

Supplementary Material

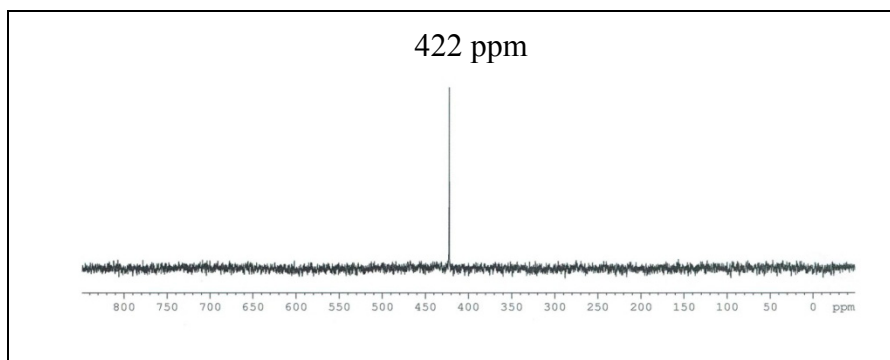


Figure S1. ^{77}Se -NMR spectra of pure diaryl selenide **16** in $\text{DMSO-}d_6$.

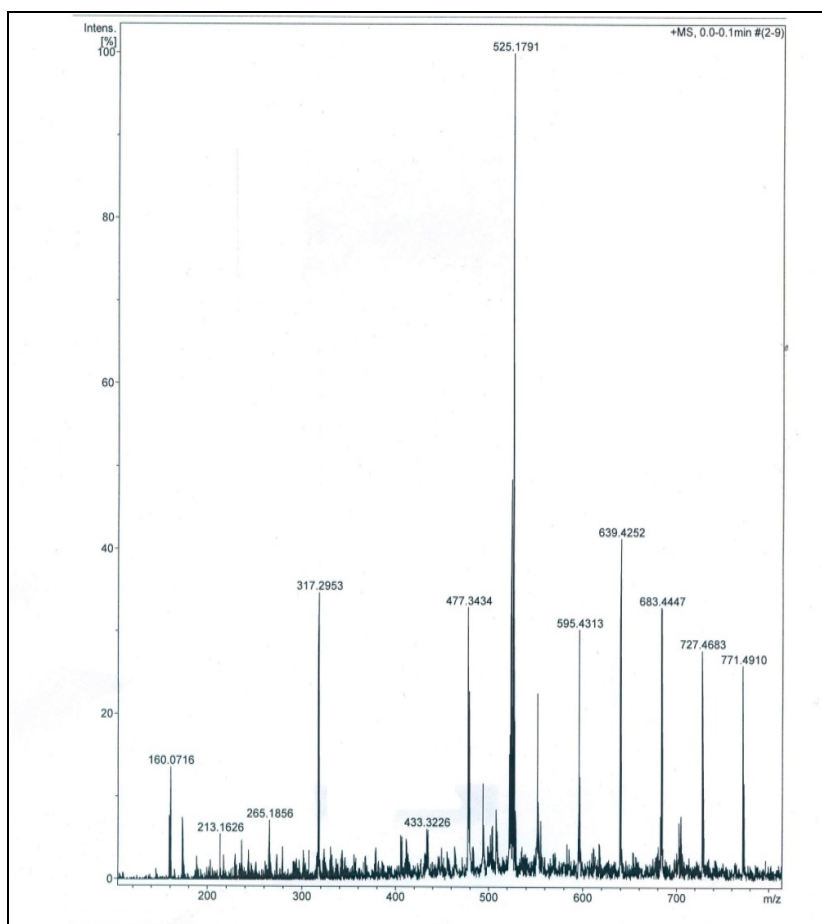


Figure S2. ESI-Mass spectrum of compound **16**. ESI-MS (m/z) Calcd, $\text{C}_{26}\text{H}_{22}\text{N}_4\text{O}_2\text{Se}$: 502.4, found: 525.1 $[\text{M} + \text{Na}]^+$.

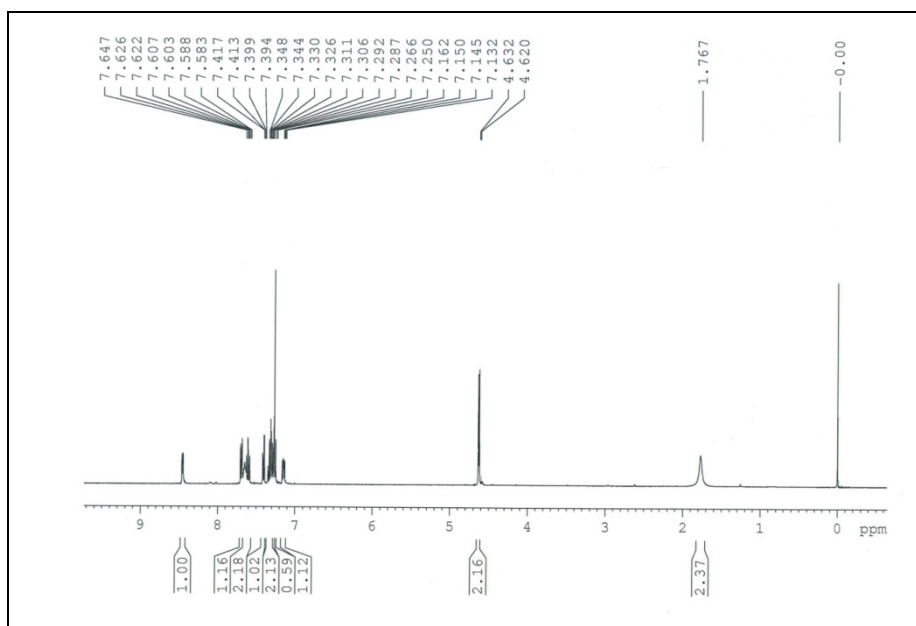


Figure S3. ¹H-NMR spectra of pure spirodiazaselenurane **30** in CDCl₃.

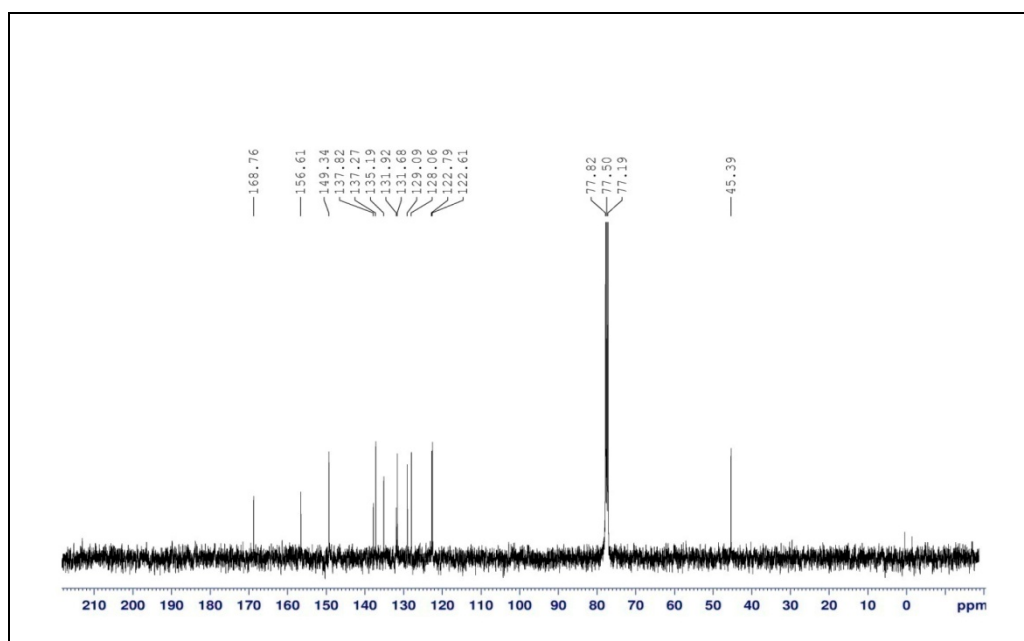


Figure S4. ¹³C-NMR spectra of pure spirodiazaselenurane **30** in DMSO-*d*₆.

