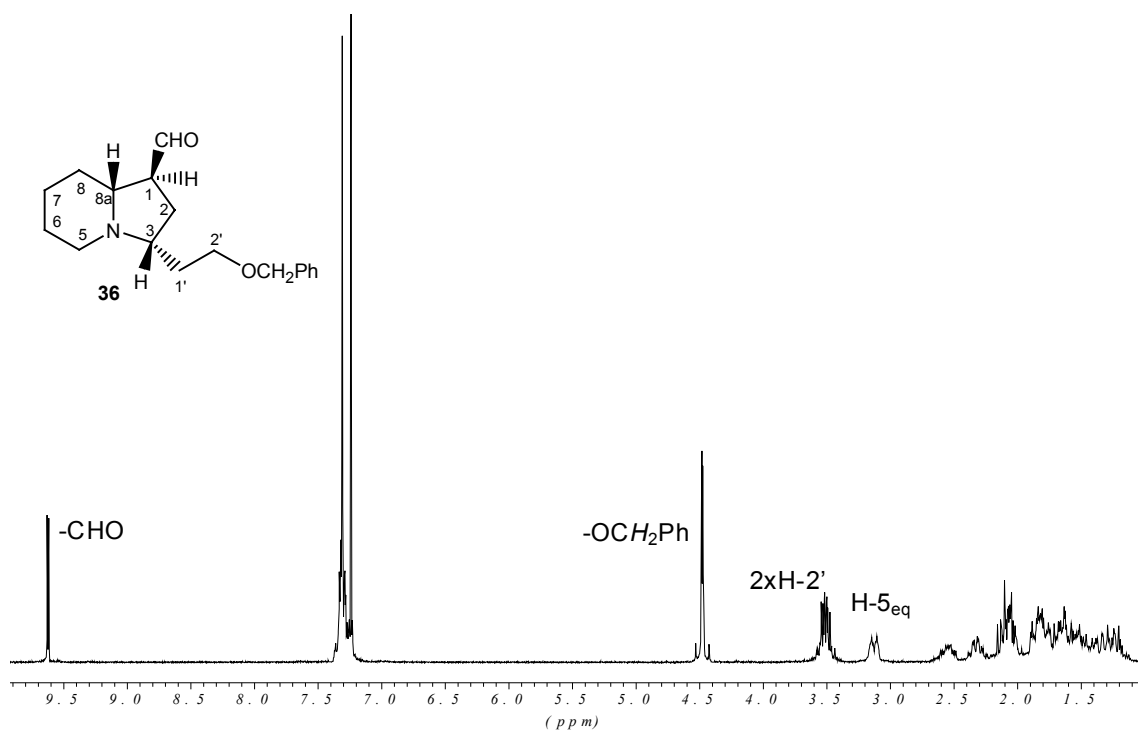
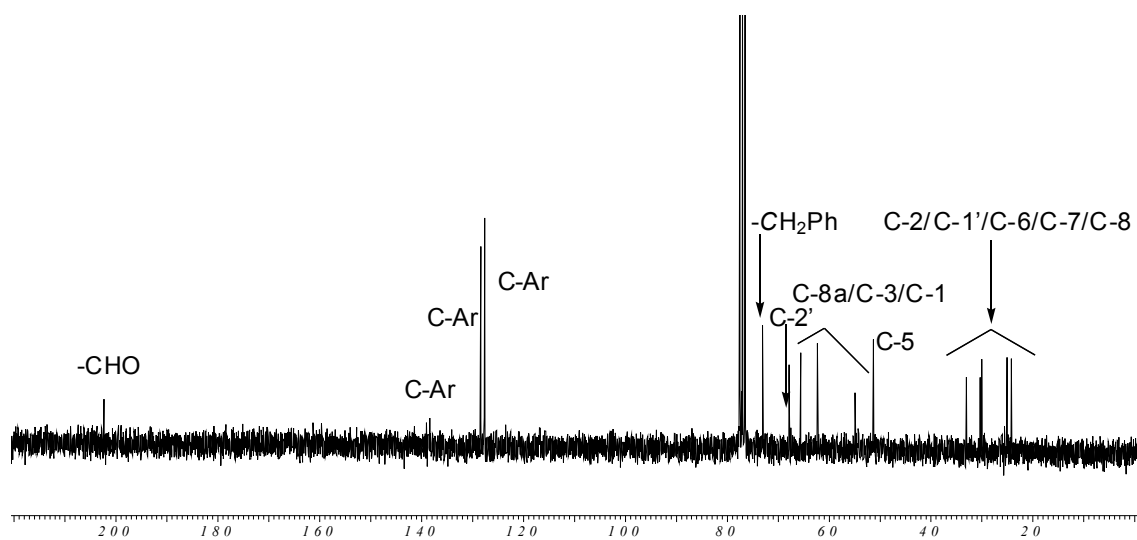
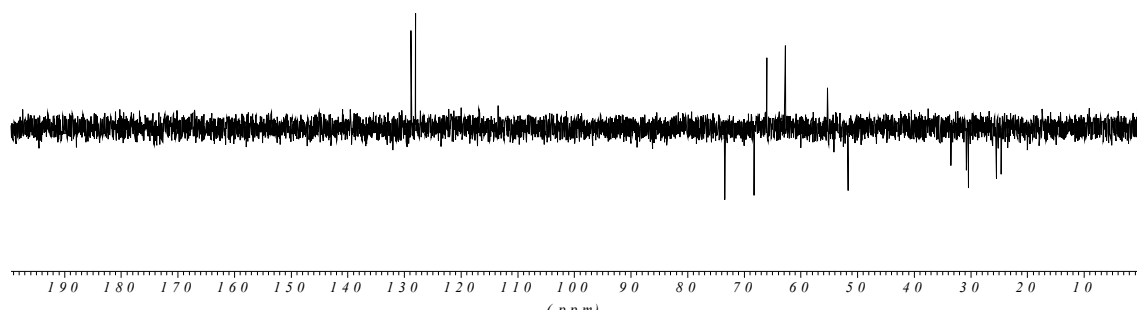
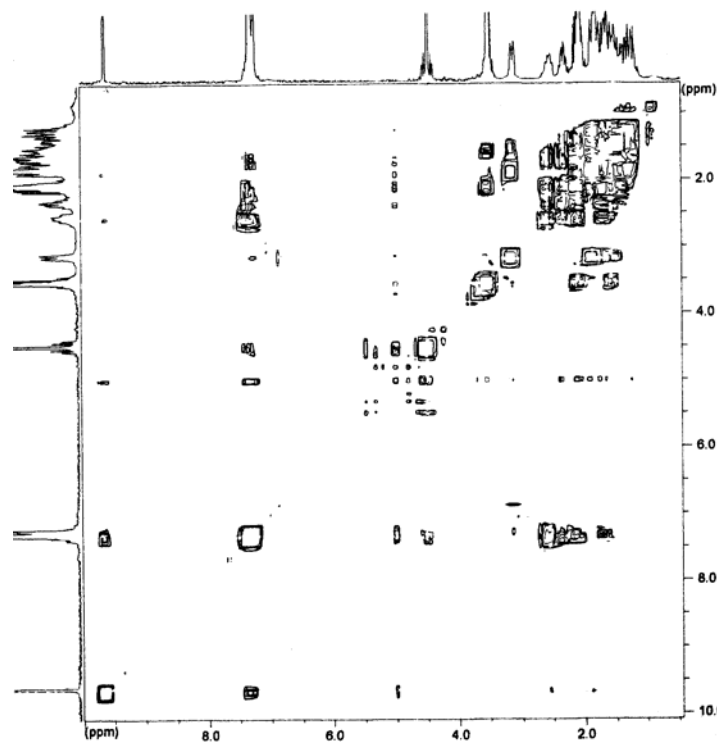
**¹H-RMN (250 MHz, CDCl₃) de 31****¹H-RMN (250 MHz, CDCl₃) de 36**



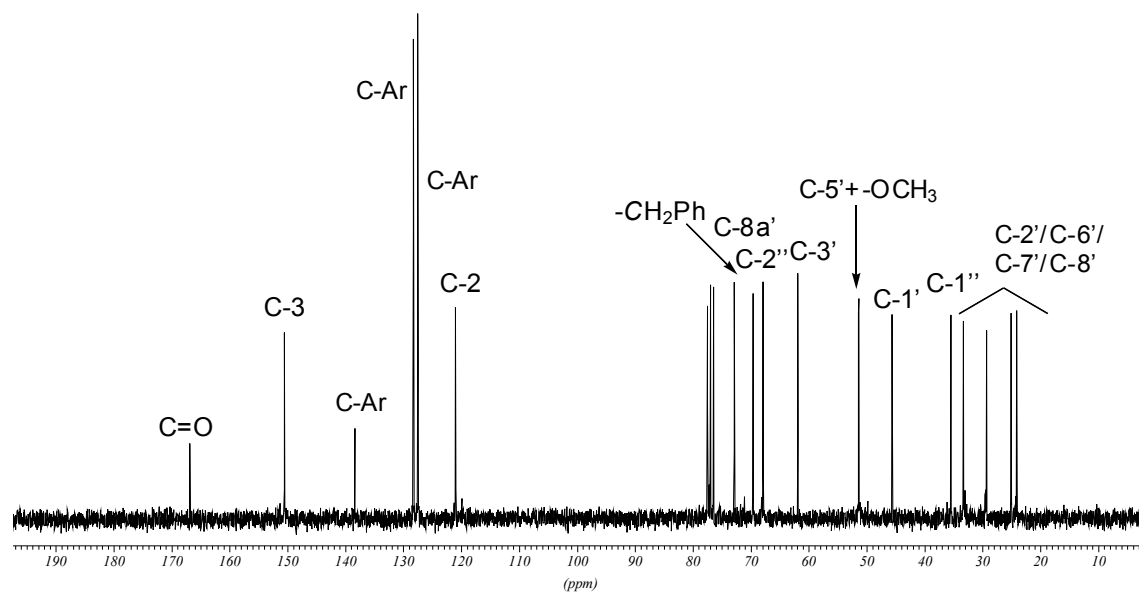
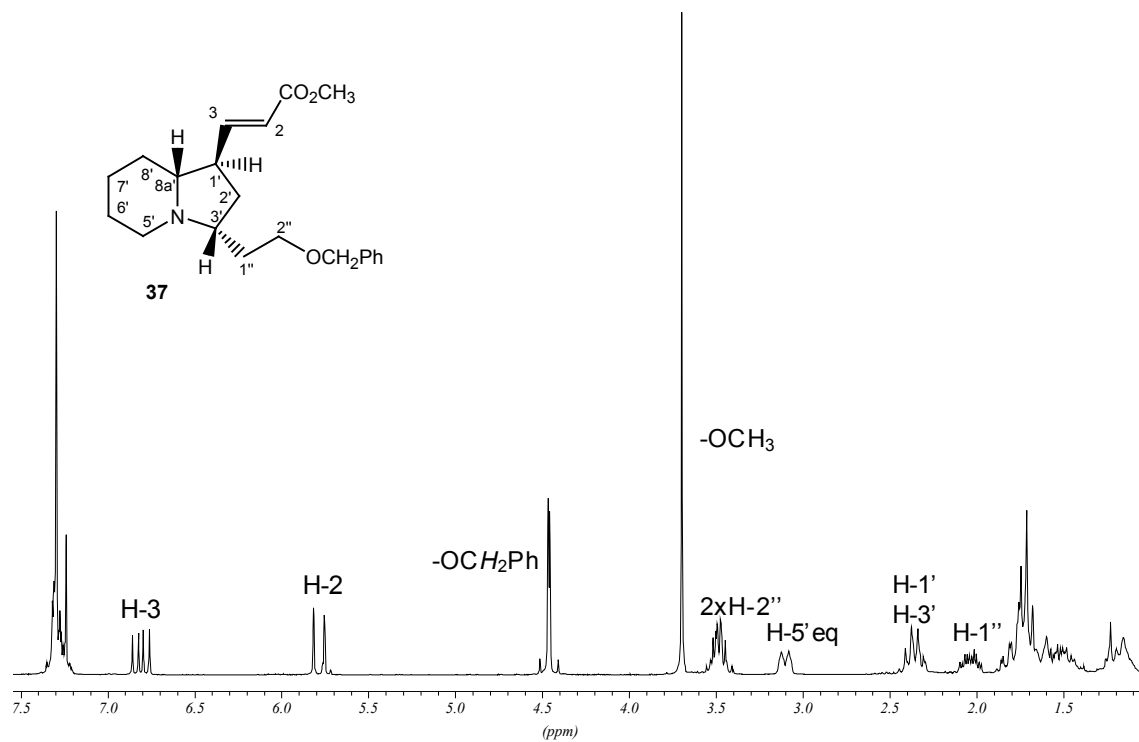
¹³C-RMN (62.5 MHz, CDCl₃) de 36

