

Novas Saponinas Triterpênicas de Mandacaru (*Cereus jamacaru*)

Novel Triterpene Saponins from Mandacaru (*Cereus jamacaru*)

Analu F. de S. Brito,^a Thalisson A. de Souza,^a Laiane C. O. Pereira,^a César A. G. Dantas,^a Yuri M. do Nascimento,^a Maria de F. Agra,^b Alecksandra V. de Lacerda,^c Raimundo Braz-filho,^e Marcelo S. da Silva,^a Josean F. Tavares,^{a,#} Lucas S. Abreu^{a,d,*}

^a Universidade Federal da Paraíba, Centro de Ciências da Saúde, Instituto de Pesquisa em Fármacos e Medicamentos, Via Ipê Amarelo, Cidade Universitária, Campus I, CEP 58050-585, João Pessoa - PB, Brasil

^b Universidade Federal da Paraíba, Centro de Biotecnologia, Departamento de Biotecnologia. Via Ipê Amarelo, Cidade Universitária, Campus I, CEP 58050-585, João Pessoa-PB, Brasil

^c Universidade Federal de Campina Grande, Centro de Desenvolvimento Sustentável do Semiárido, Unidade Acadêmica de Tecnologia do Desenvolvimento. Rua Francisco Braz, Frei Damião, CEP 58540-000, Sumé-PB, Brasil

^d Universidade Federal Fluminense, Instituto de Química, Departamento de Química Orgânica. Rua Outeiro de São João Batista, Campus do Valonguinho, Centro, CEP 24020-141, Niterói-RJ, Brasil

^e Universidade Federal Rural do Rio de Janeiro, Instituto de Química, Departamento de Química Orgânica. Rodovia BR 465, Km 07 - Zona Rural, CEP 23890-000, Seropédica-RJ, Brasil

***E-mail:** [*abreu_lucas@id.uff.br](mailto:abreu_lucas@id.uff.br); [#josean@ltf.ufpb.br](mailto:josean@ltf.ufpb.br)

Material Suplementar

Sumário

[illegible]

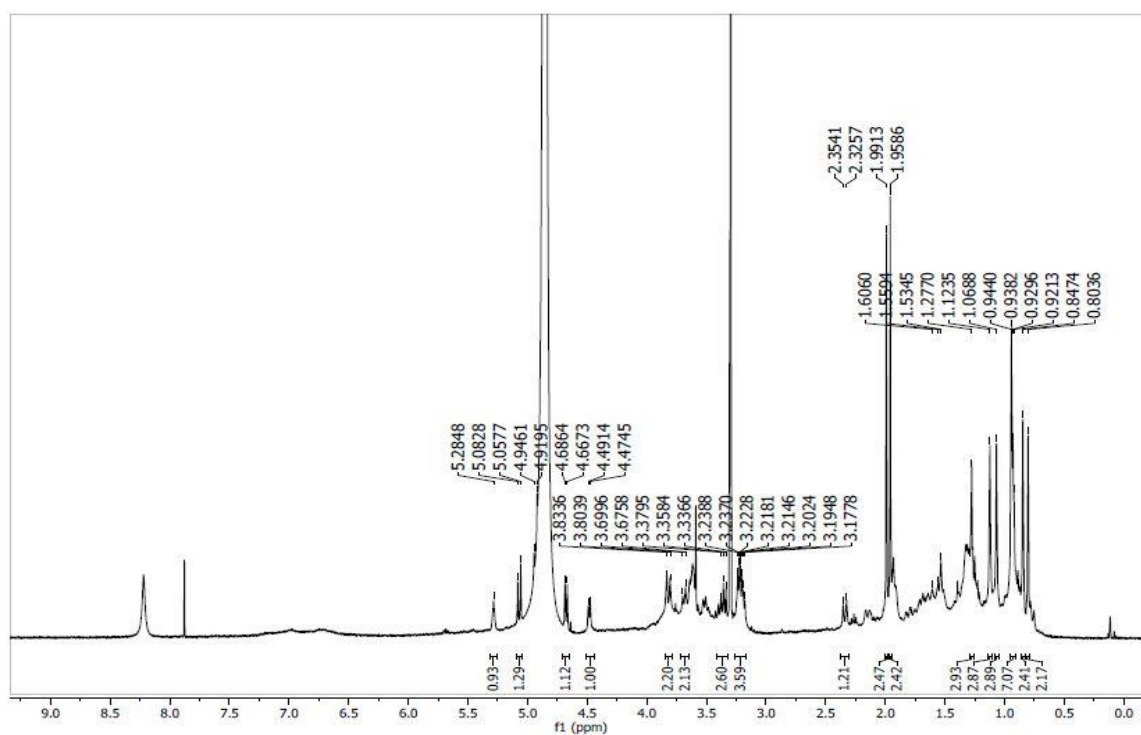


Figura 1. Espectro RMN de ^1H (400 MHz, CD_3OD) do composto 1.

