# Supplementary Material

# A convenient synthetic approach to 11*H*-indolo[3,2-*c*]quinoline framework via Friedlander condensation and Cadogan cyclization

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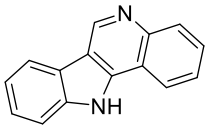
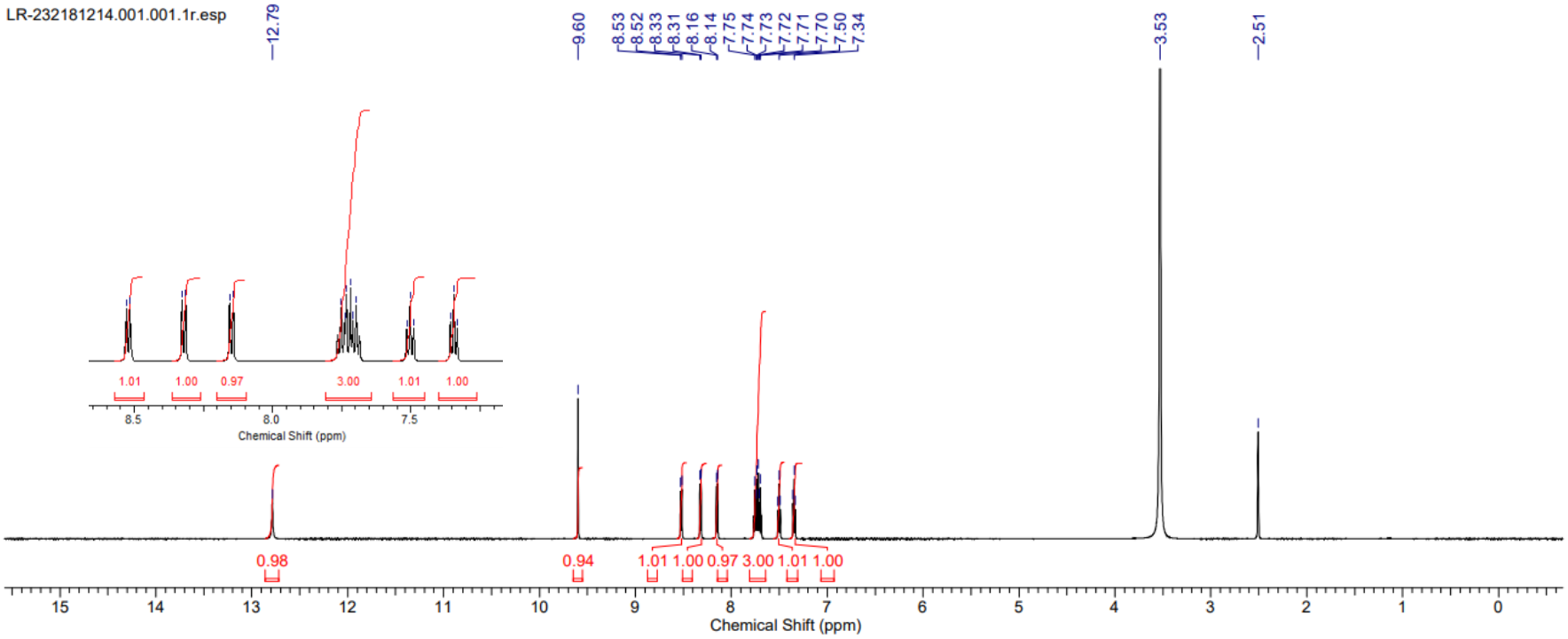
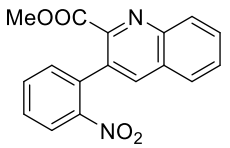