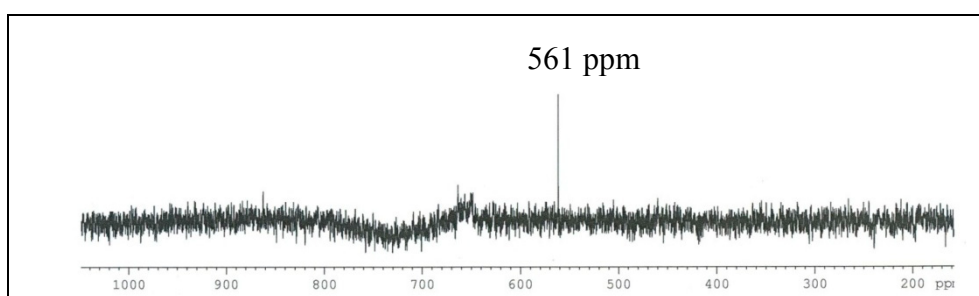


Figure S5. ⁷⁷Se-NMR spectra of pure spirodiazaselenurane **30** in DMSO-*d*₆.

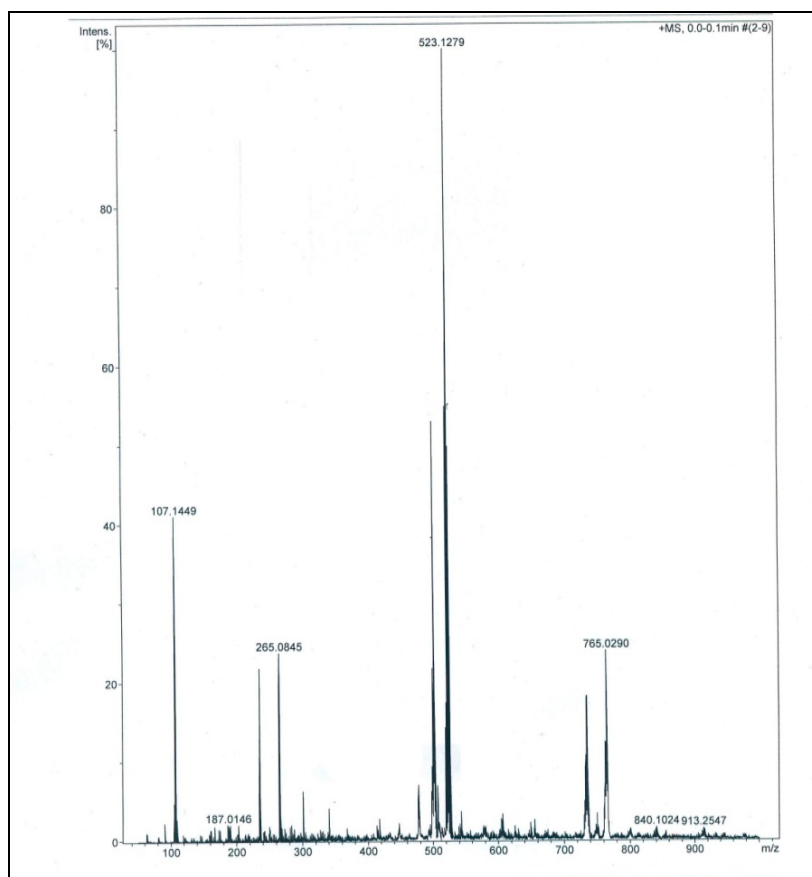


Figure S6. ESI-Mass spectrum of compound **30**. ESI-MS (m/z) Calcd, $C_{26}H_{20}N_2O_4Se$: 503.4, found: 523.1 $[M + Na]^+$.

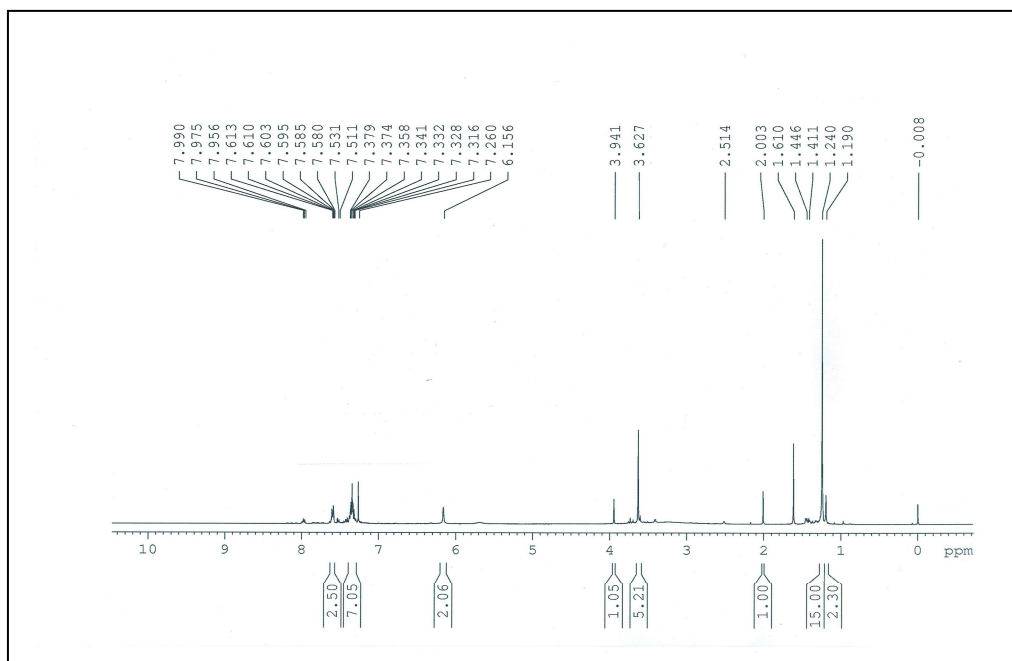


Figure S7. 1H -NMR spectra of pure spirodiazaselenurane **34** in $CDCl_3$.

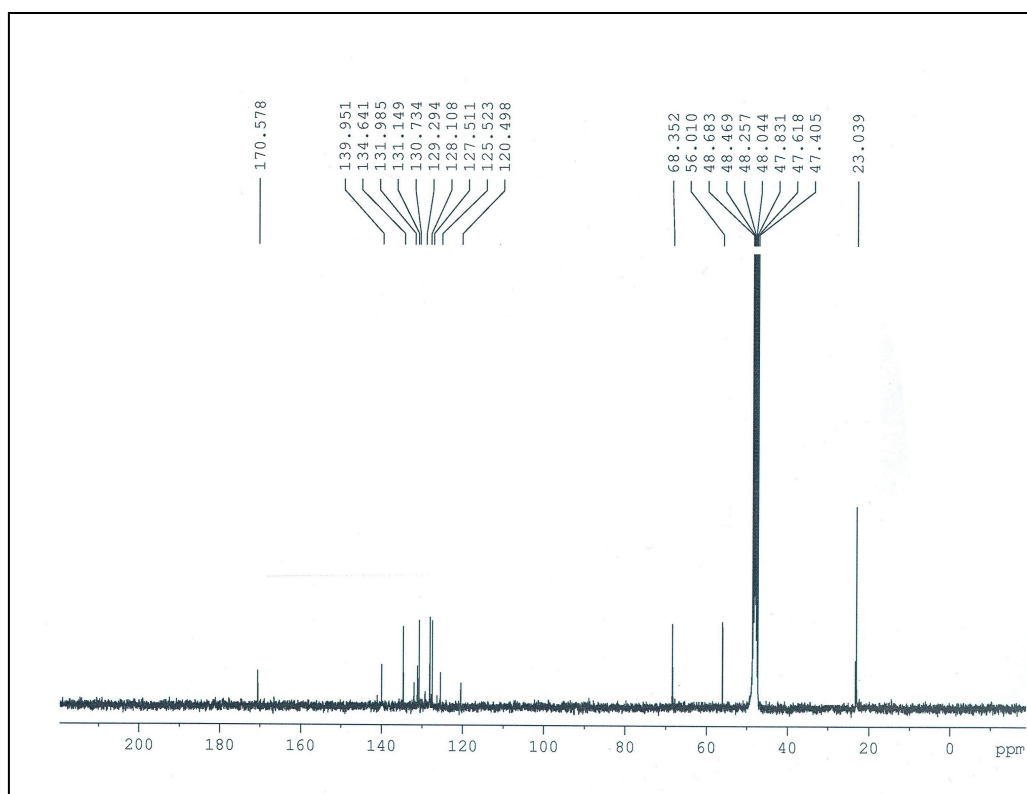


Figure S8. ¹³C-NMR spectra of pure spirodiazaselenurane **34** in CDCl₃.