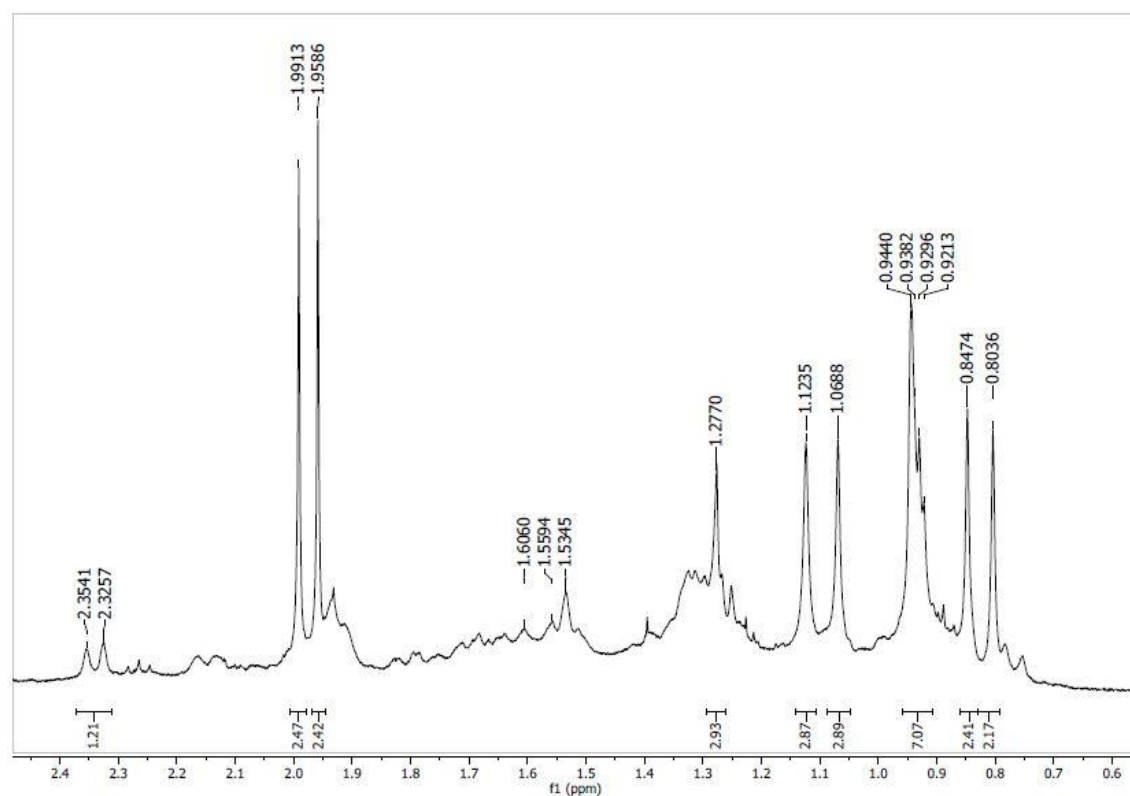


Figura 2. Expansão do espectro de RMN de ^1H (400 MHz, CD_3OD) do composto 1

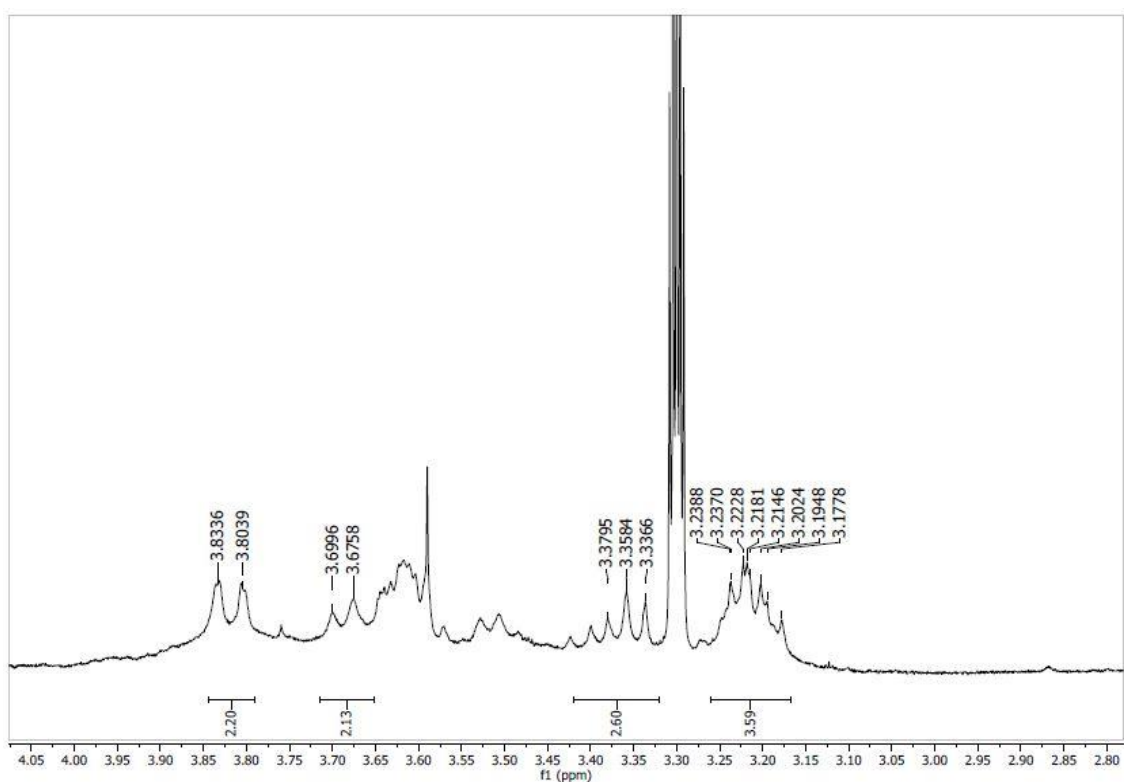


Figura 3. Expansão do espectro de RMN de ^1H (400 MHz, CD₃OD) do composto 1

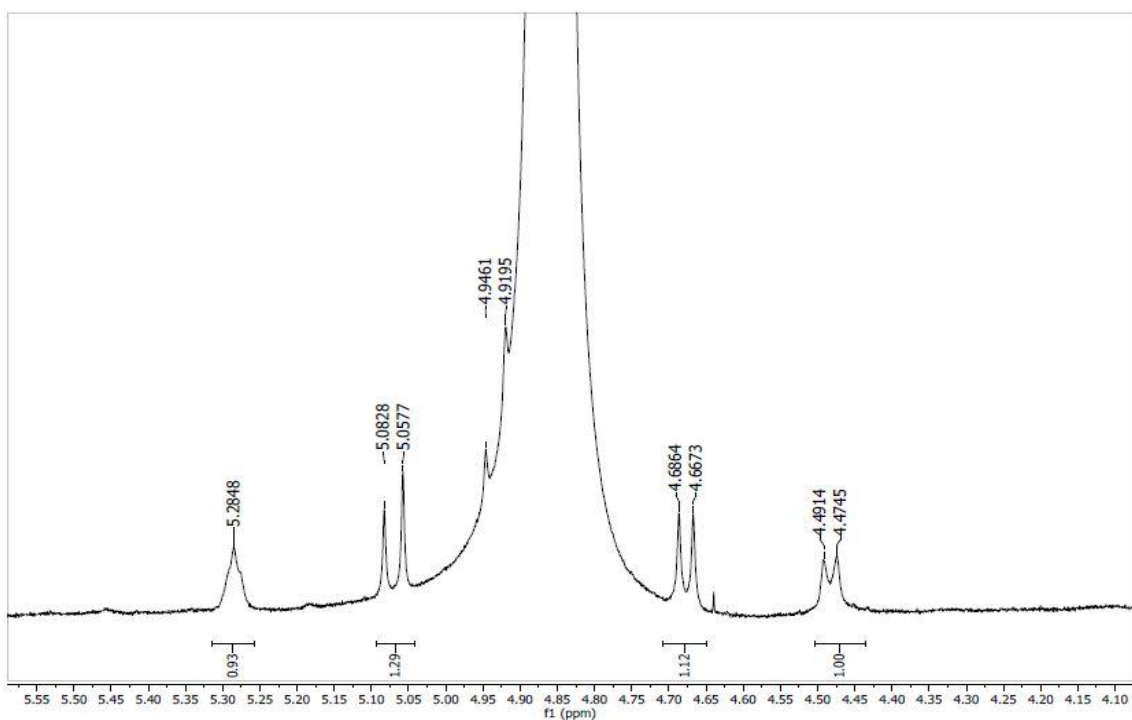


Figura 4. Expansão do espectro de RMN de ^1H (400 MHz, CD₃OD) do composto 1

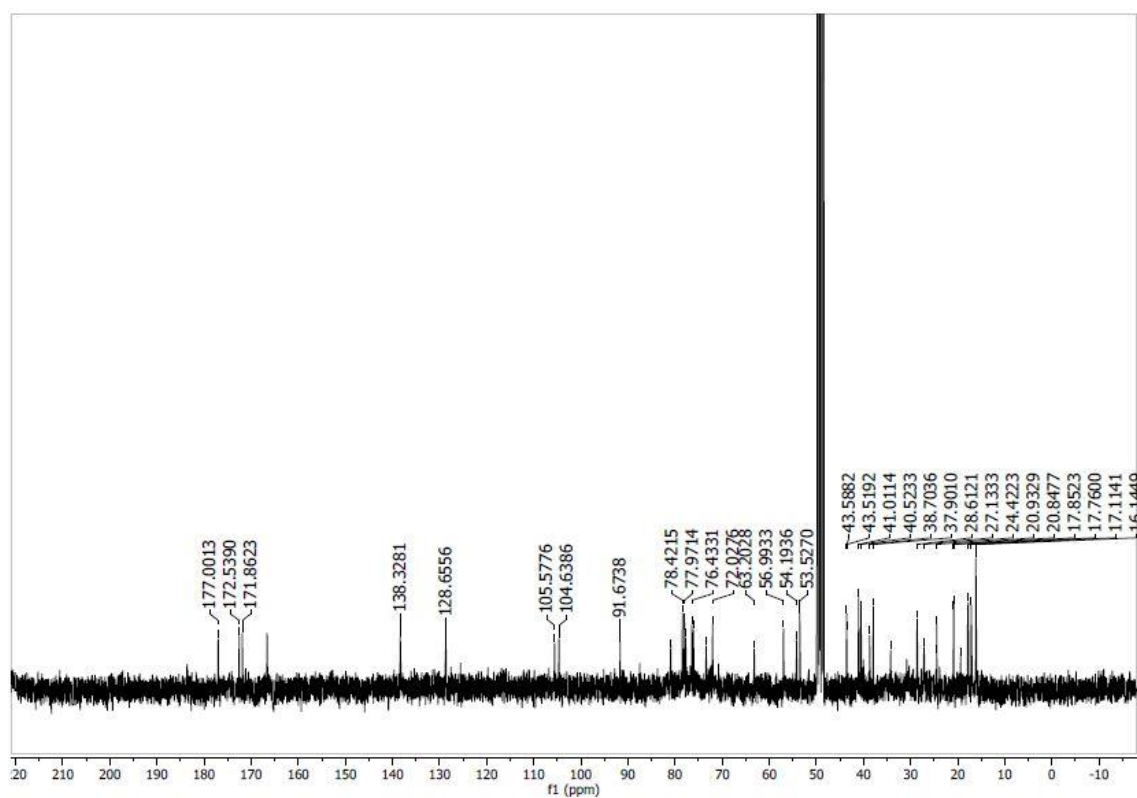


Figura 5. Espectro de RMN de ^{13}C (100 MHz, CD_3OD) do composto 1

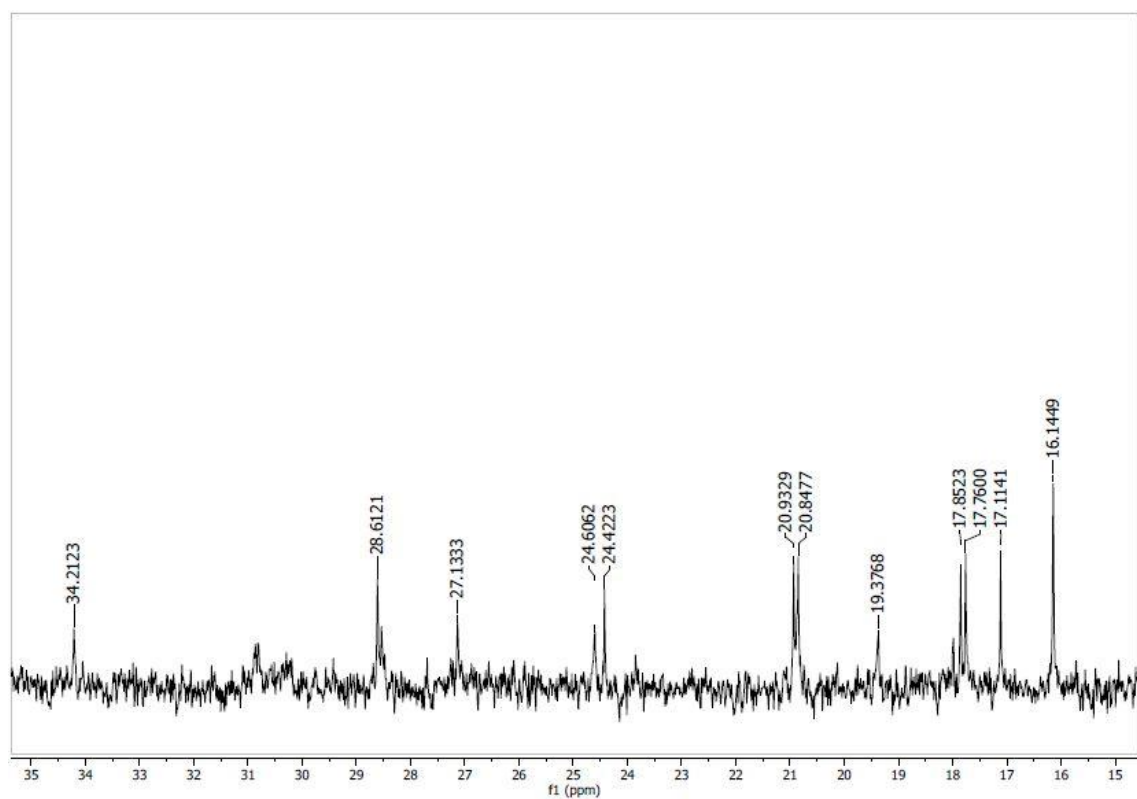


Figura 6. Expansão do espectro de RMN de ^{13}C (100 MHz, CD_3OD) do composto 1

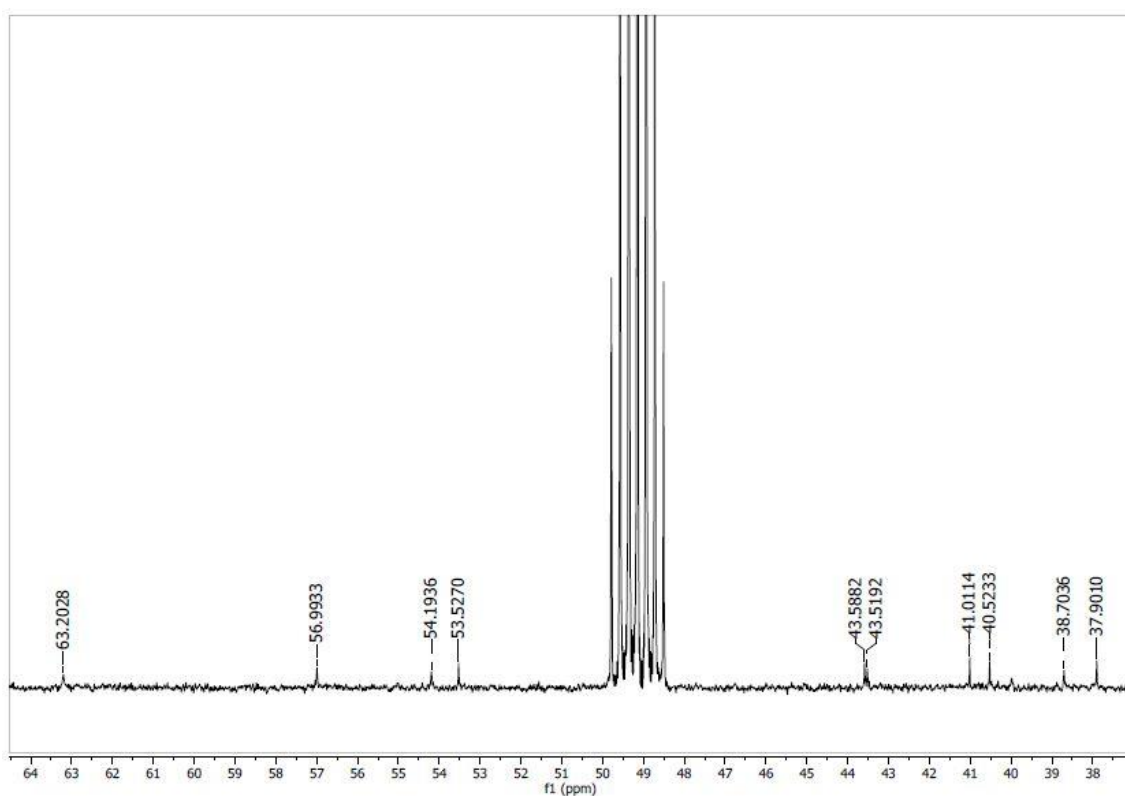


Figura 7. Expansão do espectro de RMN de ^{13}C (100 MHz, CD_3OD) do composto 1

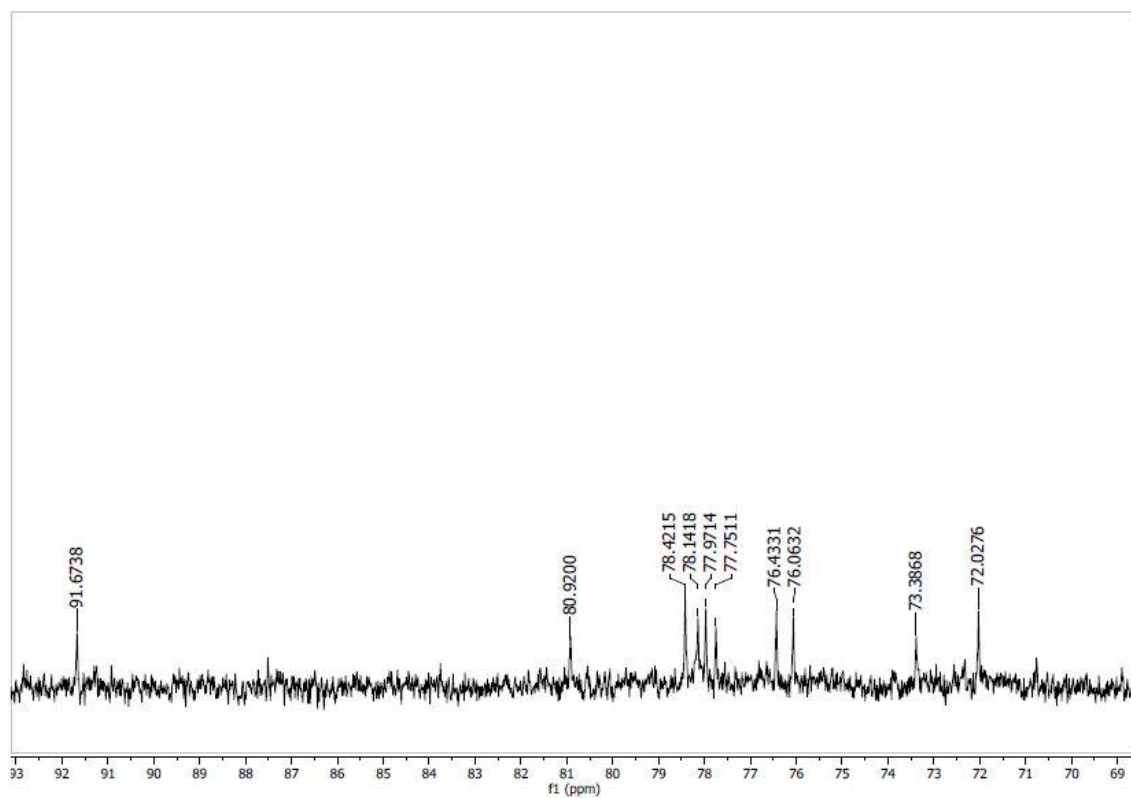


Figura 8. Expansão do espectro de RMN de ^{13}C (100 MHz, CD_3OD) do composto 1

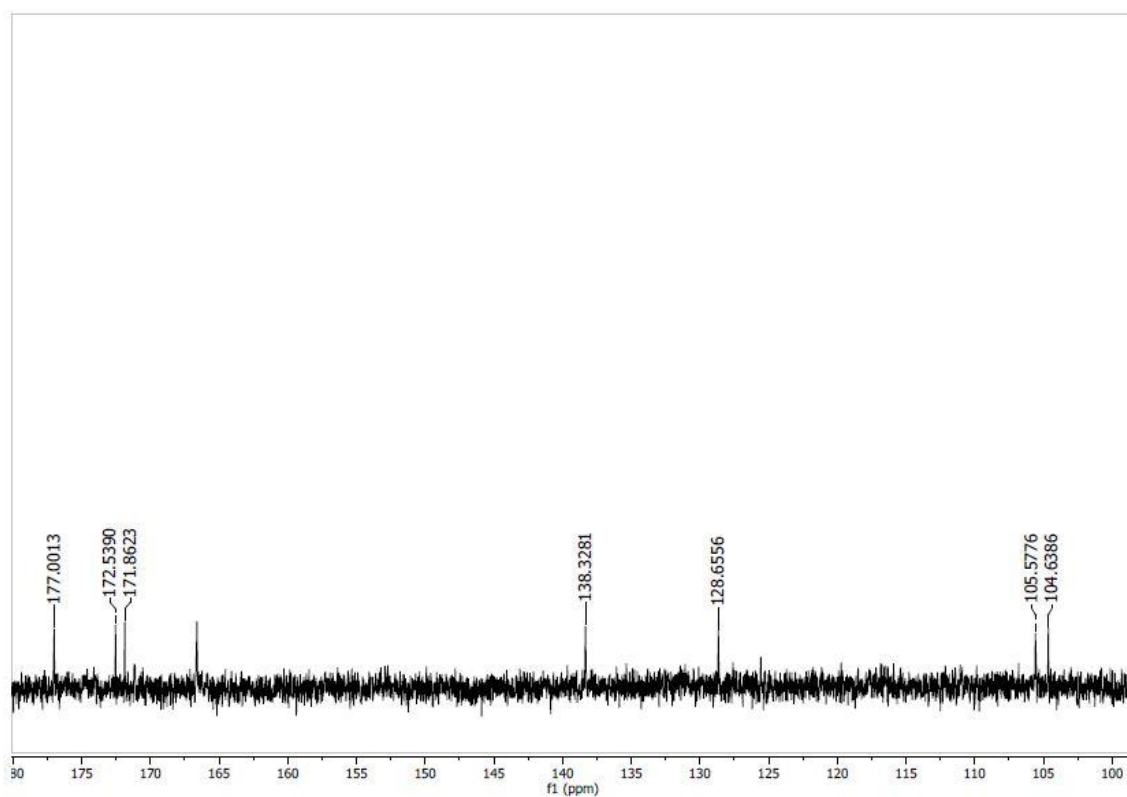


Figura 9. Expansão do espectro de RMN de ^{13}C (100 MHz, CD_3OD) do composto 1