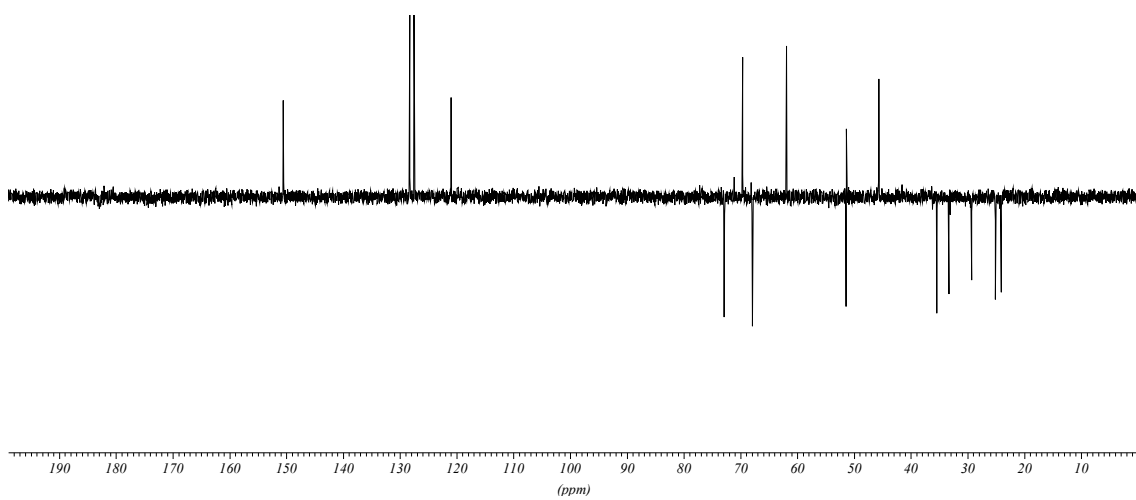


DEPT (62.5 MHz, CDCl₃) de 36

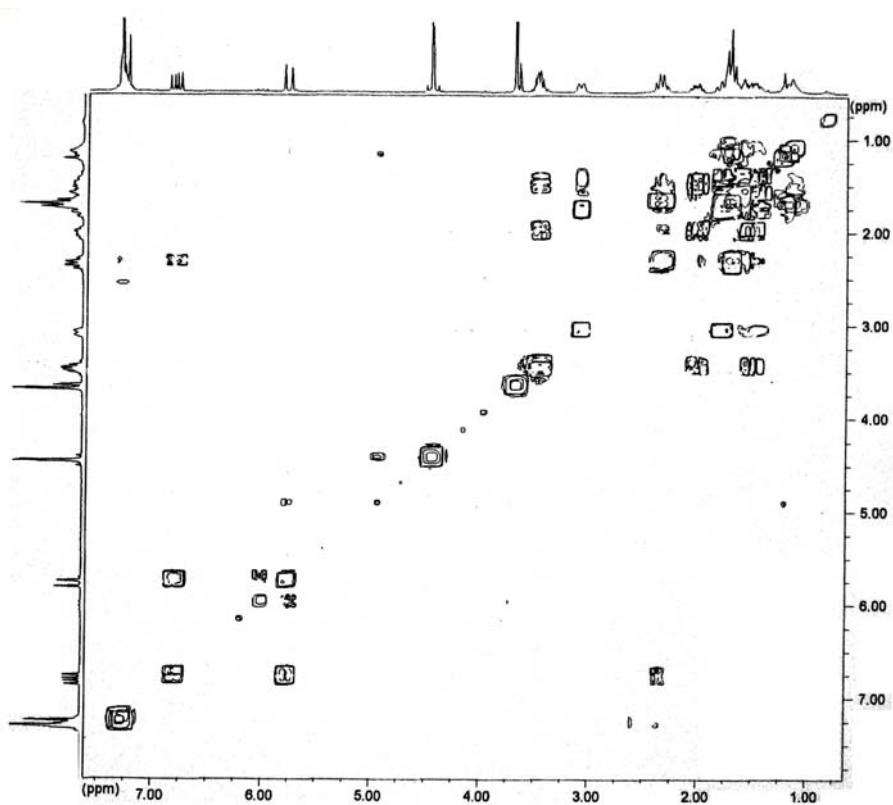


COSY (250 MHz, CDCl₃) de 36

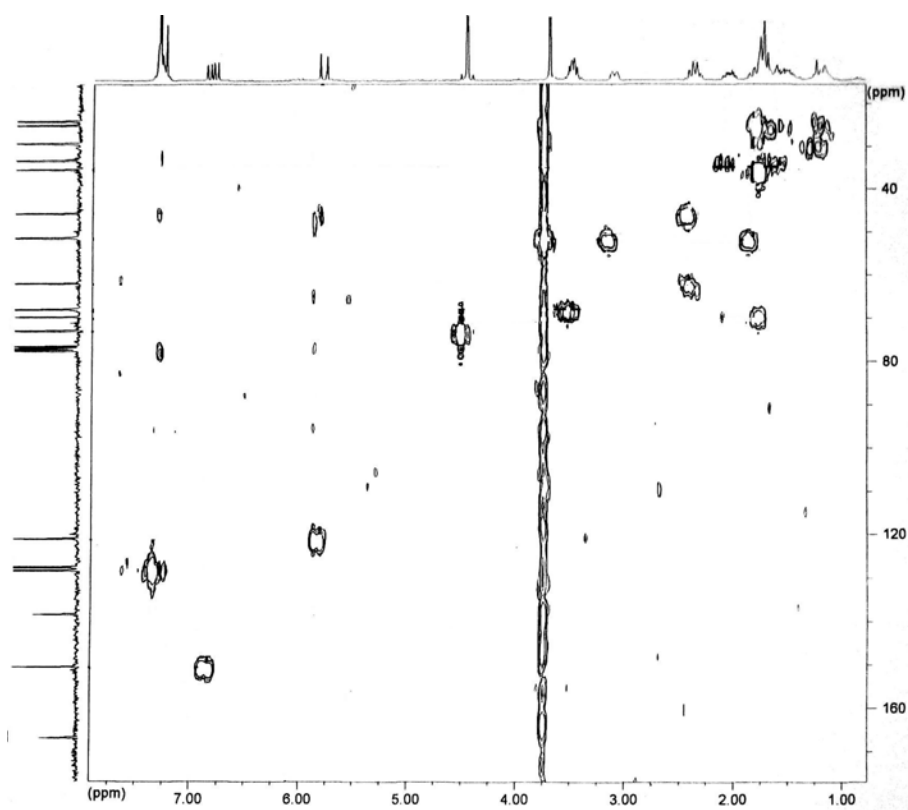




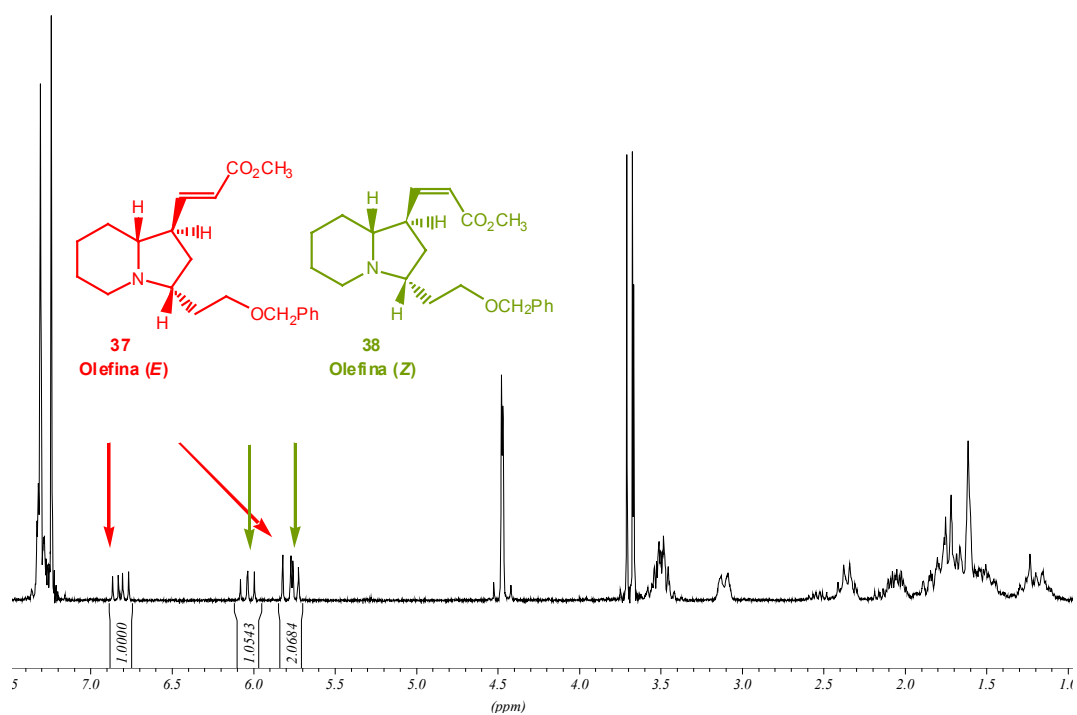
DEPT (62.5 MHz, CDCl₃) de 37



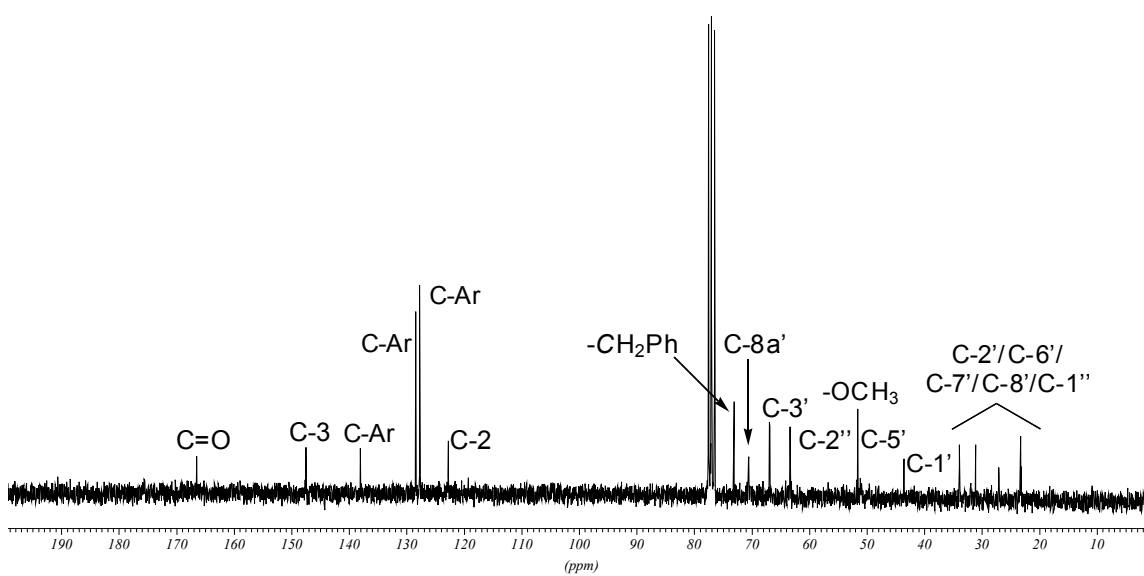
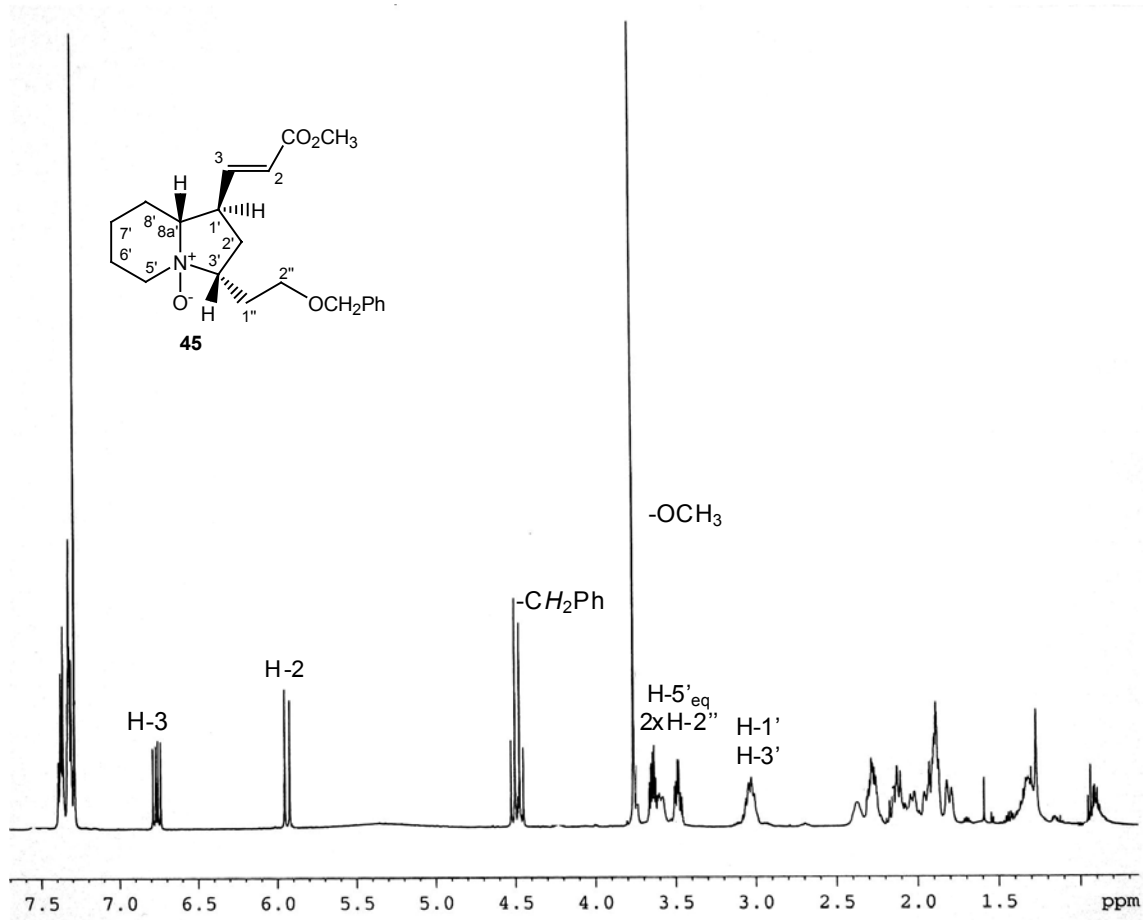
COSY (250 MHz, CDCl₃) de 37