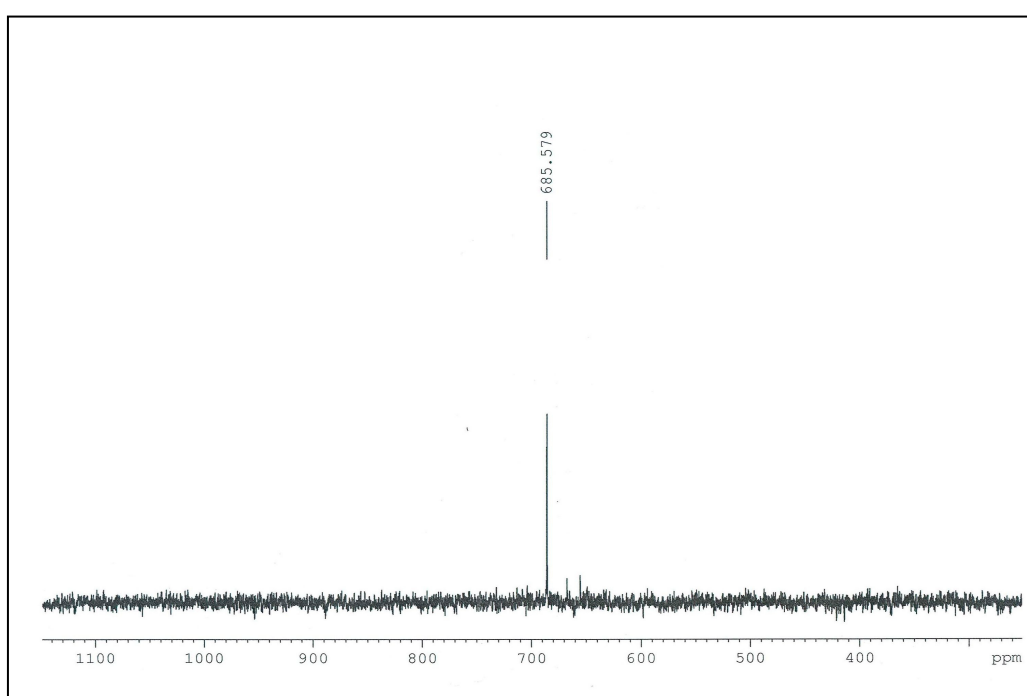


Figure S9. ⁷⁷Se-NMR spectra of pure spirodiazaselenurane **34** in CDCl₃.

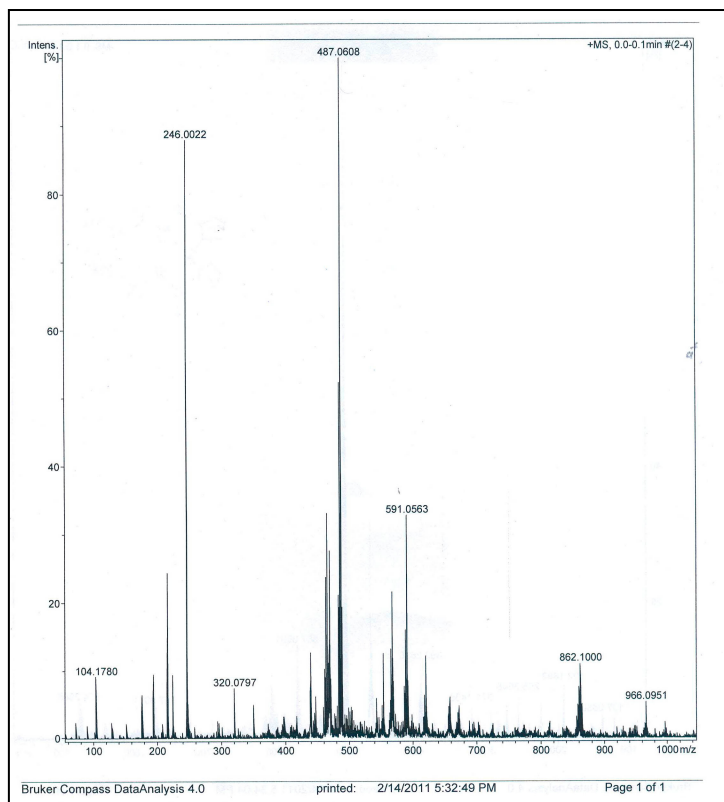


Figure S10. ESI-Mass spectrum of compound **34**. ESI-MS, (m/z) Calcd, $C_{22}H_{26}N_2O_4Se$: 462.4, found: 487.0 $[M + Na]^+$.

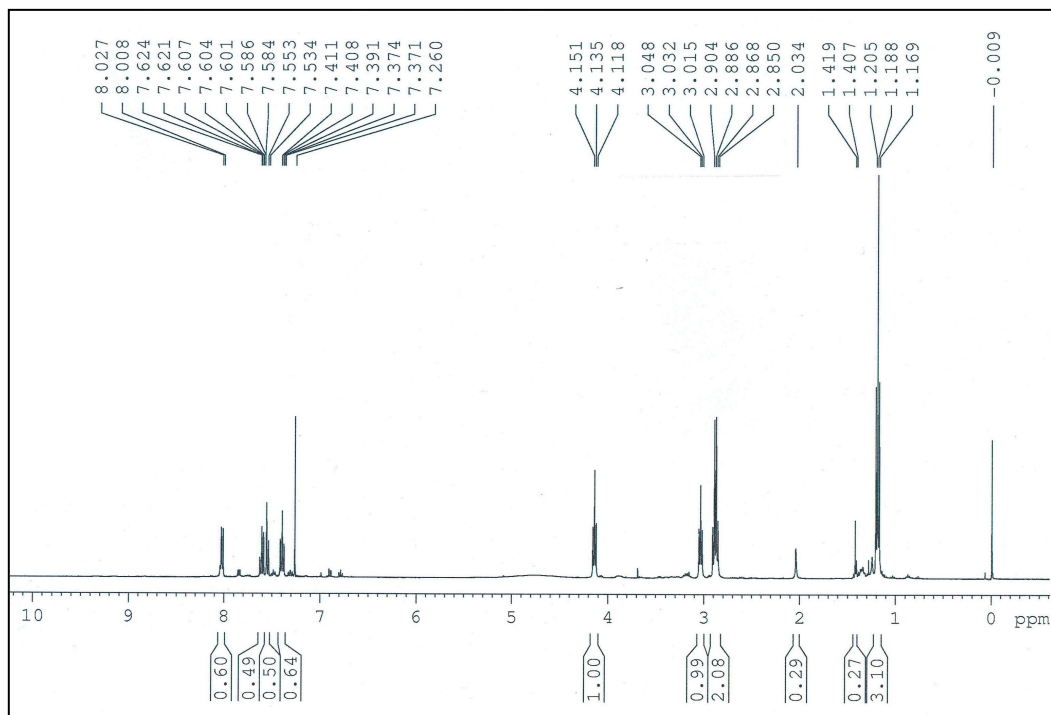


Figure S11. 1H -NMR spectra of pure spirodiazaselenurane **35** in $CDCl_3$.