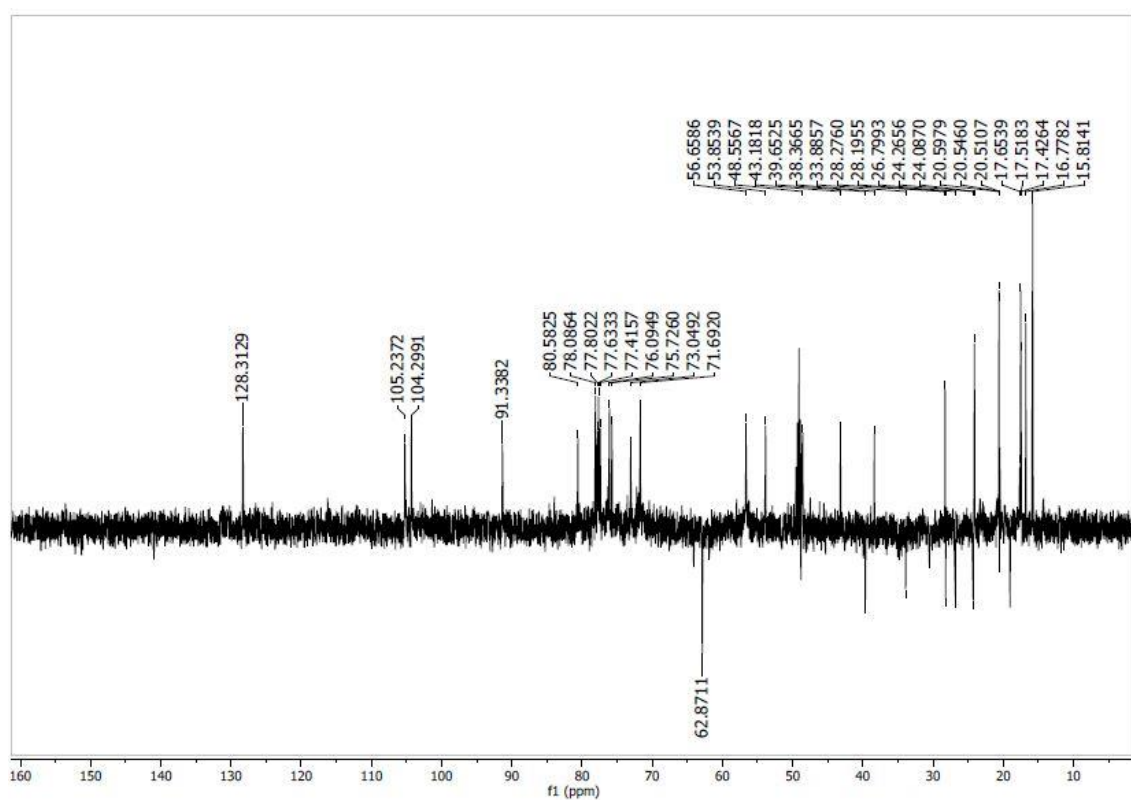


Figura 10. Espectro de RMN DEPT 135 (100 MHz, CD₃OD) do composto 1

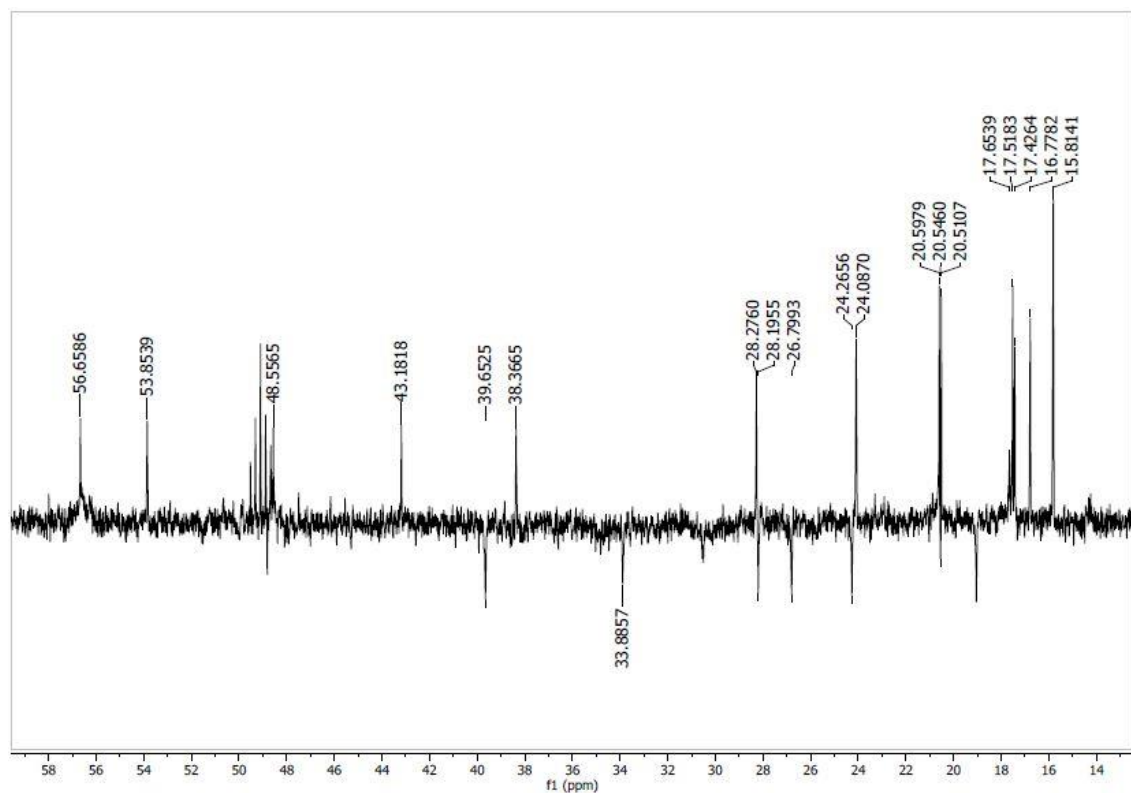


Figura 11. Expansão do espectro de RMN DEPT 135 (100 MHz, CD₃OD) do composto 1

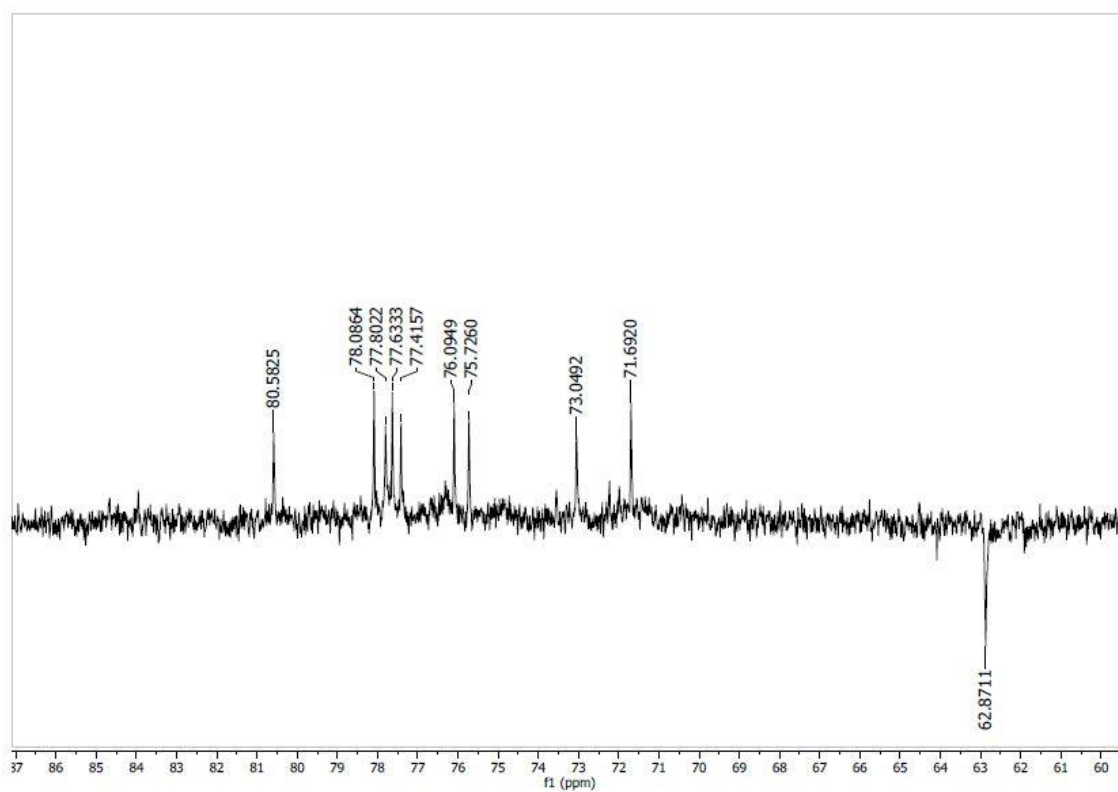


Figura 12. Expansão do espectro de RMN DEPT 135 (100 MHz, CD₃OD) do composto 1

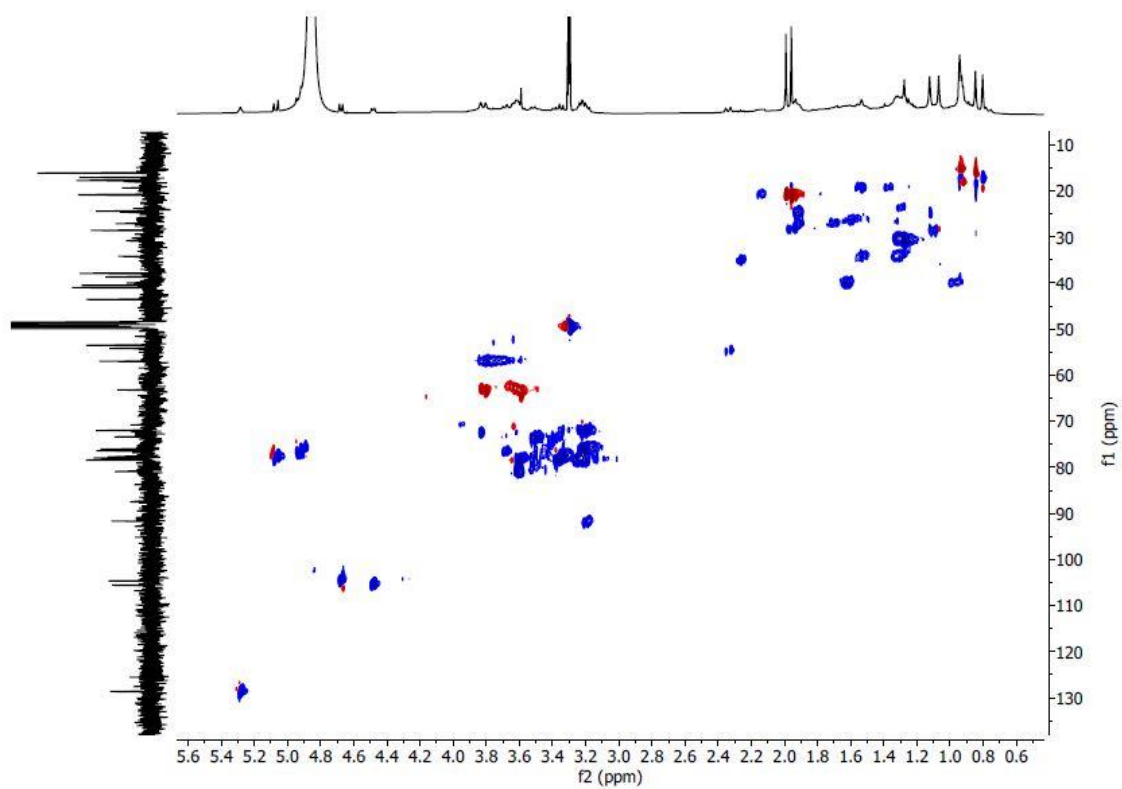


Figura 13. Espectro de HSQC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

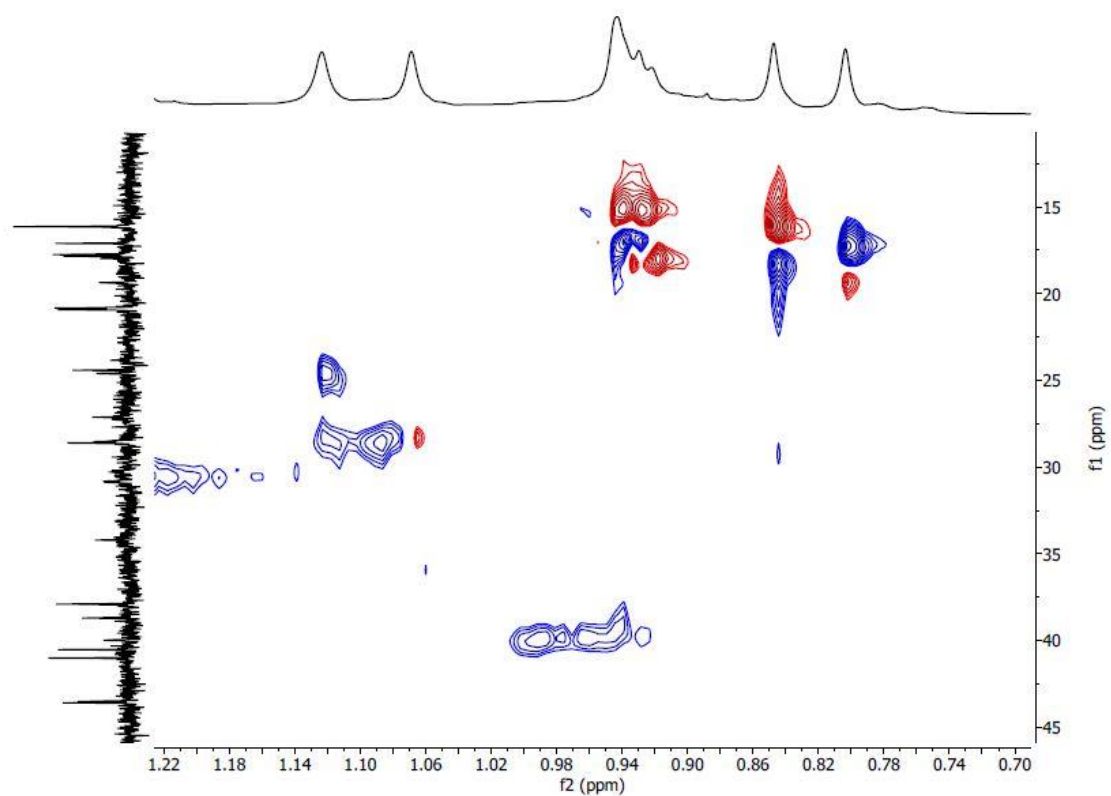


Figura 14. Expansão do espectro de HSQC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

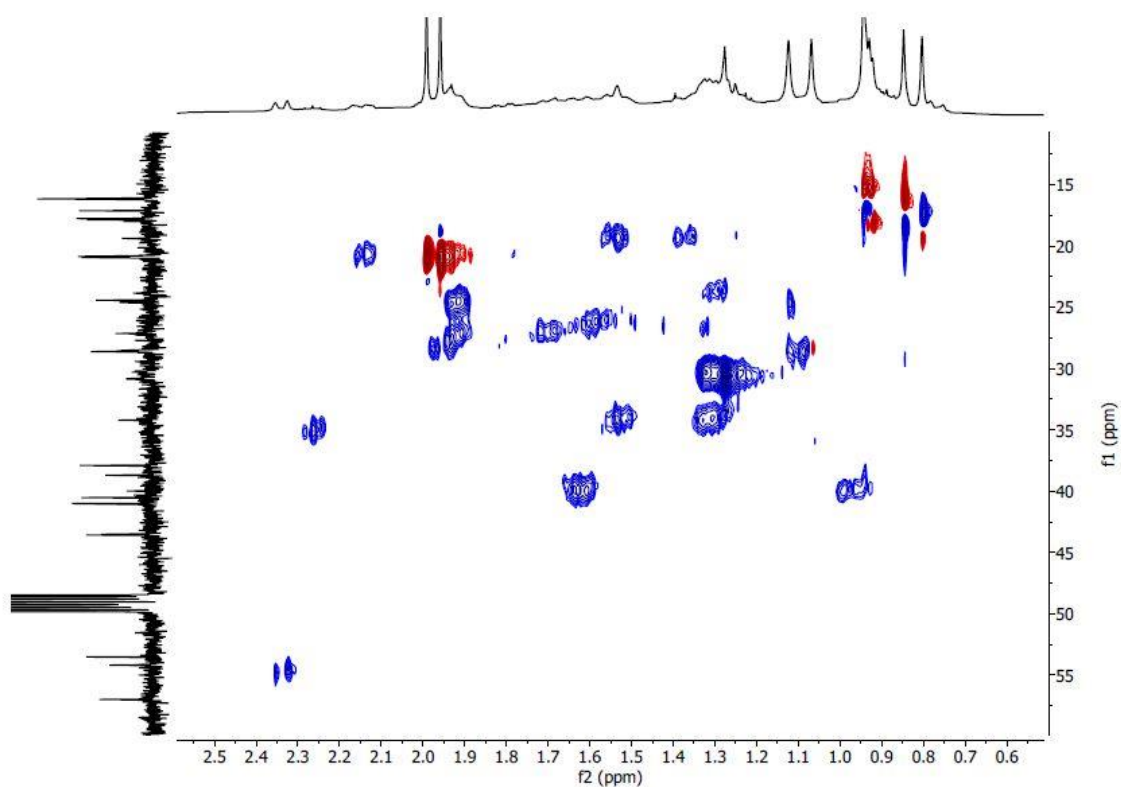


Figura 15. Expansão do espectro de HSQC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

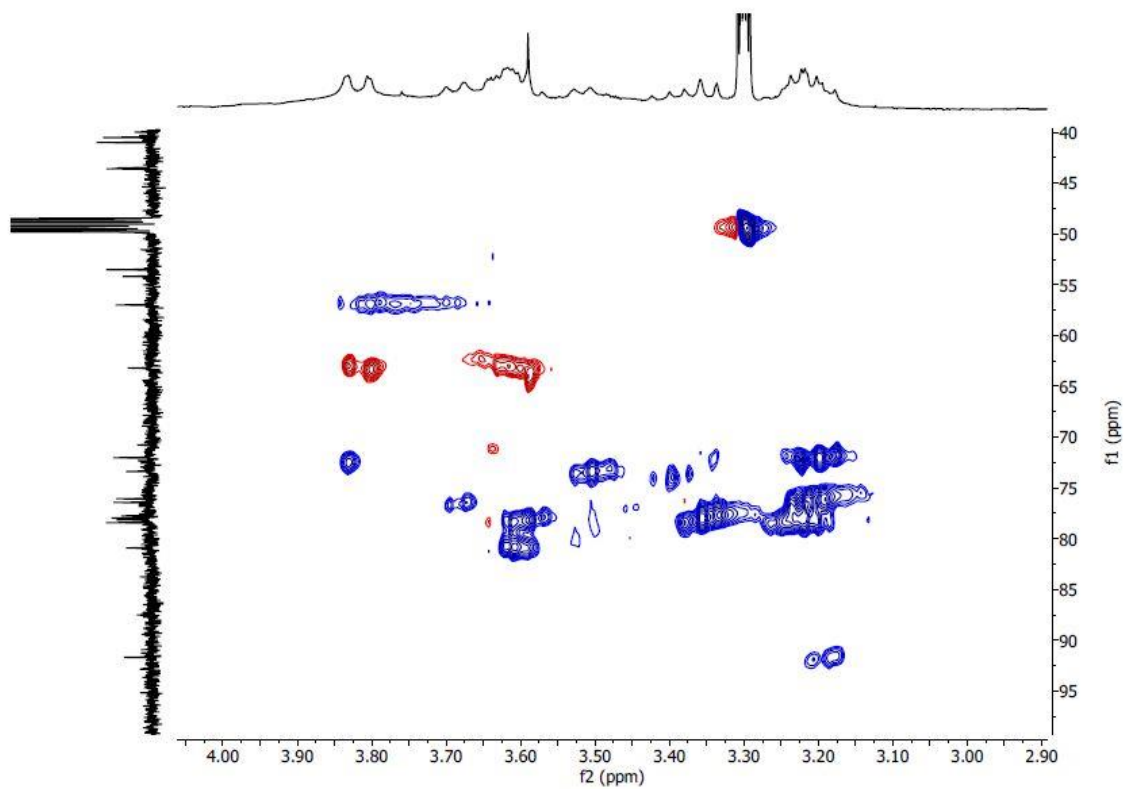


Figura 16. Expansão do espectro de HSQC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

