J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

Synthesis and NMR characterization of Bile Acid Derivatives Bearing Ugi 4CR-Modified Side Chains

Josué Vazquez-Chavez, Brian A. Verdeja-Perdomo, Martin A. Iglesias-Arteaga*

Facultad de Química, Universidad Nacional Autónoma de México. CDMX, 04510, México

***Corresponding author:** Martin A. Iglesias-Arteaga, email: martin.iglesias@unam.mx

Received May 4th, 2023; Accepted August 28th, 2023.

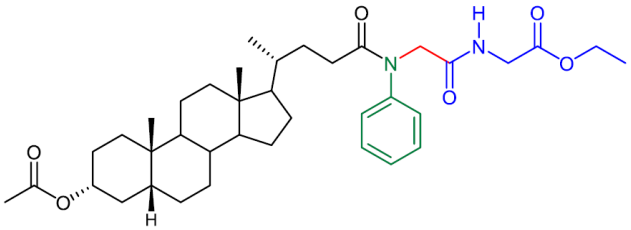
DOI for the article: http://dx.doi.org/10.29356/jmcs.v68i2.2061

Supplementary Information

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

NMR spectra of reported compounds



Ugi adduct **3a**.

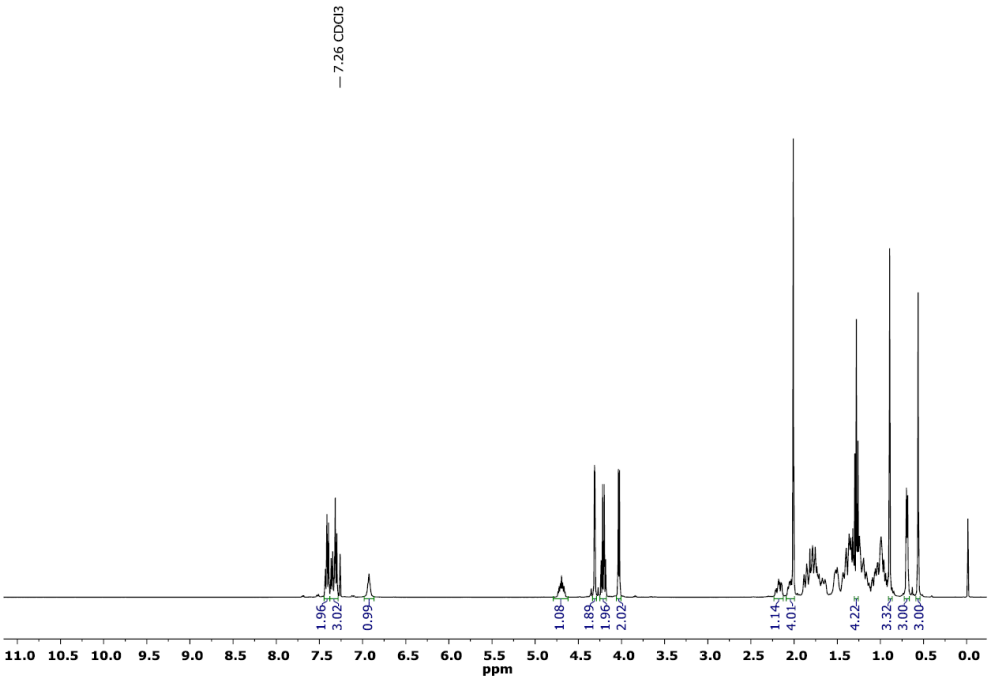


Fig. S1. ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3a**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

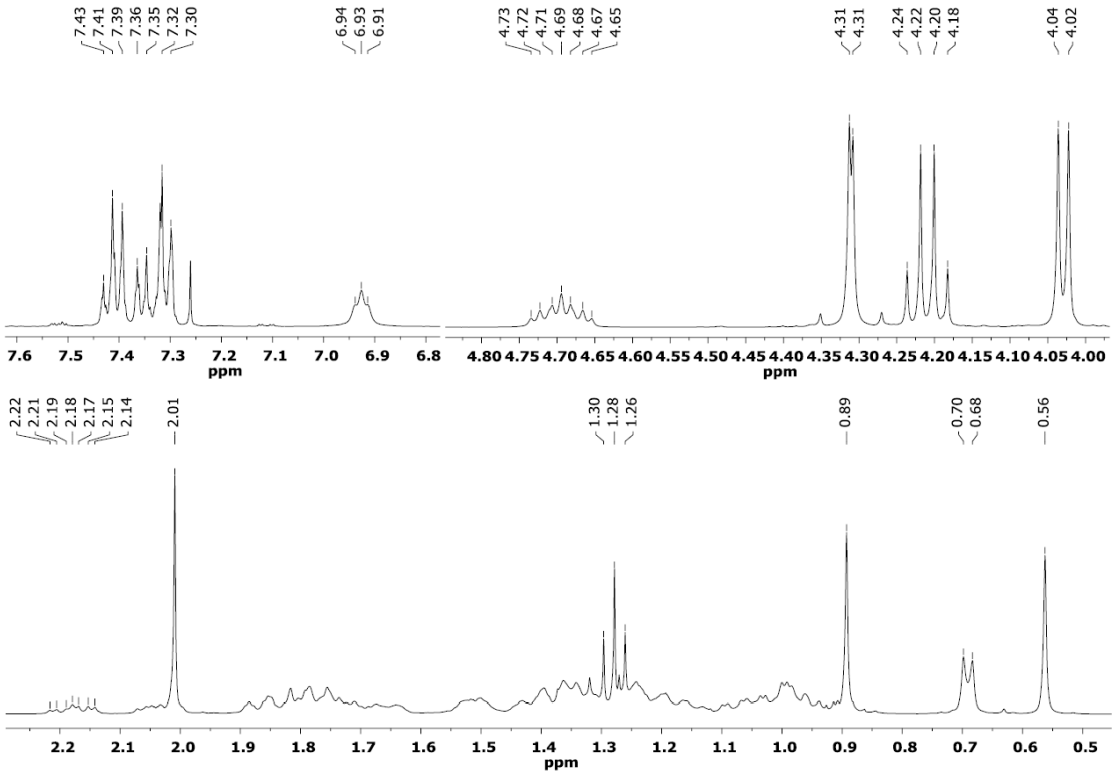


Fig. S2. Sections of the ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3a**.