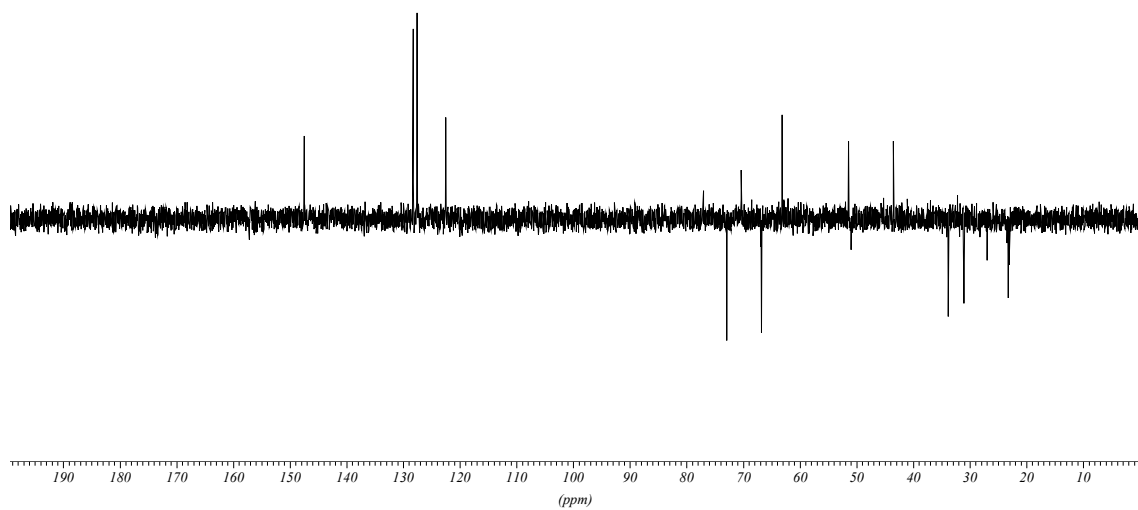


Correlació $^1\text{H}/^{13}\text{C}$ (250 MHz, CDCl_3) de **37**

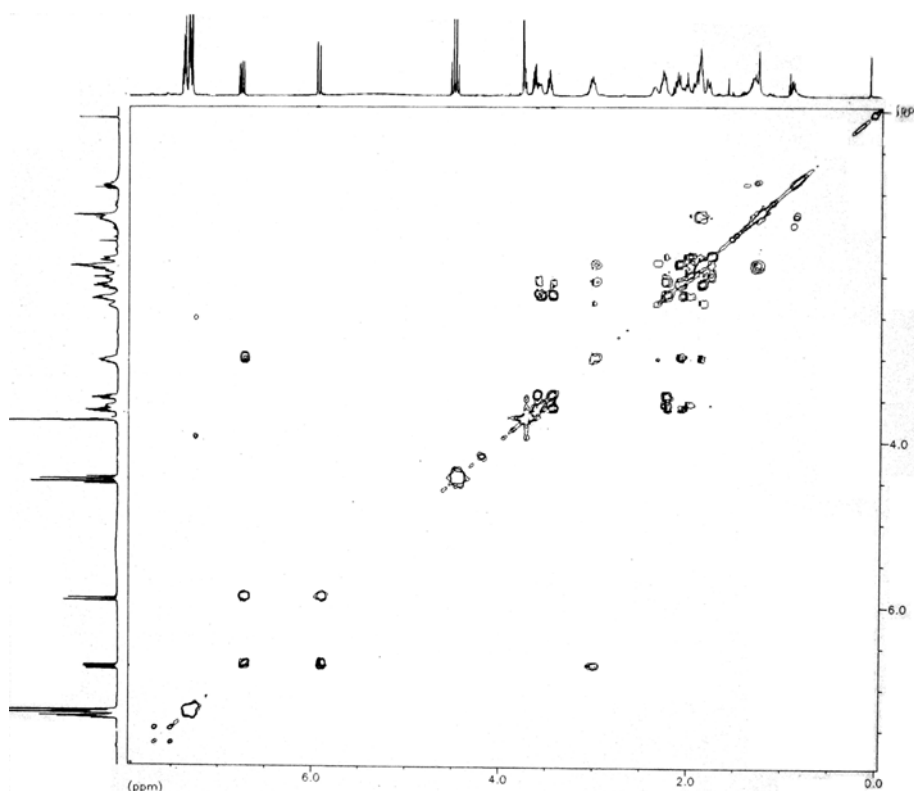


^1H -RMN (250 MHz, CDCl_3) d'una barreja 1/1 de **37** i **38**

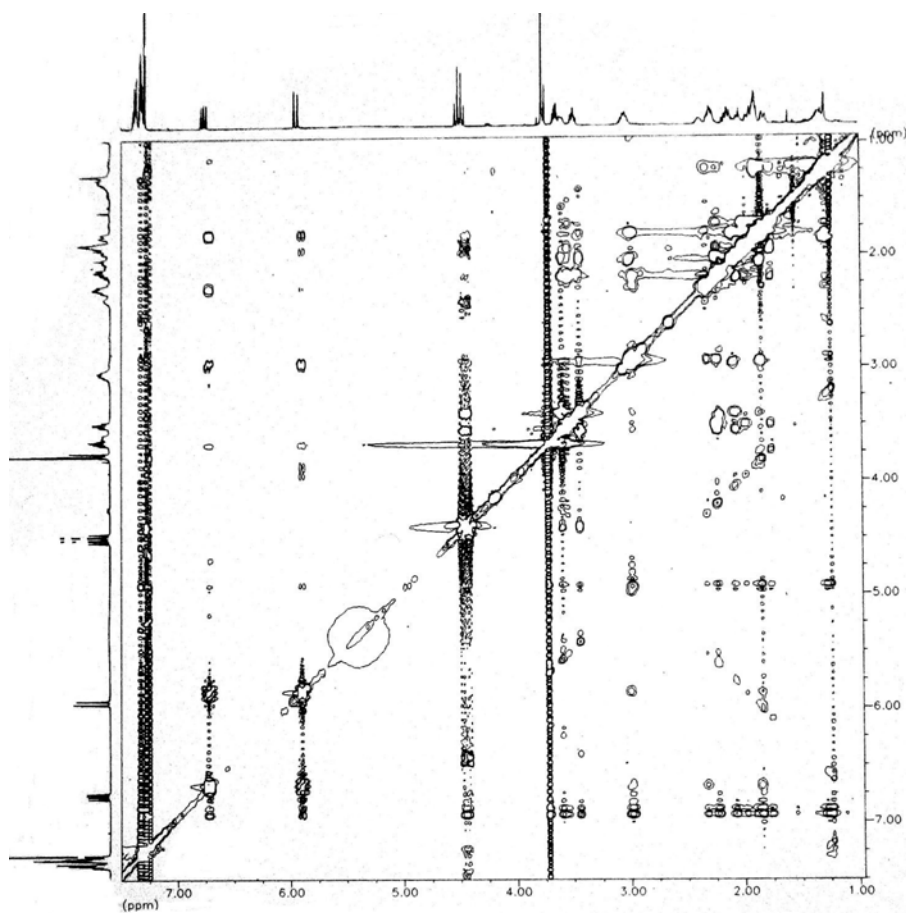




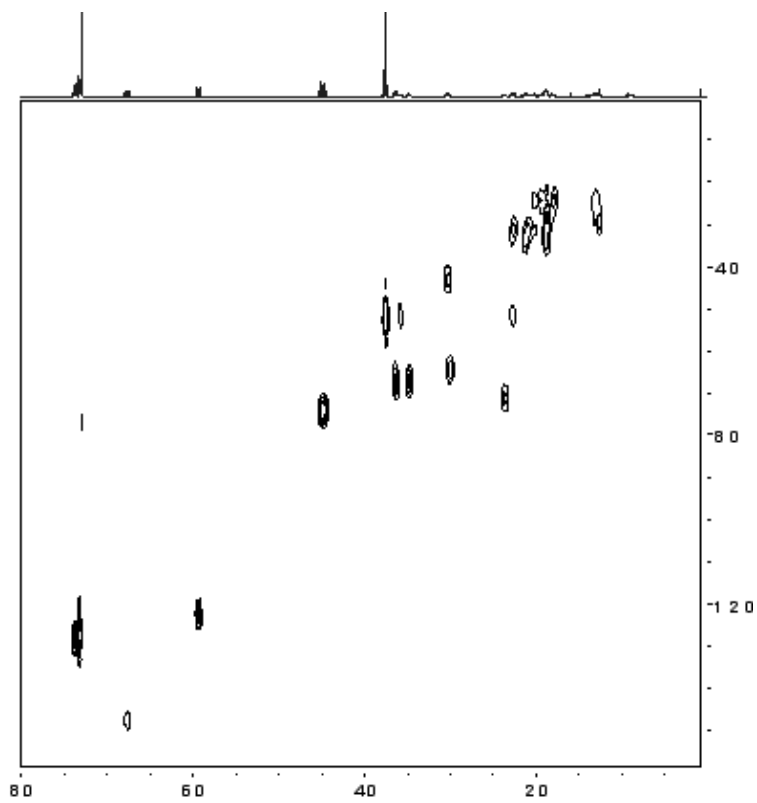
DEPT (62.5 MHz, CDCl_3) de 45



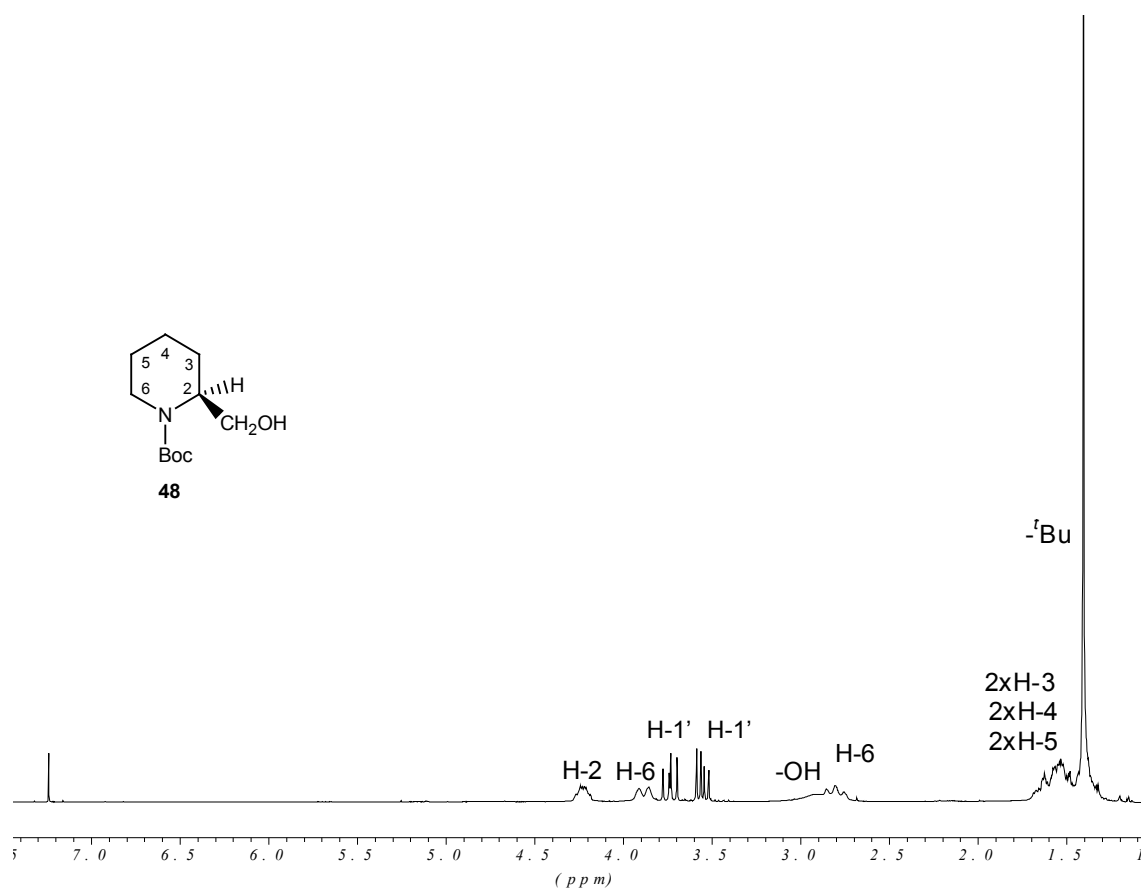
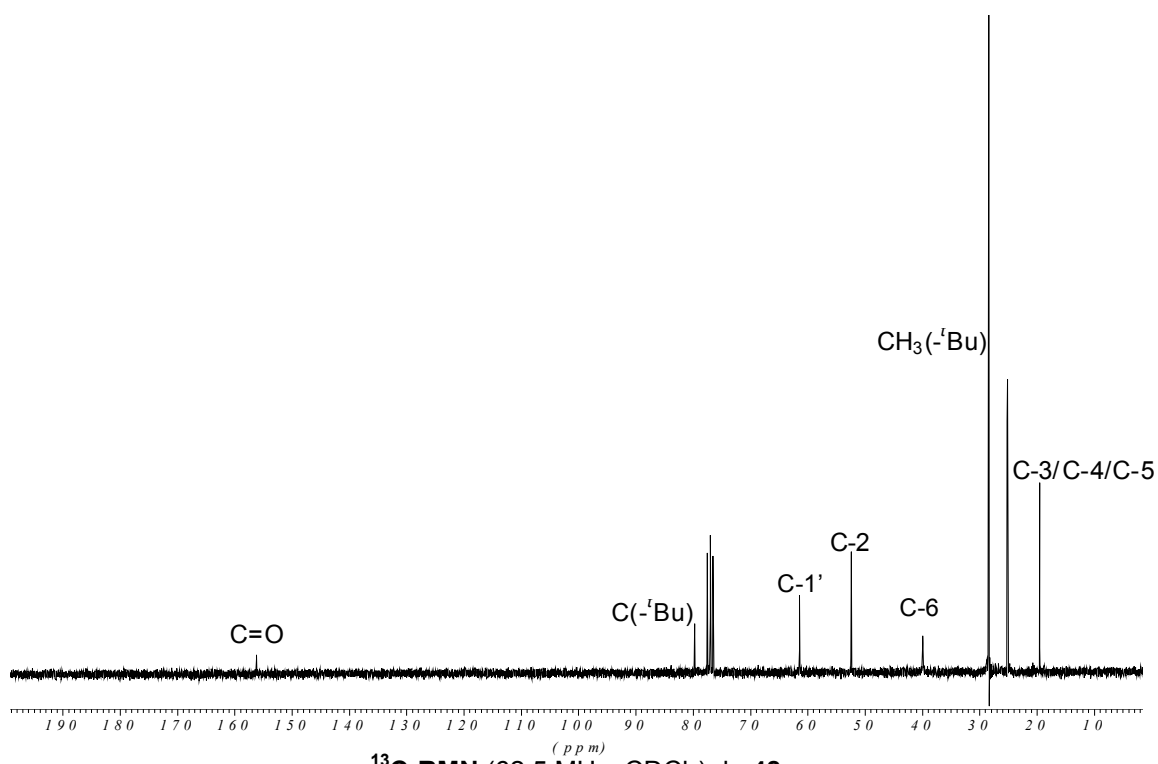
COSY (500 MHz, CDCl_3) de 45