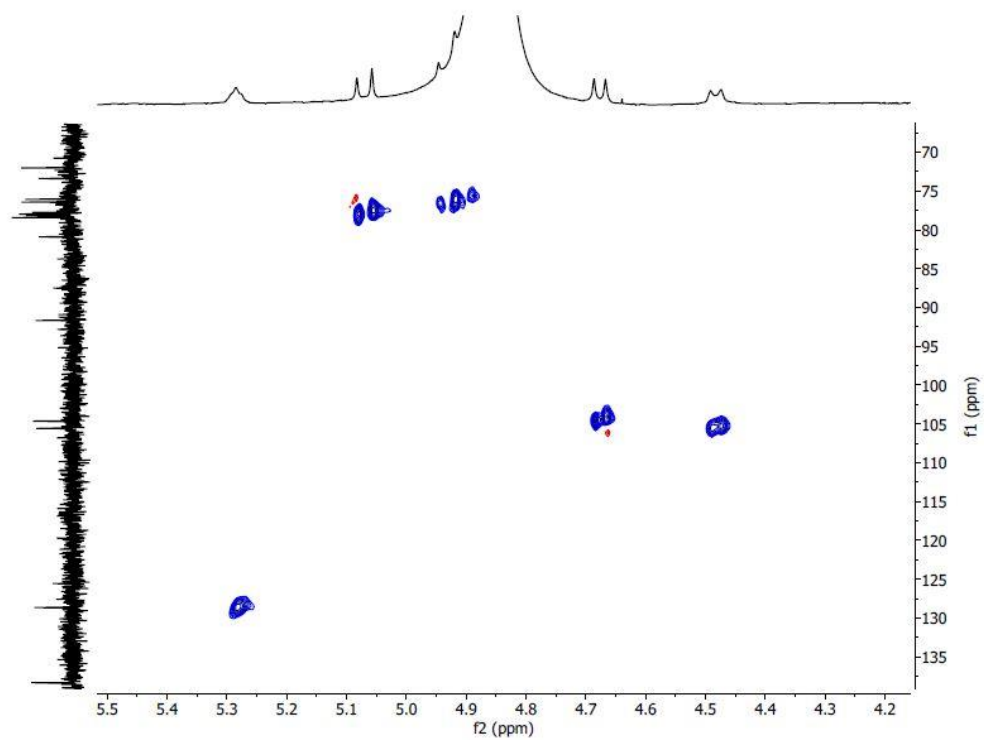


Figura 17. Expansão do espectro de HSQC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

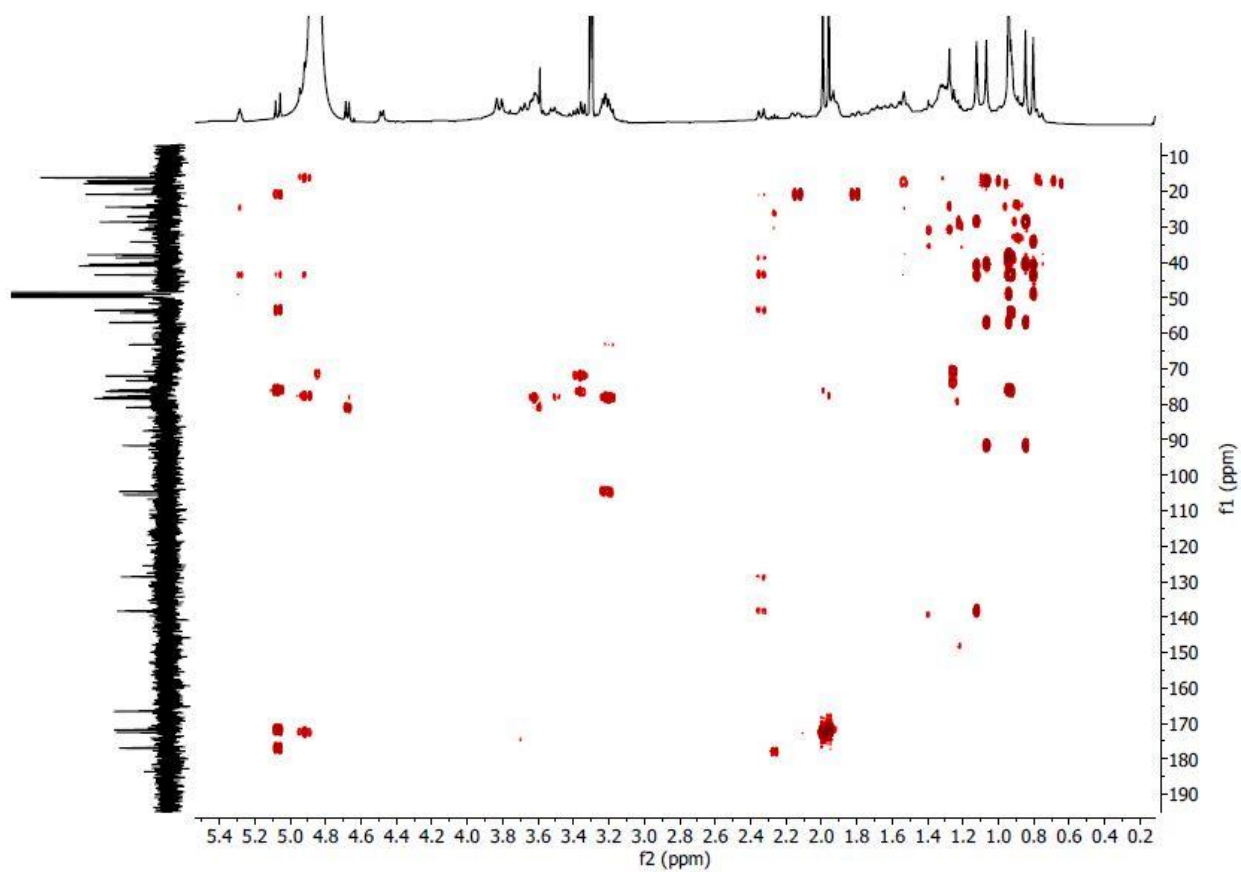


Figura 18. Espectro de HMBC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

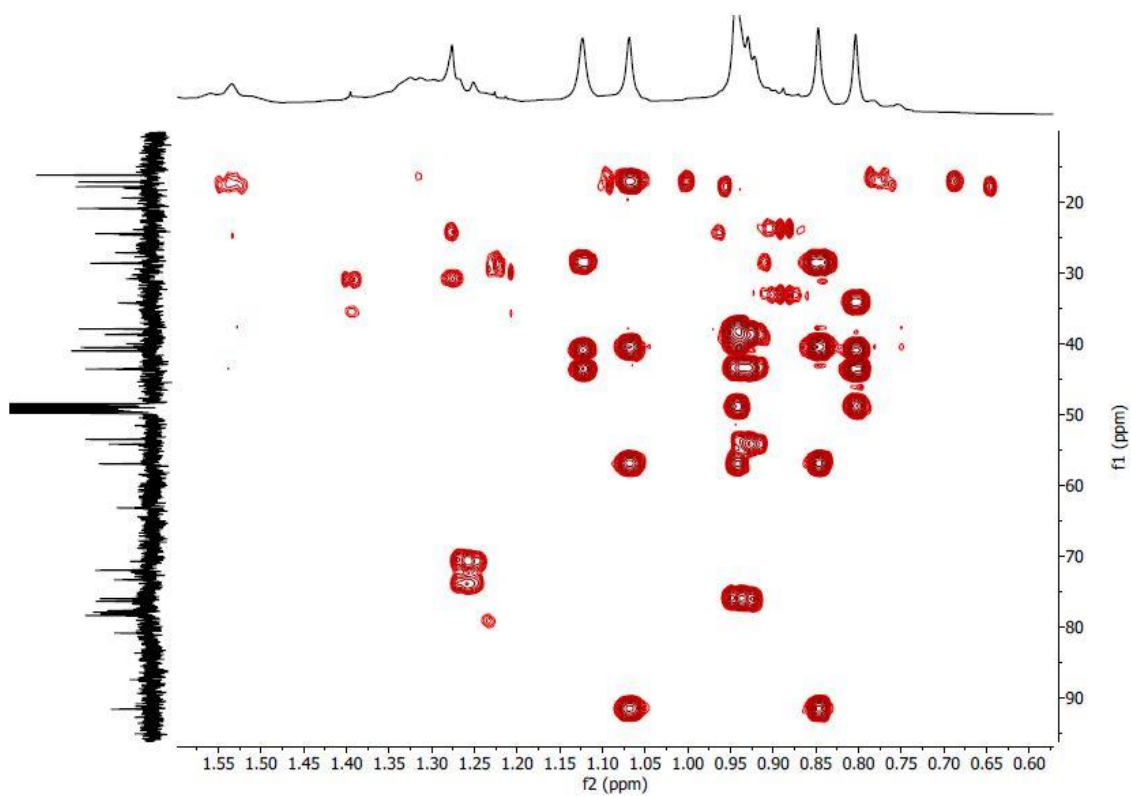


Figura 19. Expansão do espectro de HMBC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

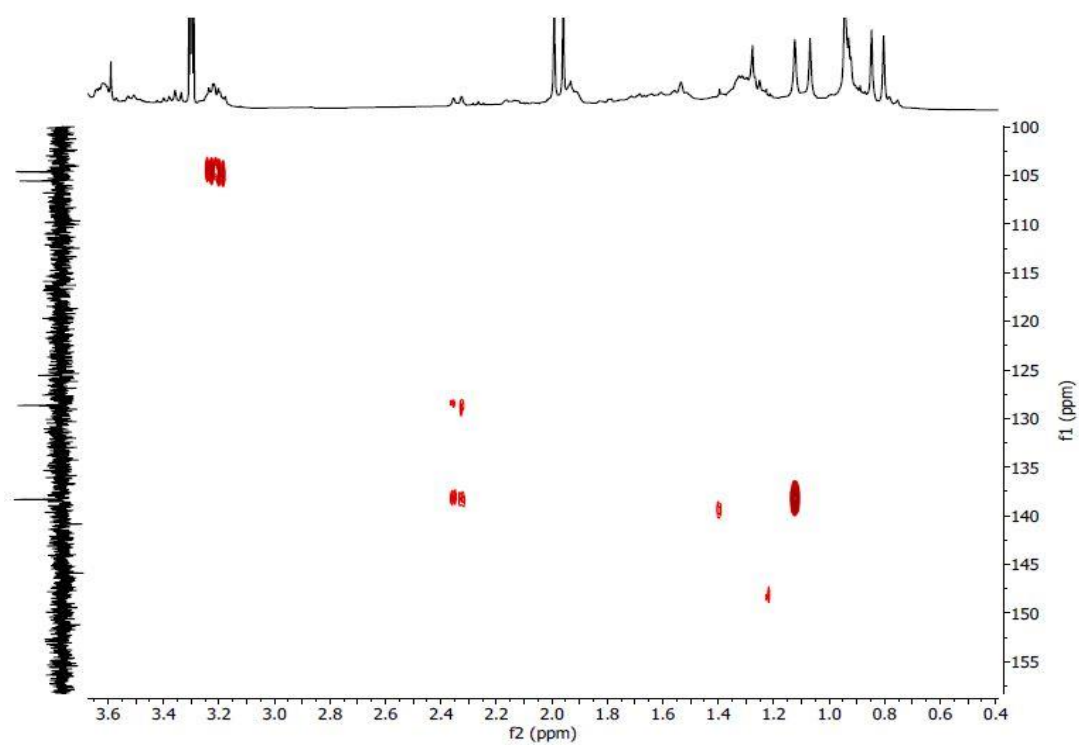


Figura 20. Expansão do espectro de HMBC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

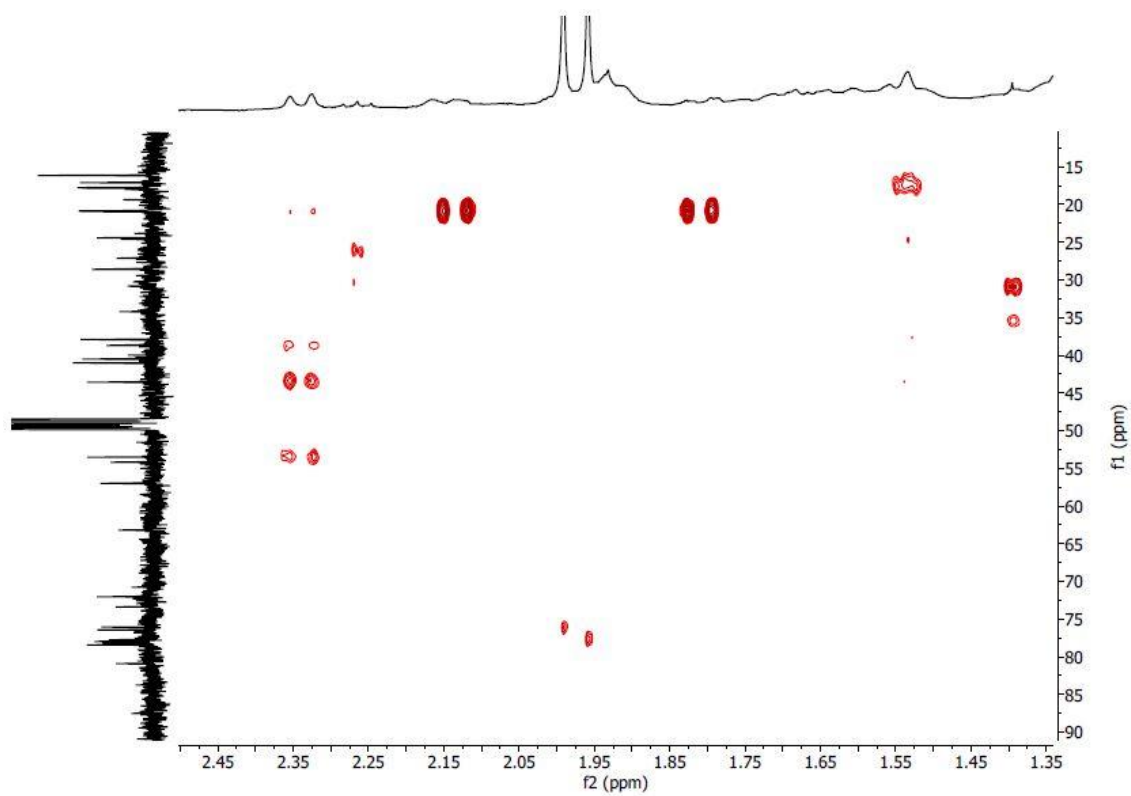


Figura 21. Expansão do espectro de HMBC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