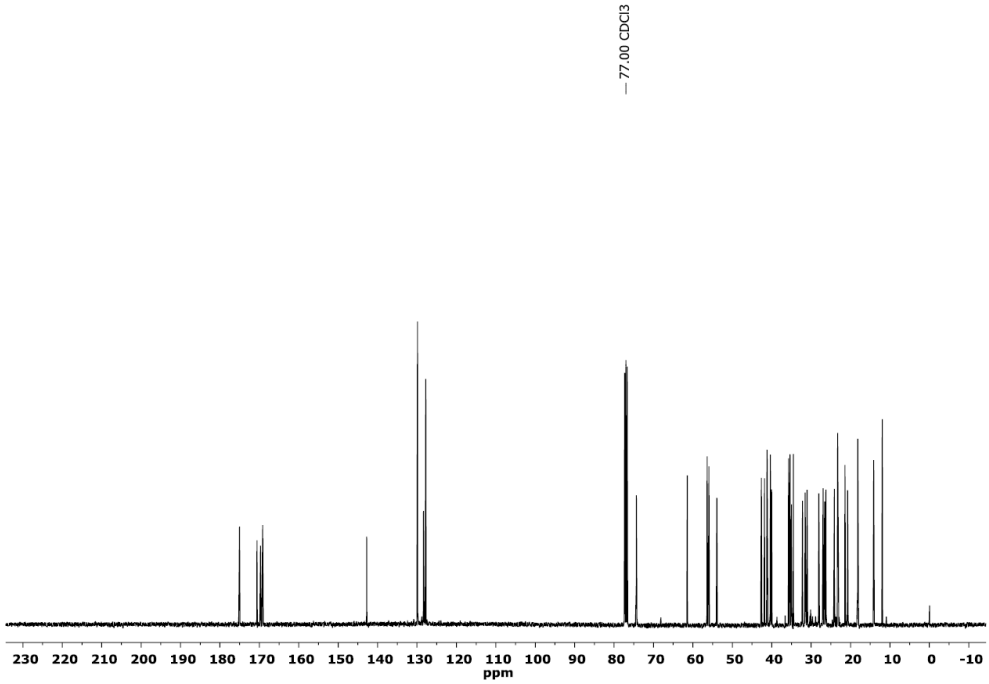


Fig.S3. ^{13}C NMR spectrum (100.53 MHz, CDCl3) of compound **3a**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

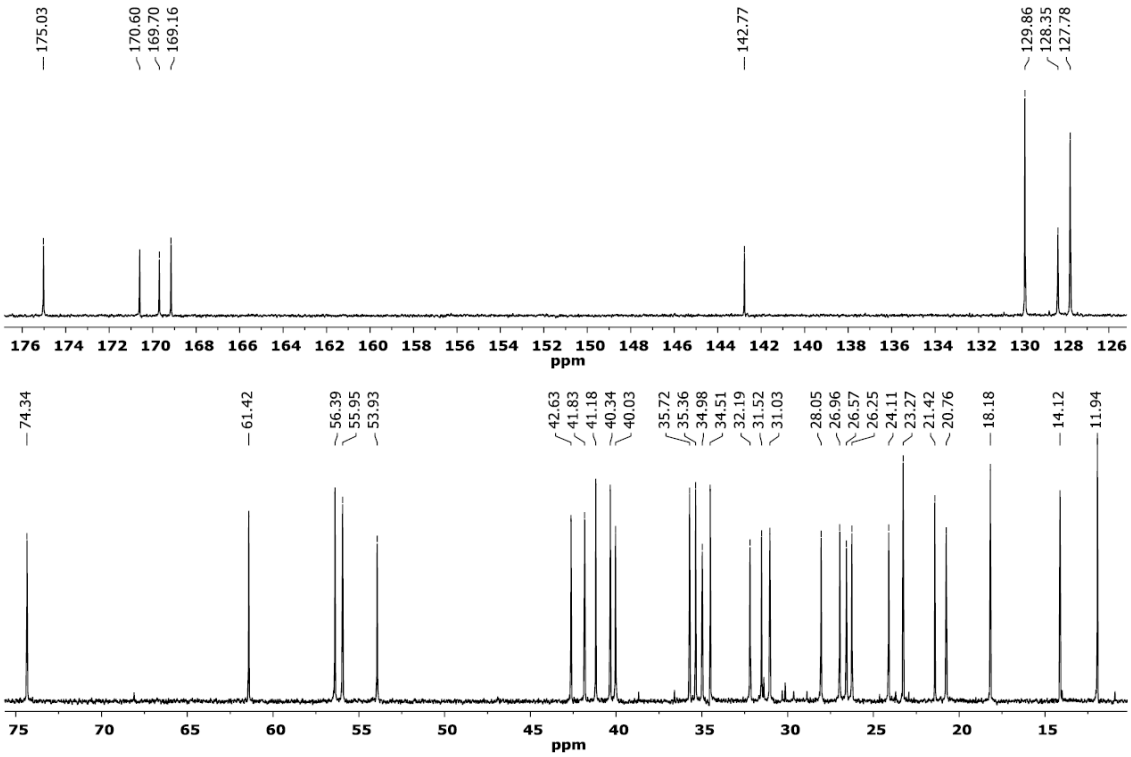
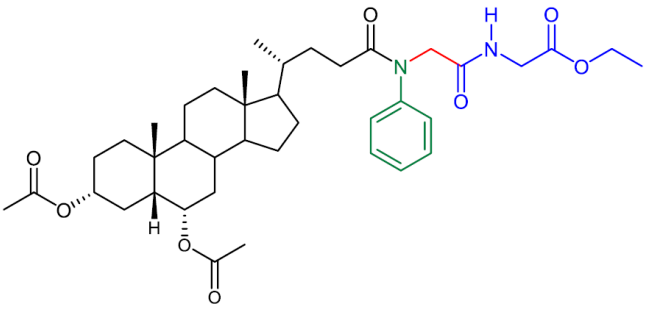


Fig. S4. Sections of the ^{13}C NMR spectrum (100.53 MHz, CDCl3) of compound **3a**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317