**2**, $CDCl_3$, 600 MHz



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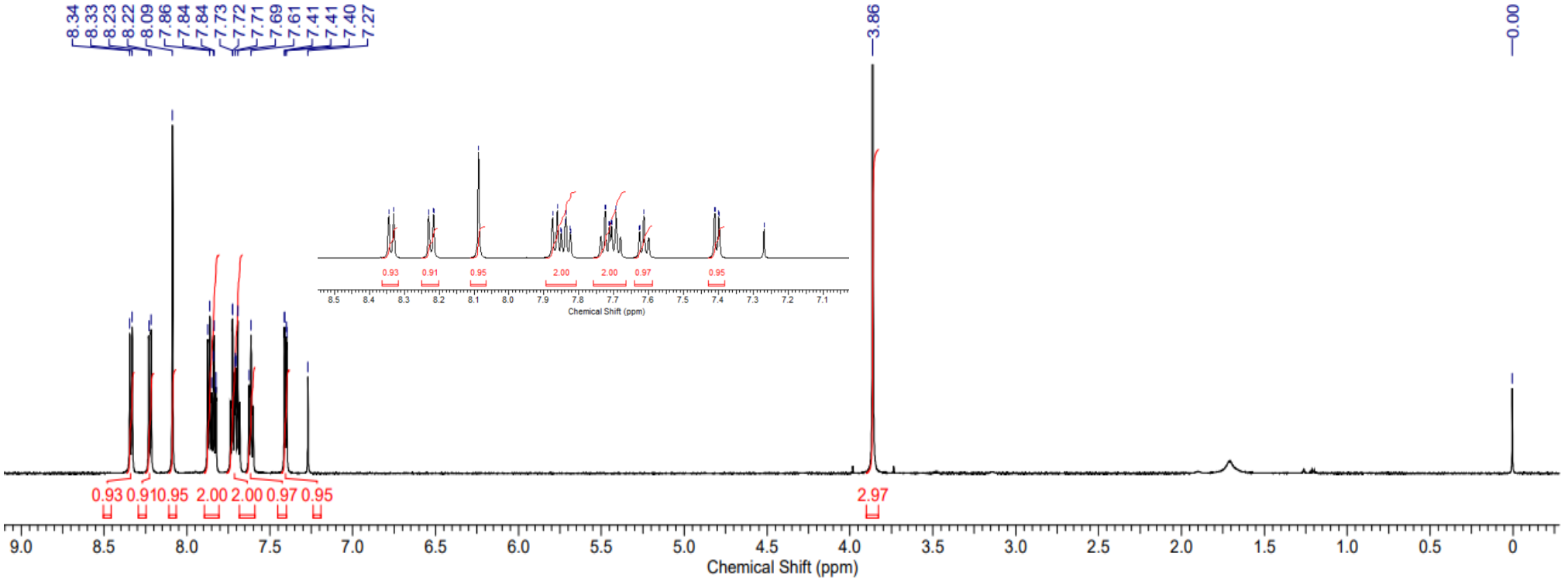