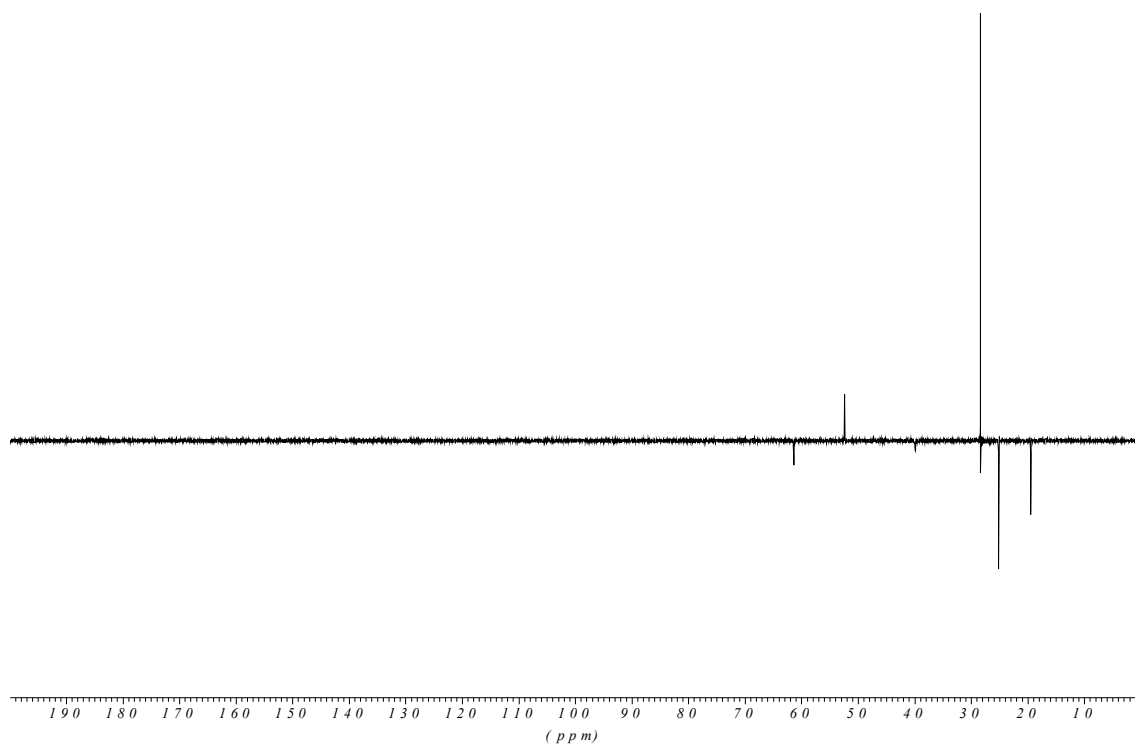


NOESY (500 MHz, CDCl₃) de 45

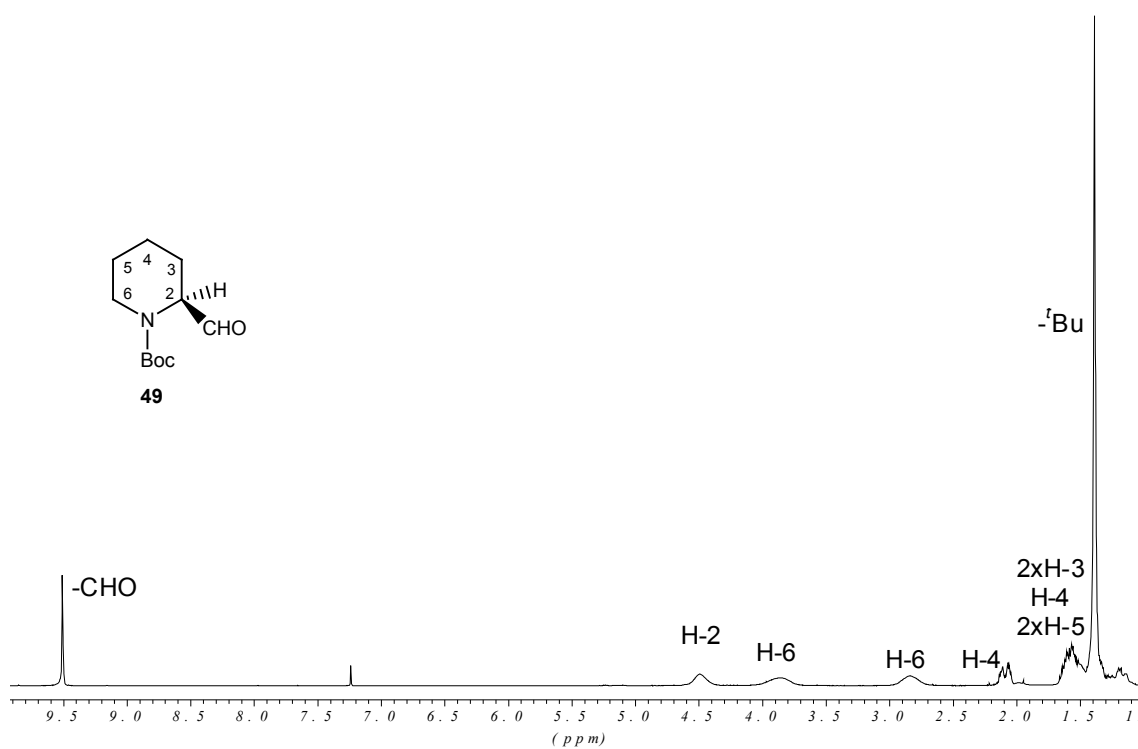


Correlació ¹H/¹³C (500 MHz, CDCl₃) de 45

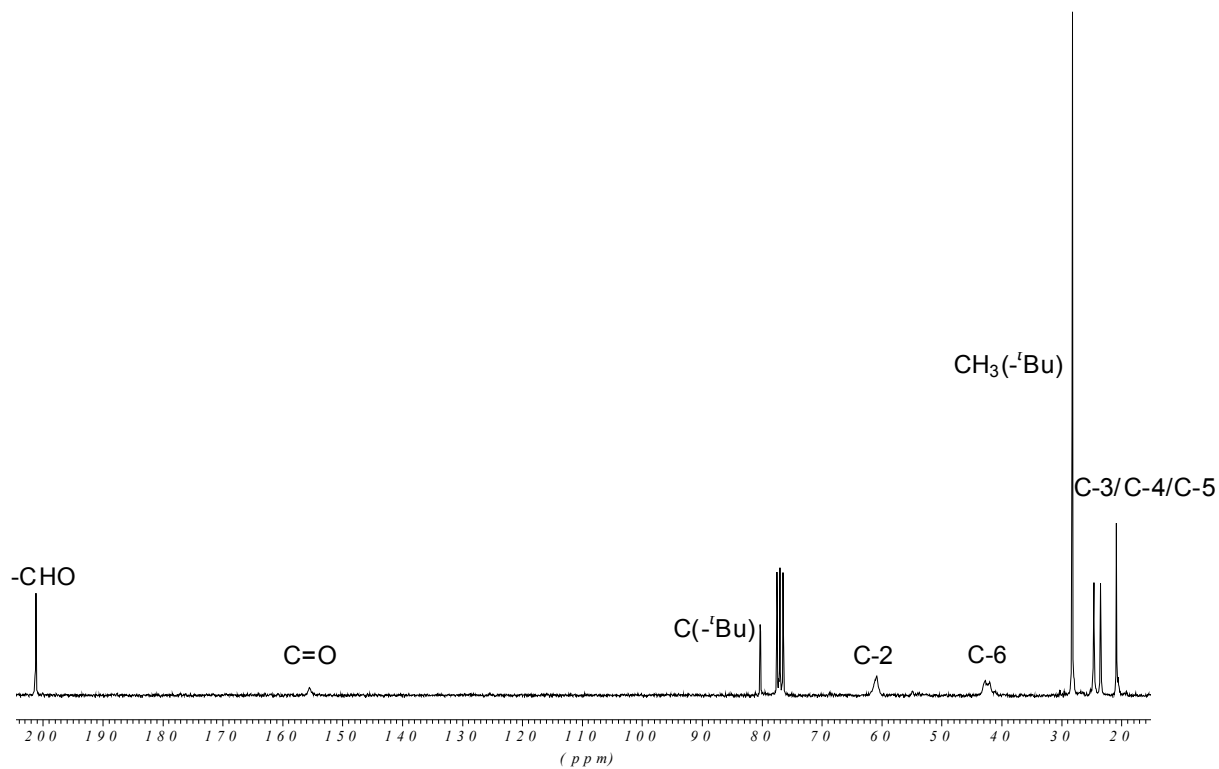
ESPECTRES RUTA B $^1\text{H-NMR}$ (250 MHz, CDCl_3) de **48** $^{13}\text{C-NMR}$ (62.5 MHz, CDCl_3) de **48**