Ugi adduct **3b**

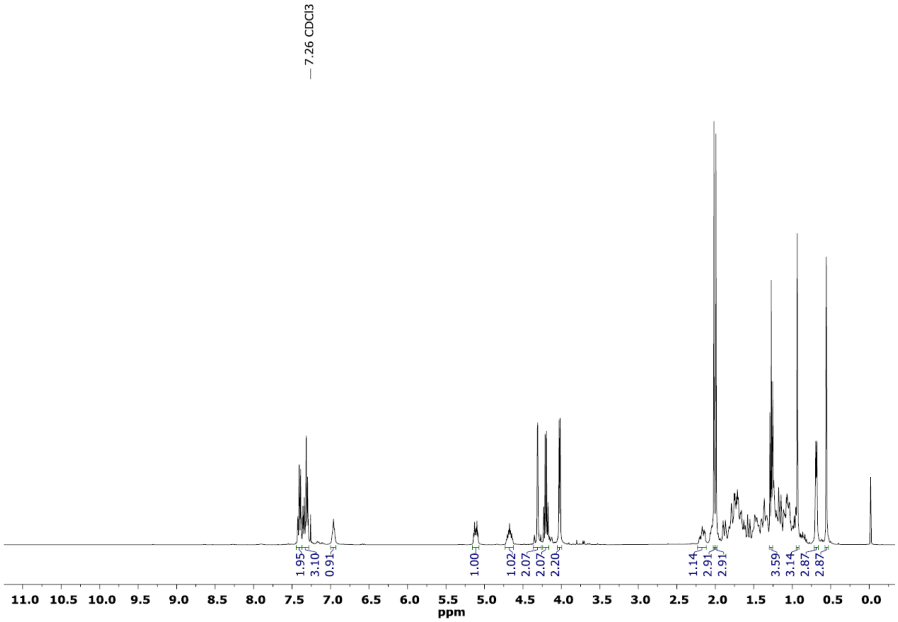


Fig. S5. ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3b**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

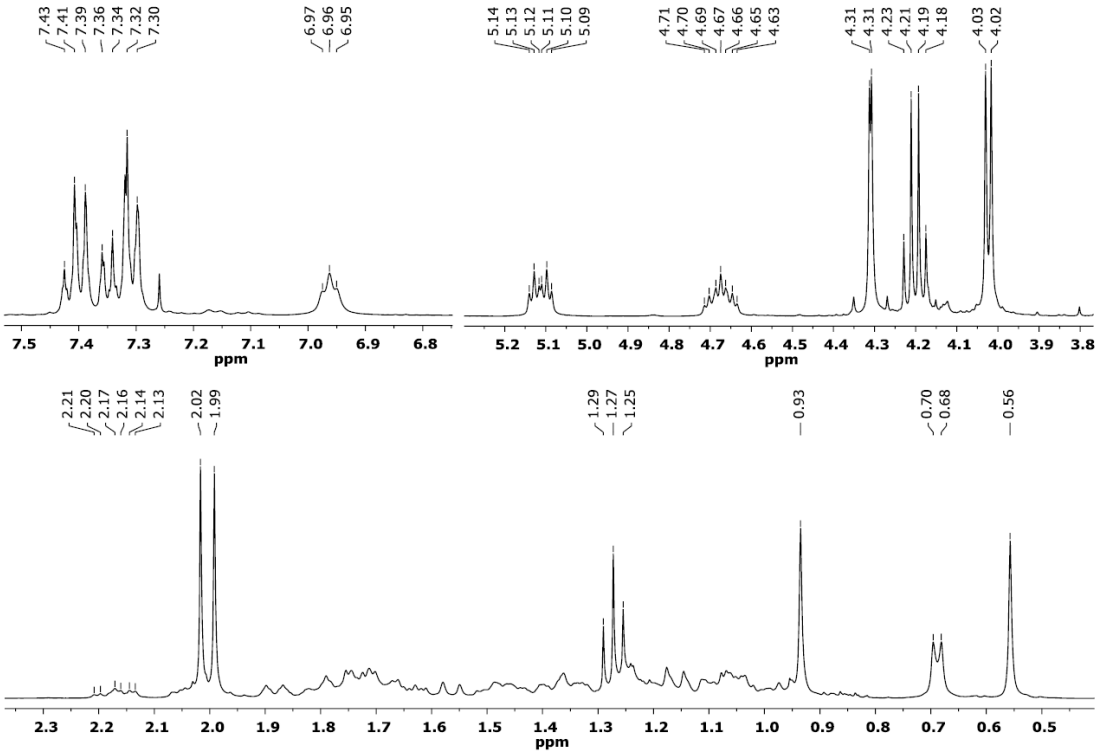


Fig. S6. Sections of the ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3b**.

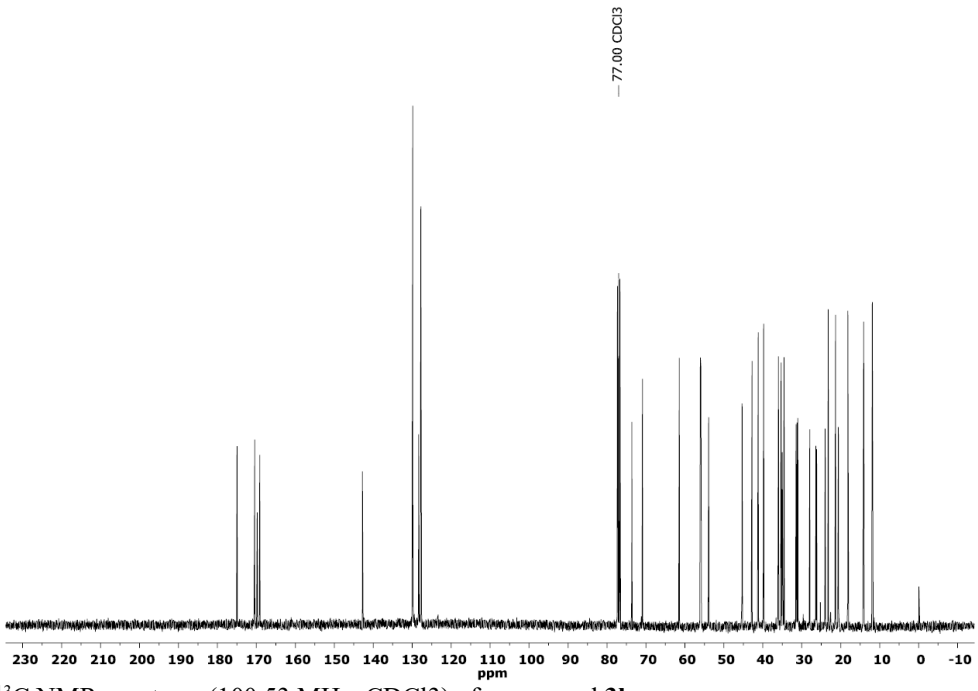


Fig. S7. ^{13}C NMR spectrum (100.53 MHz, CDCl3) of compound **3b**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