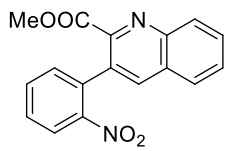


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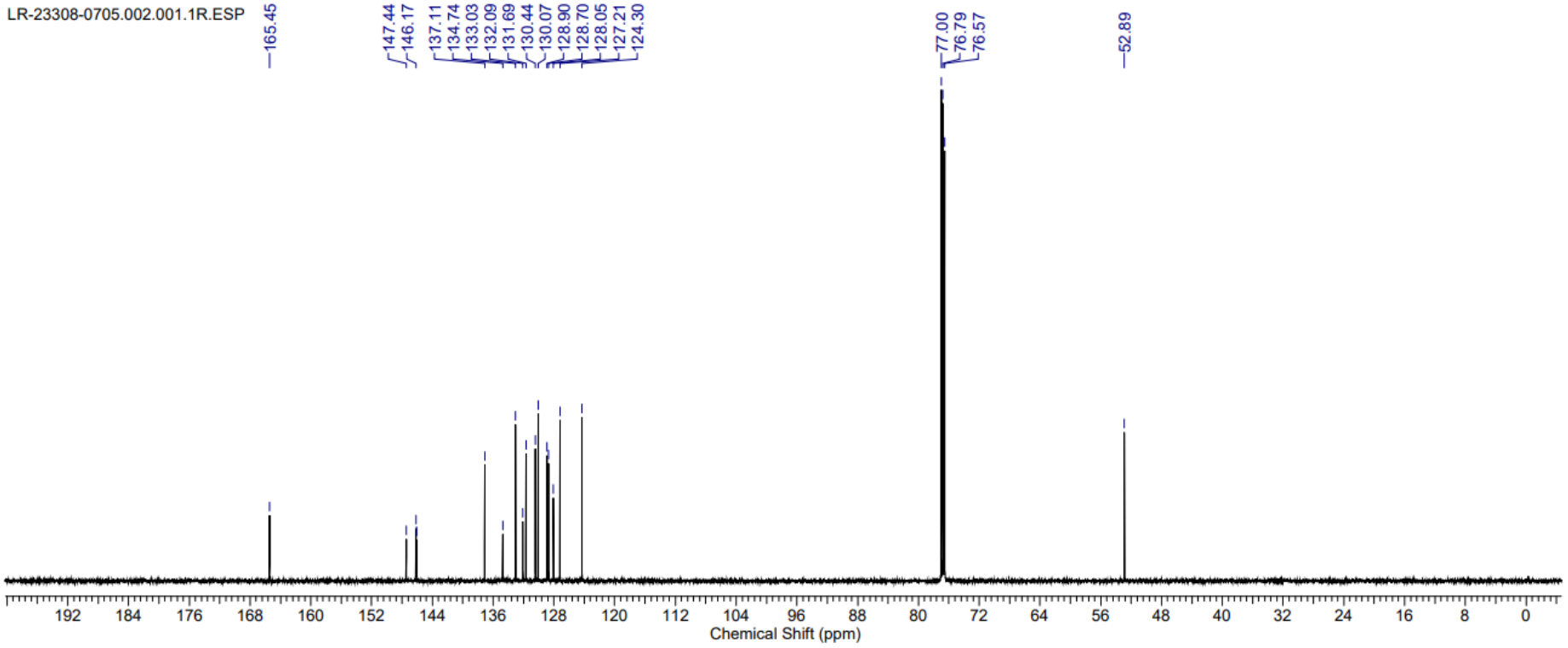

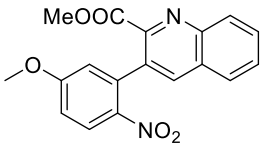


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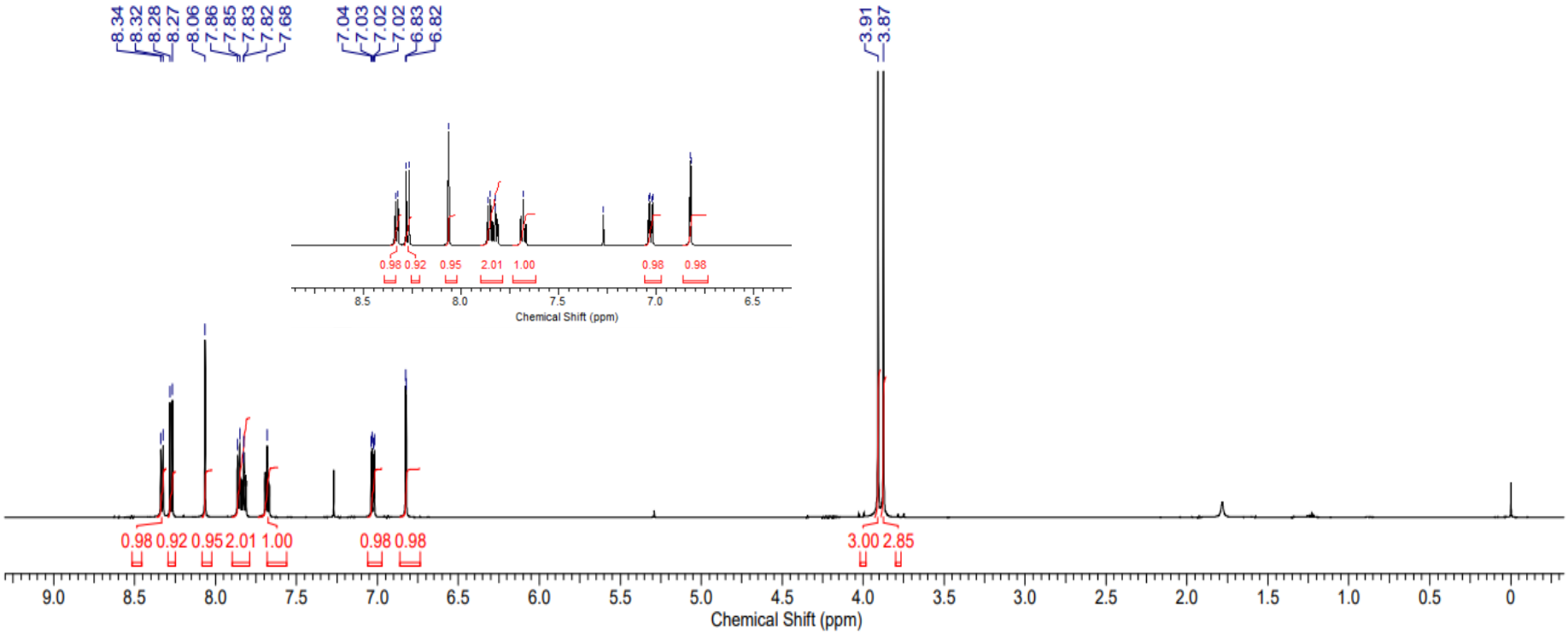