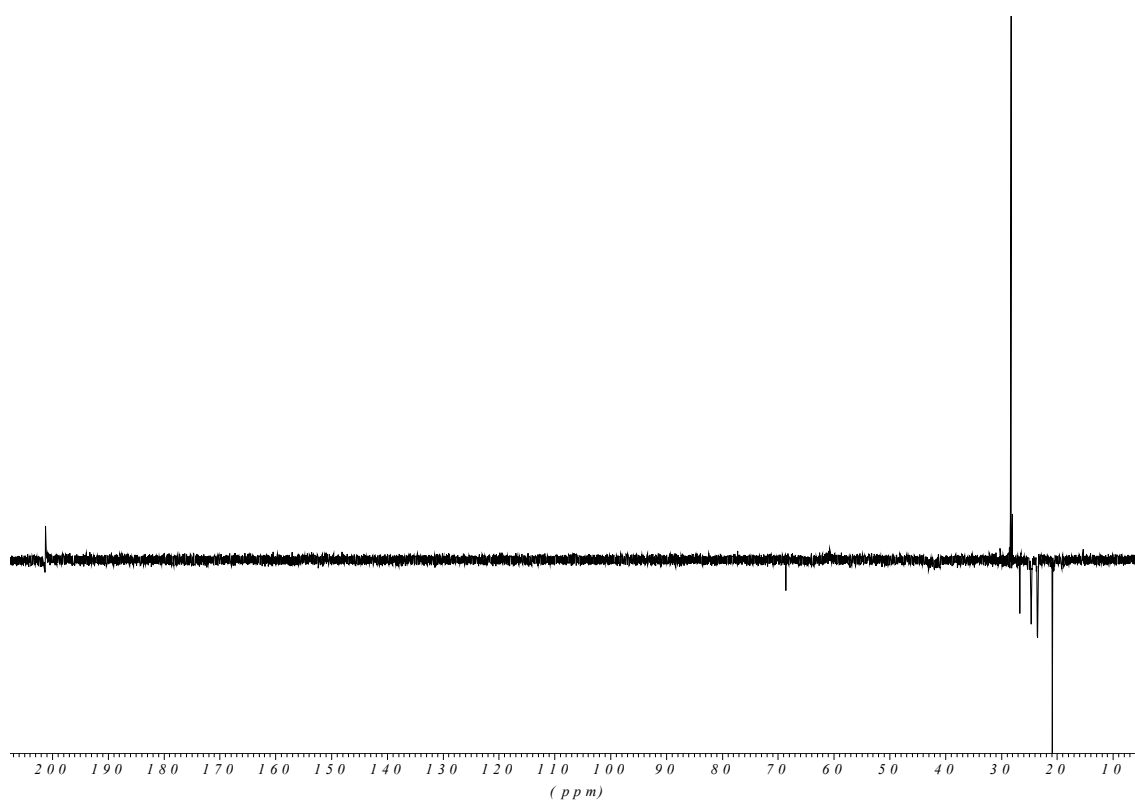
DEPT (62.5 MHz, CDCl_3) de **48**



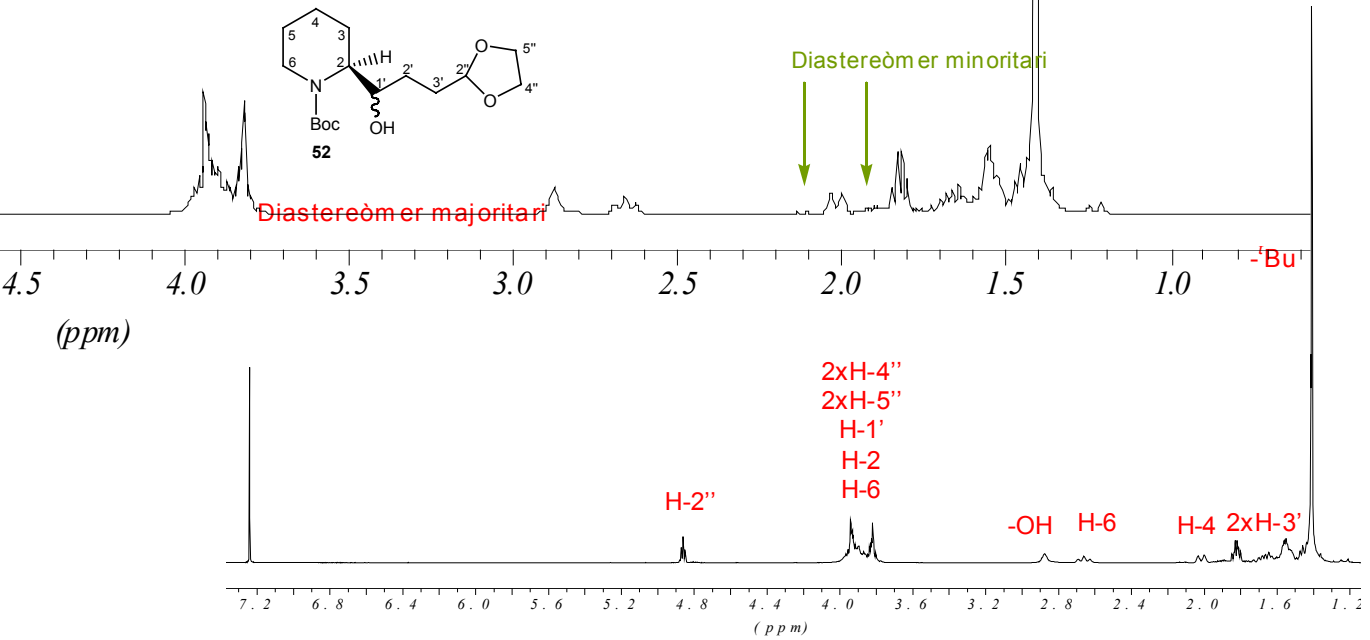
^1H -RMN (250 MHz, CDCl_3) de **49**



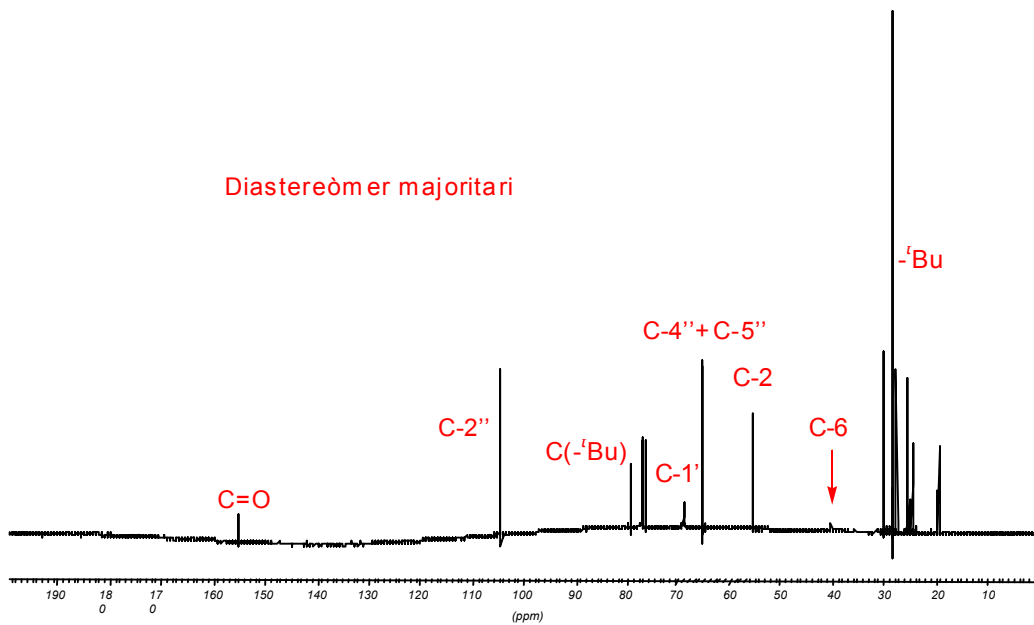
^{13}C -RMN (62.5 MHz, CDCl_3) de **49**



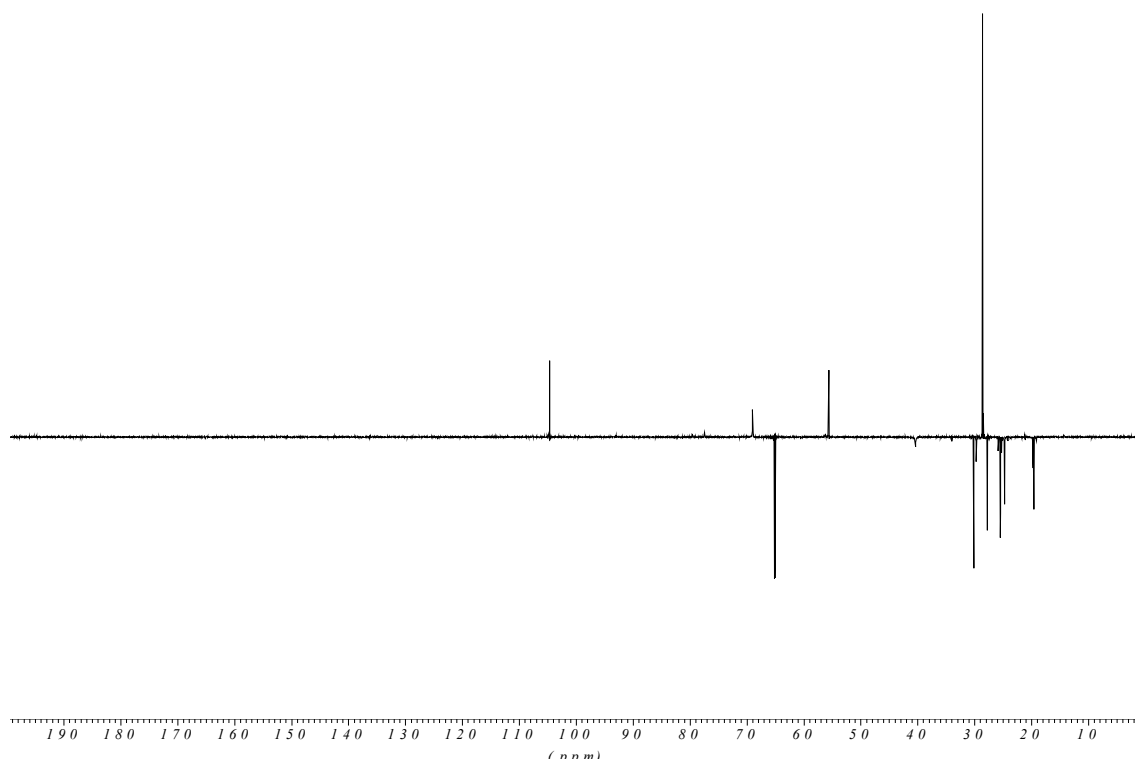
DEPT (62.5 MHz, CDCl_3) de **49**



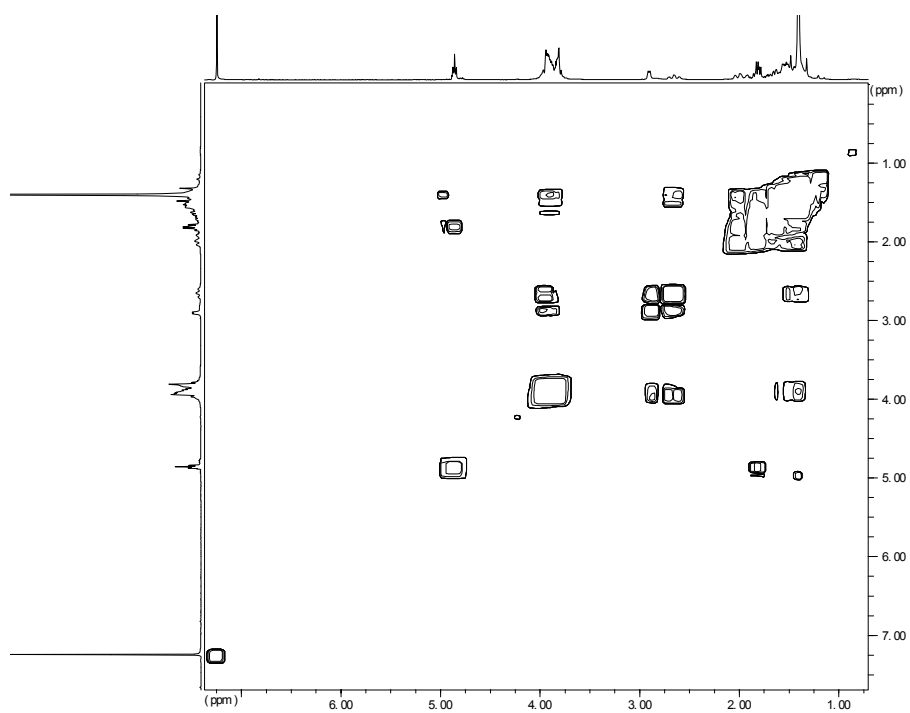
$^1\text{H-RMN}$ (400 MHz, CDCl_3) d'una barreja 10/1 dels dos diastereòmers de **52**



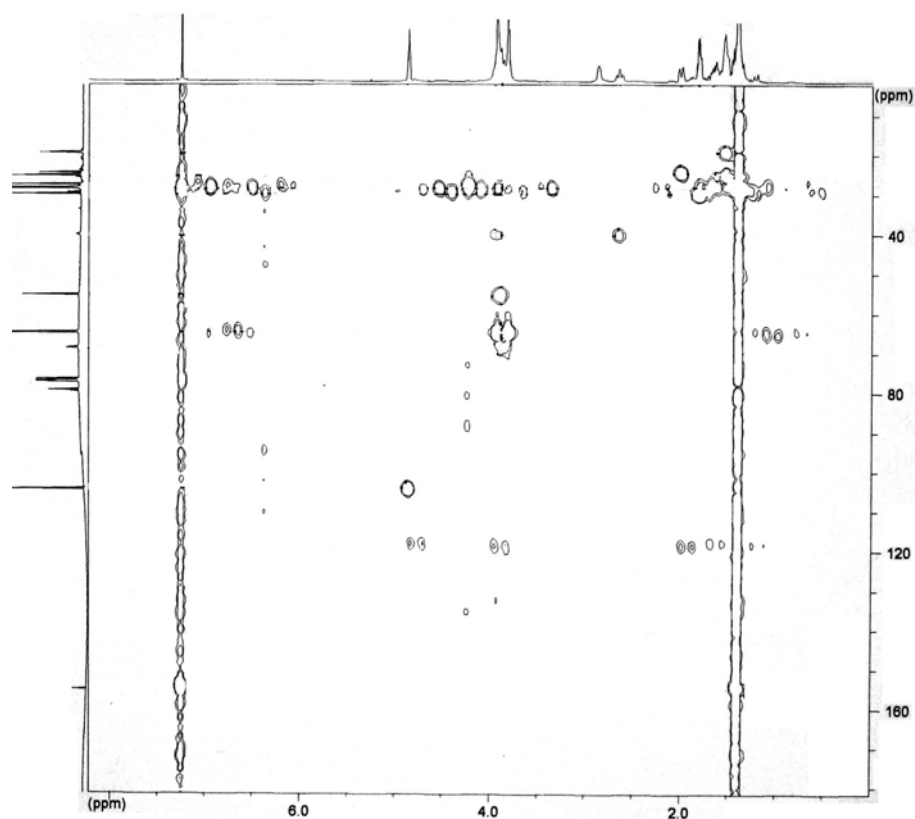
$^{13}\text{C-RMN}$ (100 MHz, CDCl_3) d'una barreja 10/1 dels dos diastereòmers de **52**



