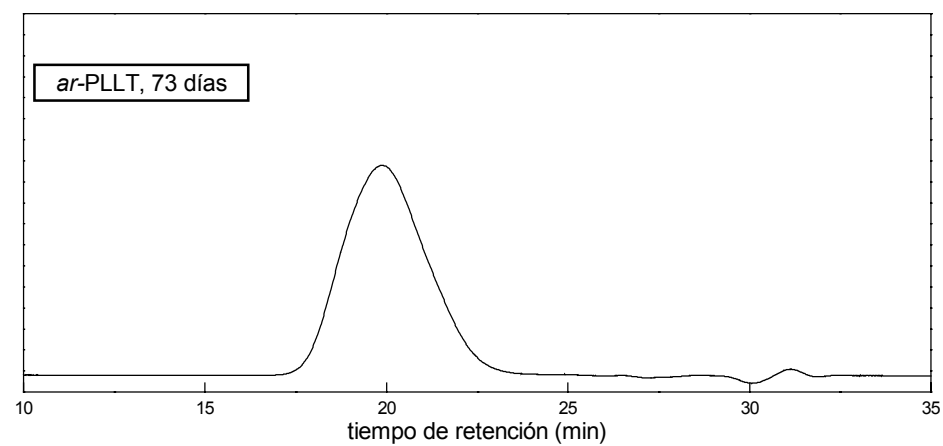
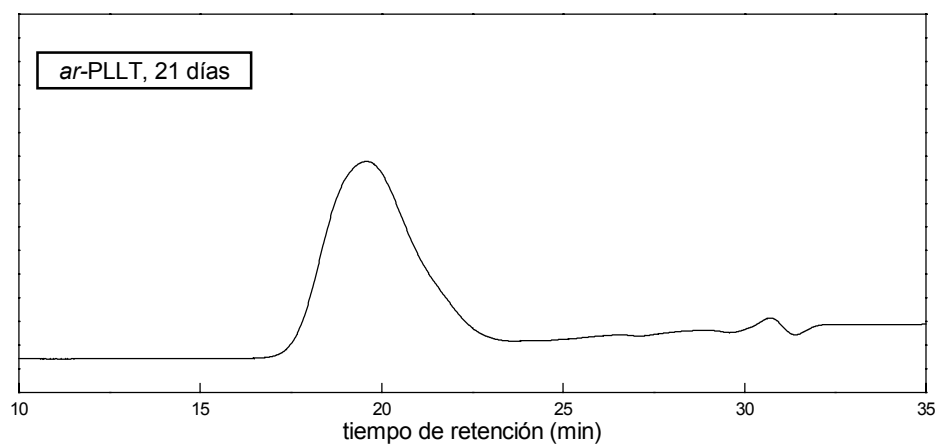
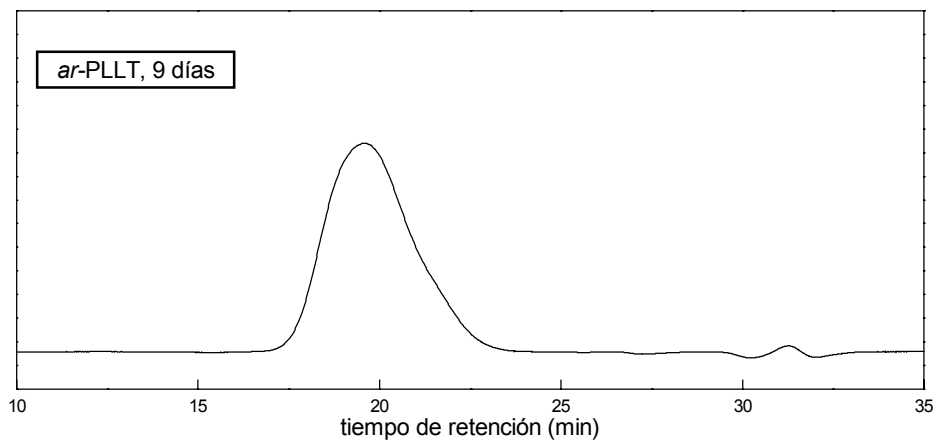


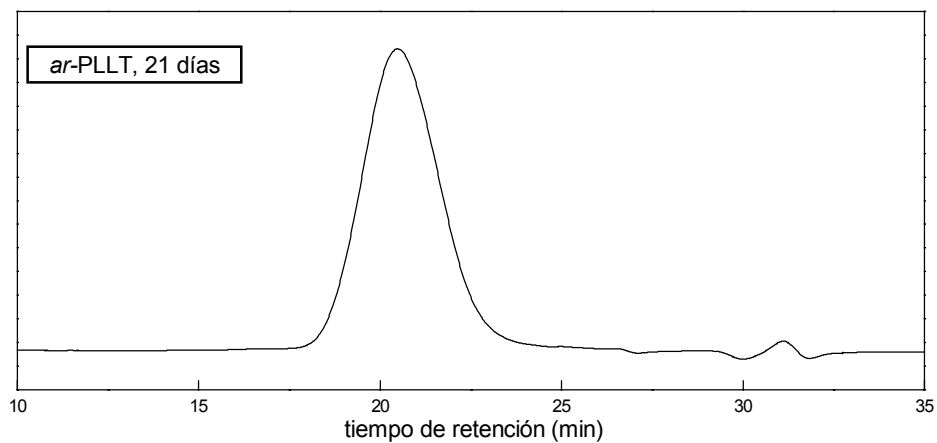
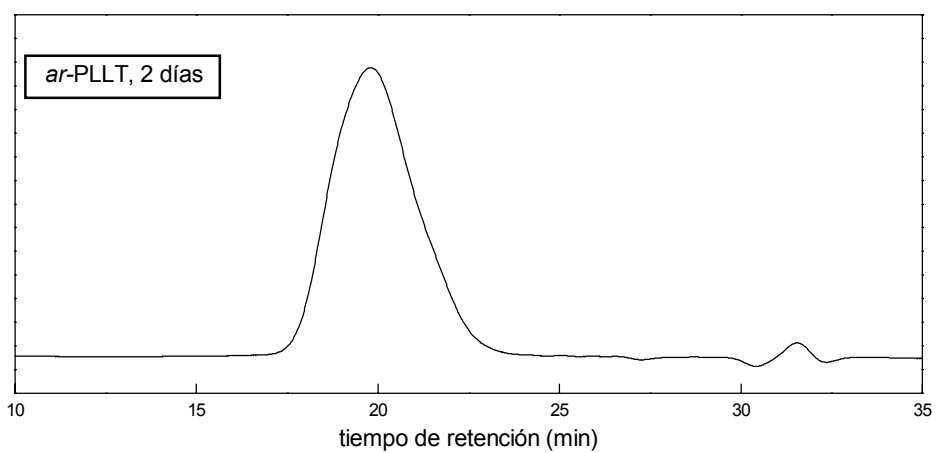
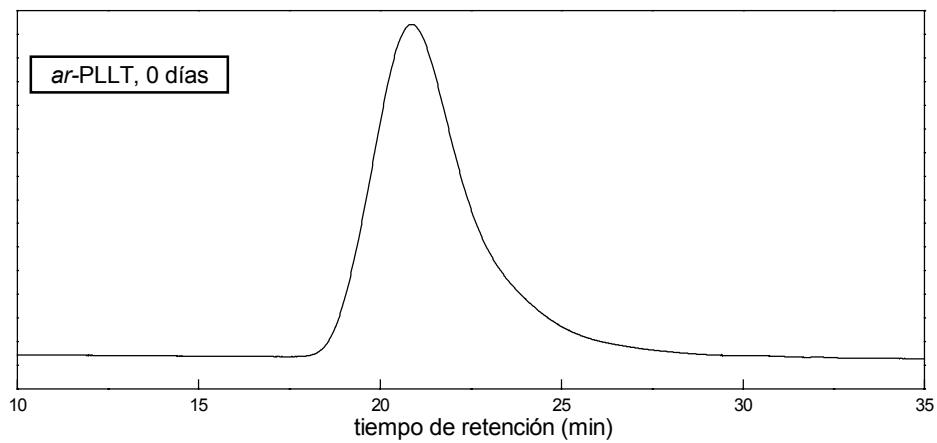