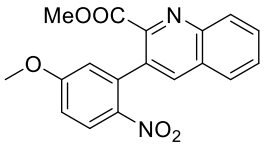


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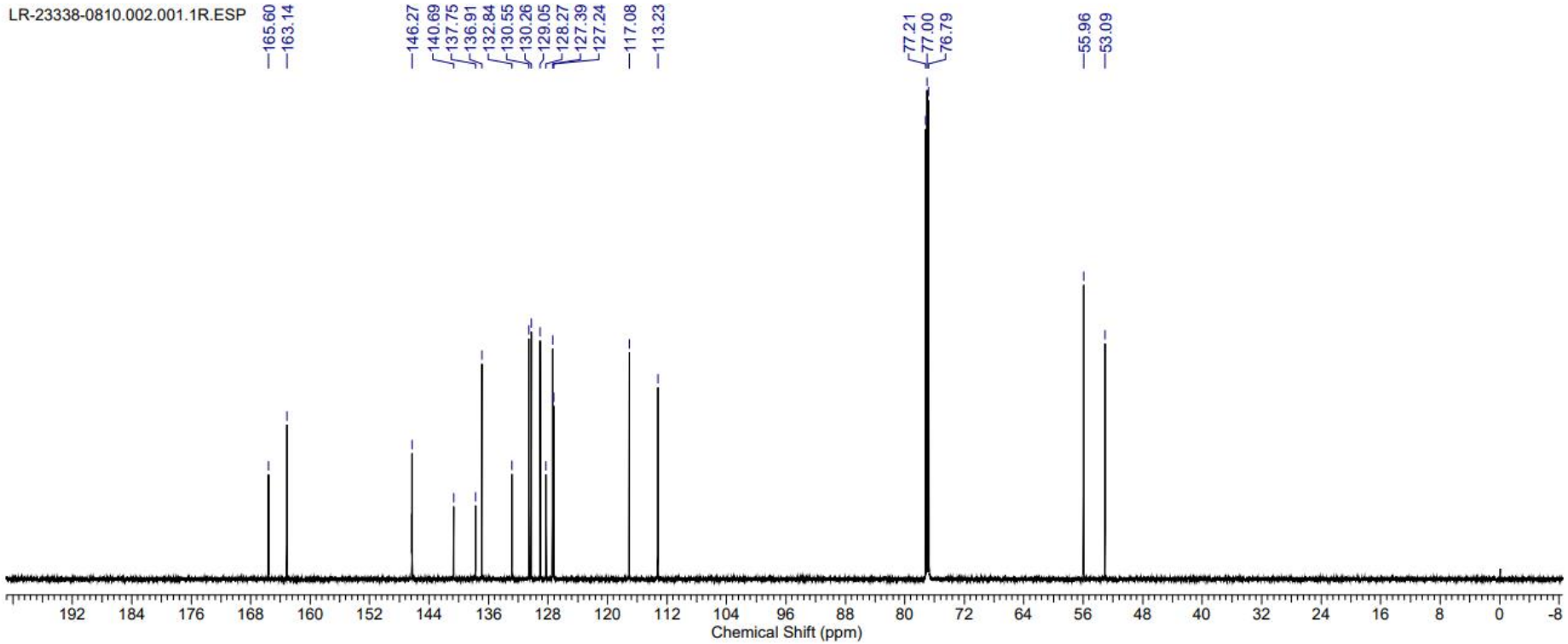