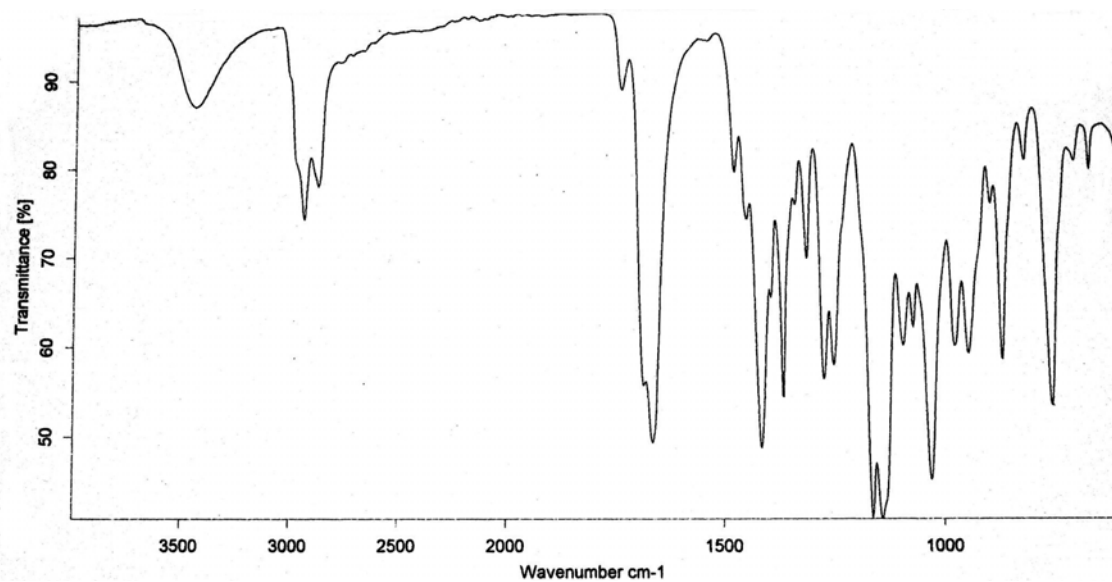
DEPT (100 MHz, CDCl_3) d'una barreja 10/1 dels dos diastereòmers de **52**



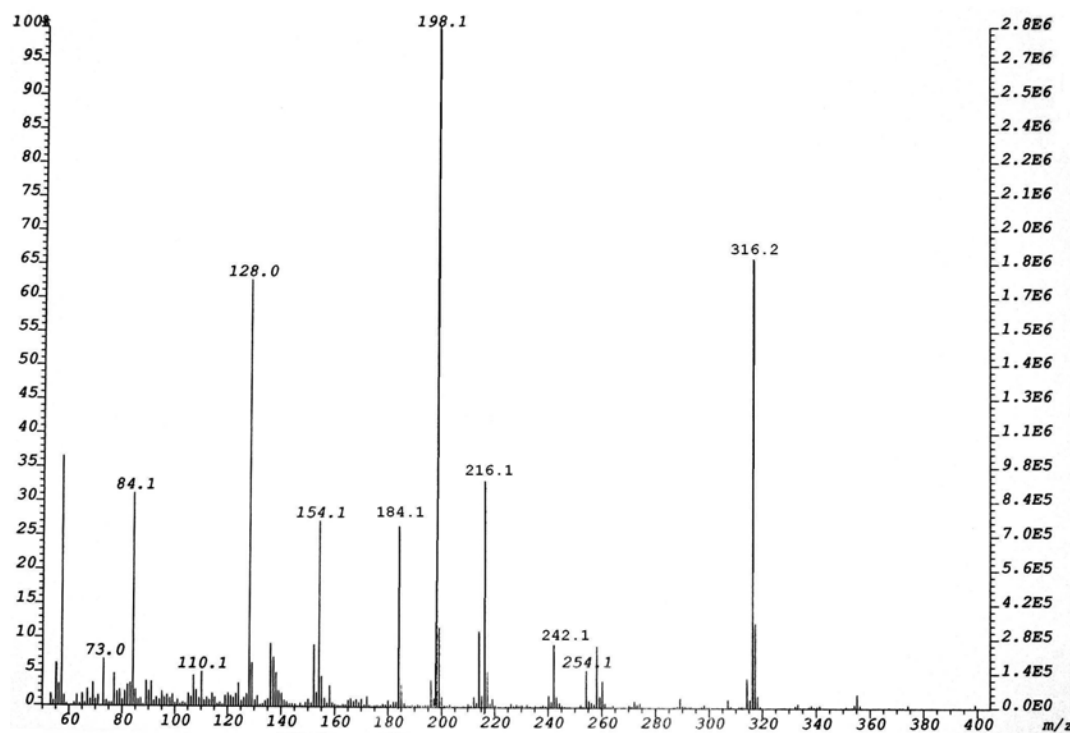
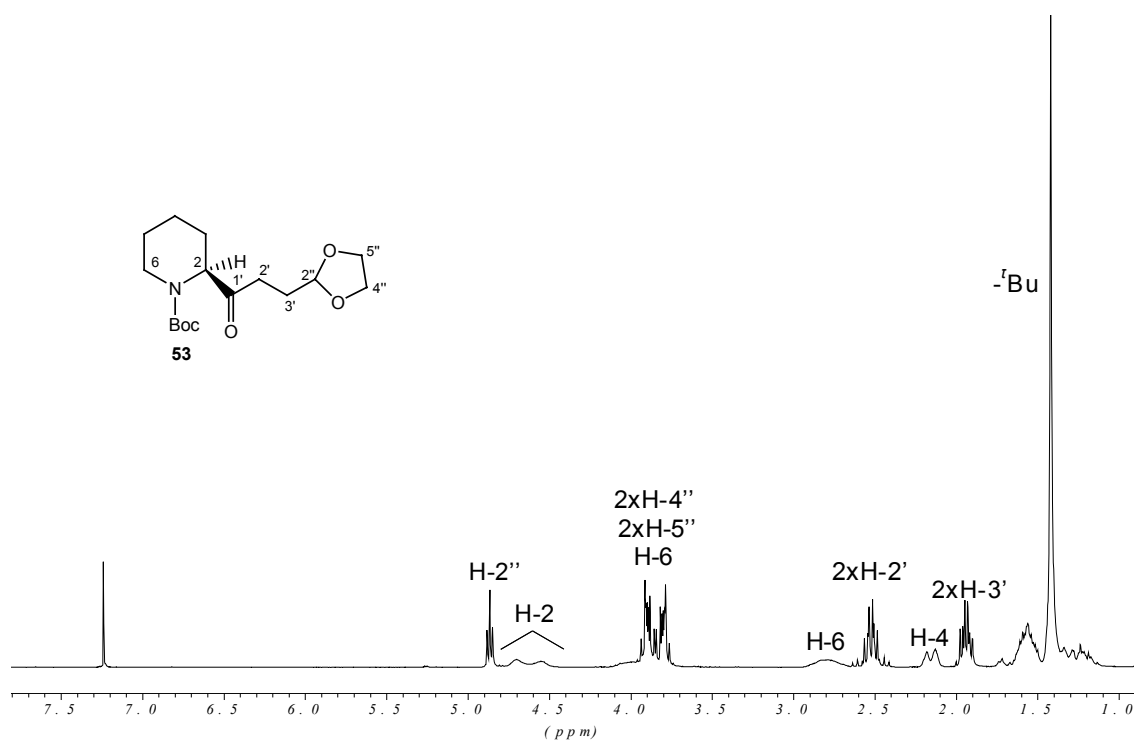
COSY (400 MHz, CDCl_3) d'una barreja 10/1 dels dos diastereòmers de **52**

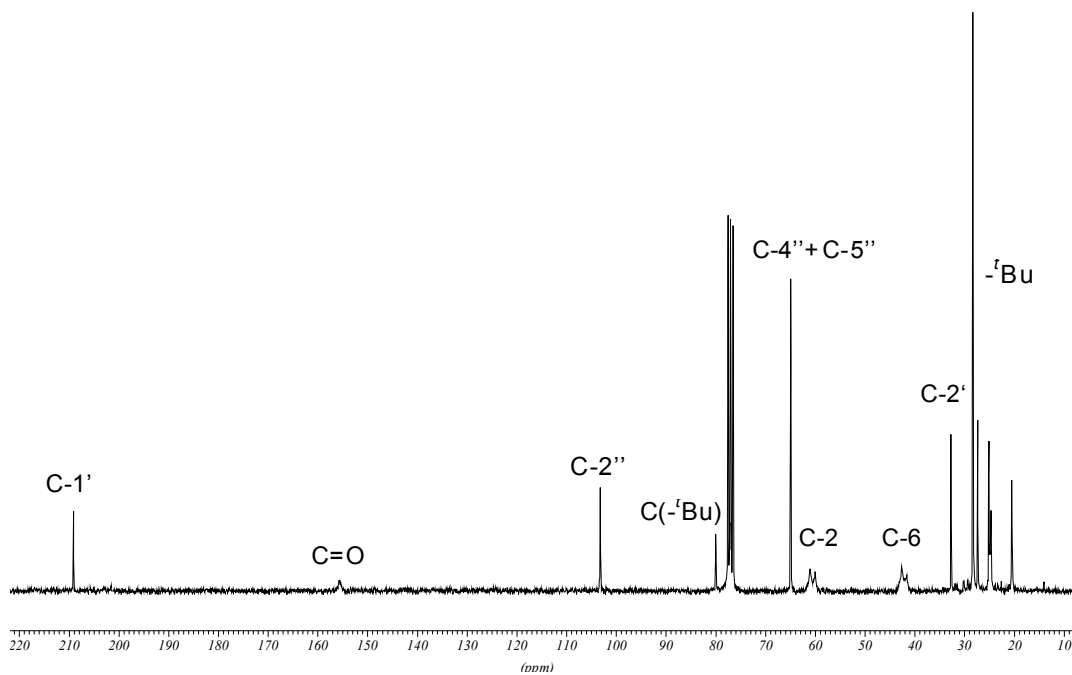


Correlació $^1\text{H}/^{13}\text{C}$ (400 MHz, CDCl_3) d'una barreja 10/1 dels dos diastereòmers de **52**

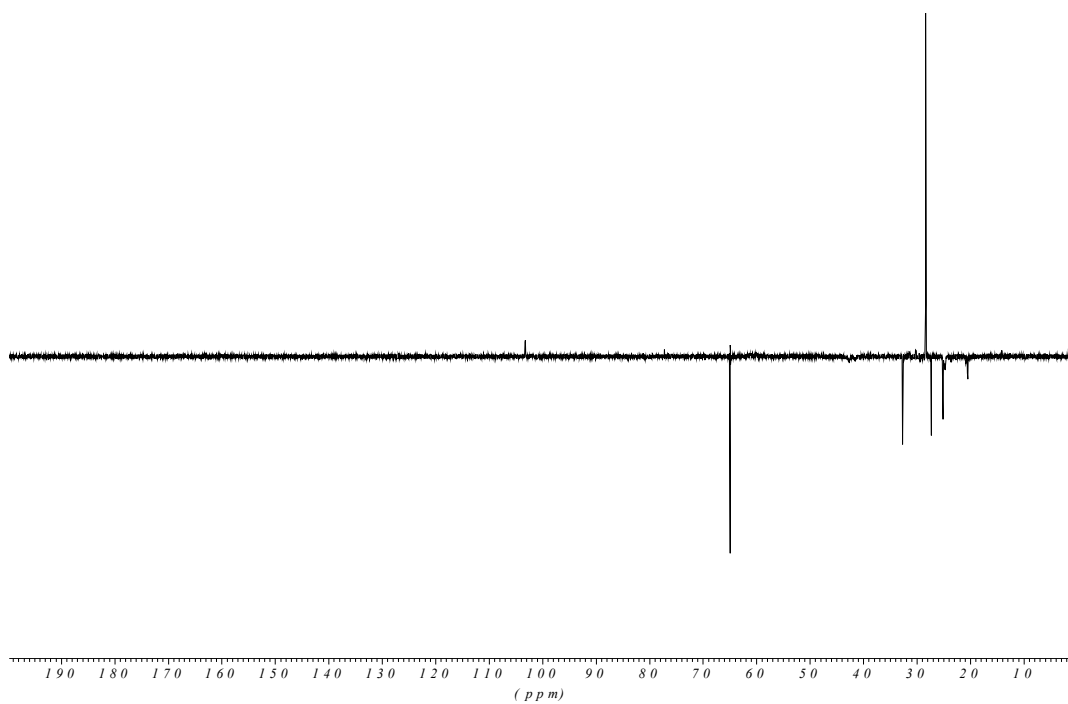


IR (ATR) d'una barreja 10/1 dels dos diastereòmers de **52**

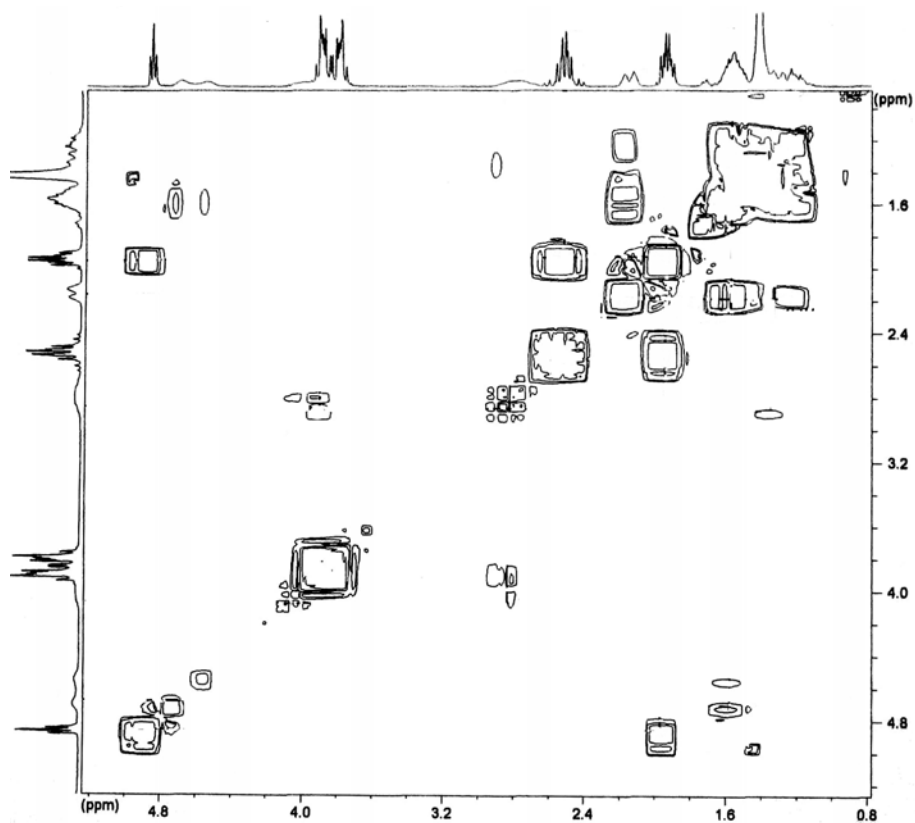
EM d'una barreja 10/1 dels dos diastereòmers de **52** $^1\text{H-RMN}$ (250 MHz, CDCl_3) de **53**