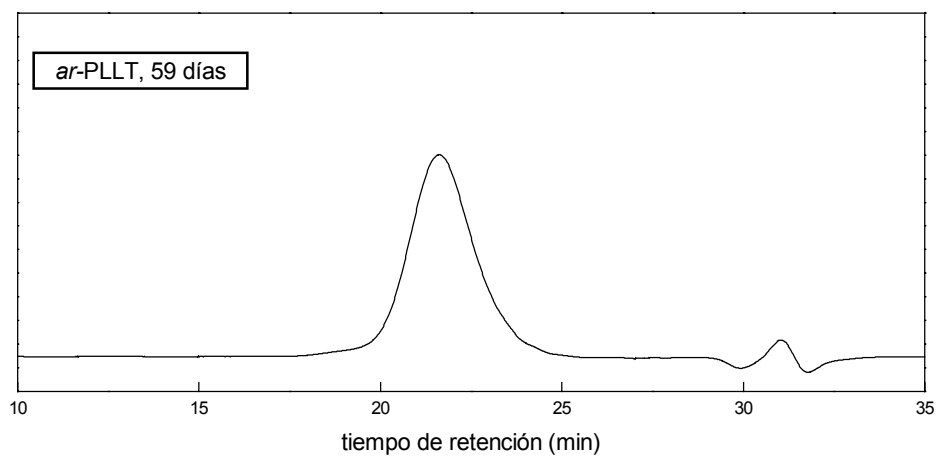
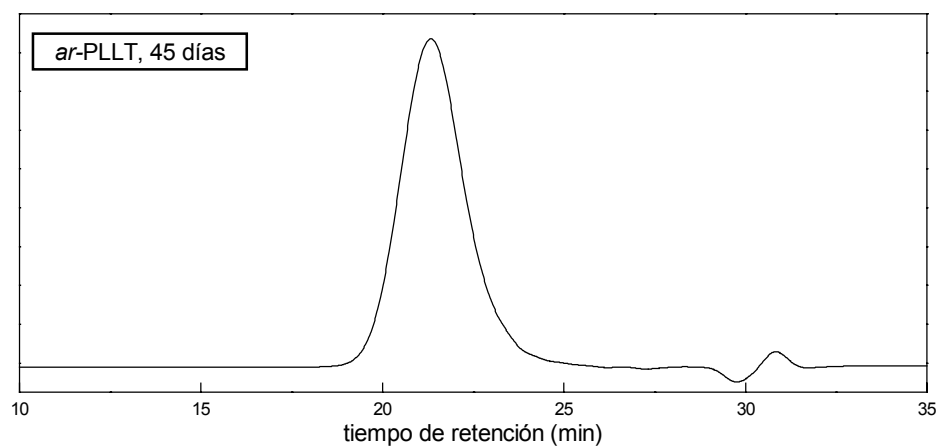


Cromatograma de degradación de poliamida *ar*-PLL a 60 °C.

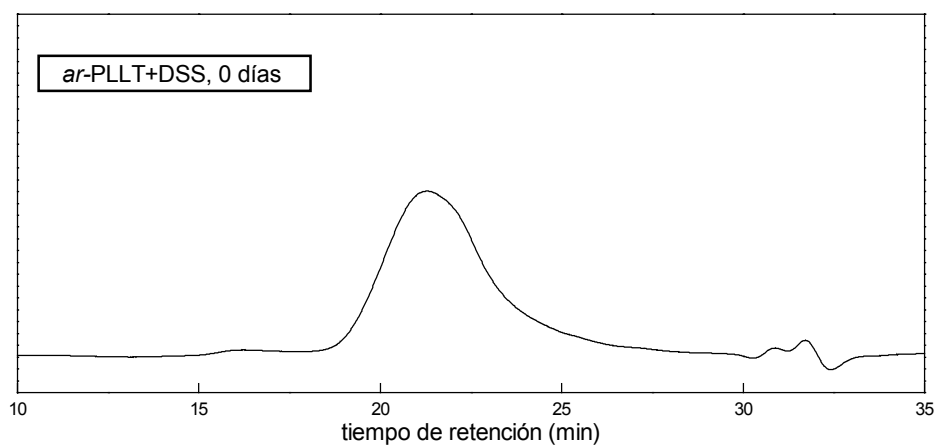


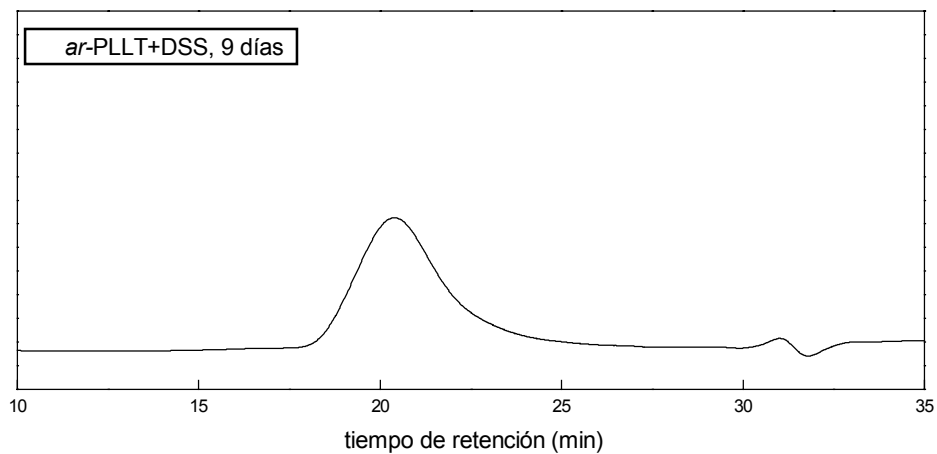
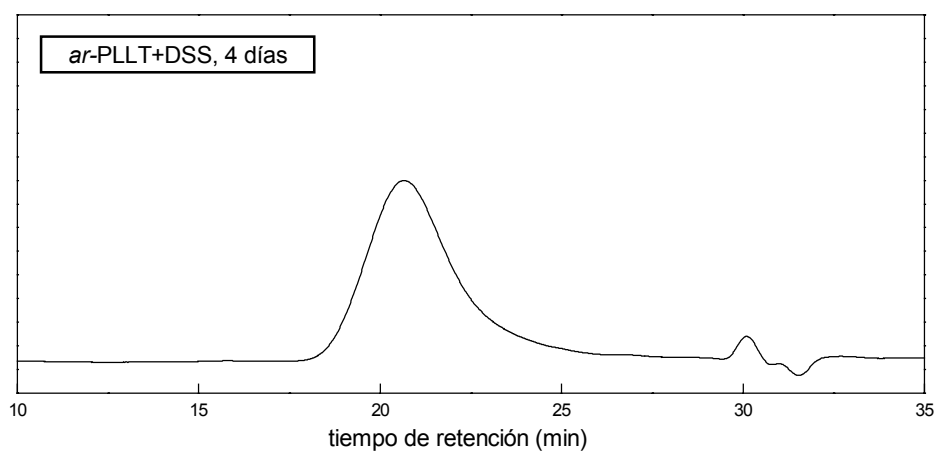
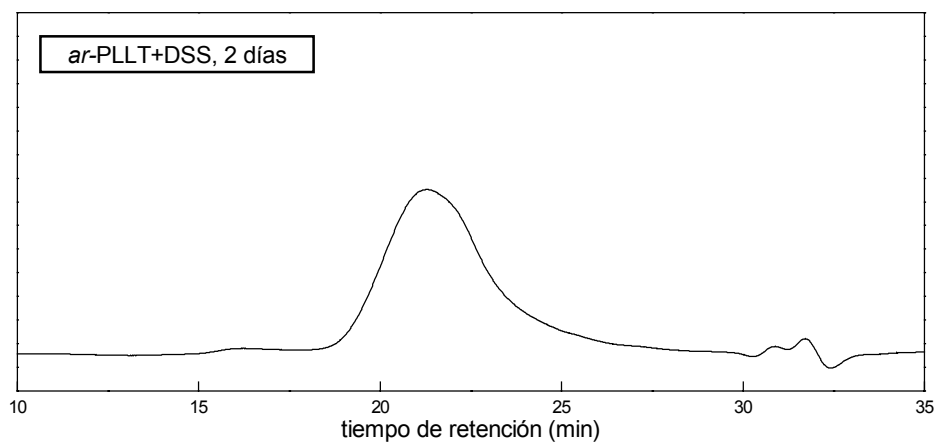