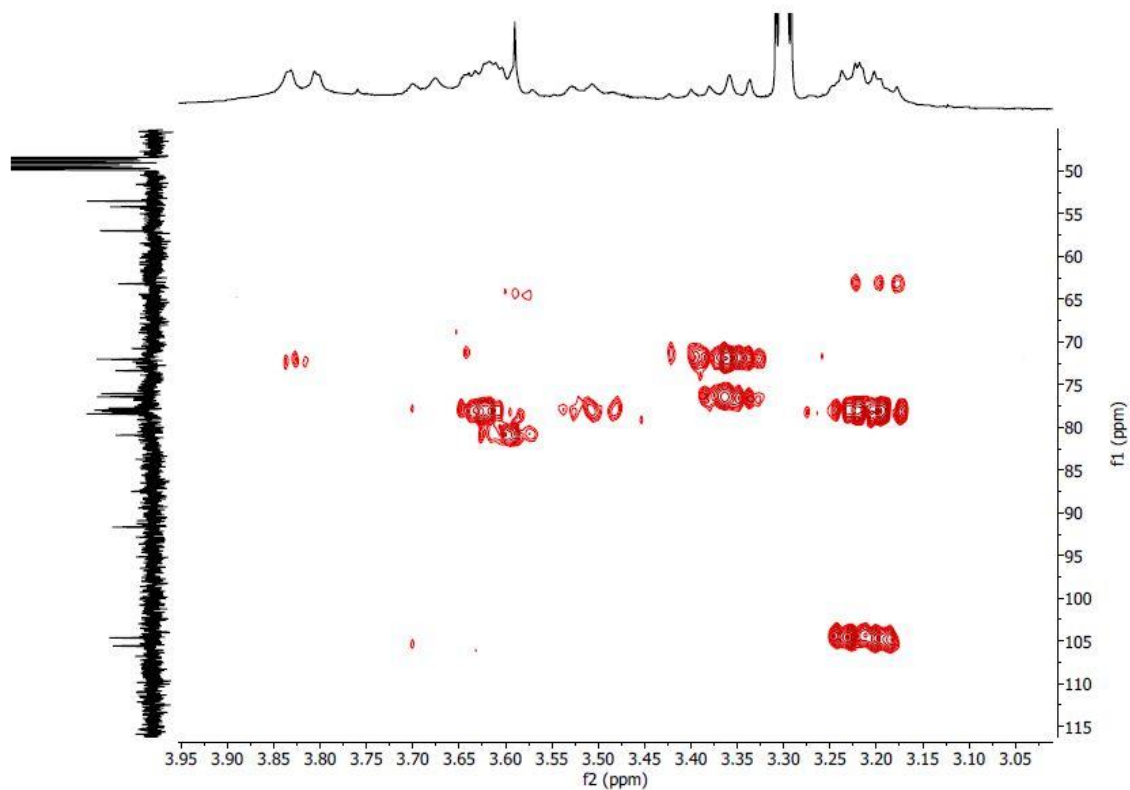


Figura 22. Expansão do espectro de HMBC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

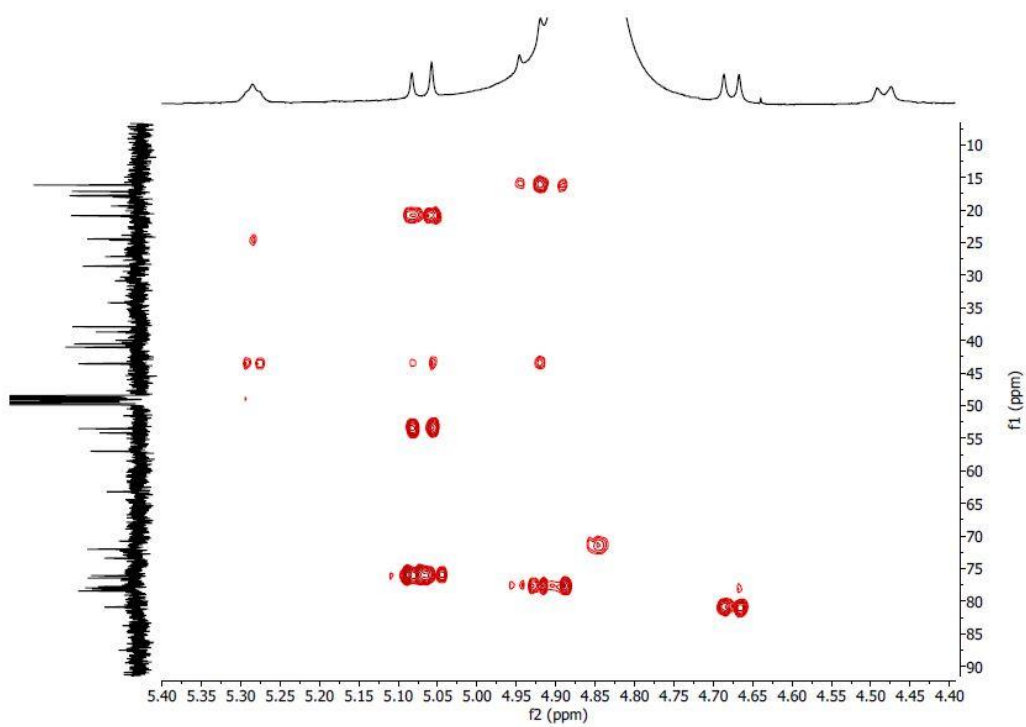


Figura 23. Expansão do espectro de HMBC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

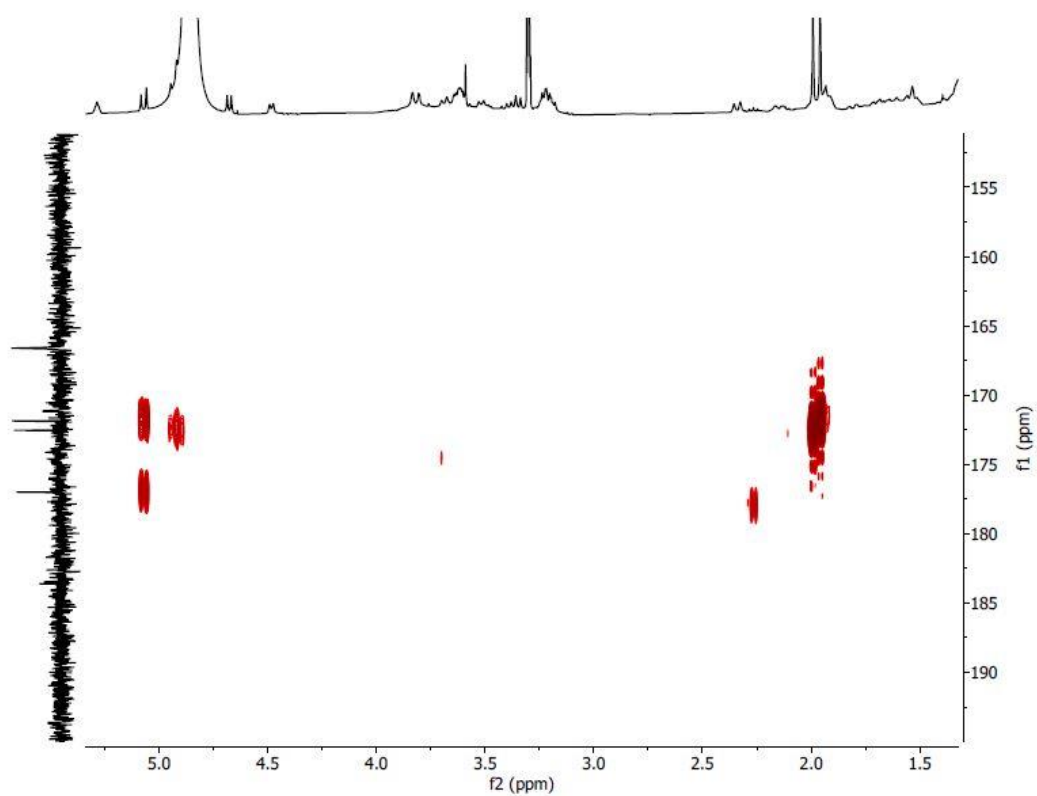


Figura 24. Expansão do espectro de HMBC $^1\text{H} \times ^{13}\text{C}$ (400 MHz, 100 MHz, CD_3OD) do composto 1