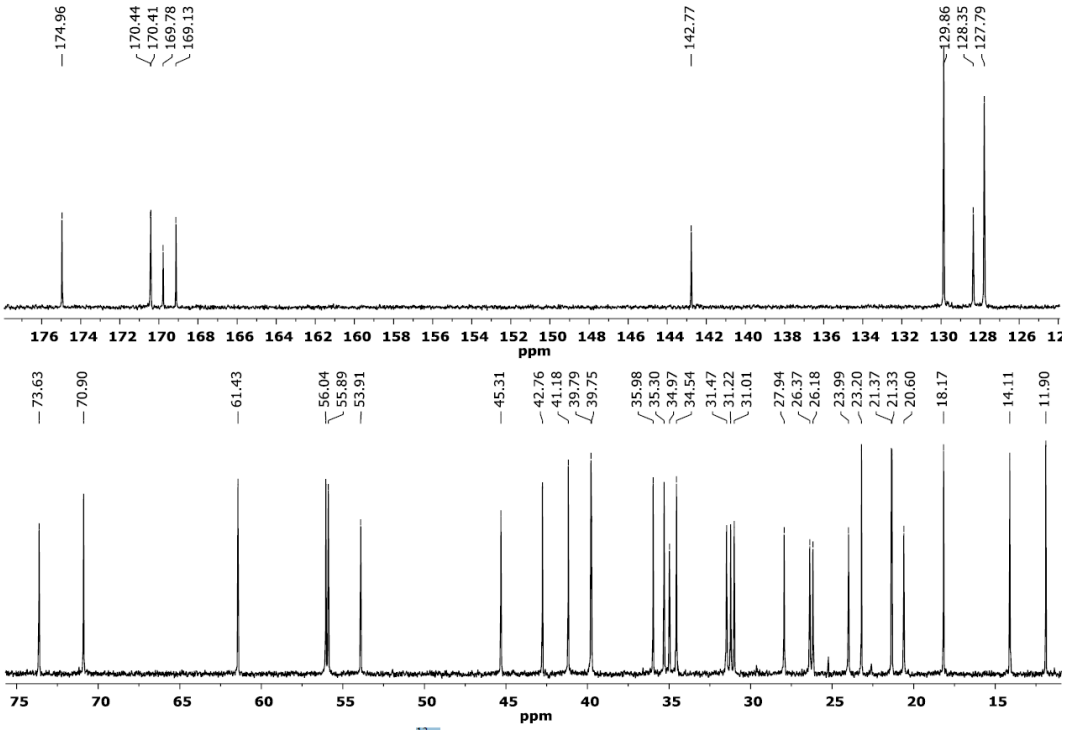
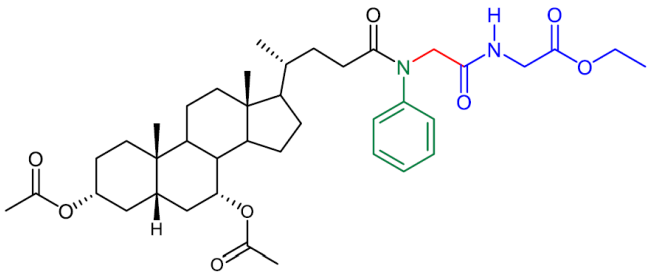


Fig. S8. Sections of the ^{13}C NMR spectrum (100.53 MHz, $CDCl_3$) of compound **3b**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317



Ugi adduct **3c**

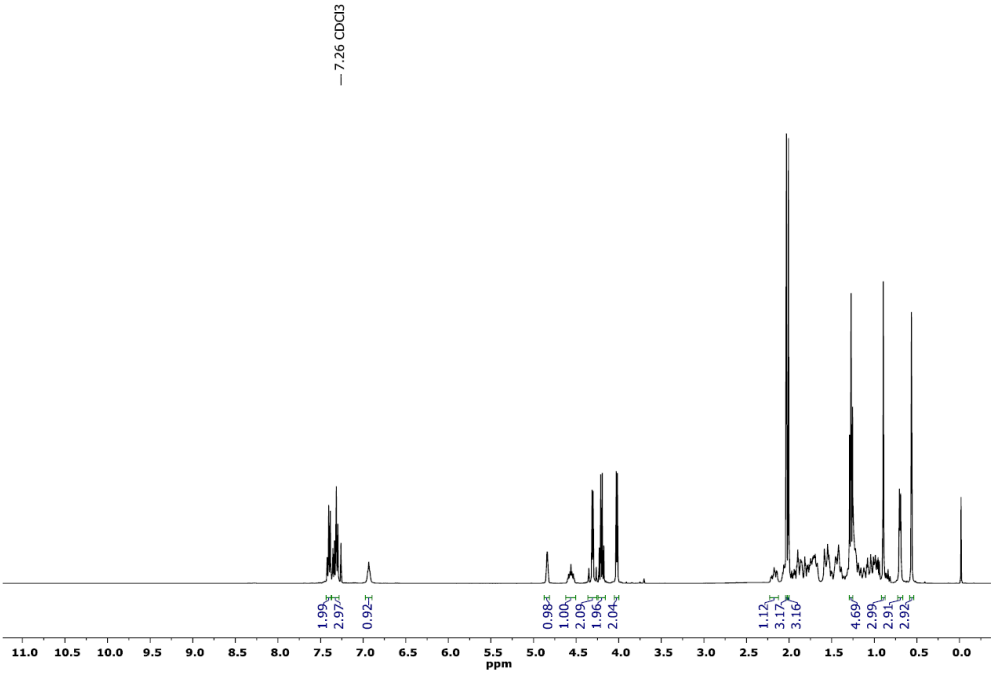


Fig. S9. ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3c**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