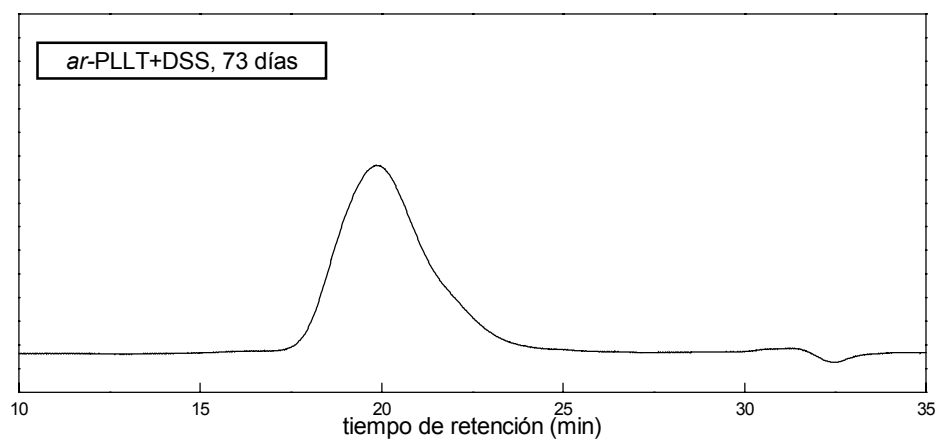
Cromatograma de degradación de poliamida *ar*-PLL_T a 80 °C.



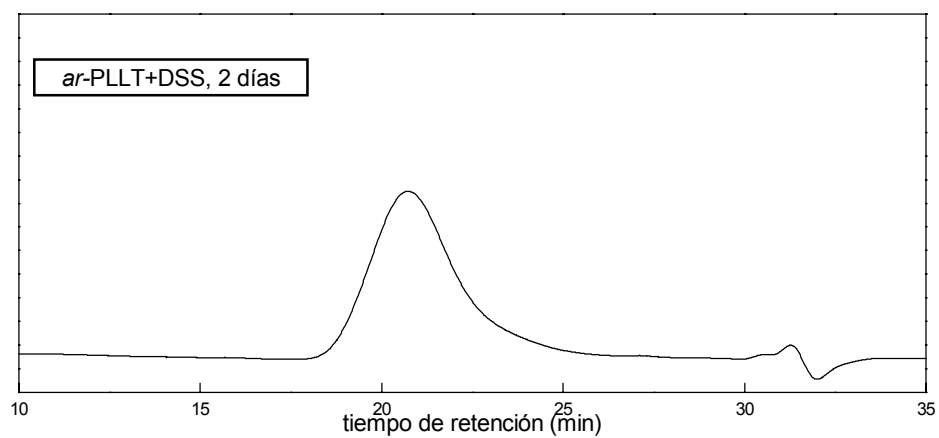
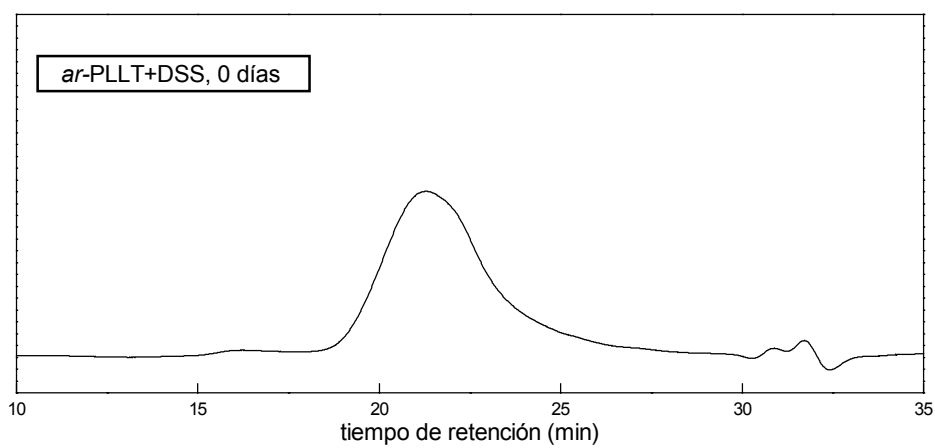
Cromatograma de degradación de poliamida *ar*-PLL+DSS a 25 °C.