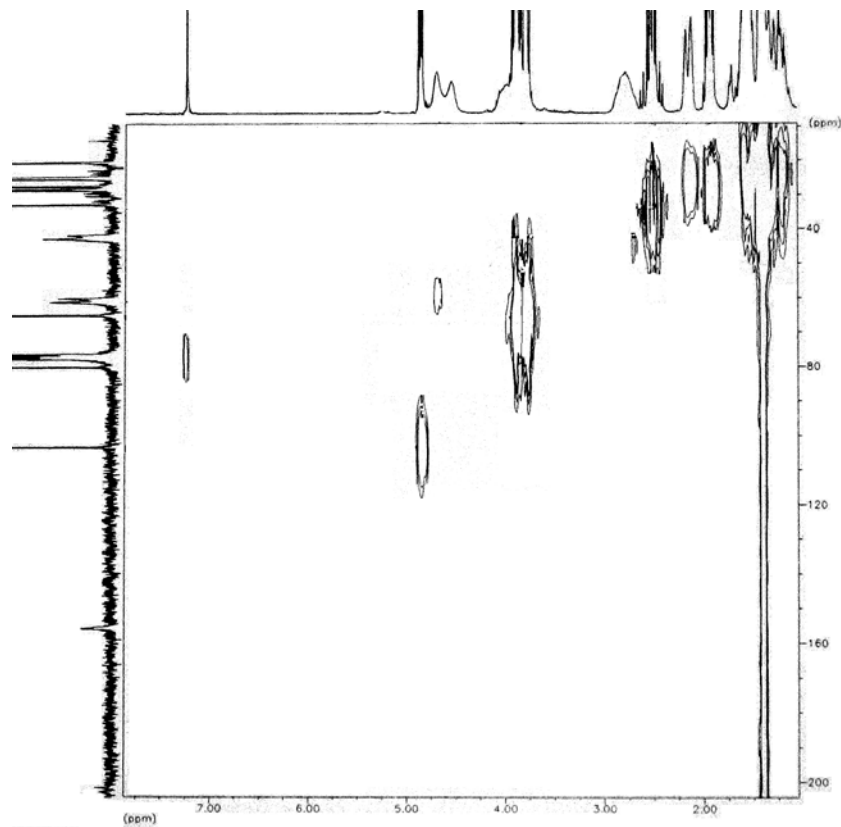
^{13}C -RMN (62.5 MHz, CDCl_3) de 53



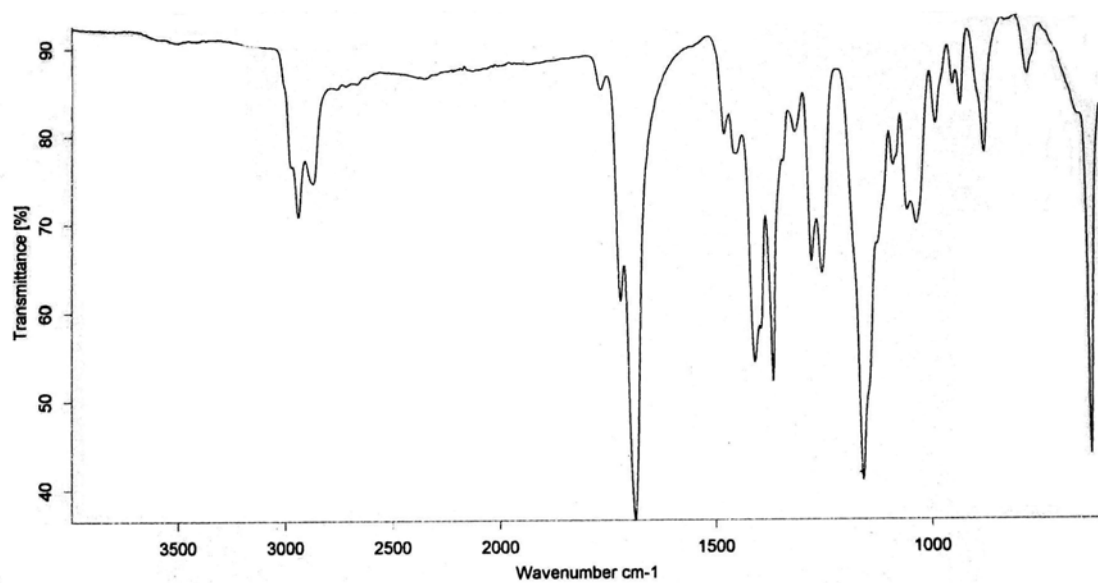
DEPT (62.5 MHz, CDCl_3) de 53



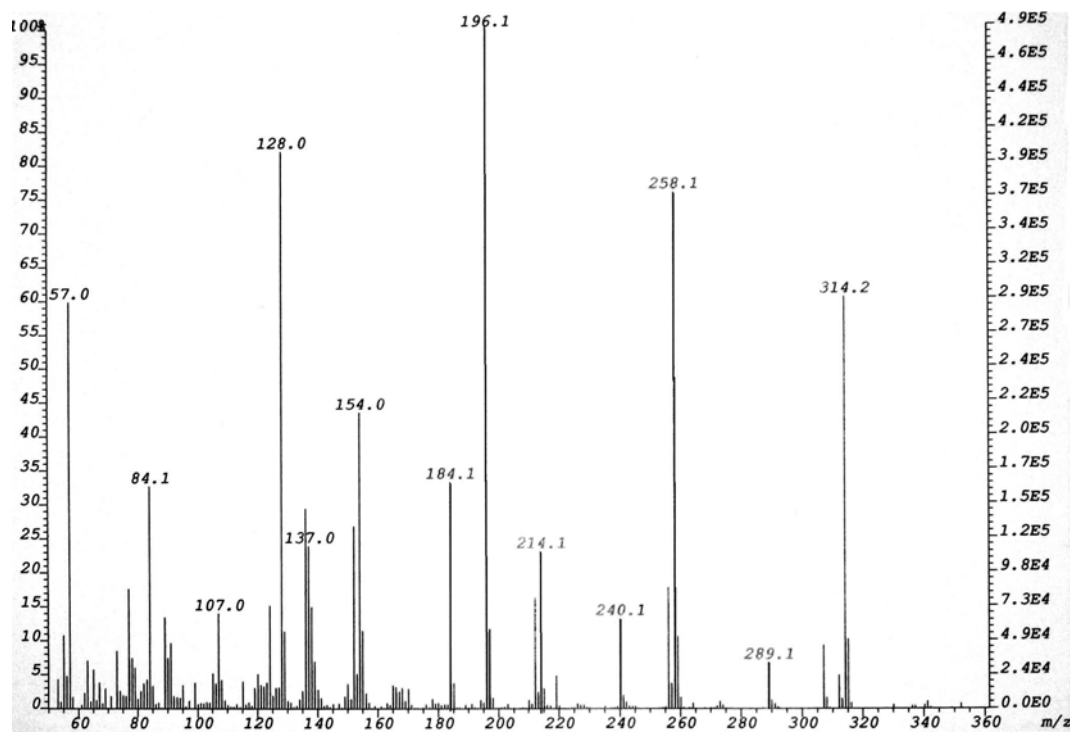
COSY (250 MHz, CDCl₃) de 53



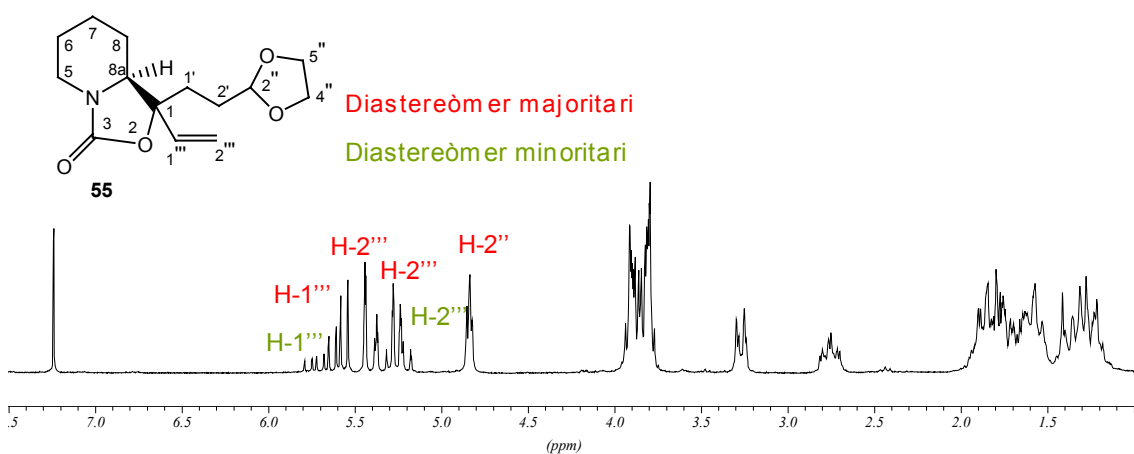
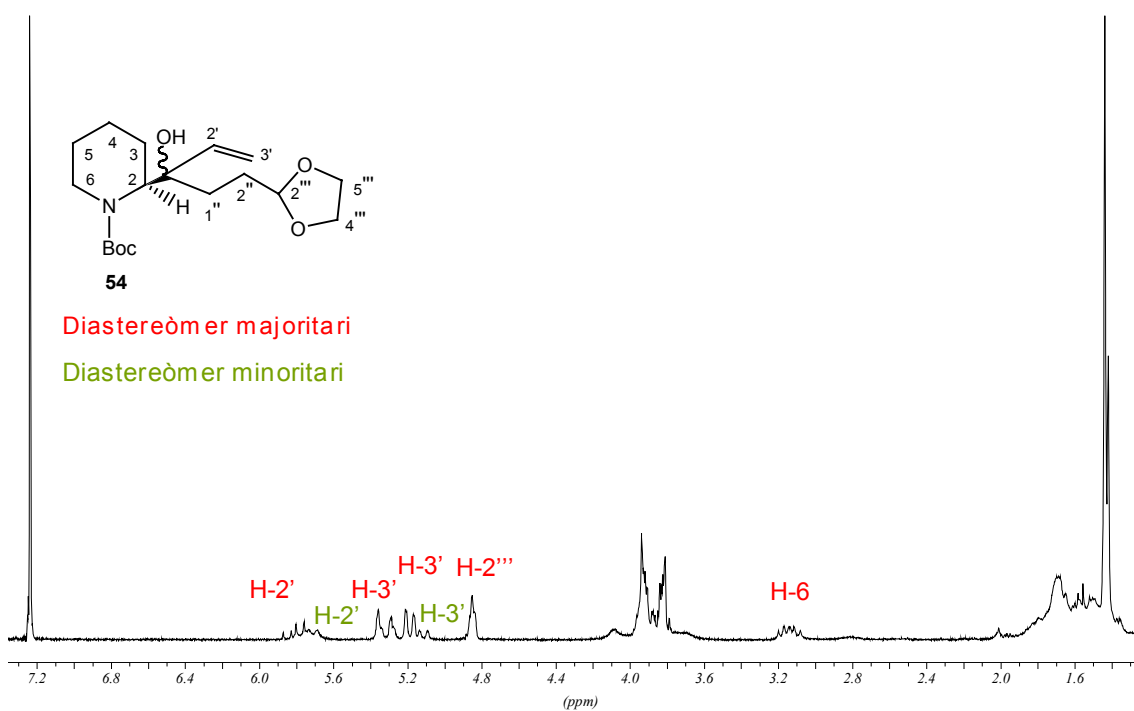
Correlació ¹H/¹³C (250 MHz, CDCl₃) de 53