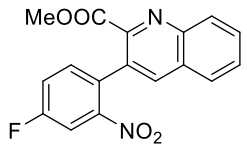


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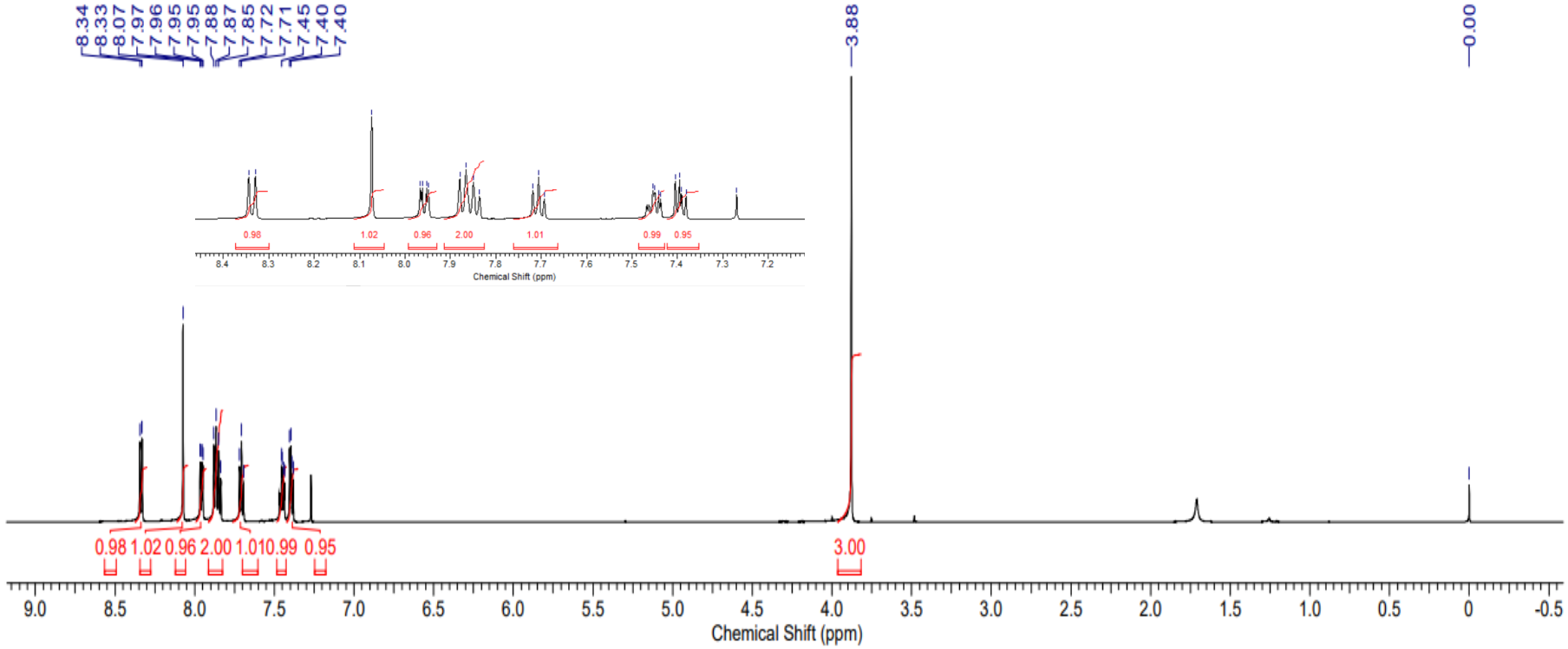