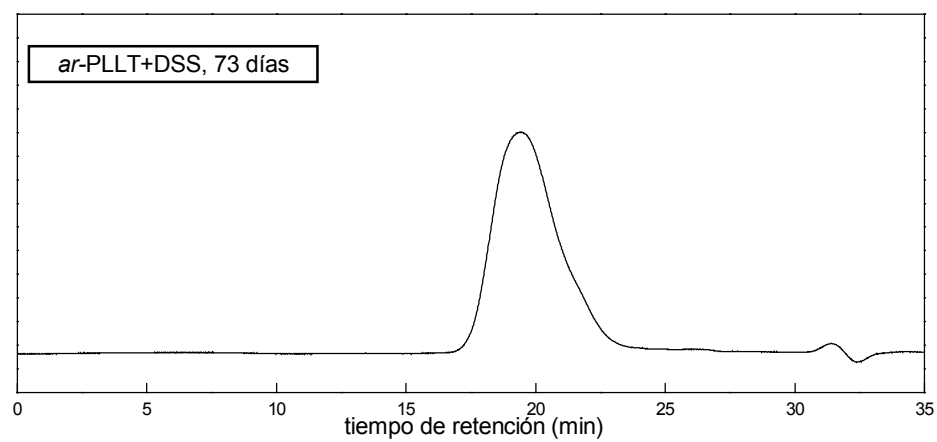
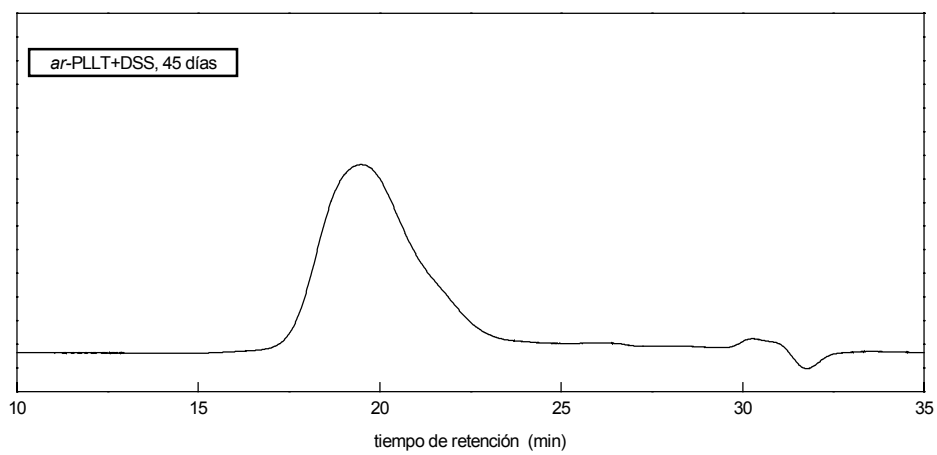
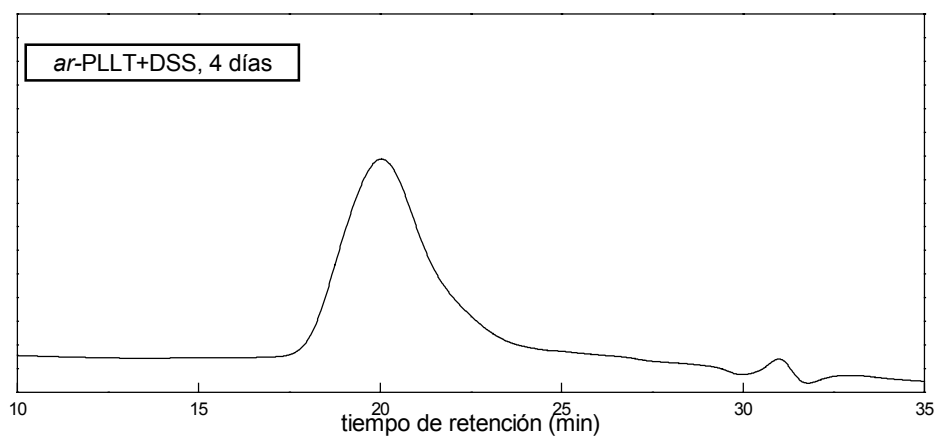


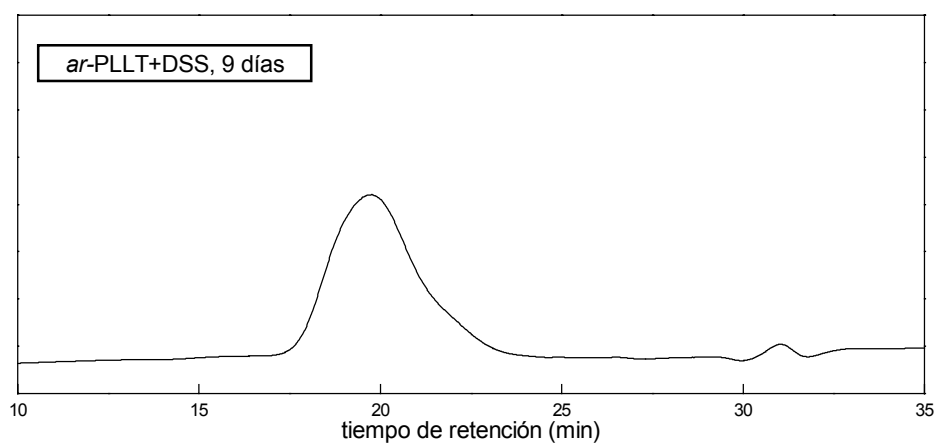
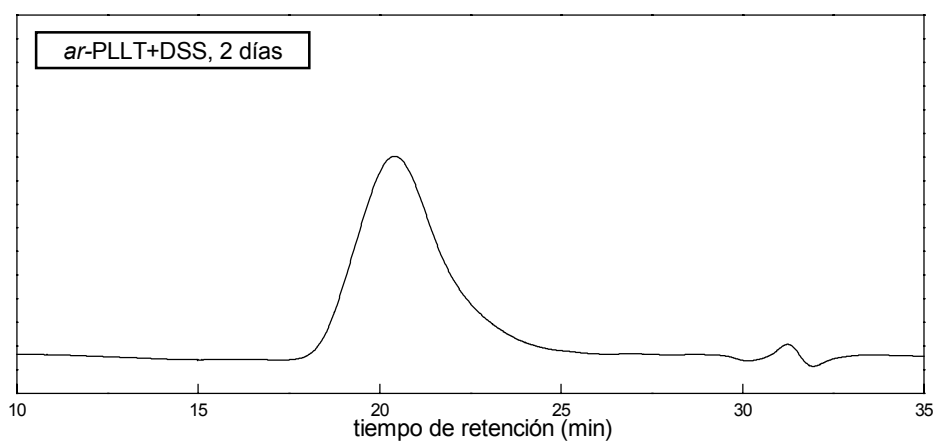
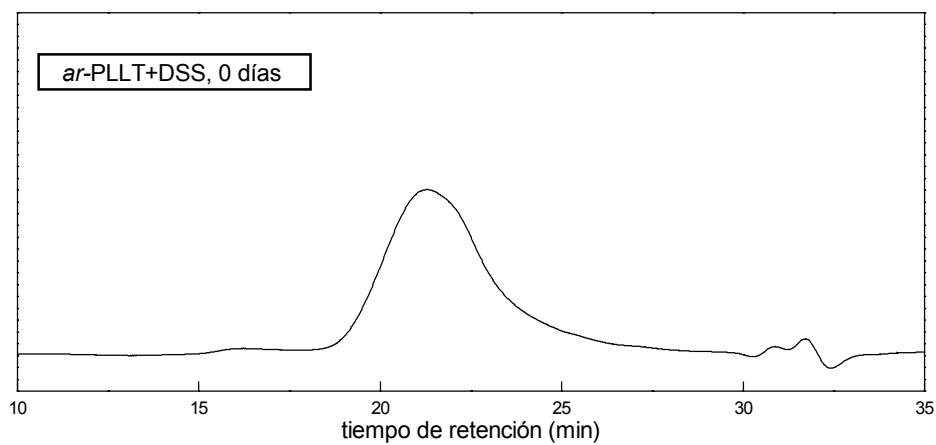