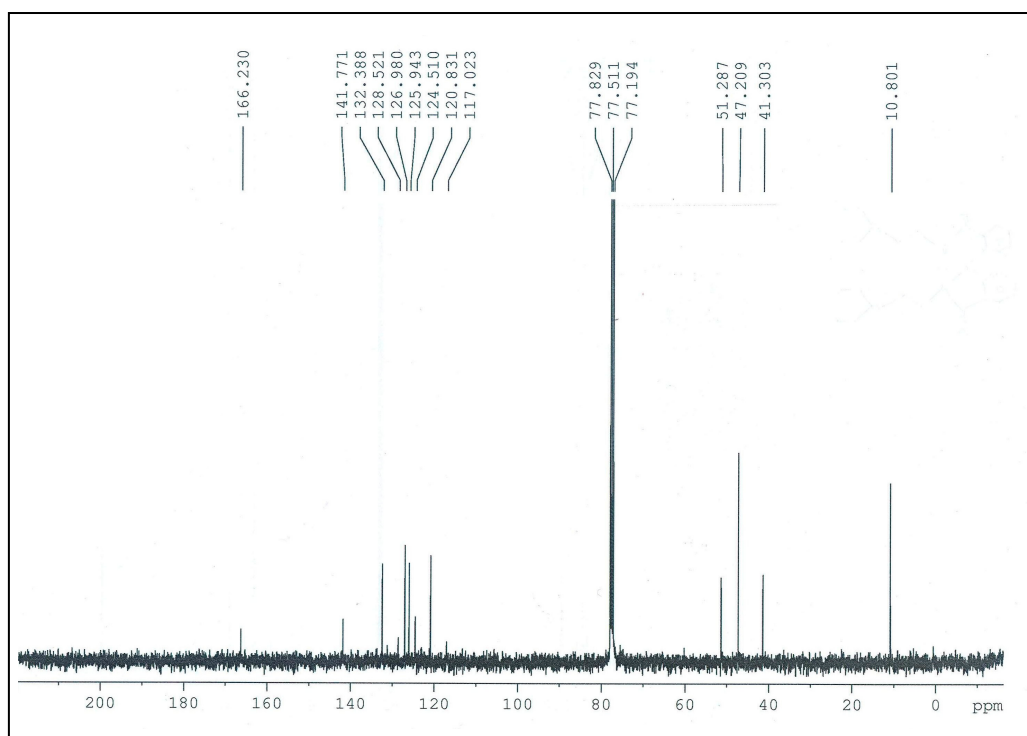


Figure S12. ¹³C-NMR spectra of pure spirodiazaselenurane **35** in CDCl₃.

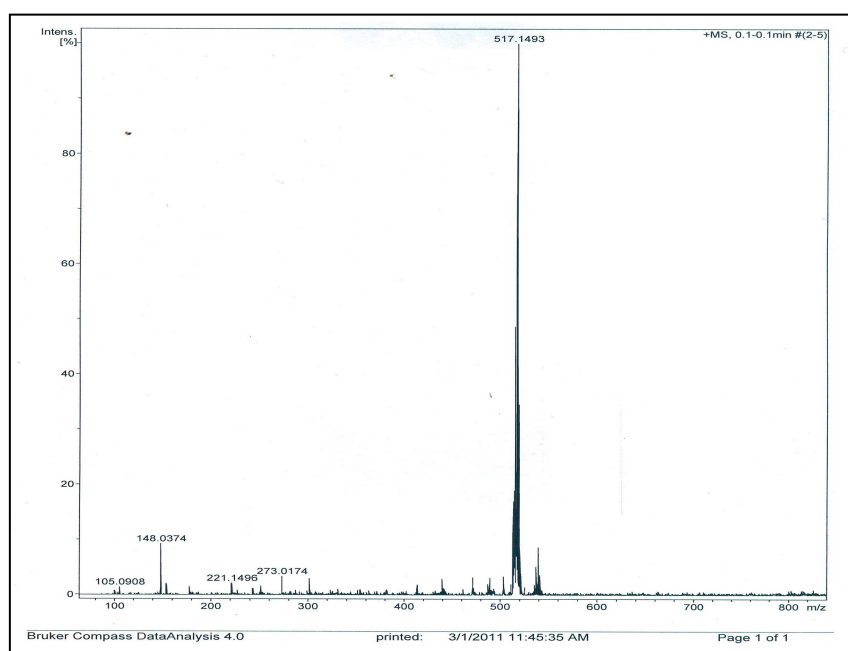


Figure S13. ESI-Mass spectrum of compound **35**. Calcd, C₂₆H₃₆N₄O₂Se: 516.0, found: 517.1 [M + H]⁺.

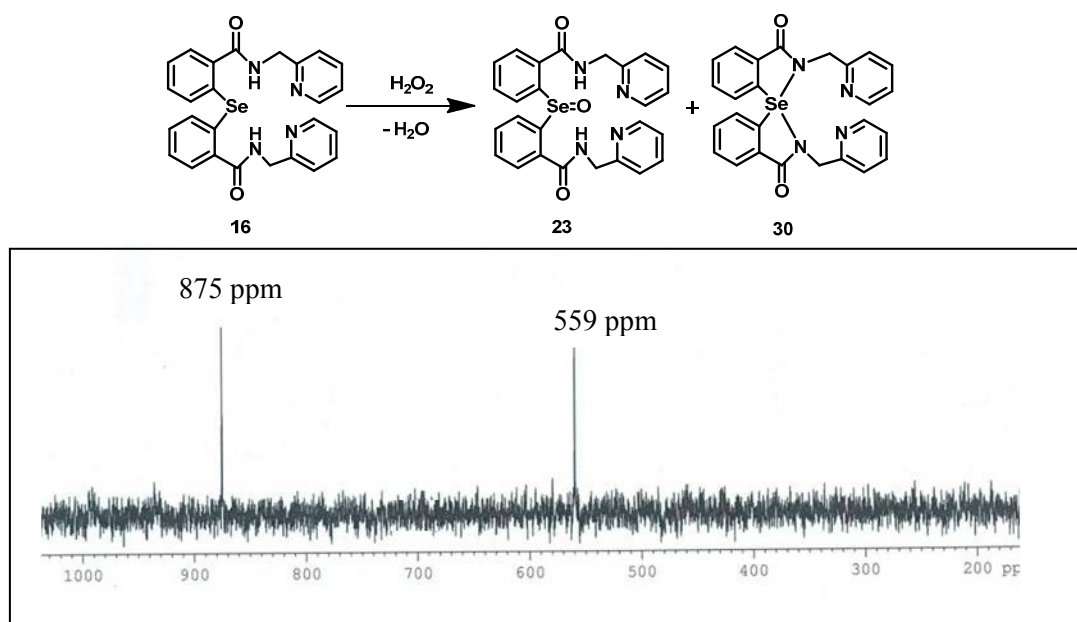


Figure S14. ^{77}Se -NMR spectrum of the diaryl selenide **16** with 1 equiv of H_2O_2 in CH_2Cl_2 . Formation of selenoxide **23** and spirodiazaselenurane **30** were observed.