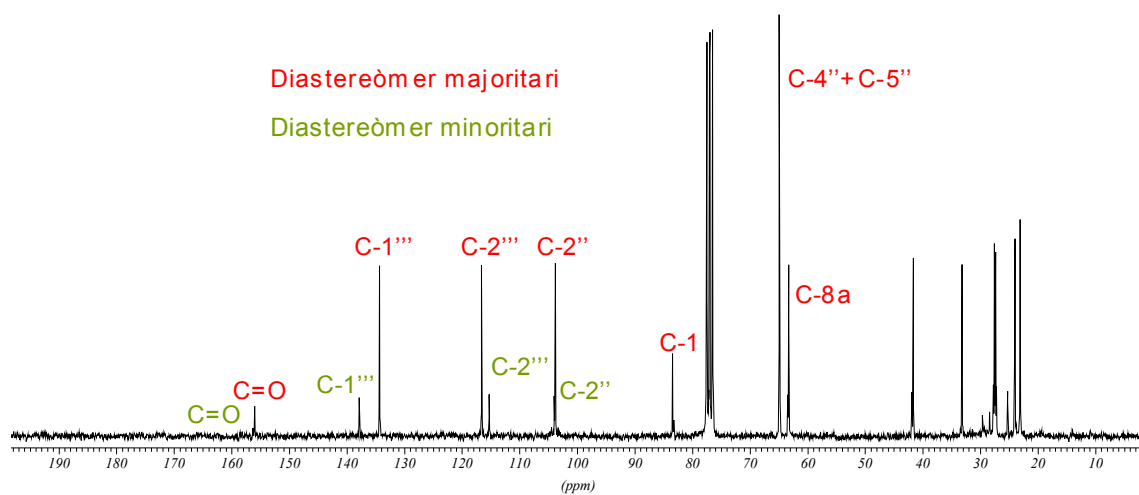


IR (ATR) de 53

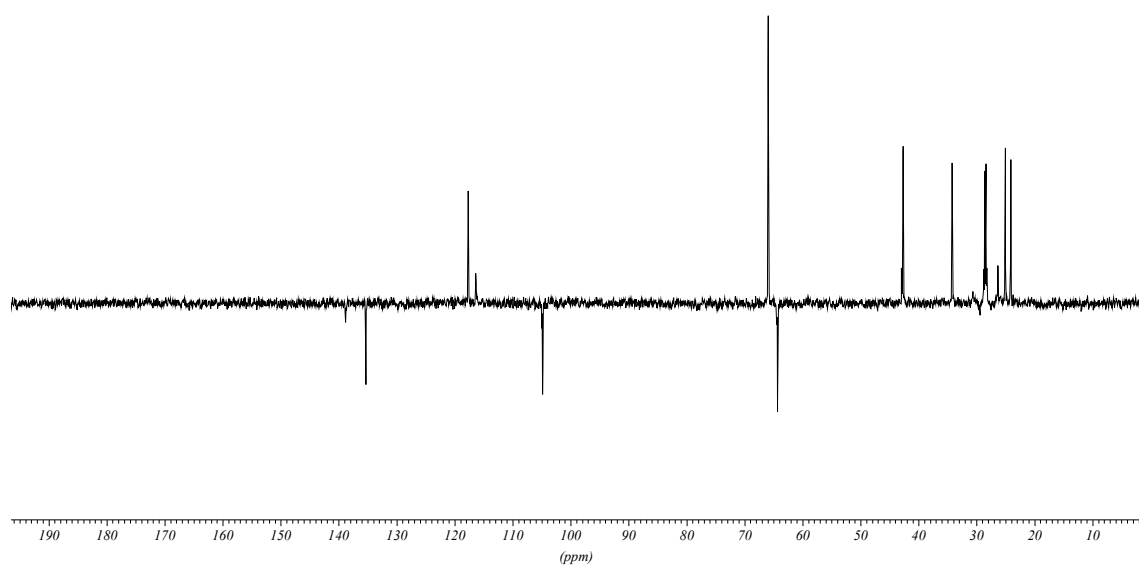


EM de 53

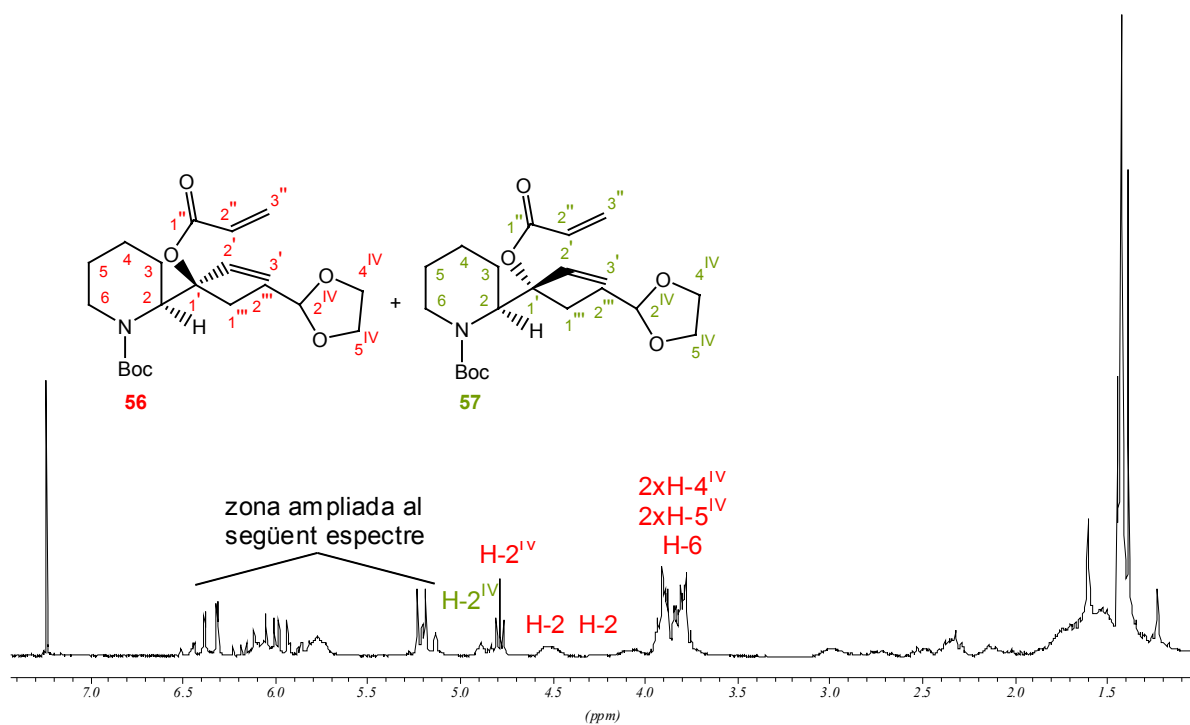




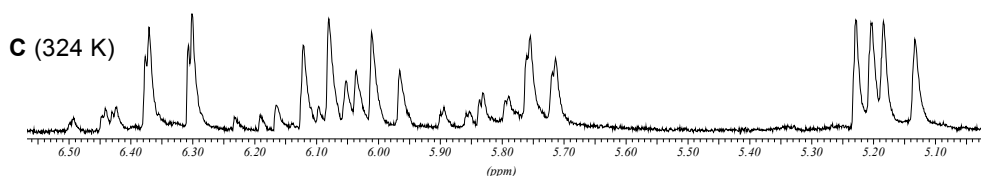
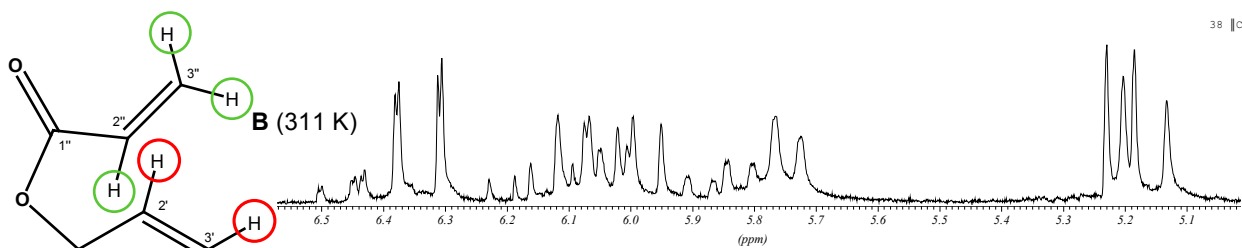
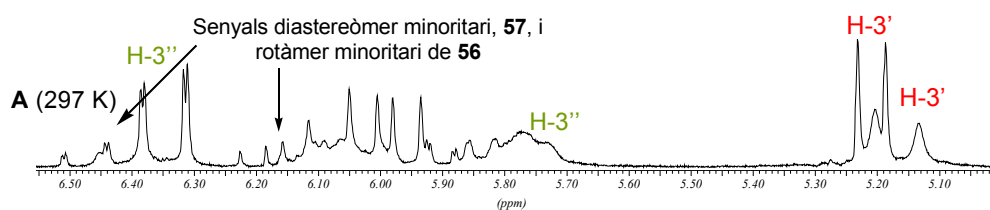
¹³C-RMN (62.5 MHz, CDCl₃) d'una barreja 6/1 dels dos diastereòmers de **55**



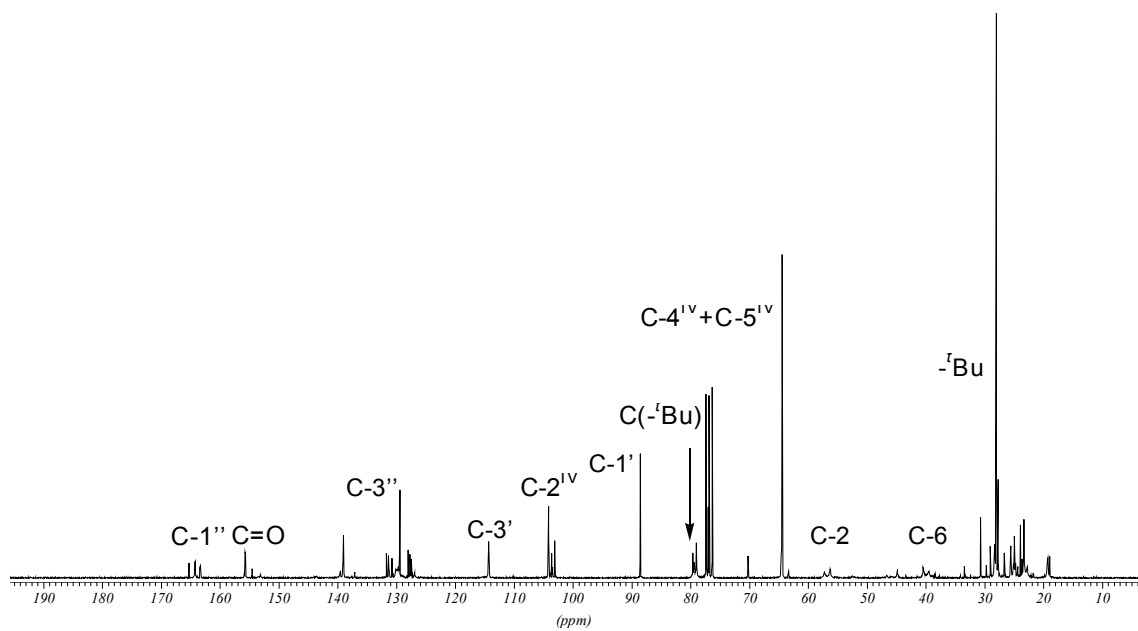
DEPT (62.5 MHz, CDCl₃) d'una barreja 6/1 dels dos diastereòmers de **55**



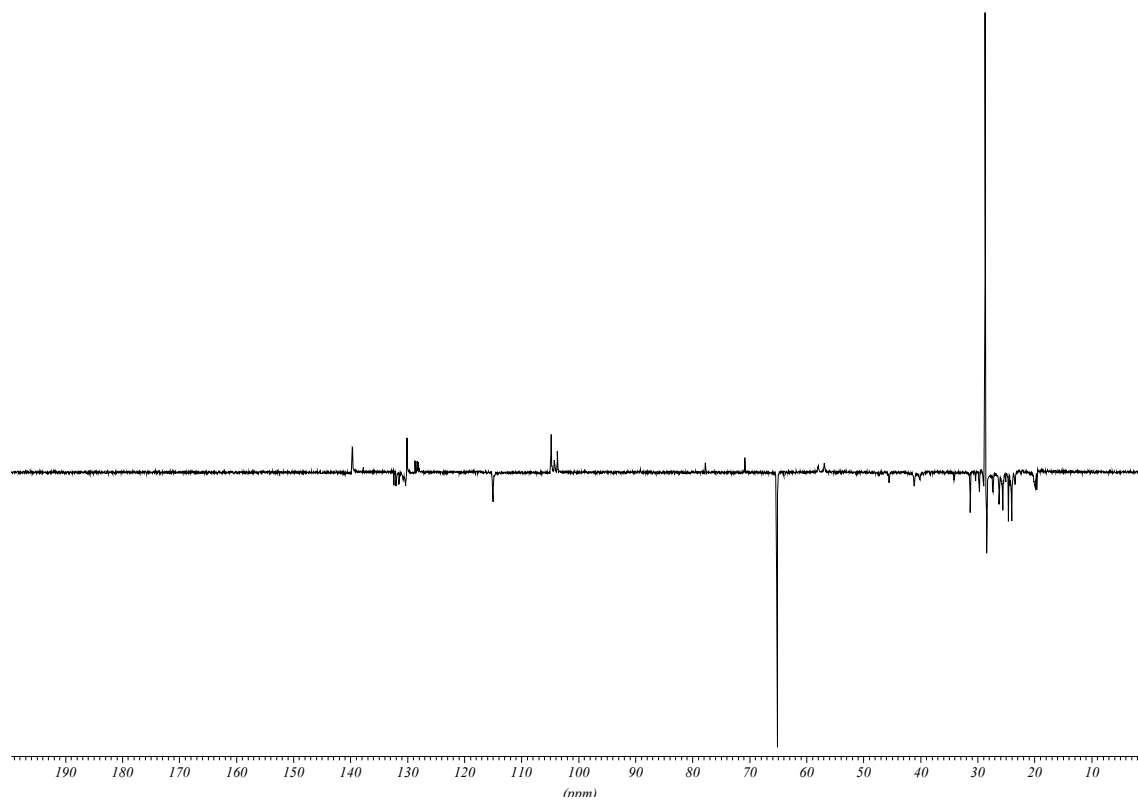
¹H-RMN (250 MHz, CDCl₃) d'una barreja 6/1 de **56** i **57** a 297 K



¹H-RMN (250 MHz, CDCl₃) d'una barreja 6/1 de **56** i **57** a diferents temperatures (zona compresa entre 6.5 i 5.0 ppm)



¹³C-RMN (62.5 MHz, CDCl₃) d'una barreja 6/1 de **56** i **57** a 297 K



DEPT (62.5 MHz, CDCl₃) d'una barreja 6/1 de **56** i **57** a 297 K