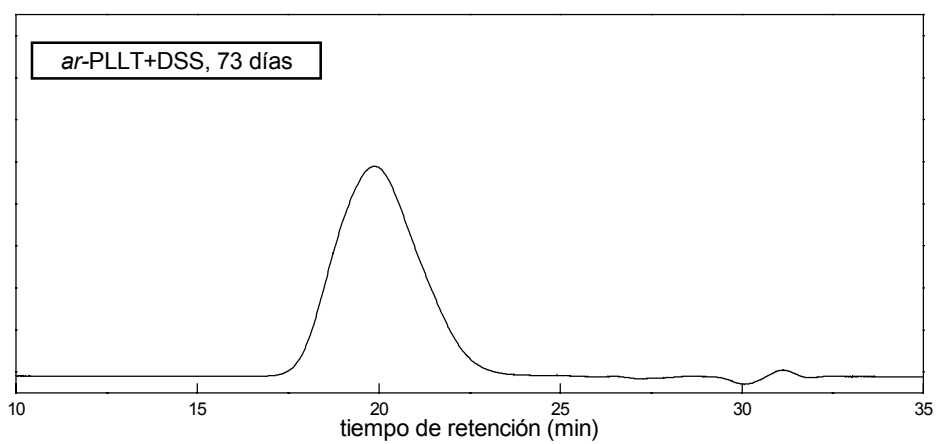
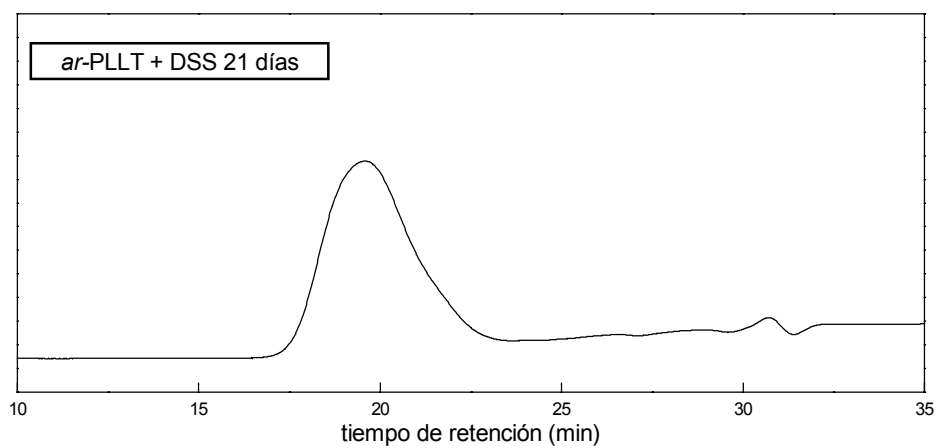


Cromatograma de degradación de poliamida *ar*-PLL + DSS a 37°C.

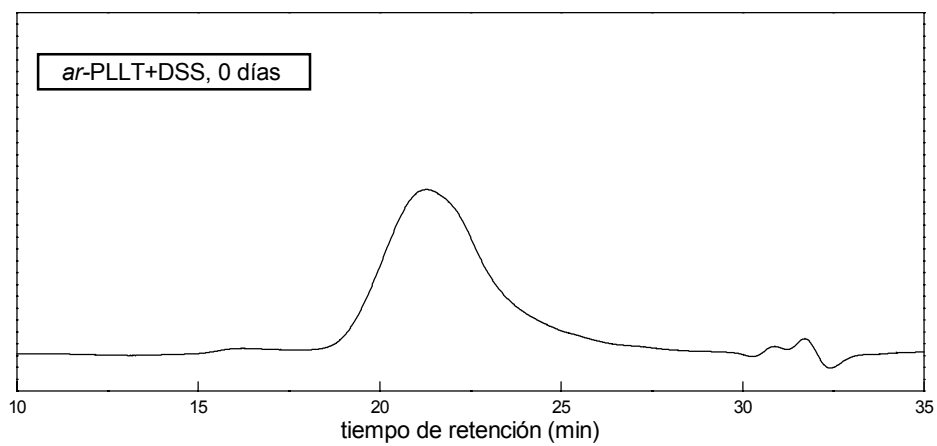


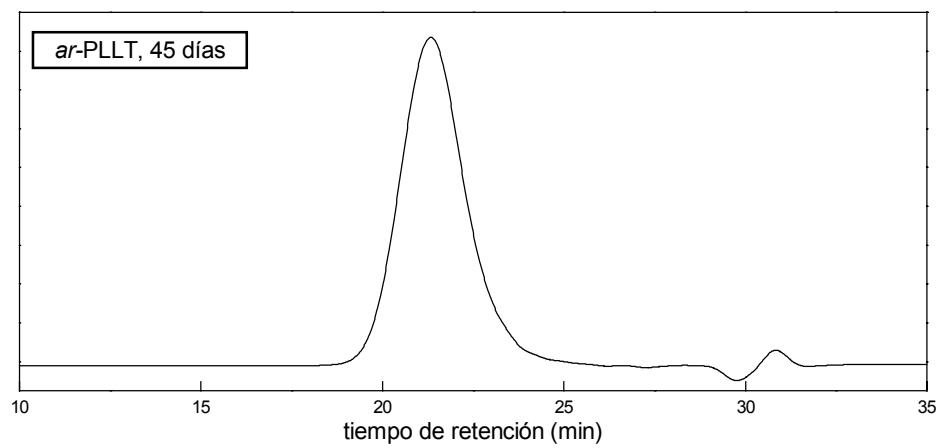
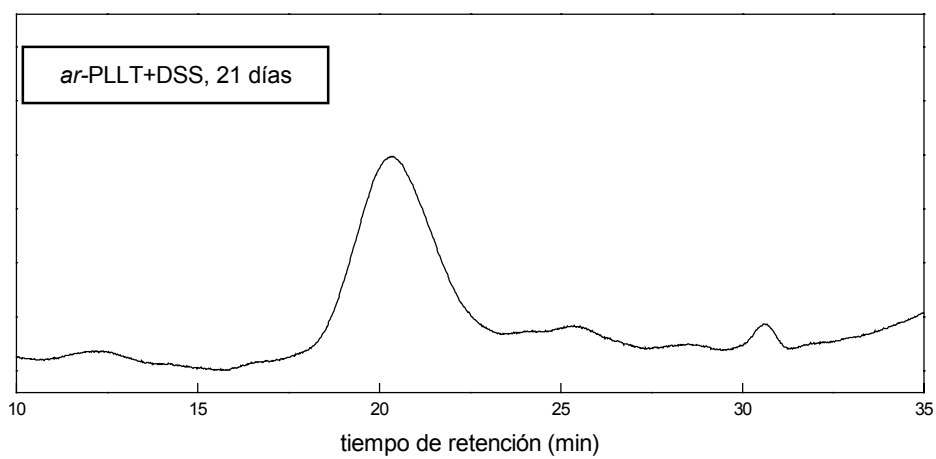
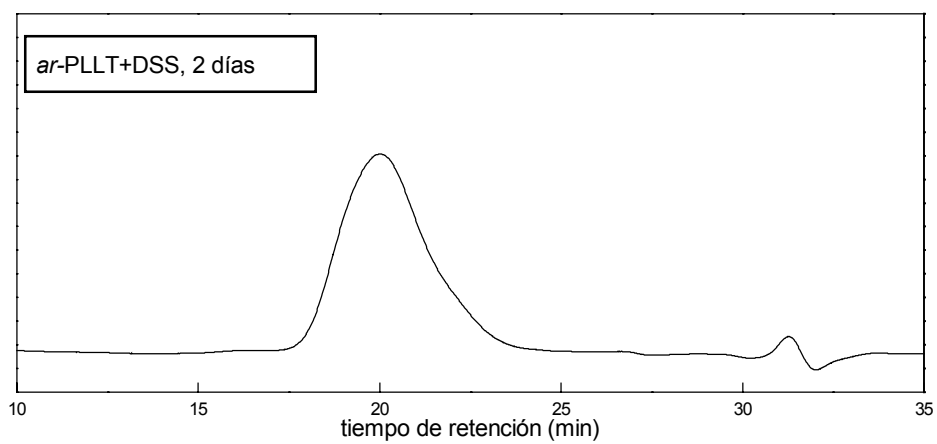


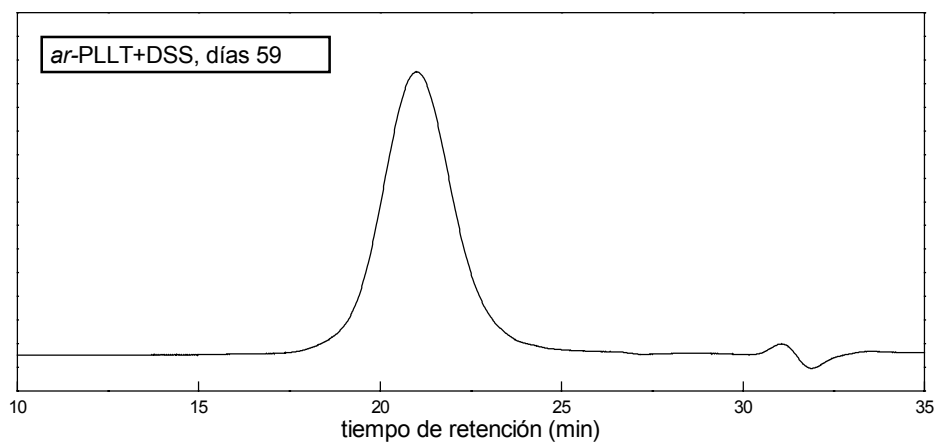
Cromatograma de degradación de poliamida *ar*-PLL + DSS a 60 °C.