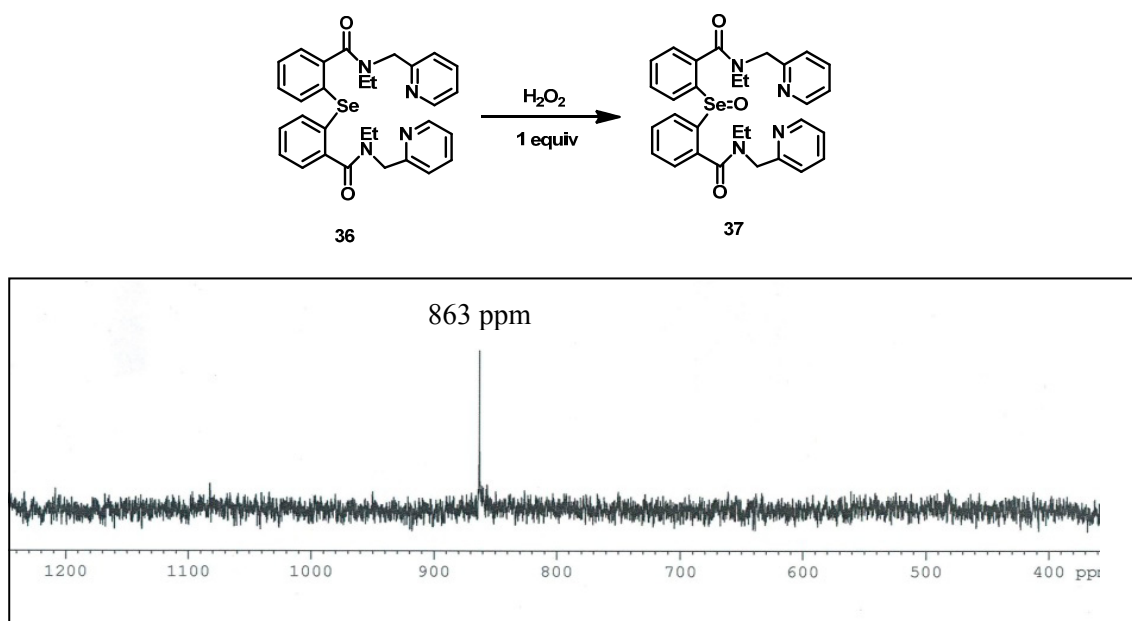


Figure S15. ^{77}Se -NMR spectrum of the monoselenide **36** with 1 equiv of H_2O_2 in CH_2Cl_2 . Formation of the selenoxide **37** was observed.

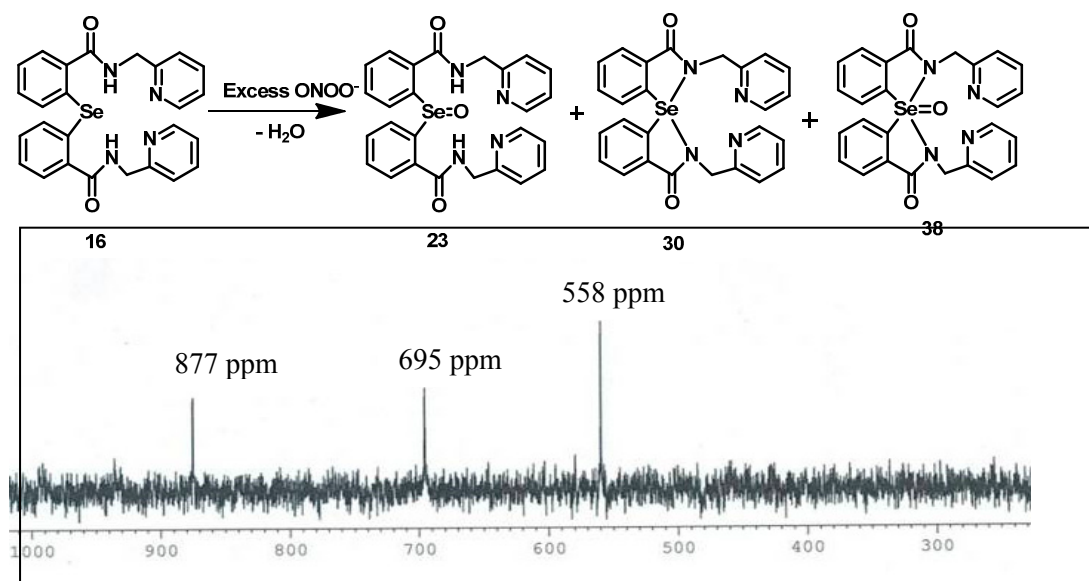


Figure S16. ^{77}Se -NMR spectrum of the diaryl selenide **16** with excess of ONOO^- in CH_2Cl_2 . Formation of selenoxide **23**, spirodiazaselenurane **30** and selenurane oxide **38** were observed.

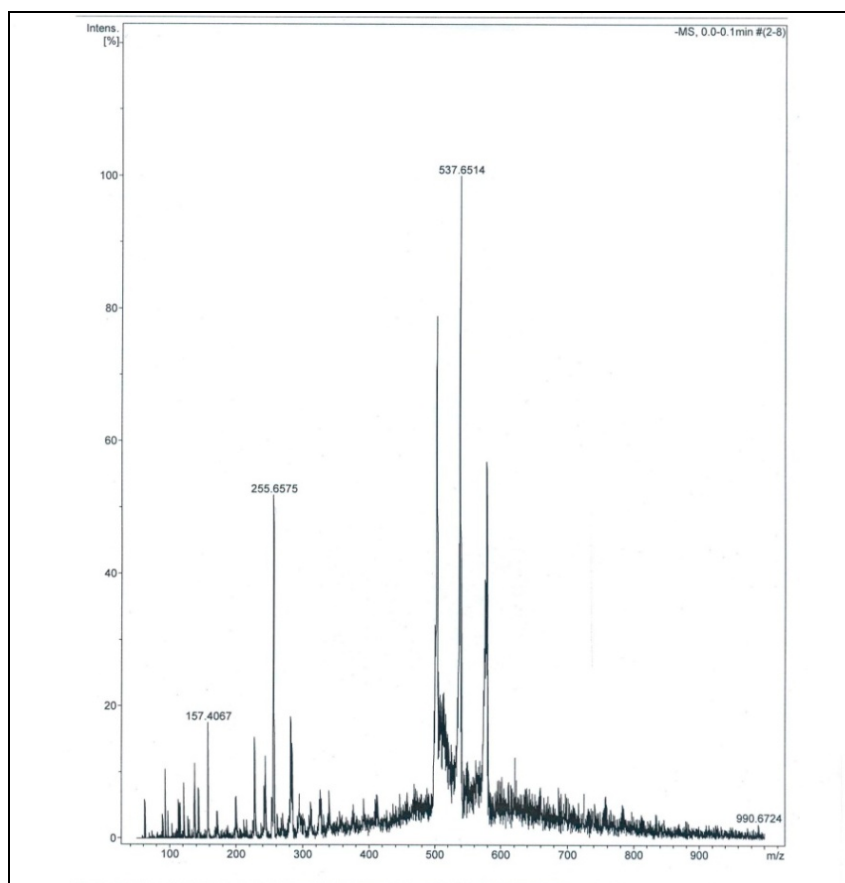


Figure S17. ESI-Mass spectrum of diaryl selenide **16** upon addition of excess of ONOO^- in CD_3OD . Calculated Mass for compound **30**: 500.07, Observed Mass: 501.91 $[\text{M} + \text{H}]^+$, Calculated Mass for compound **38**, Calculated Mass: 516.07, Observed Mass: 537.65 $[\text{M} + \text{Na}]^+$.

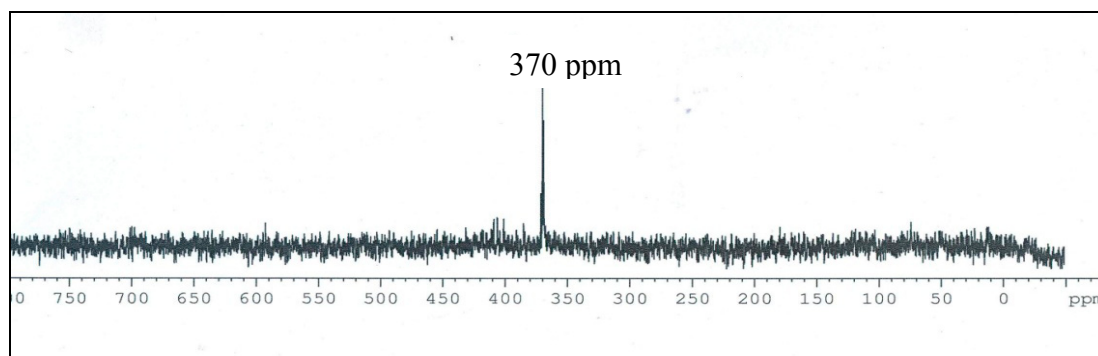


Figure S18. ^{77}Se -NMR spectra of pure monoselenide **36** in CDCl_3 .