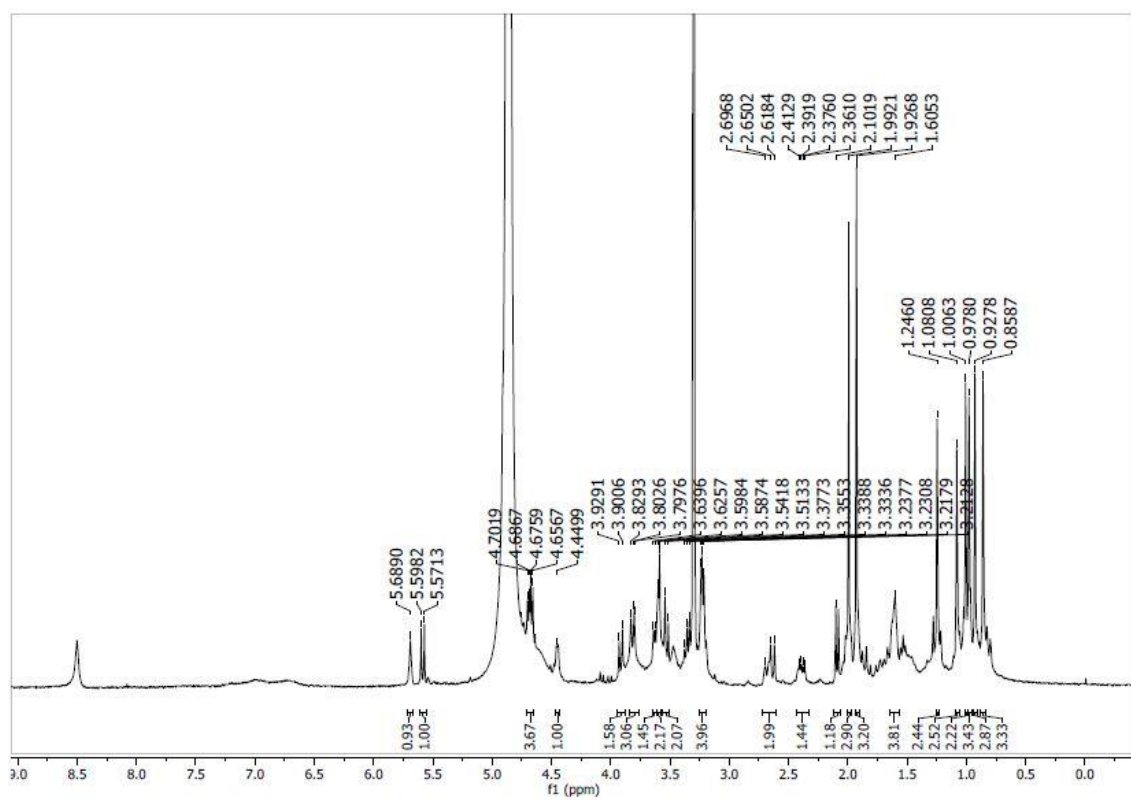


Figura 25. Espectro RMN de ^1H (400 MHz, CD_3OD) do composto 2

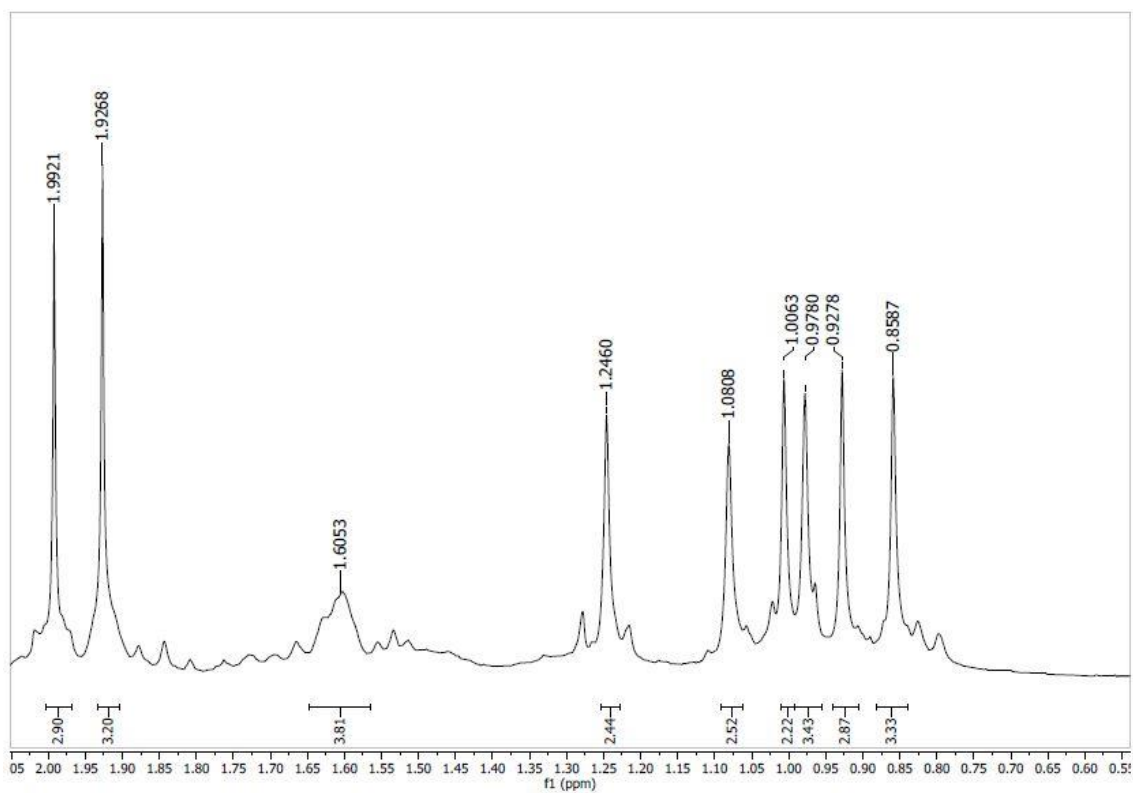


Figura 26. Expansão do espectro RMN de ^1H (400 MHz, CD_3OD) do composto 2

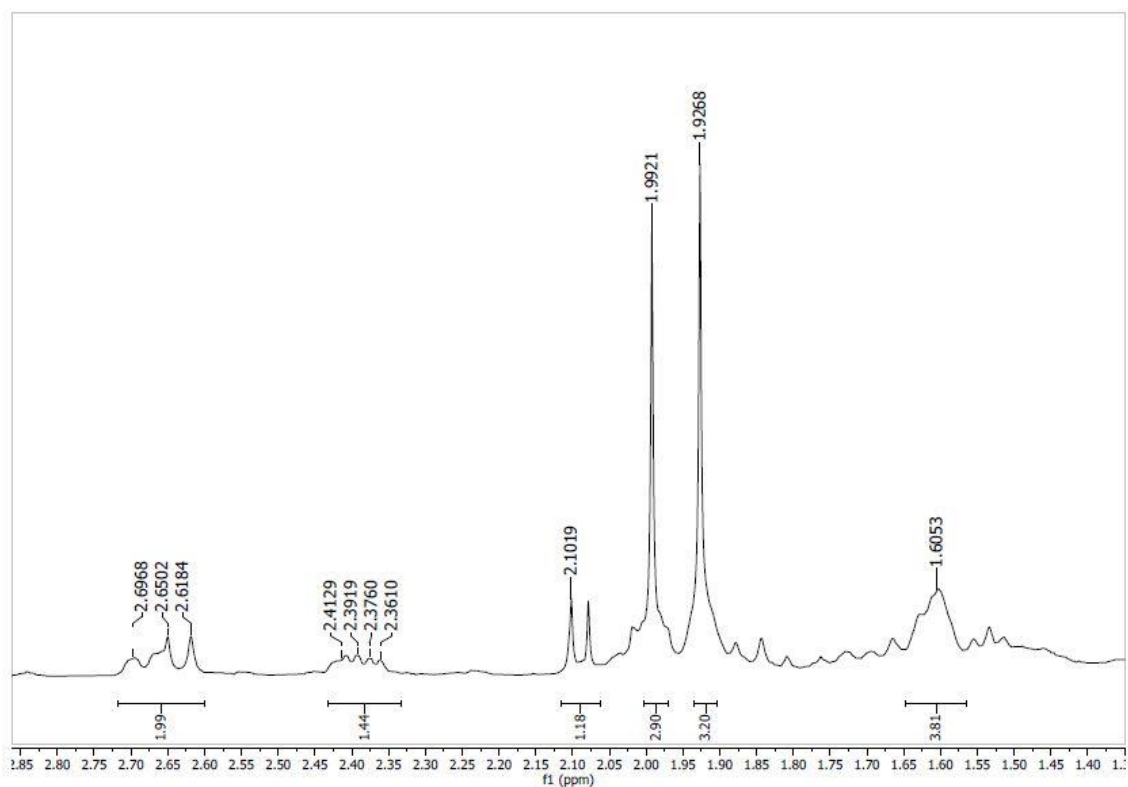


Figura 27. Expansão do espectro RMN de ^1H (400 MHz, CD₃OD) do composto 2

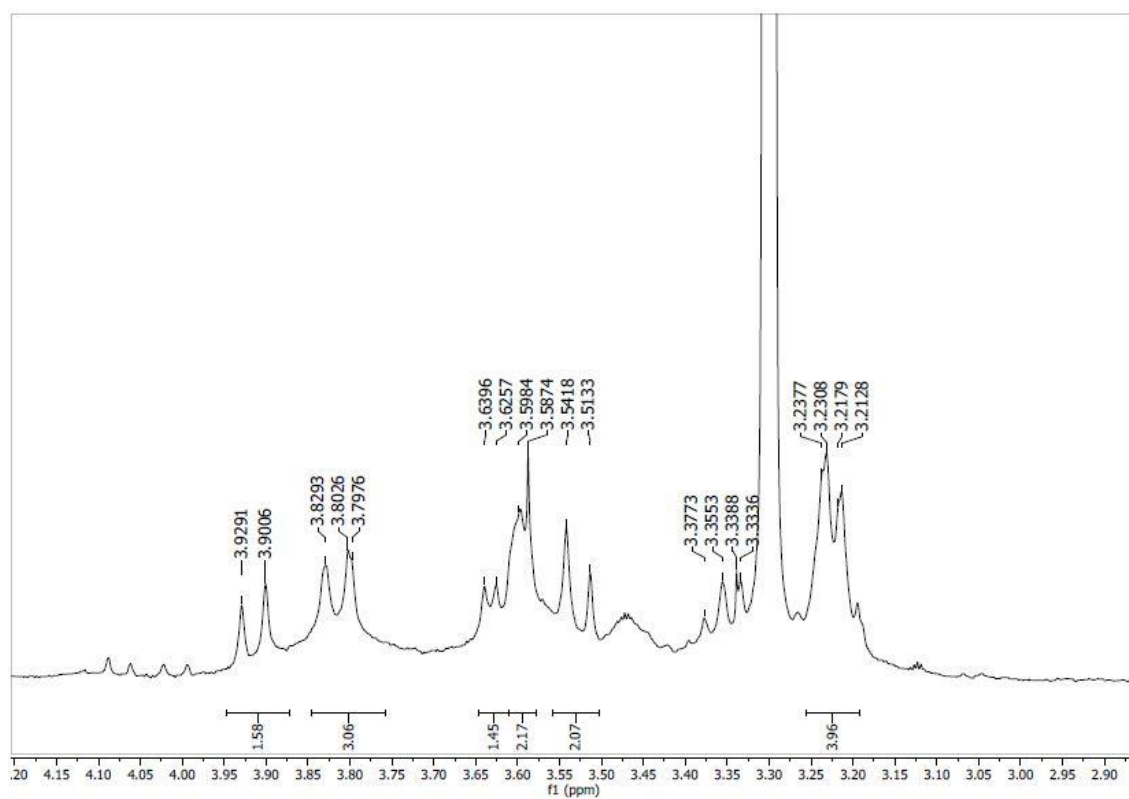


Figura 28. Expansão do espectro RMN de ^1H (400 MHz, CD₃OD) do composto 2

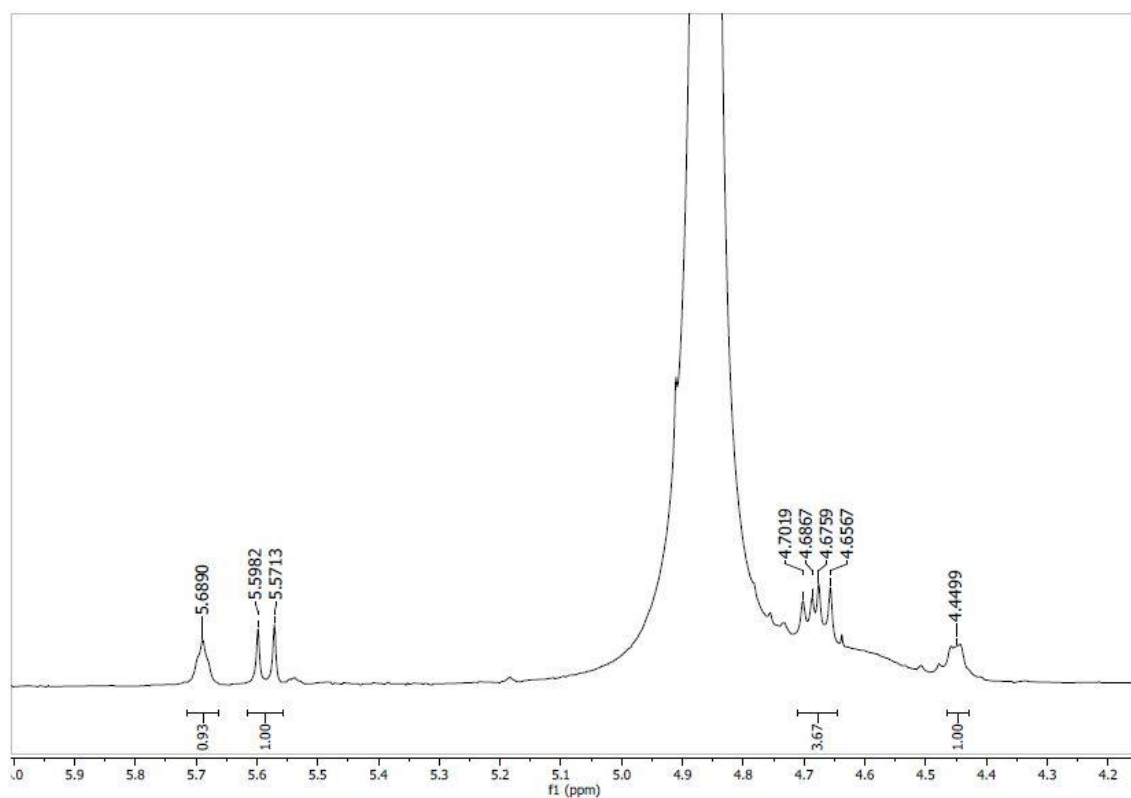


Figura 29. Expansão do espectro RMN de ¹H (400 MHz, CD₃OD) do composto 2

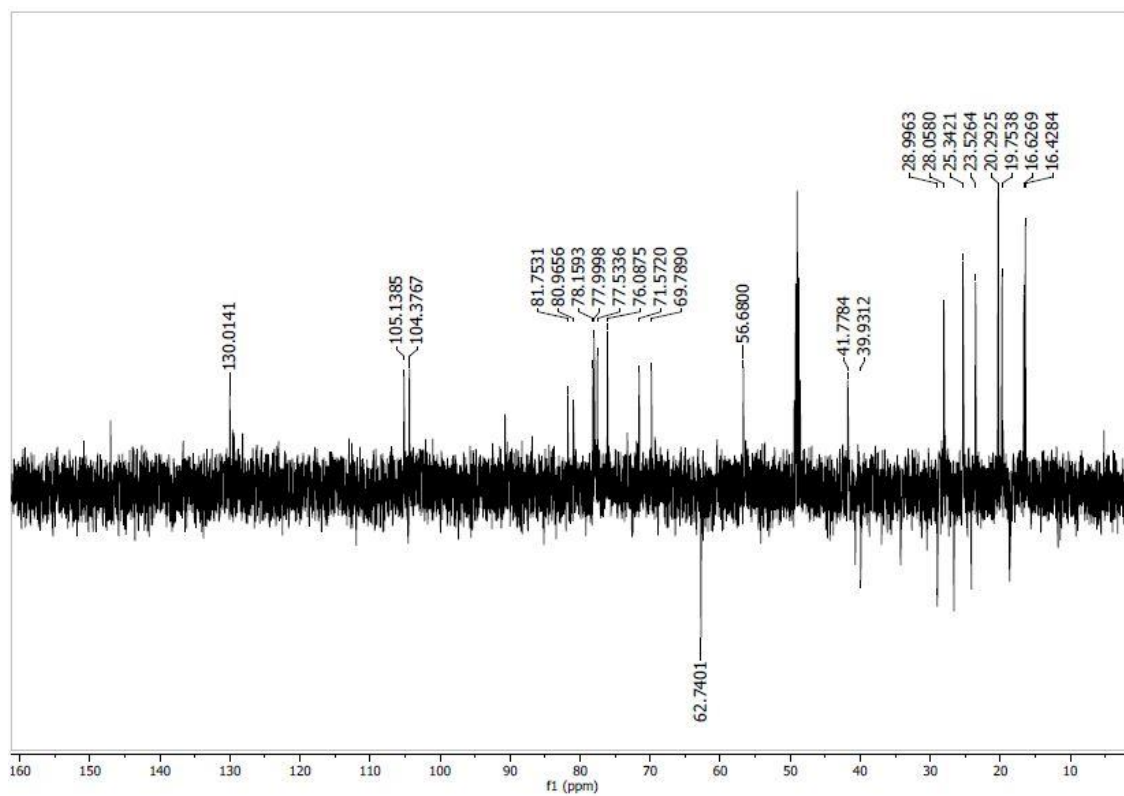


Figura 30. Espectro de RMN DEPT 135 (100 MHz, CD₃OD) do composto 2

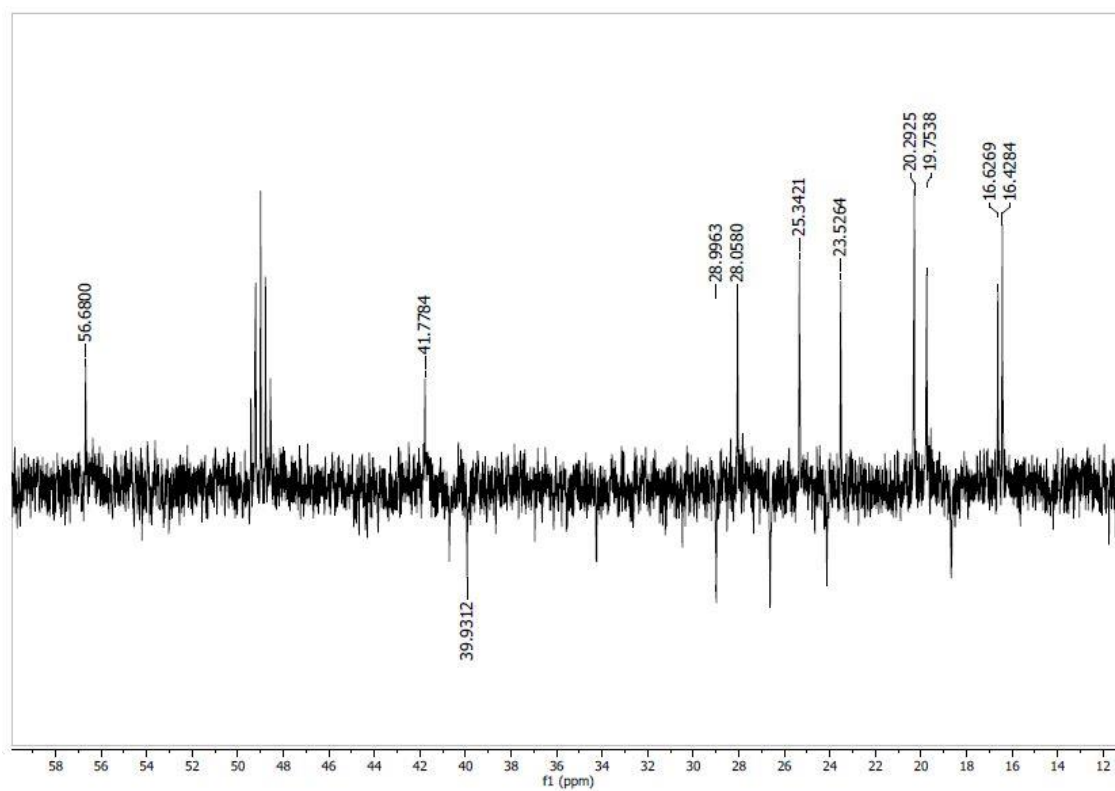


Figura 31. Expansão do espectro de RMN DEPT 135 (100 MHz, CD₃OD) do composto 2

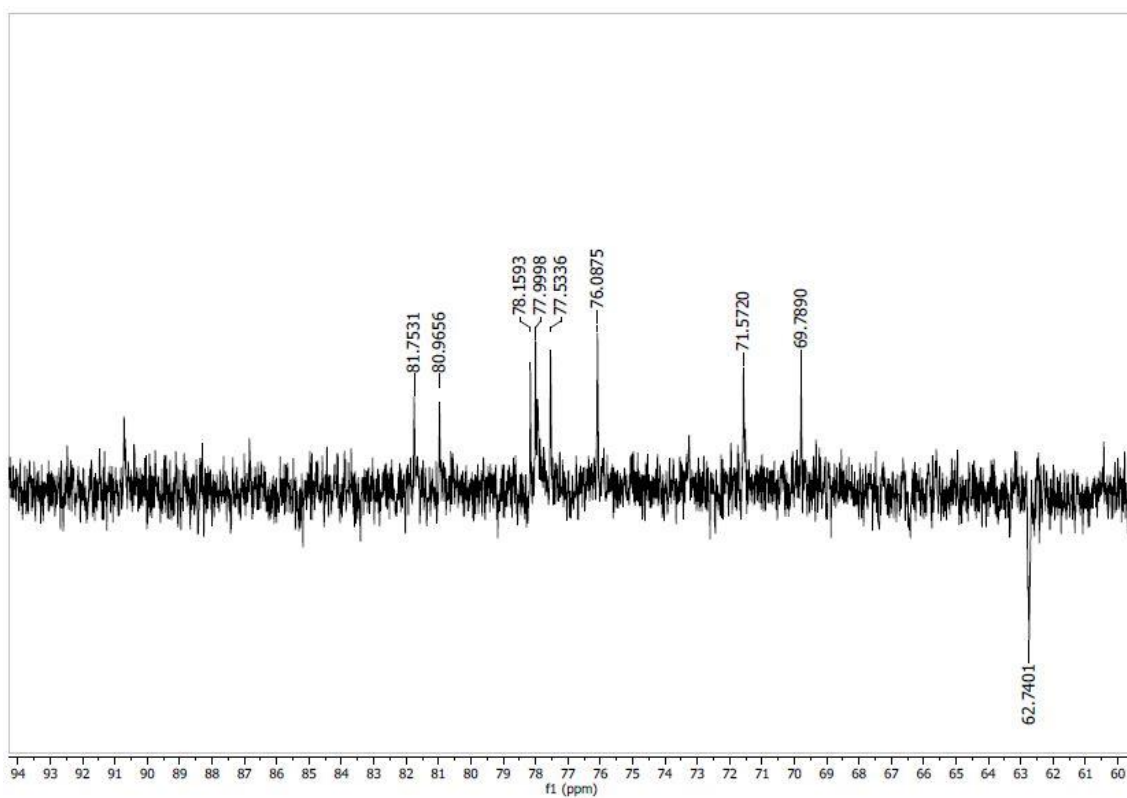


Figura 32. Expansão do espectro de RMN DEPT 135 (100 MHz, CD_3OD) do composto 2

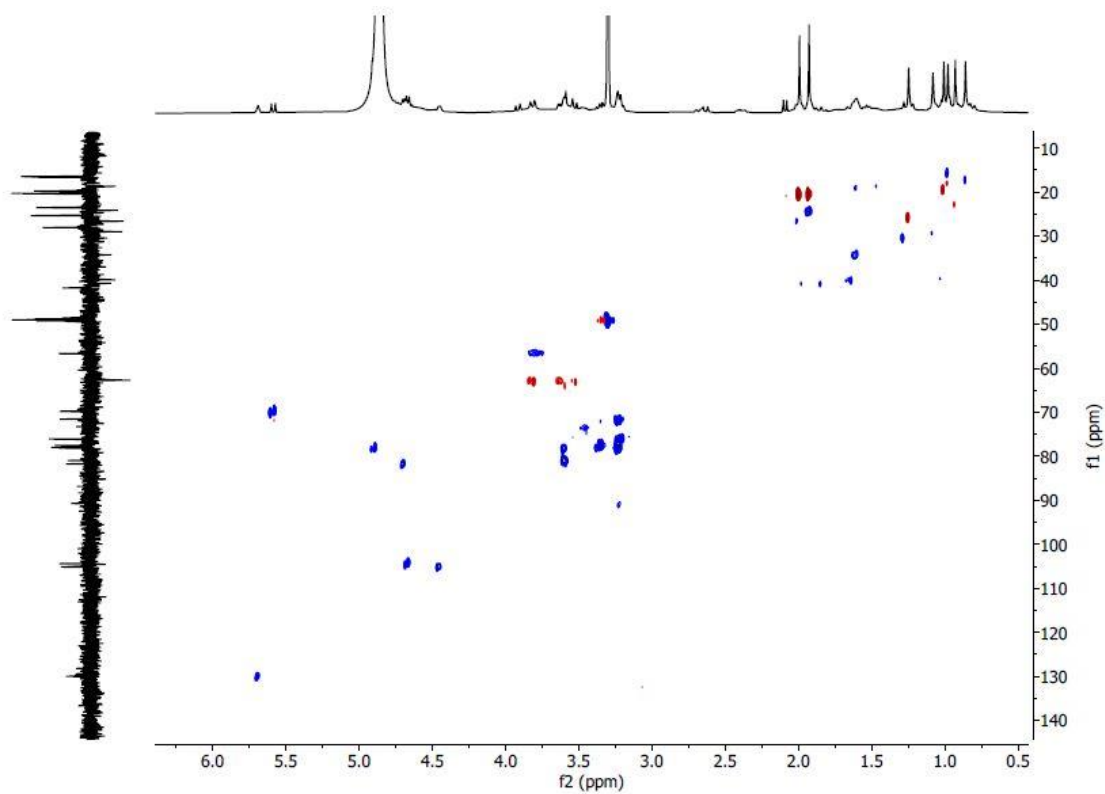


Figura 33. Espectro de HSQC ^1H x DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