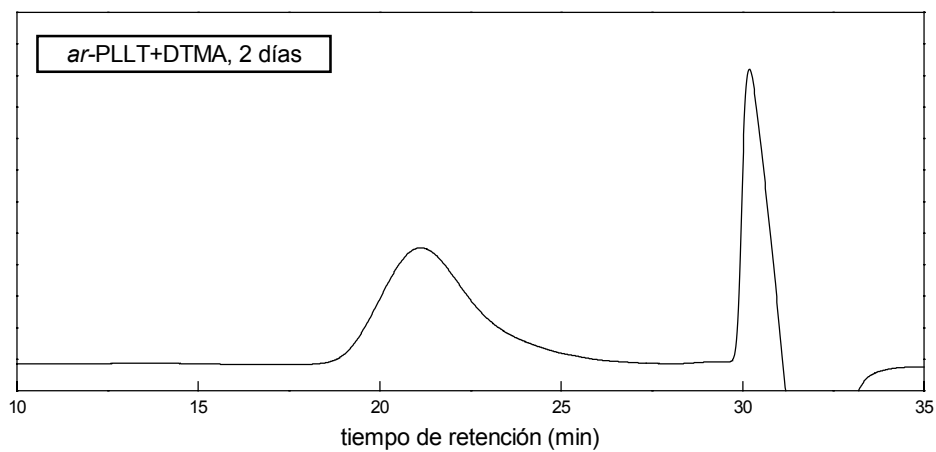
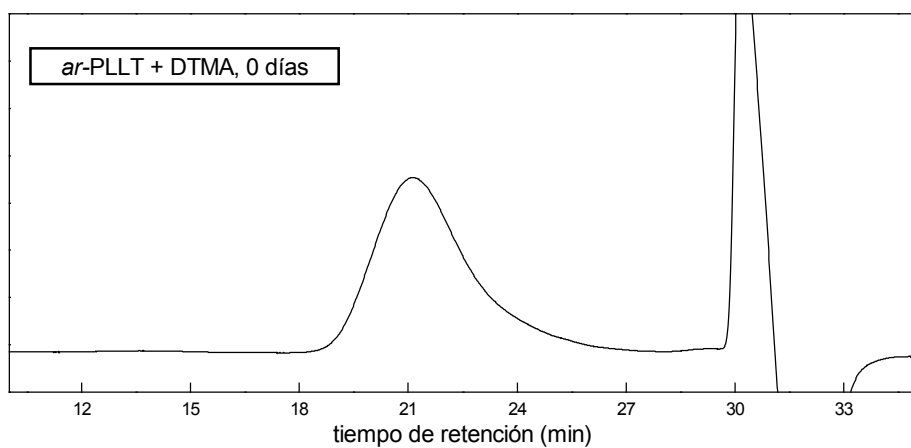
Cromatograma de degradación de poliamida *ar*-PLL + DSS a 80 °C.

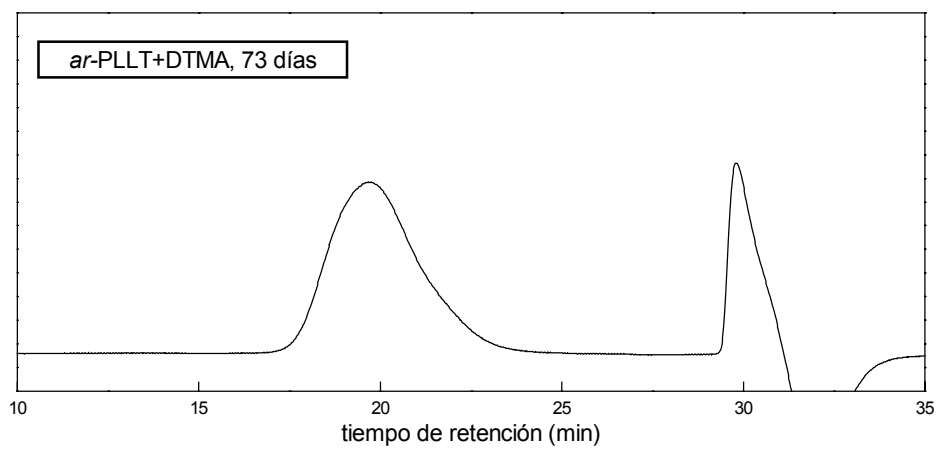
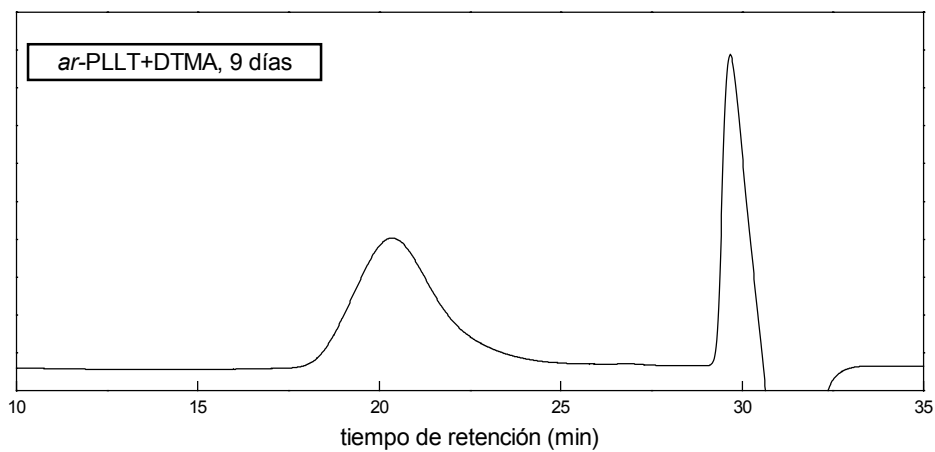
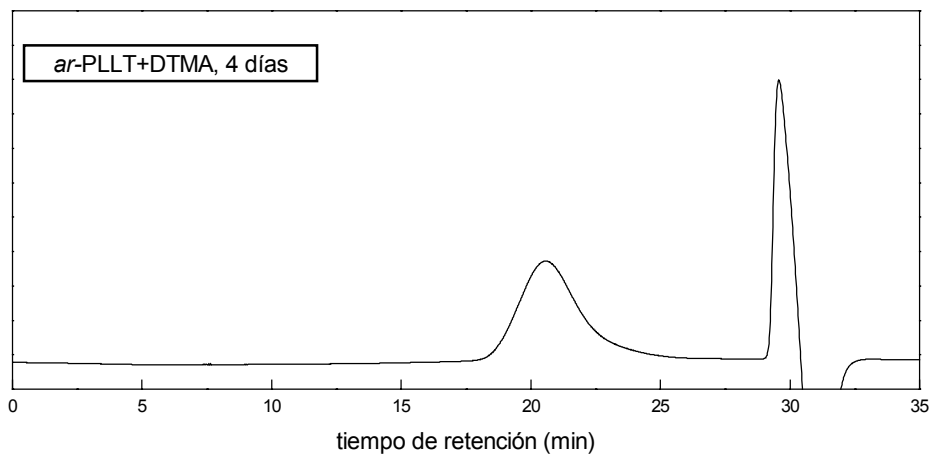