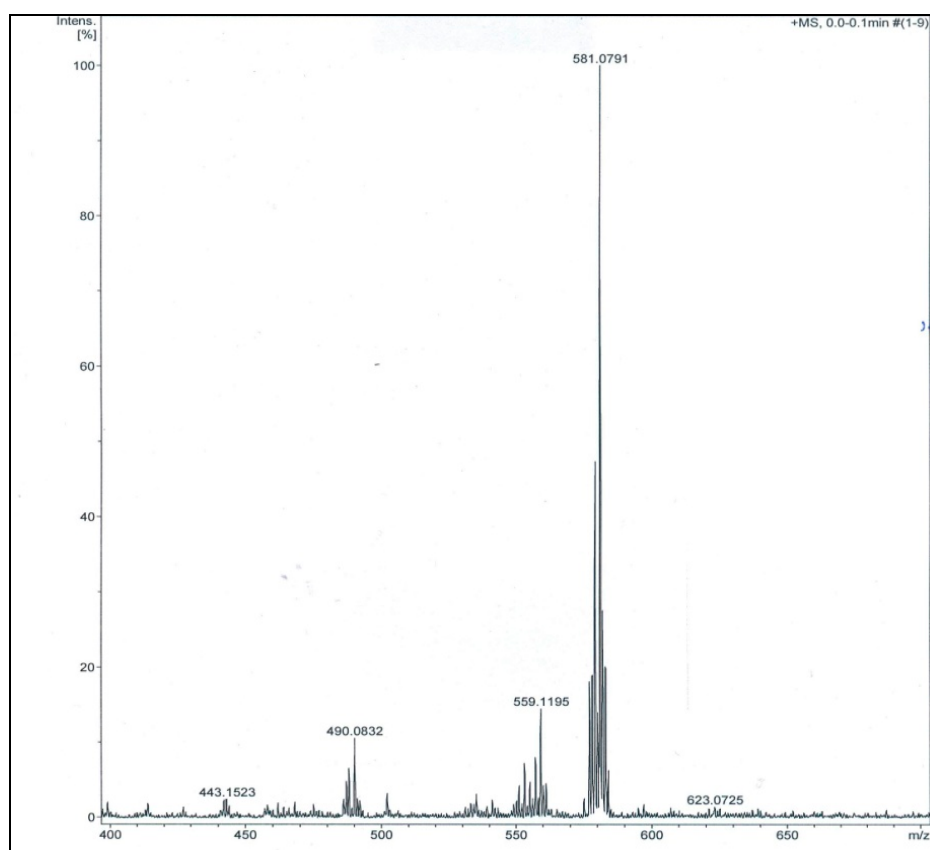


Figure S19. ESI-Mass spectrum of compound **36**. ESI-MS (m/z) Calcd, $\text{C}_{30}\text{H}_{30}\text{N}_4\text{O}_2\text{Se}$: 558.1, found: 581.0 $[\text{M} + \text{Na}]^+$.

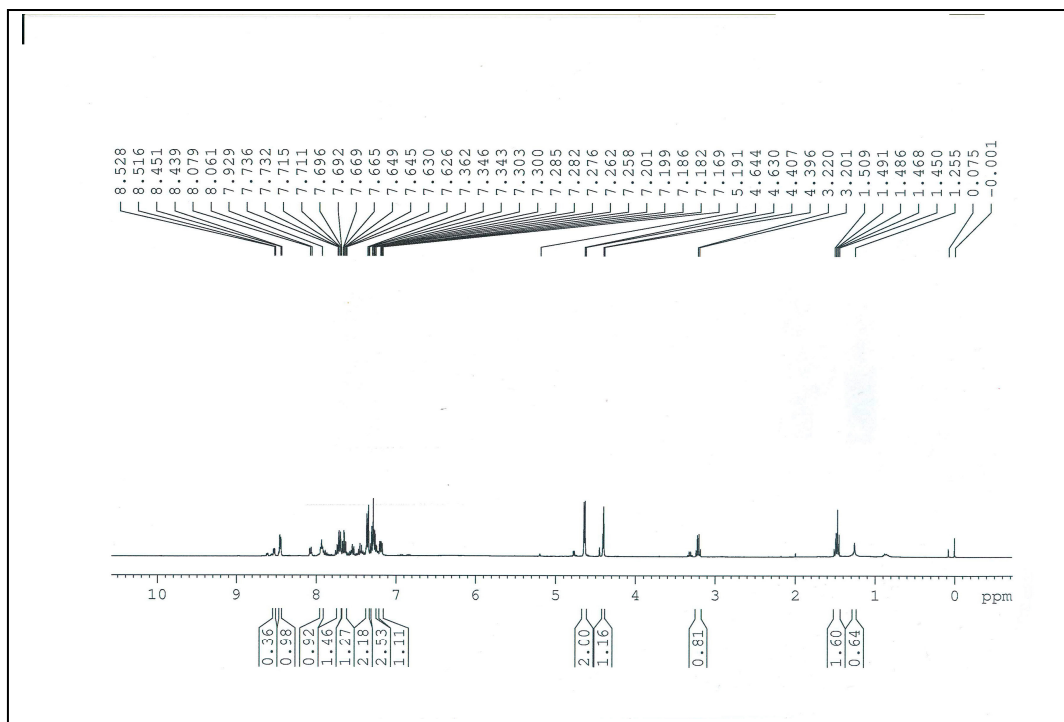


Figure S20. ¹H-NMR spectra of pure selenoxide **37** in CDCl₃.

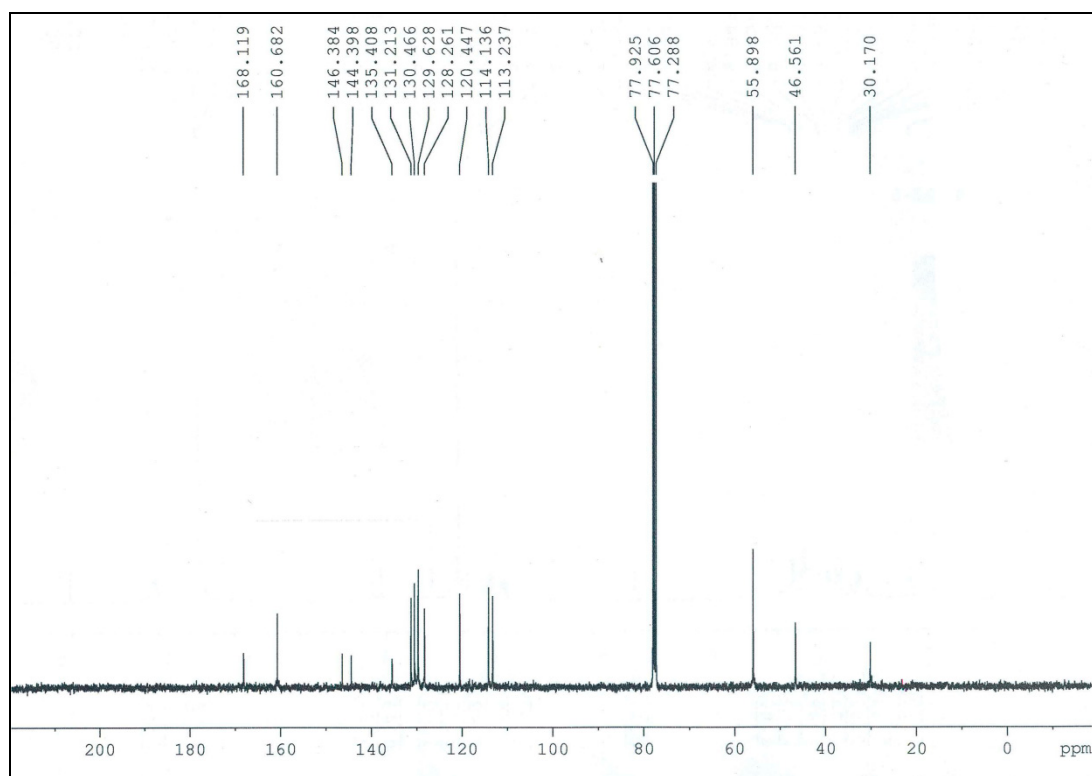


Figure S21. ¹³C-NMR spectra of pure selenoxide **37** in CDCl₃.