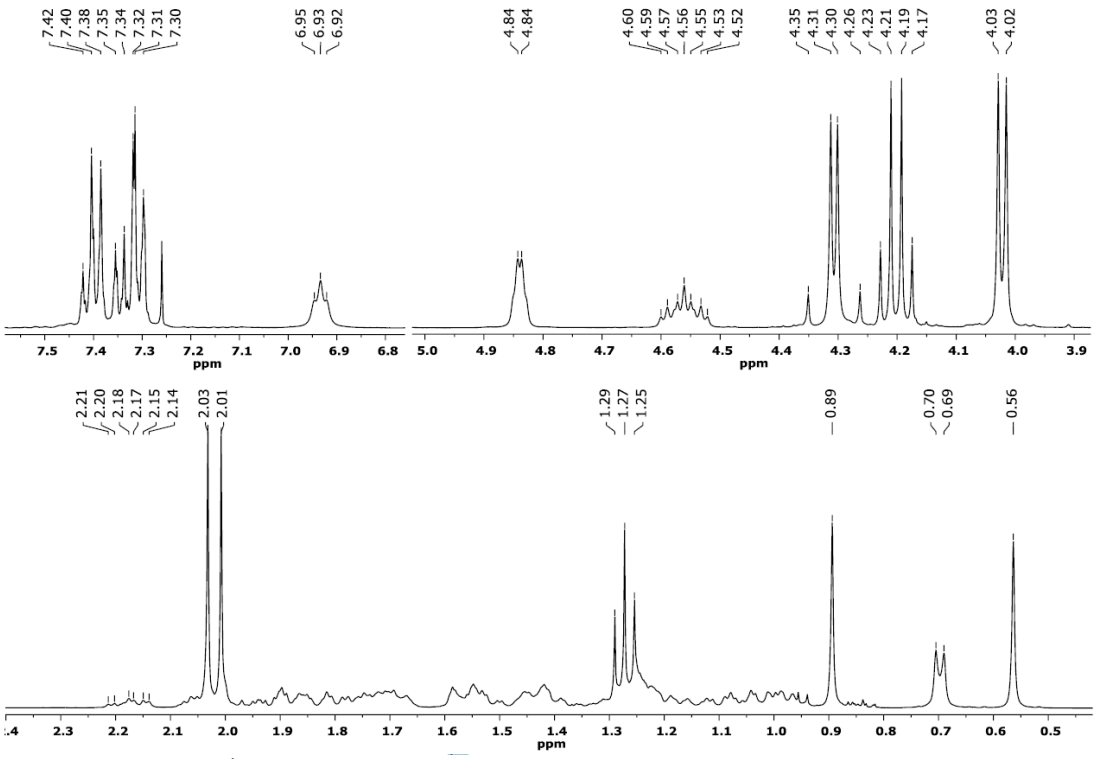


Fig. S10. Sections of the ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3c**.

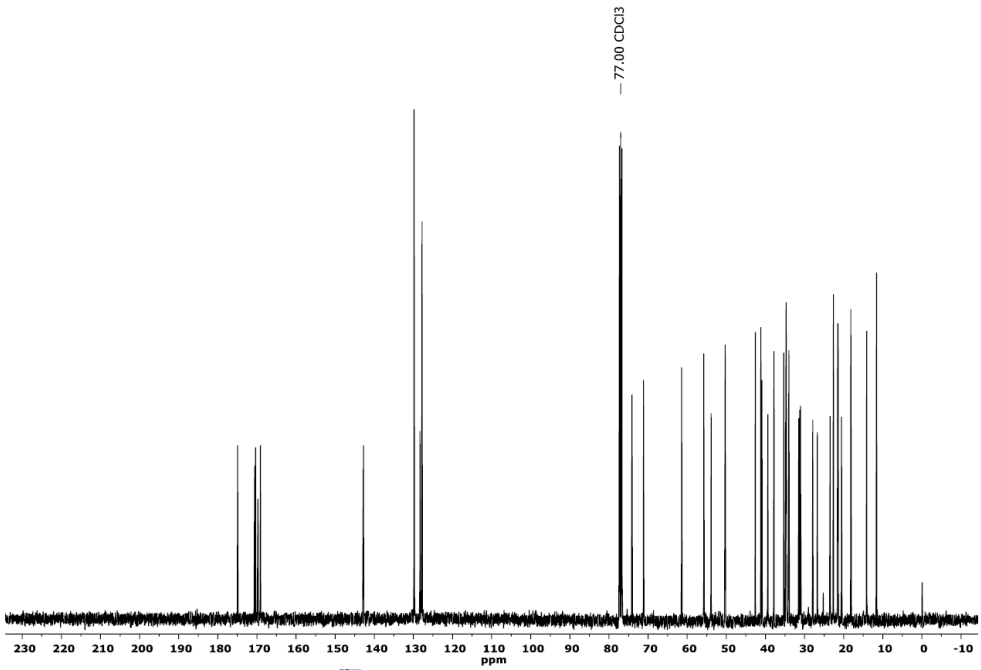


Fig. S11. ^{13}C NMR spectrum (100.53 MHz, CDCl3) of compound **3c**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

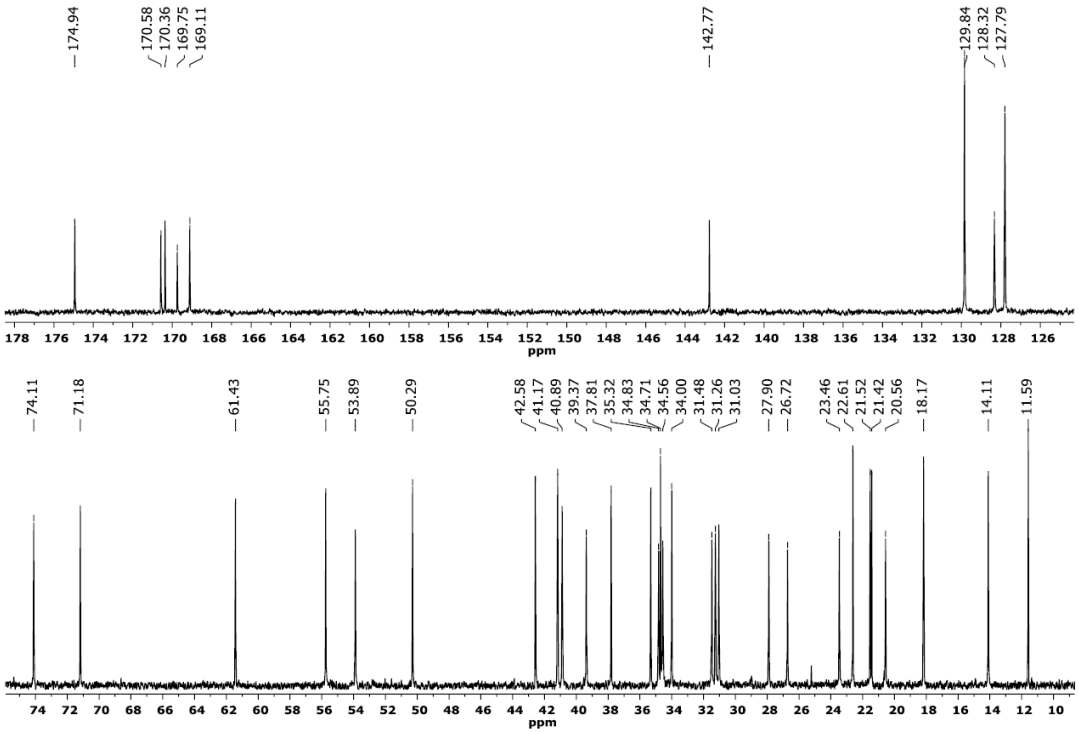
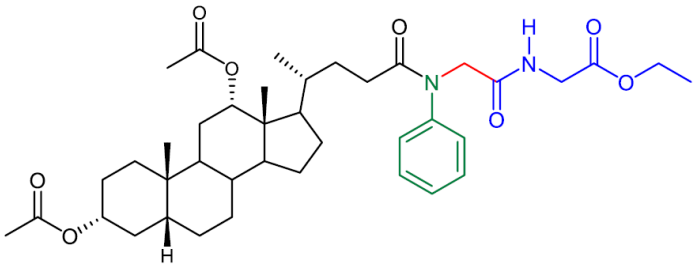