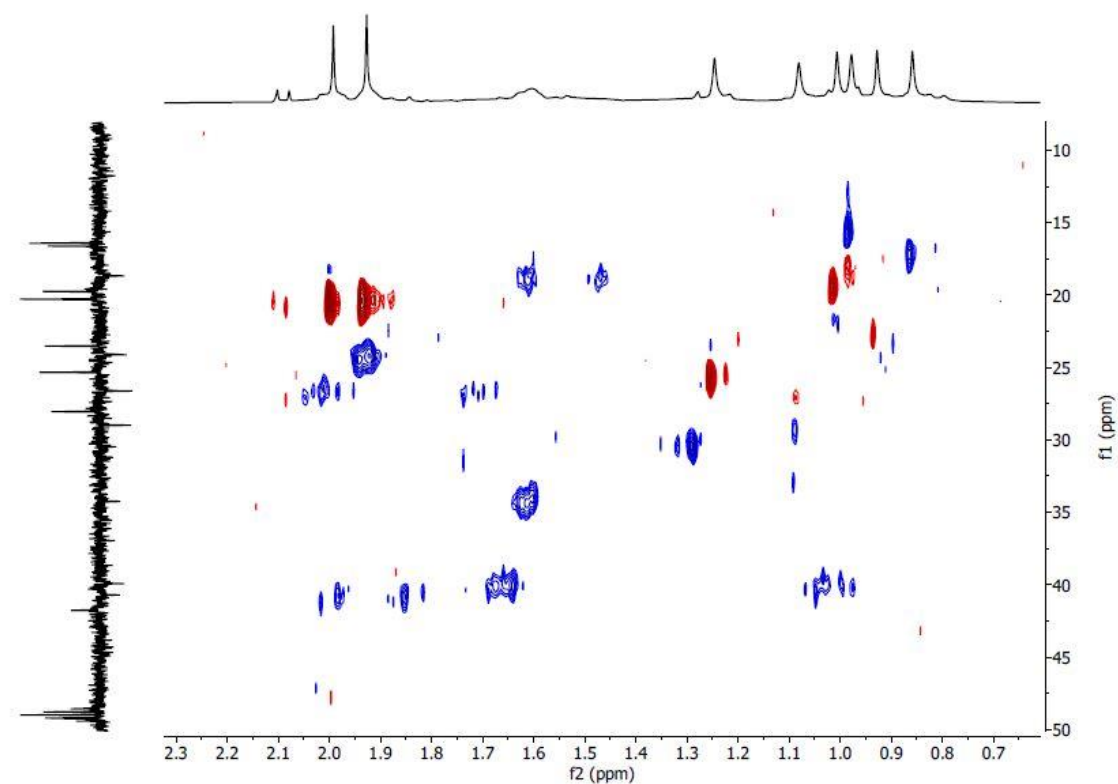


Figura 34. Expansão do espectro de HSQC ^1H x DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

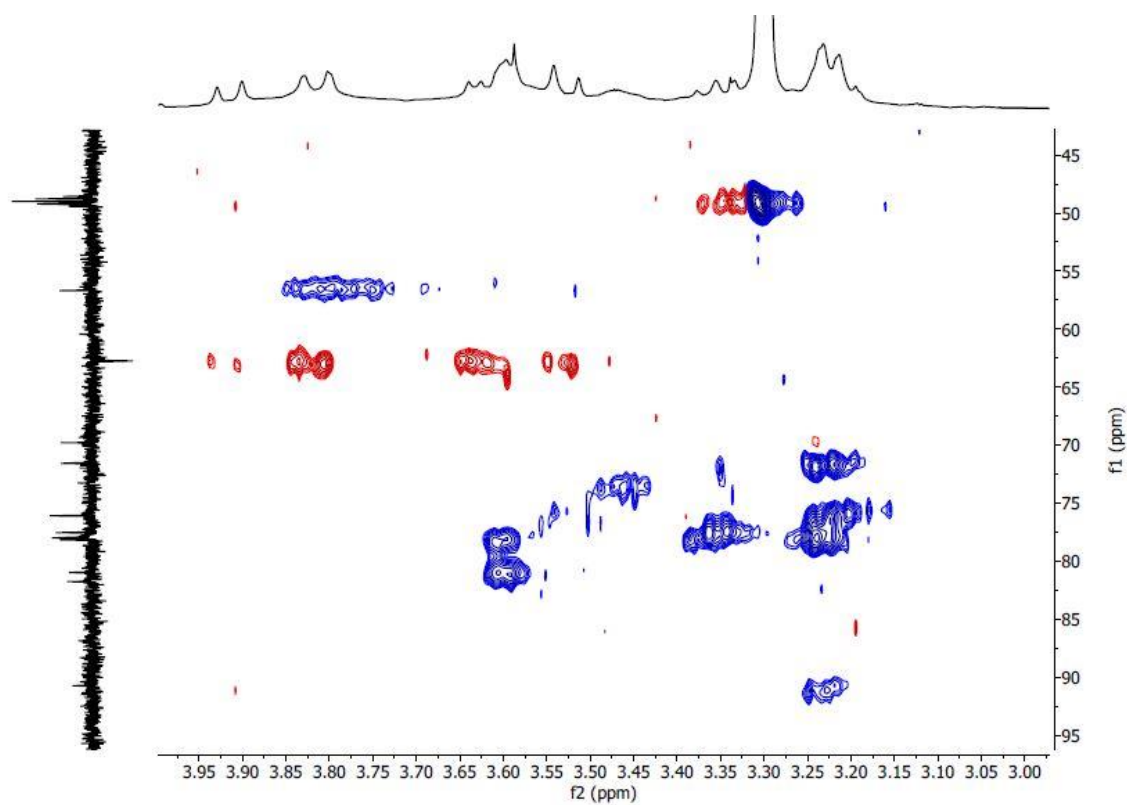


Figura 35. Expansão do espectro de HSQC ^1H x DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

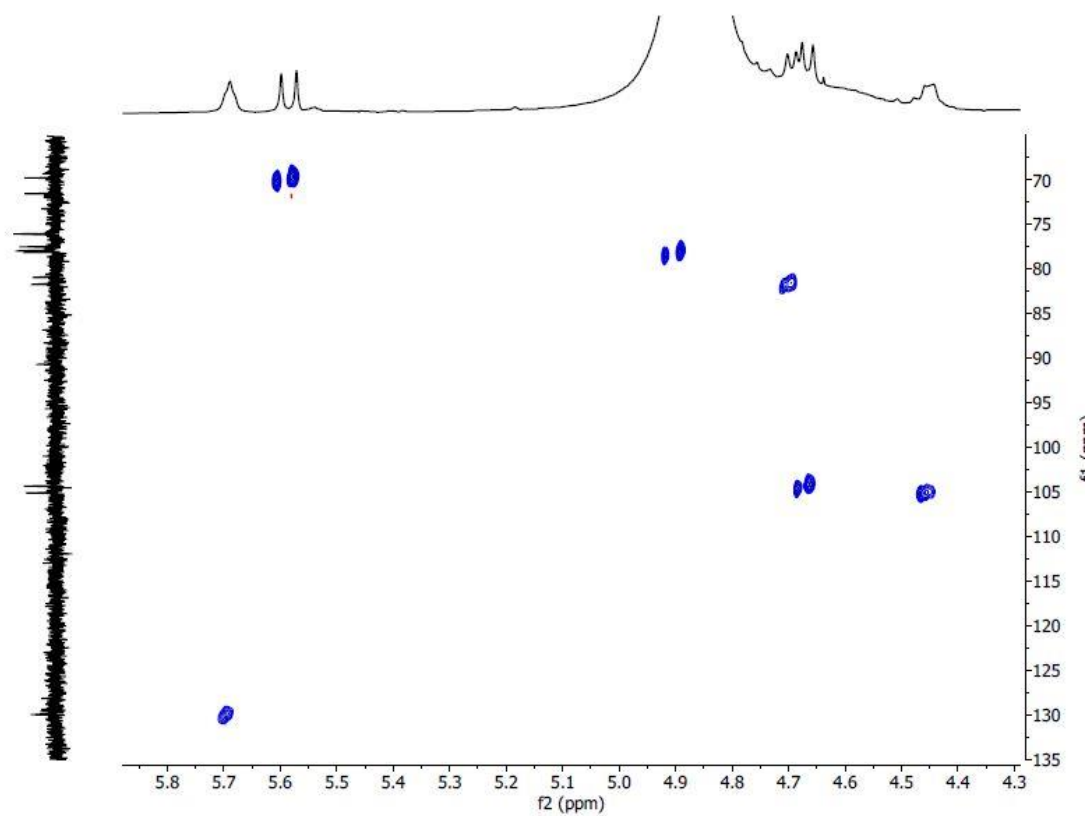


Figura 36. Expansão do espectro de HSQC ^1H x DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

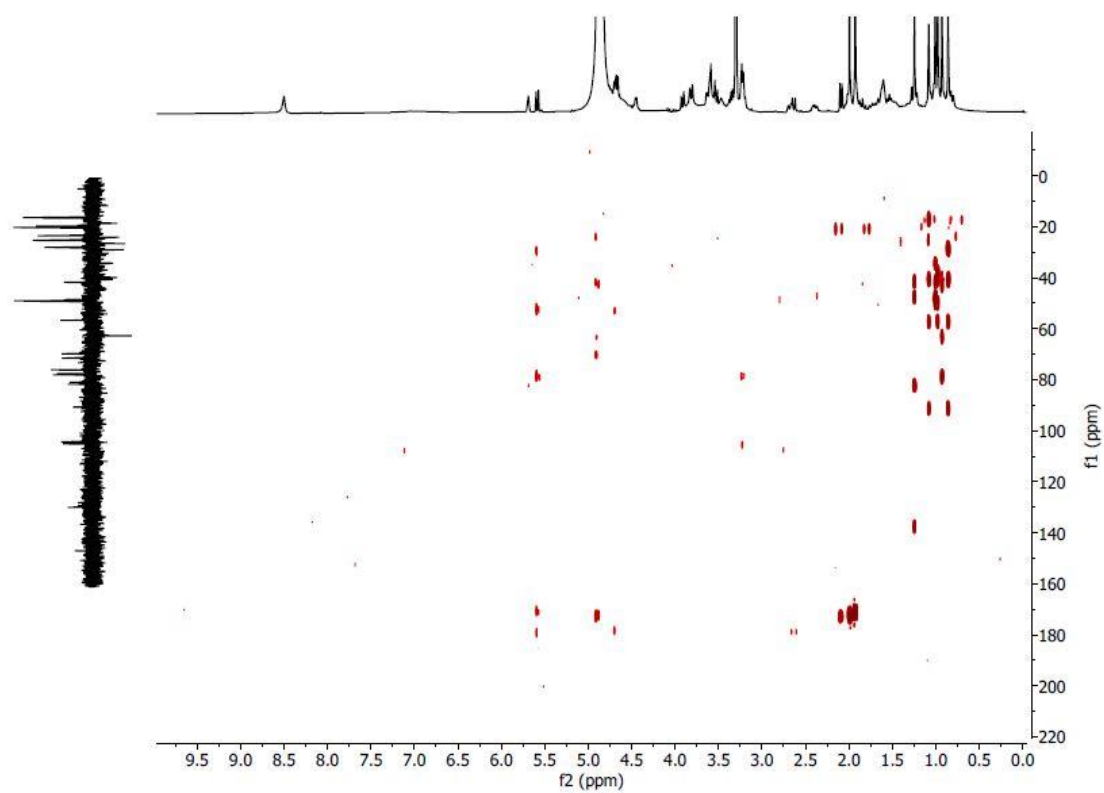


Figura 37. Espectro de HMBC ^1H x DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

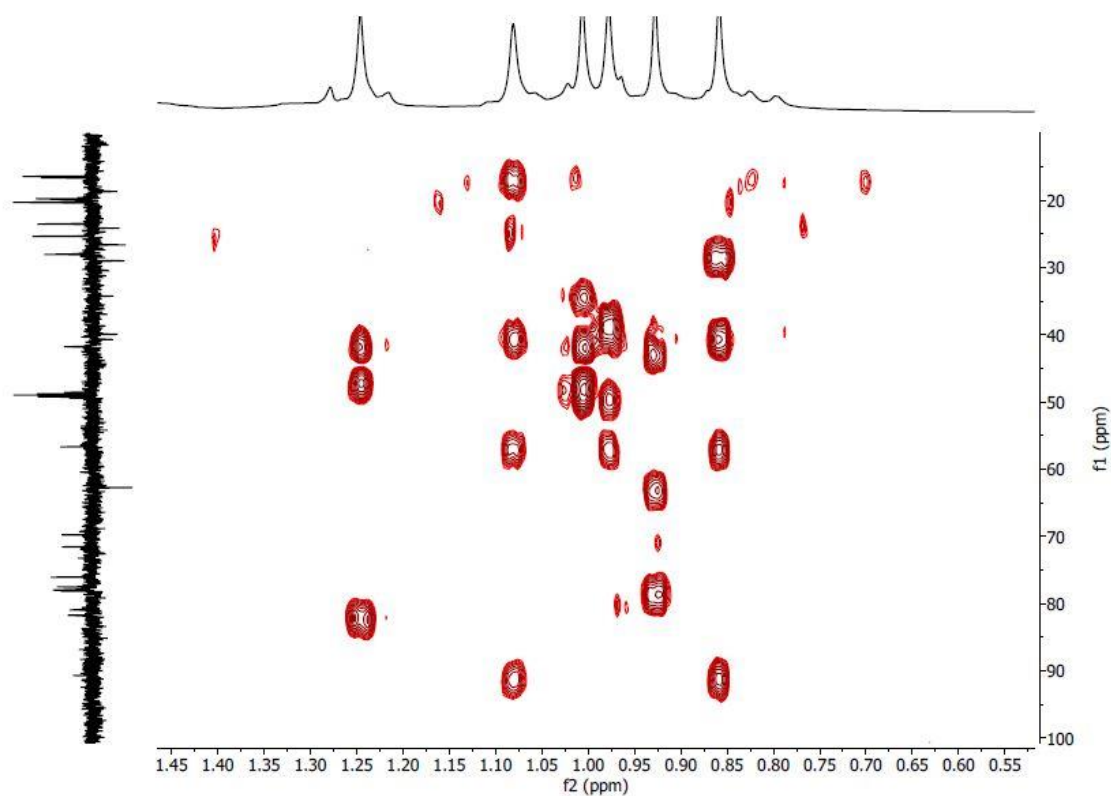


Figura 38. Expansão do espectro de HMBC ^1H x DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