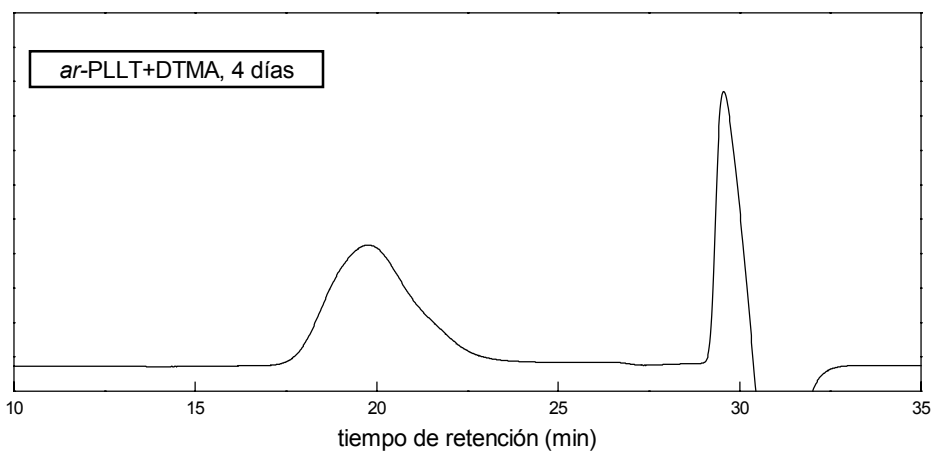
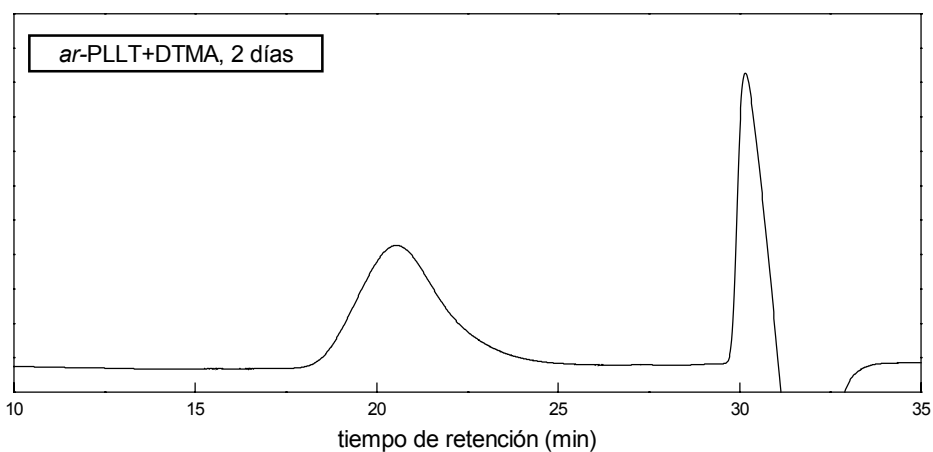
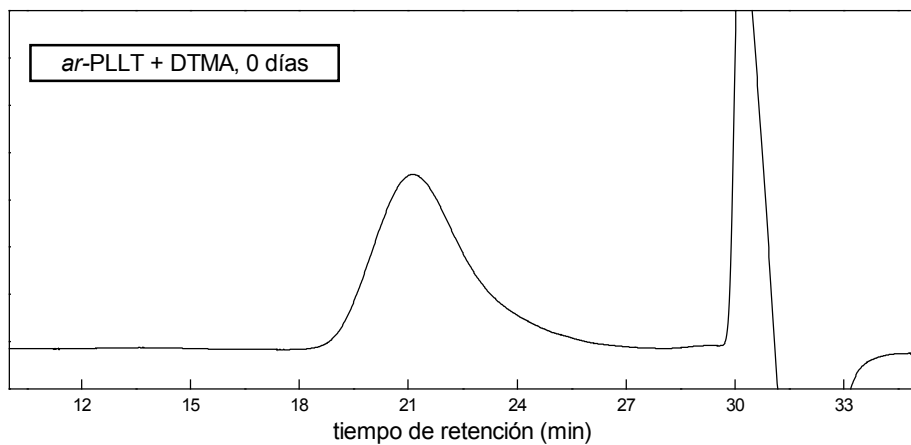


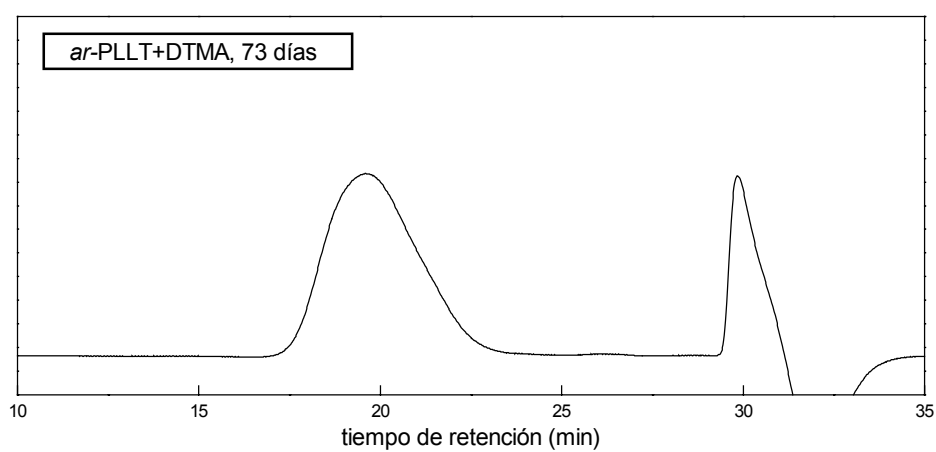
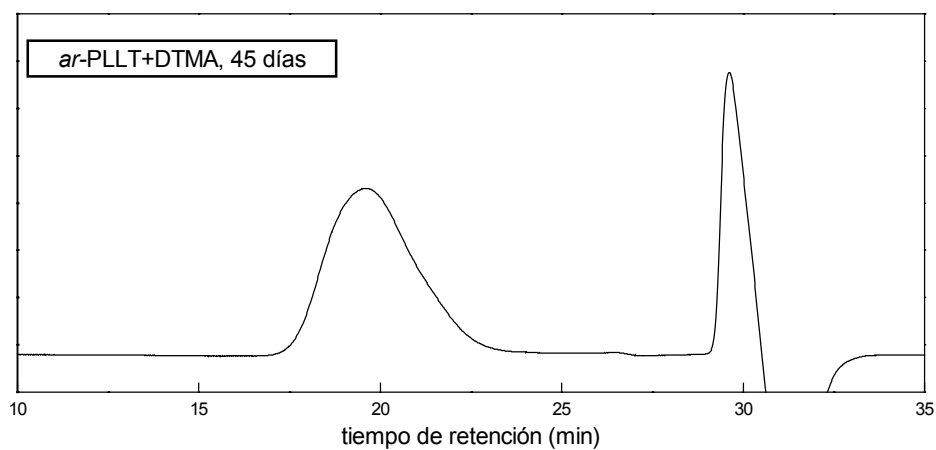


Cromatograma de degradación de poliamida *ar*-PLL + DTMA a 25 °C.