Fig. S12. Sections of the ^{13}C NMR spectrum (100.53 MHz, CDCl3) of compound **3c**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317



Ugi adduct **3d**

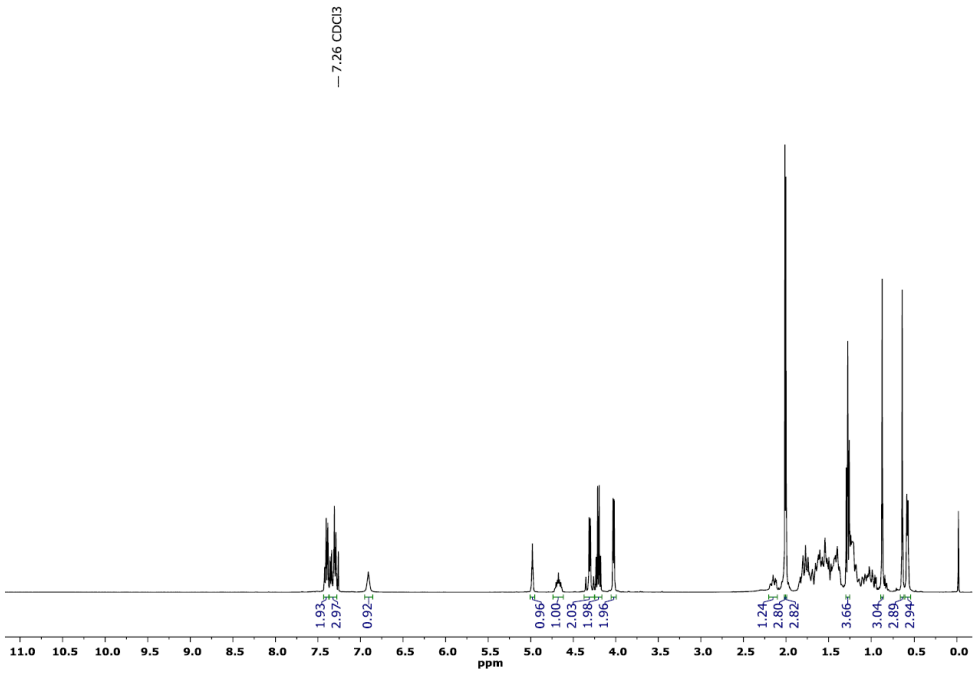


Fig. S13. ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3d**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

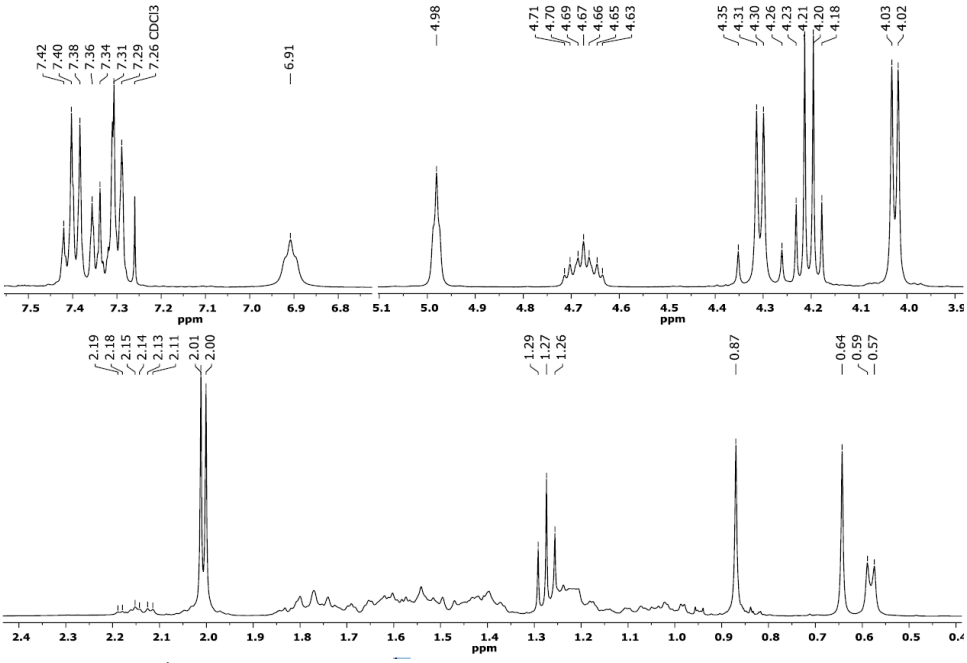


Fig. S14. Sections of the ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3d**.

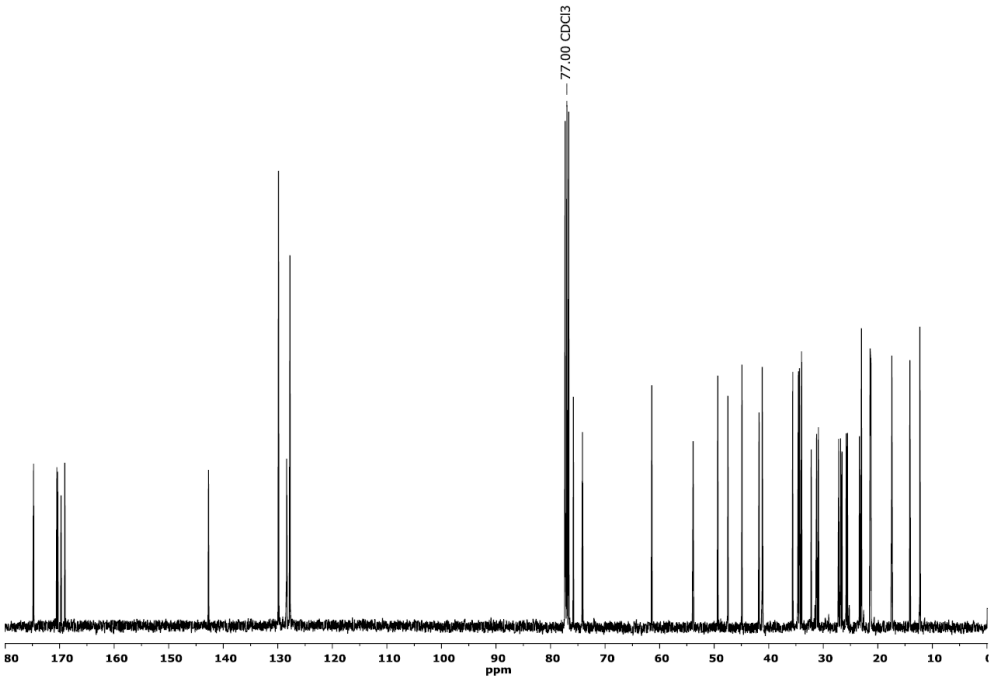


Fig. S15. ^{13}C NMR spectrum (100.53 MHz, CDCl3) of compound **3d**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