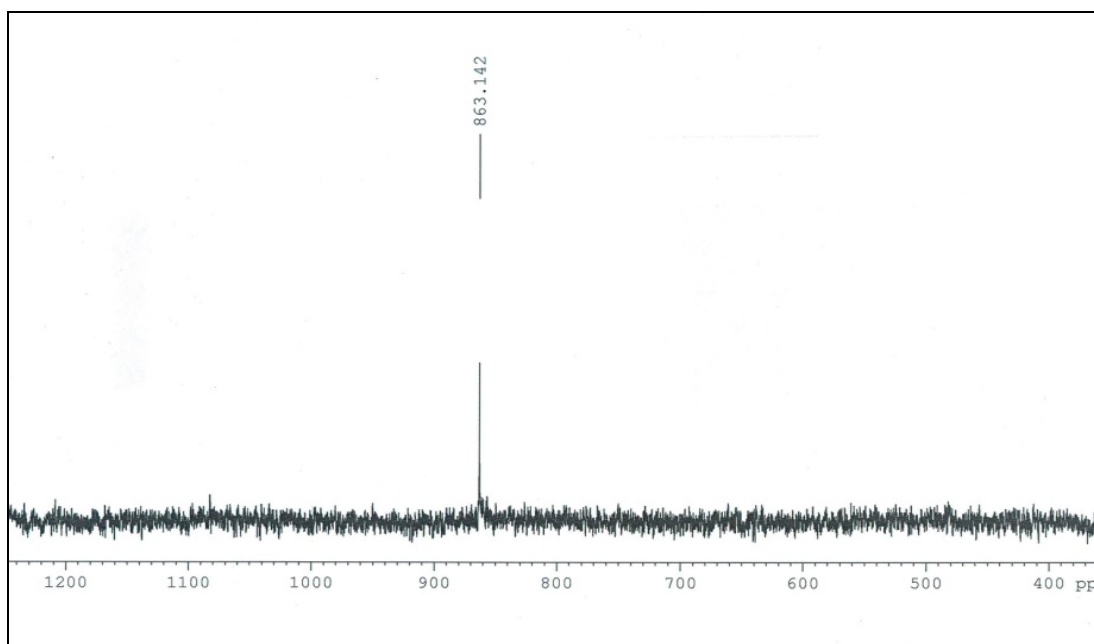


Figure S22. ^{77}Se -NMR spectra of pure selenoxide **37** in CDCl_3 .

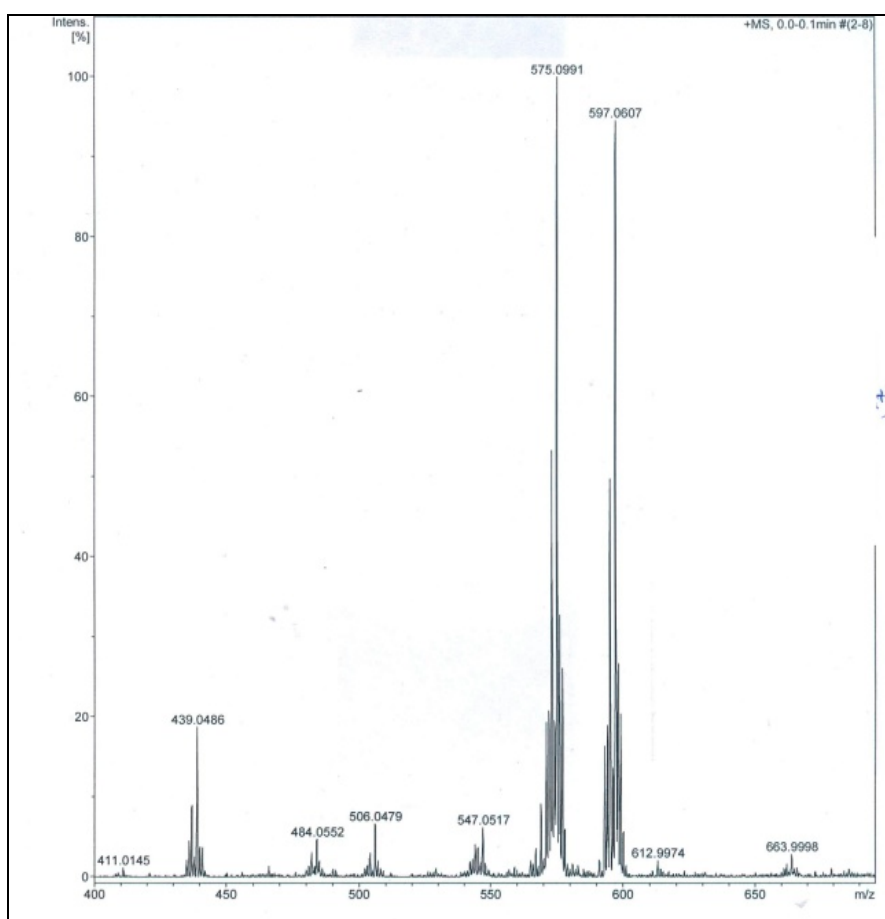


Figure S23. ESI-Mass spectrum of compound **37**. ESI-MS (m/z) Calcd, $\text{C}_{30}\text{H}_{30}\text{N}_4\text{O}_3\text{Se}$: 574.6, found: 575.1.0 $[\text{M} + \text{H}]^+$.

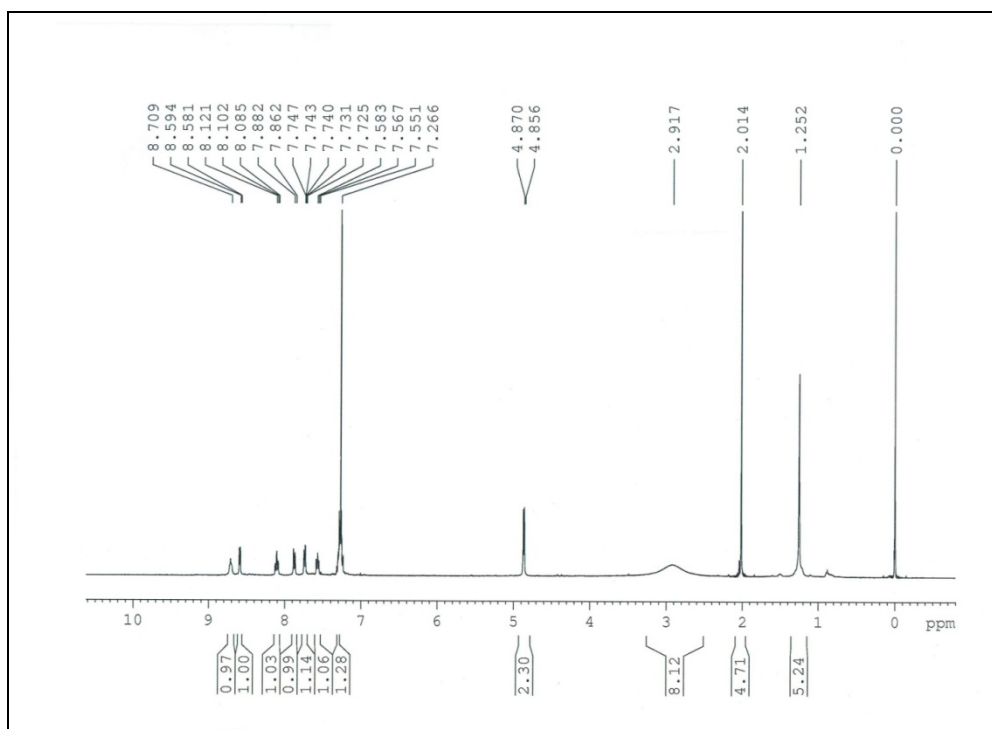


Figure S24. ¹H-NMR spectra of pure selenurane oxides **38** in CDCl₃.