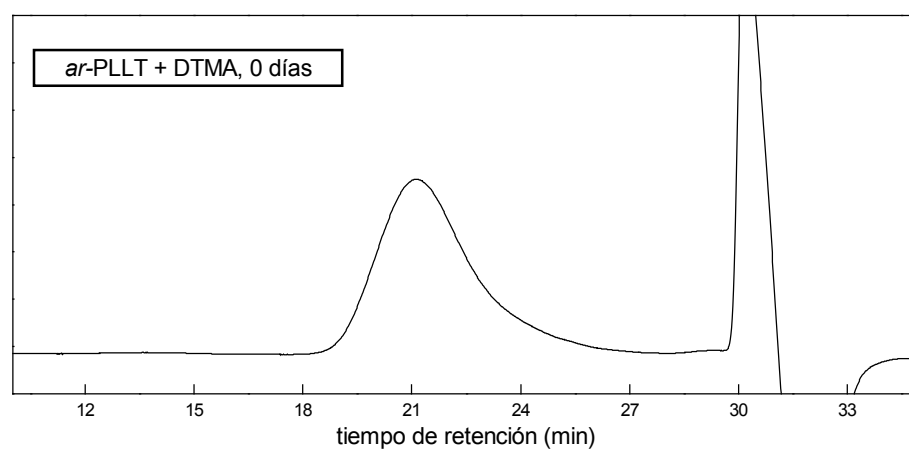


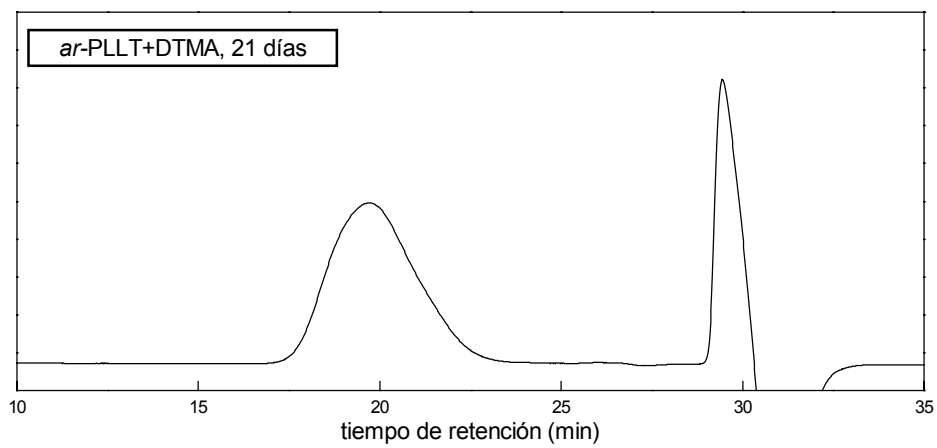
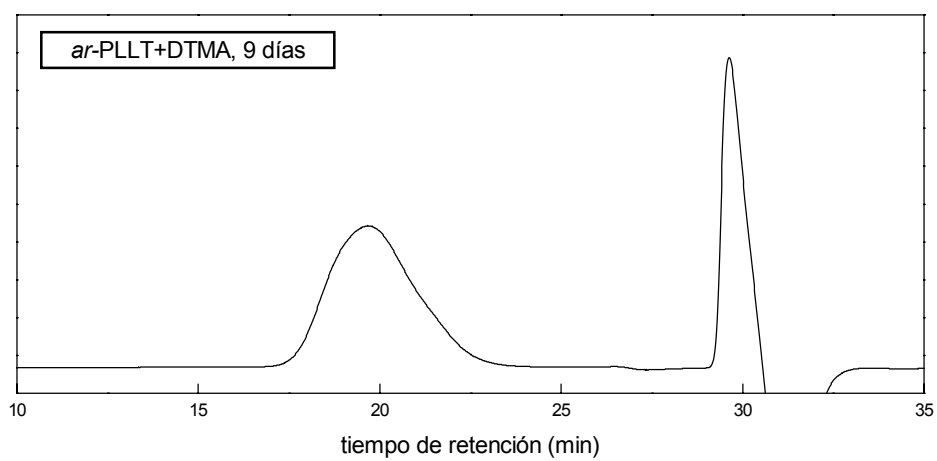
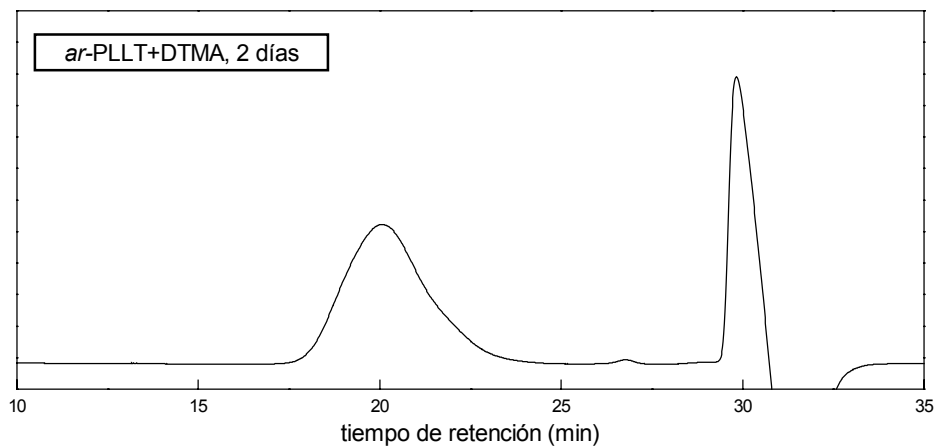


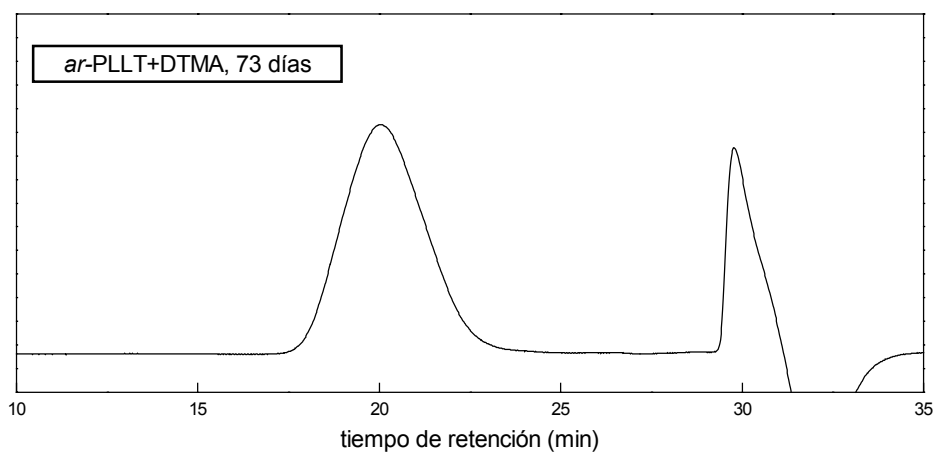
Cromatograma de degradación de poliamida *ar*-PLT + DTMA a 37 °C.



Cromatograma de degradación de poliamida *ar*-PLL + DTMA a 60 °C.







Cromatograma de degradación de poliamida *ar*-PLL + DTMA a 80 °C.