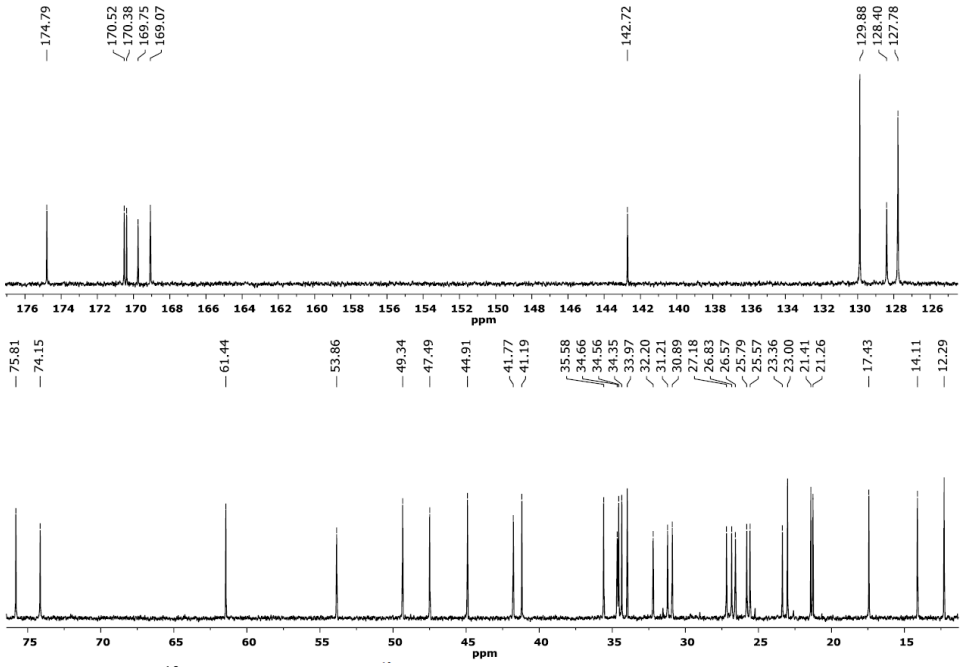
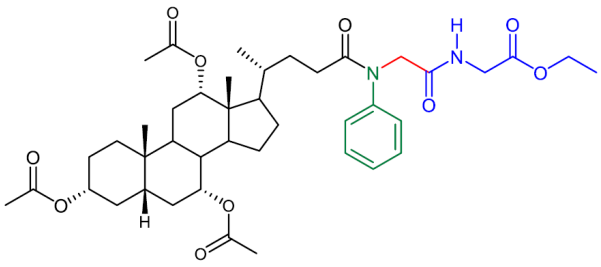


Fig. S16. Sections of the ^{13}C NMR spectrum (100.53 MHz, CDCl3) of compound **3d**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317



Ugi adduct **3e**

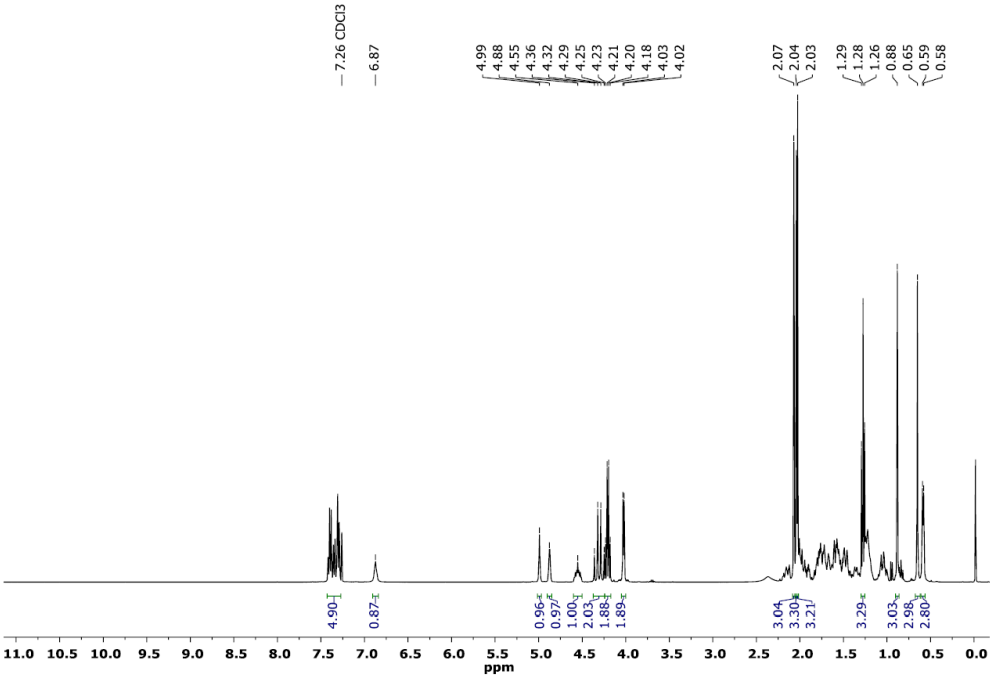


Fig. S17. ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3e**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