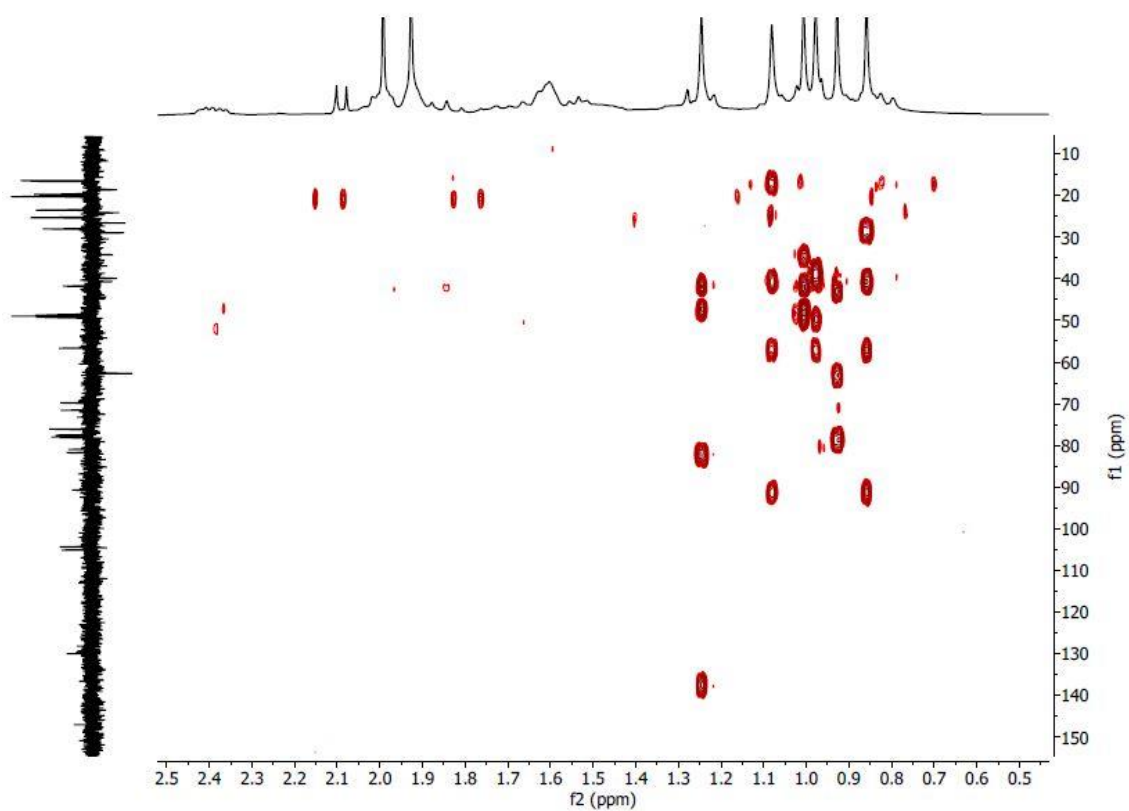


Figura 39. Expansão do espectro de HMBC ^1H x DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

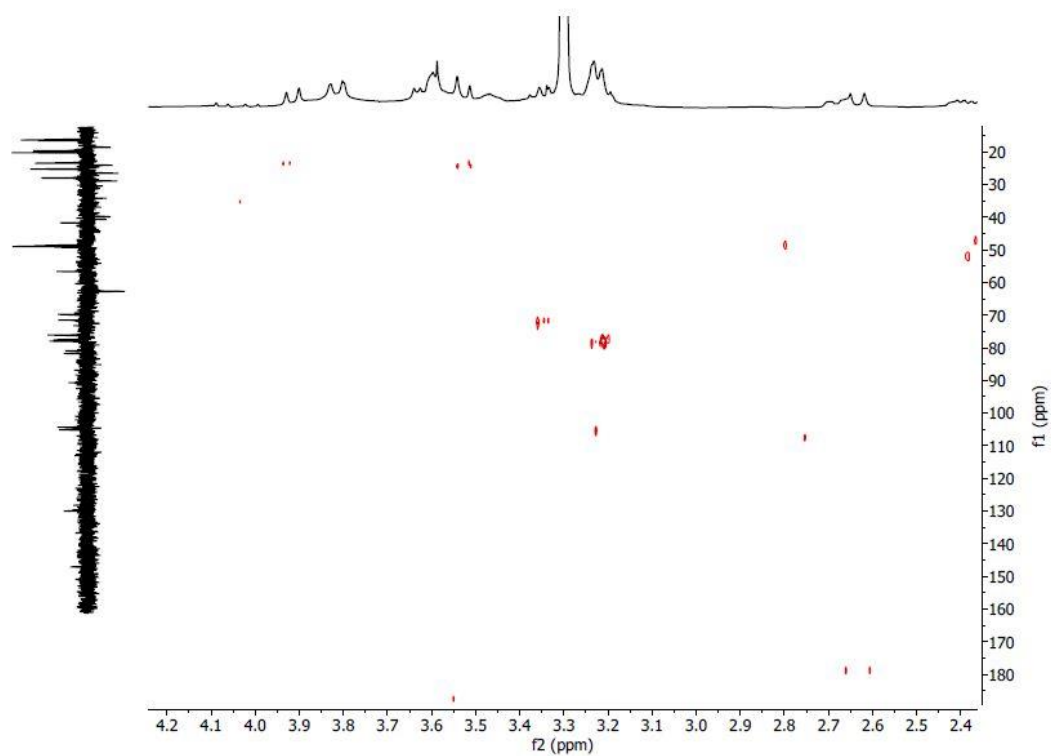


Figura 40. Expansão do espectro de HMBC ^1H x DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

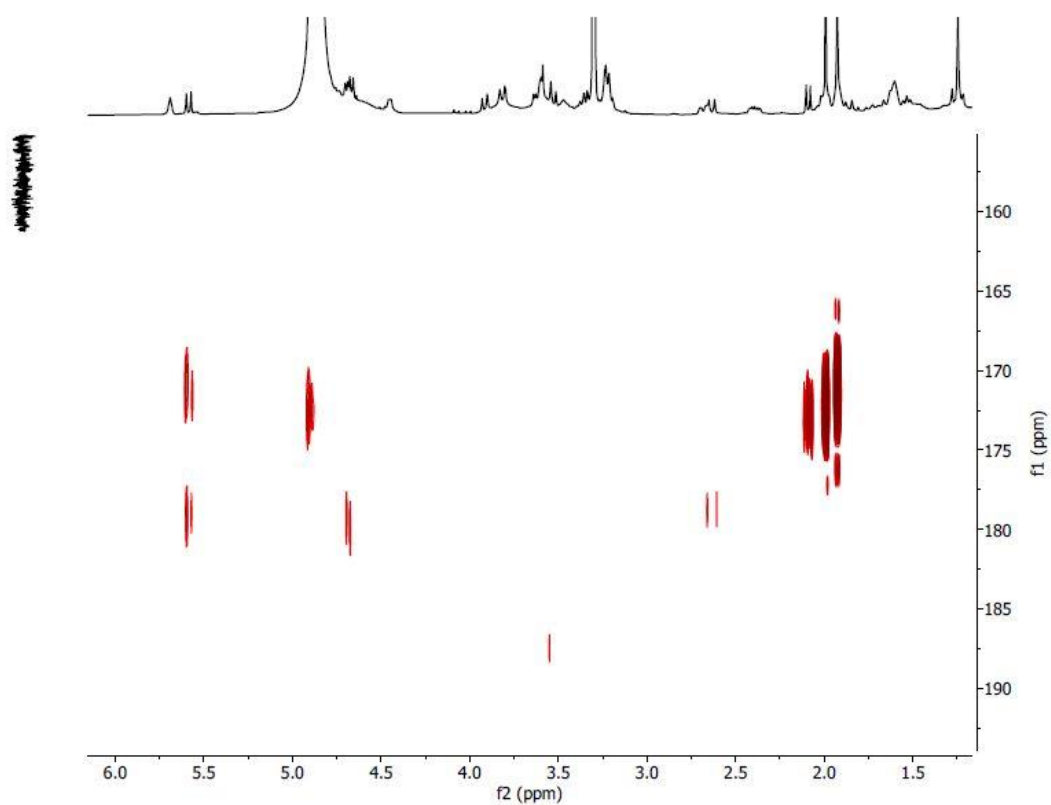


Figura 41. Expansão do espectro de HMBC ^1H x DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

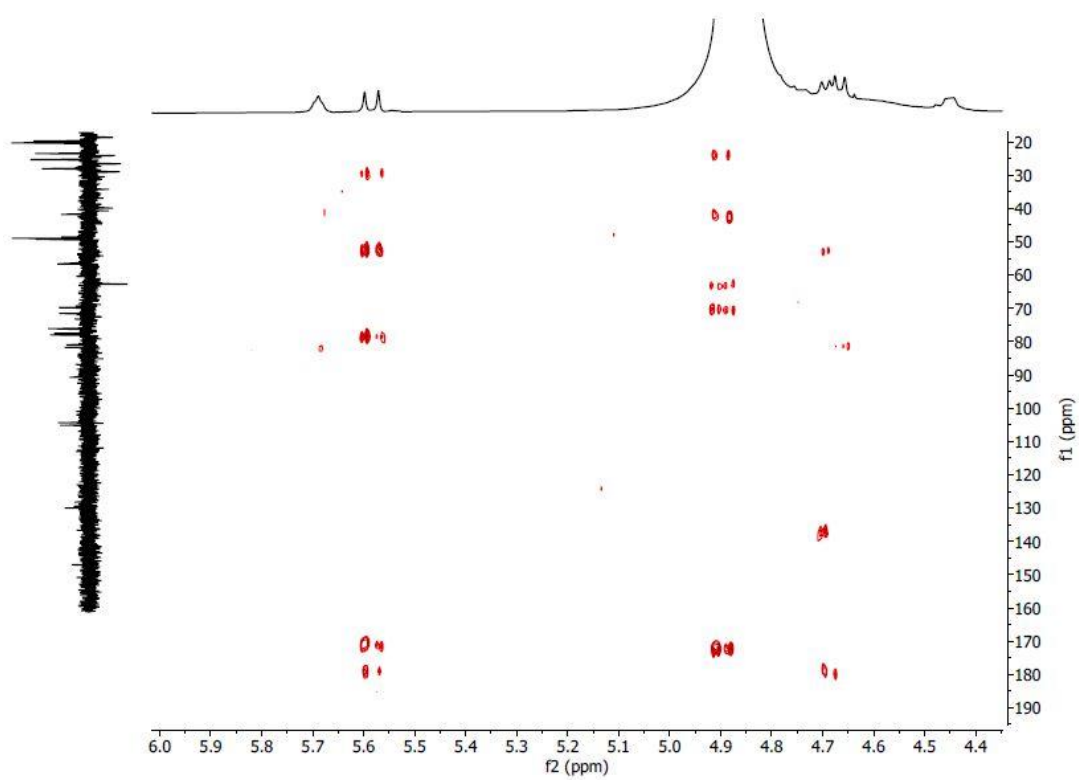


Figura 42. Expansão do espectro de HMBC ^1H x 1 DEPT 135 (400 MHz, 100 MHz, CD_3OD) do composto 2

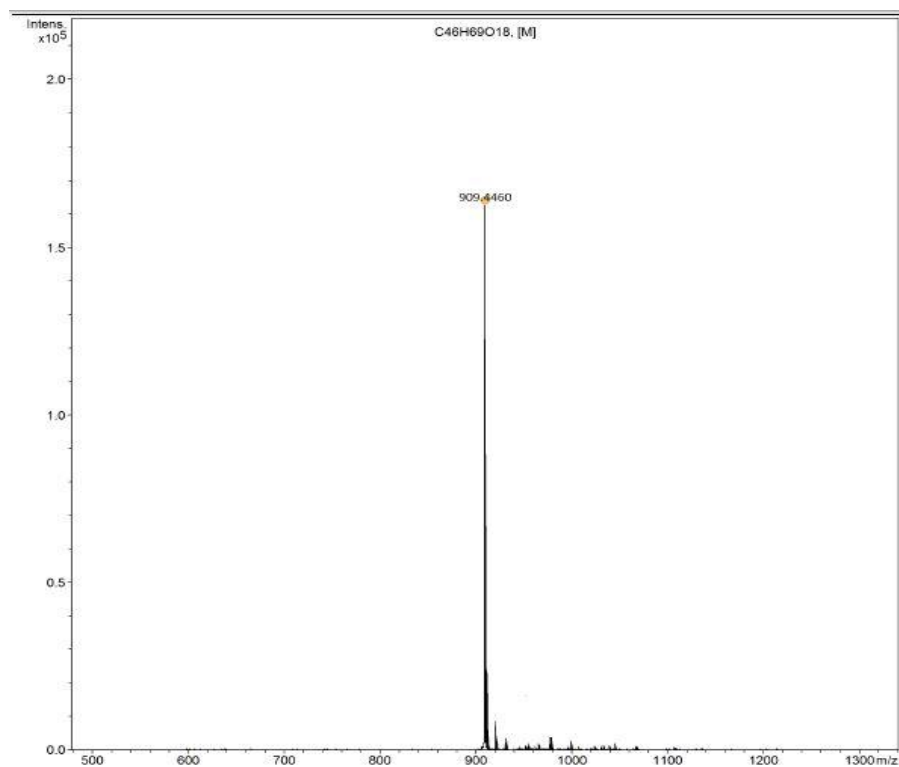


Figura 43. Espectro de massas de alta resolução do composto 1

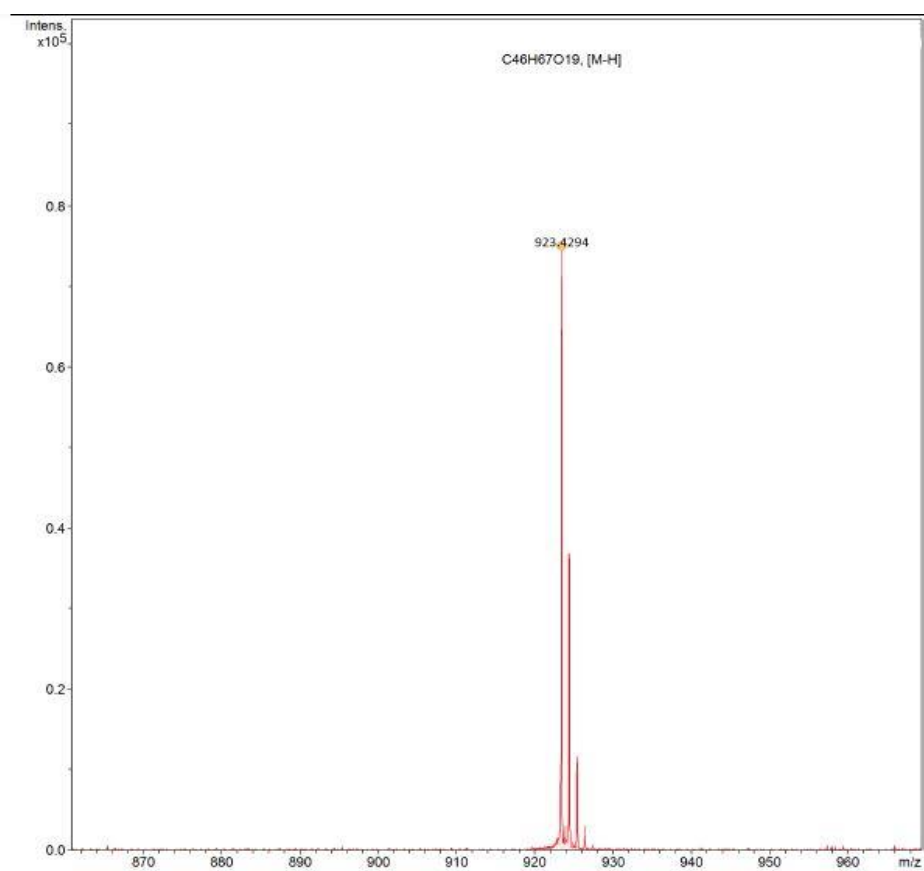


Figura 44. Espectro de massas de alta resolução do composto 2