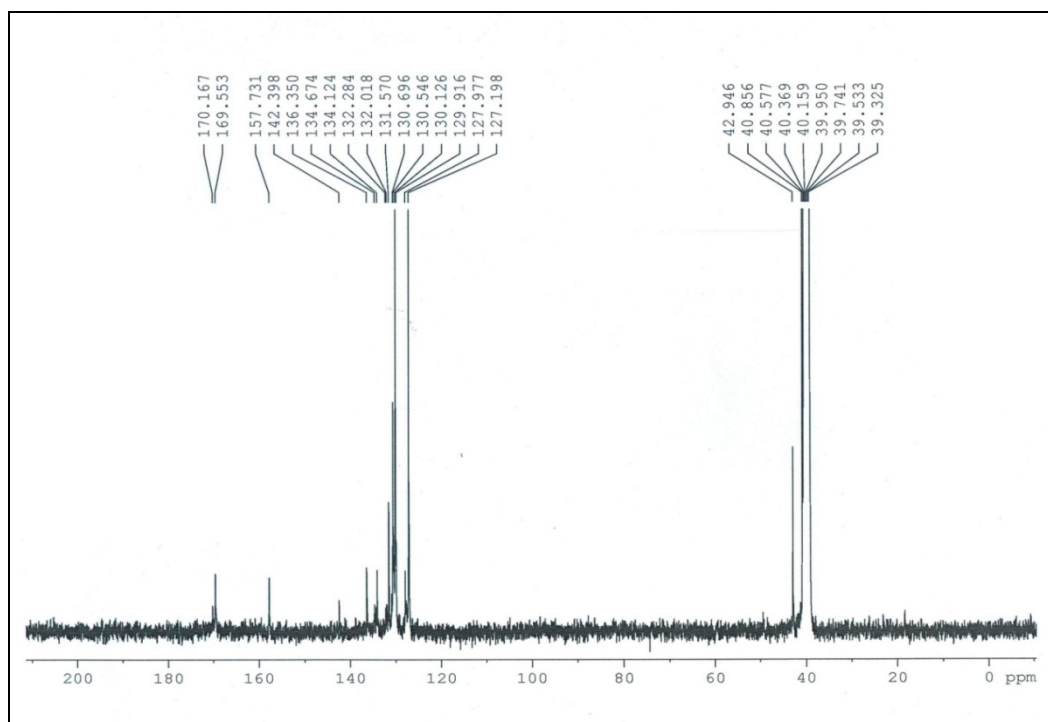


Figure S25. ¹³C-NMR spectra of pure selenurane oxides **38** in DMSO-*d*₆.

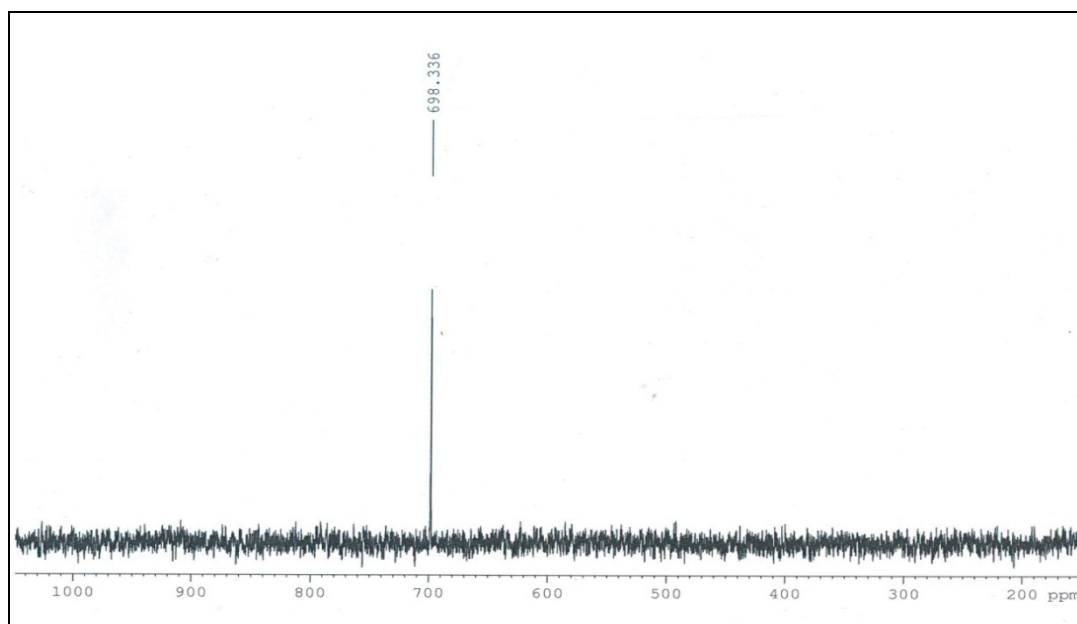


Figure S26. ^{77}Se -NMR spectra of pure spirodiazoselenurane **38** in $\text{DMSO-}d_6$.

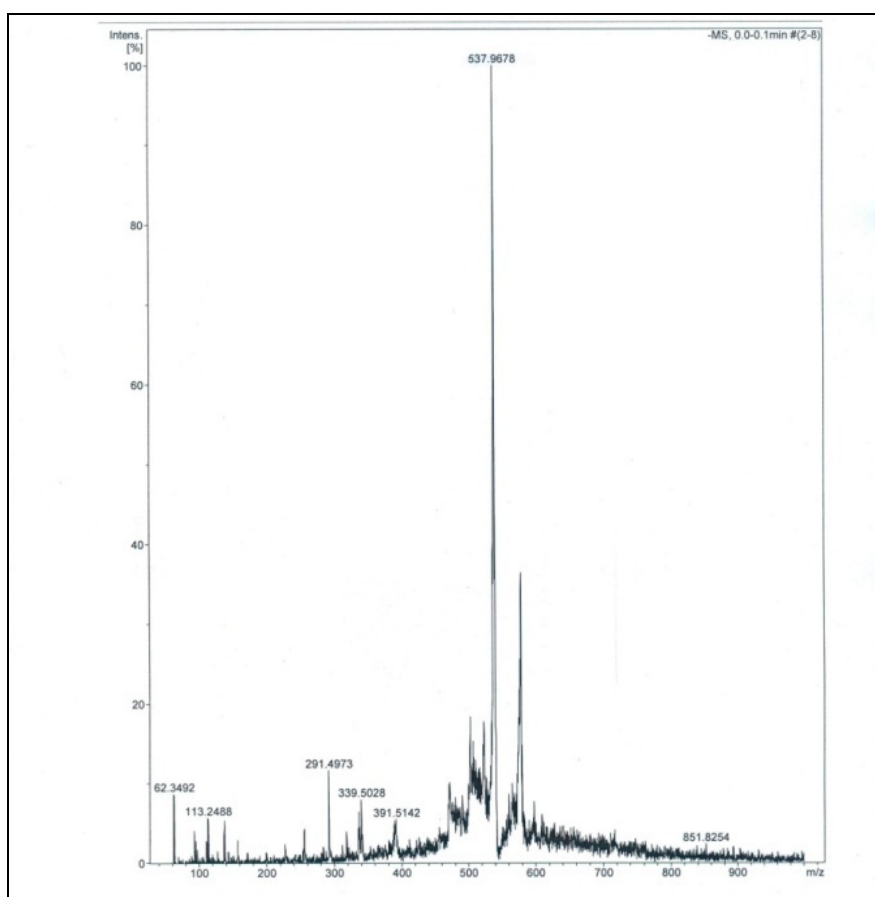


Figure S27. ESI-Mass spectrum of compound **38**. ESI-MS (m/z) Calcd, $\text{C}_{26}\text{H}_{20}\text{N}_4\text{O}_3\text{Se}$: 516.8, found: 537.9 $[\text{M} + \text{Na}]^+$.