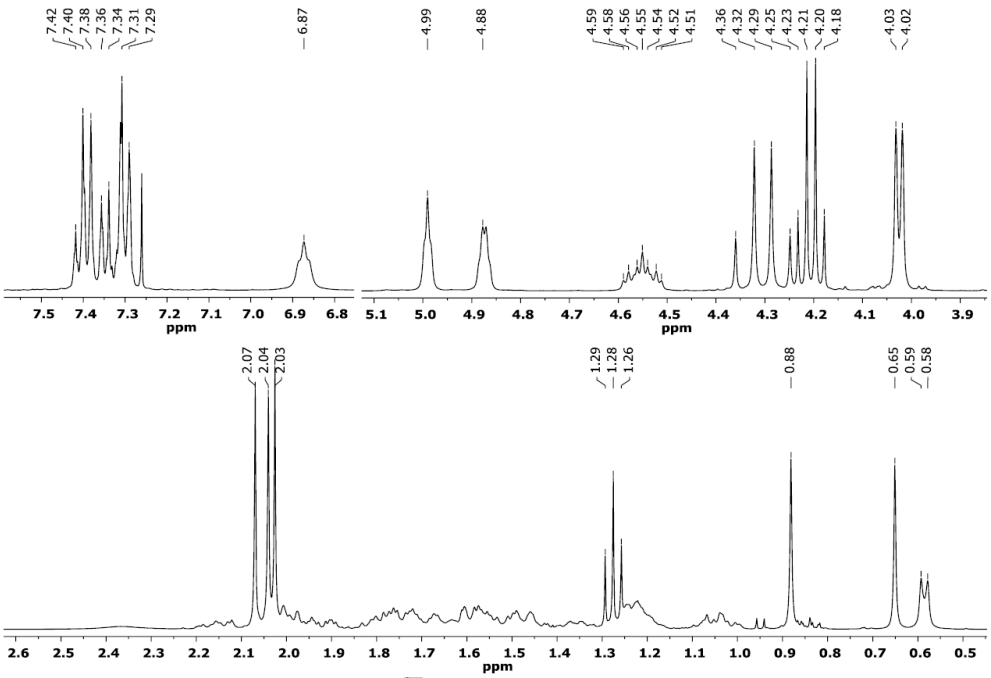


Fig. S18. Sections of the ^{1}H NMR spectrum (400 MHz, CDCl3) of compound **3e**.

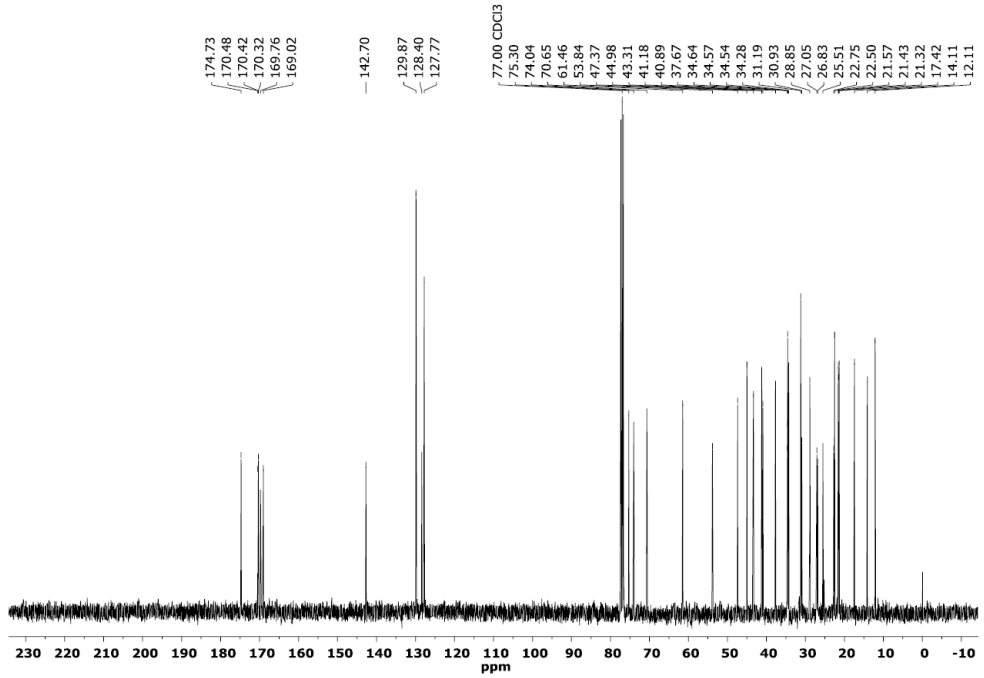


Fig. S19. ^{13}C NMR spectrum (100.53 MHz, CDCl3) of compound **3e**.

J. Mex. Chem. Soc. **2024**, *68*(2)
Regular Issue

ISSN-e 2594-0317

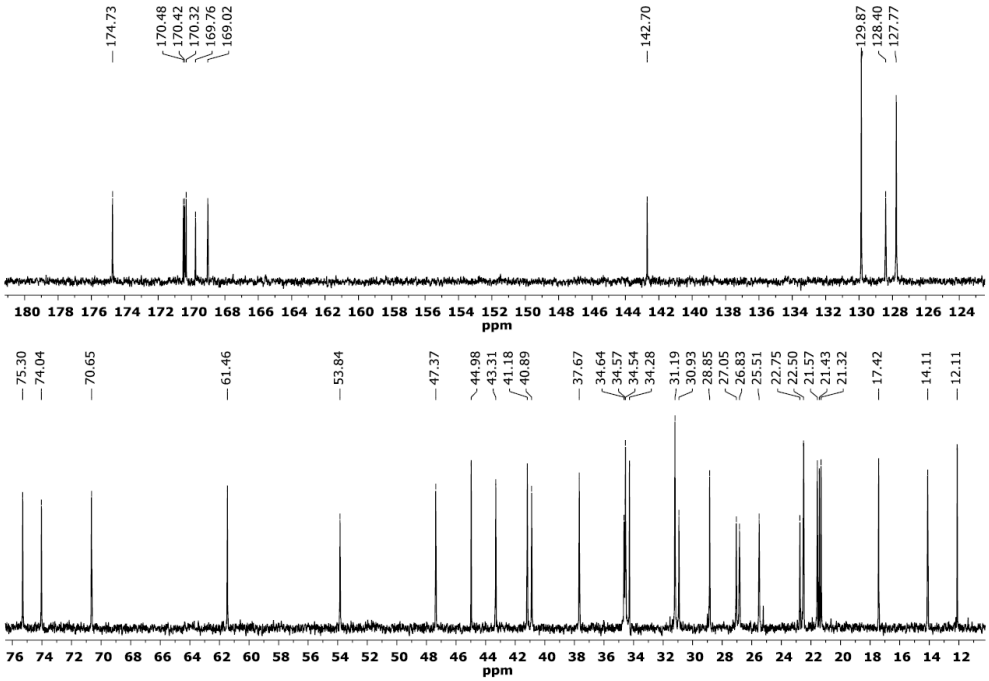


Fig. S20. Sections of the ^{13}C NMR spectrum (100.53 MHz, CDCl3) of compound **3e**.