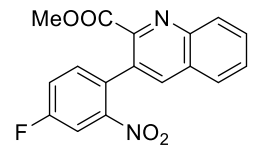


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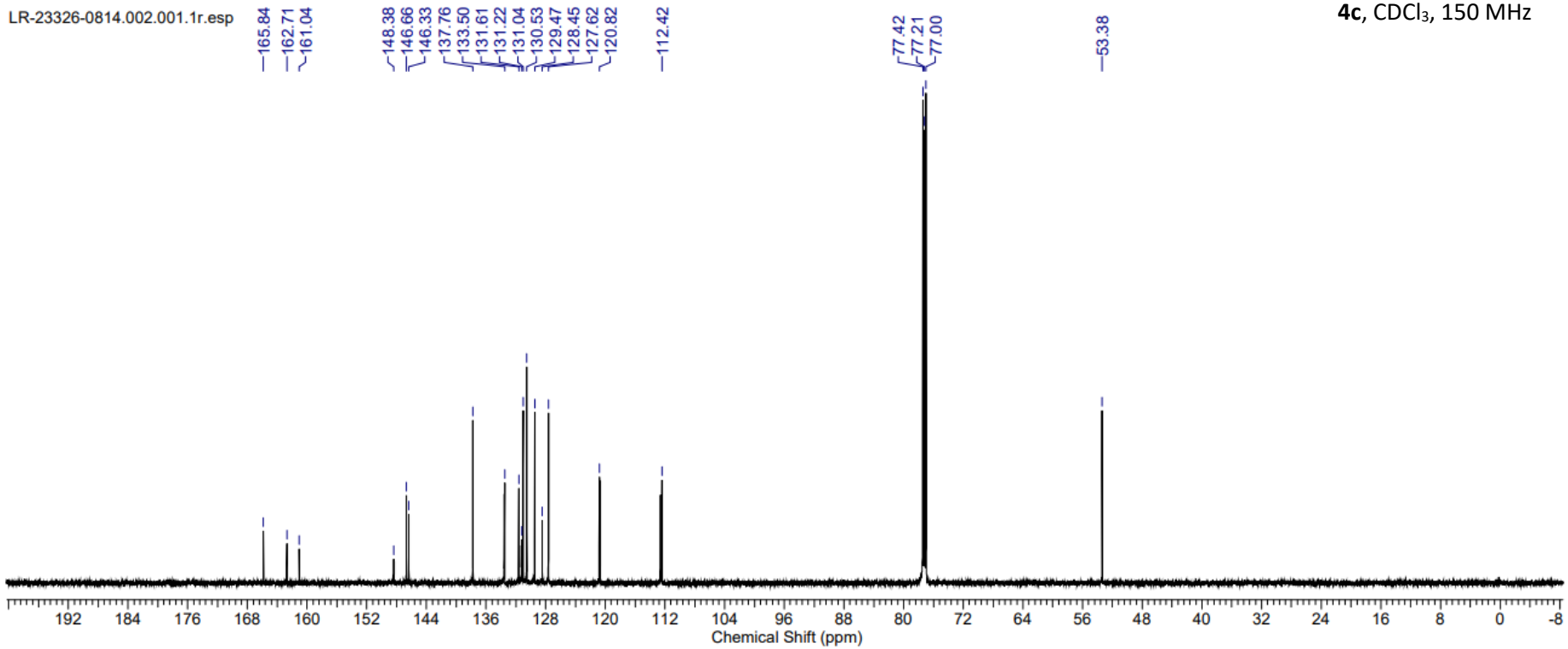

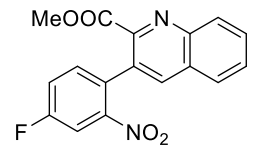


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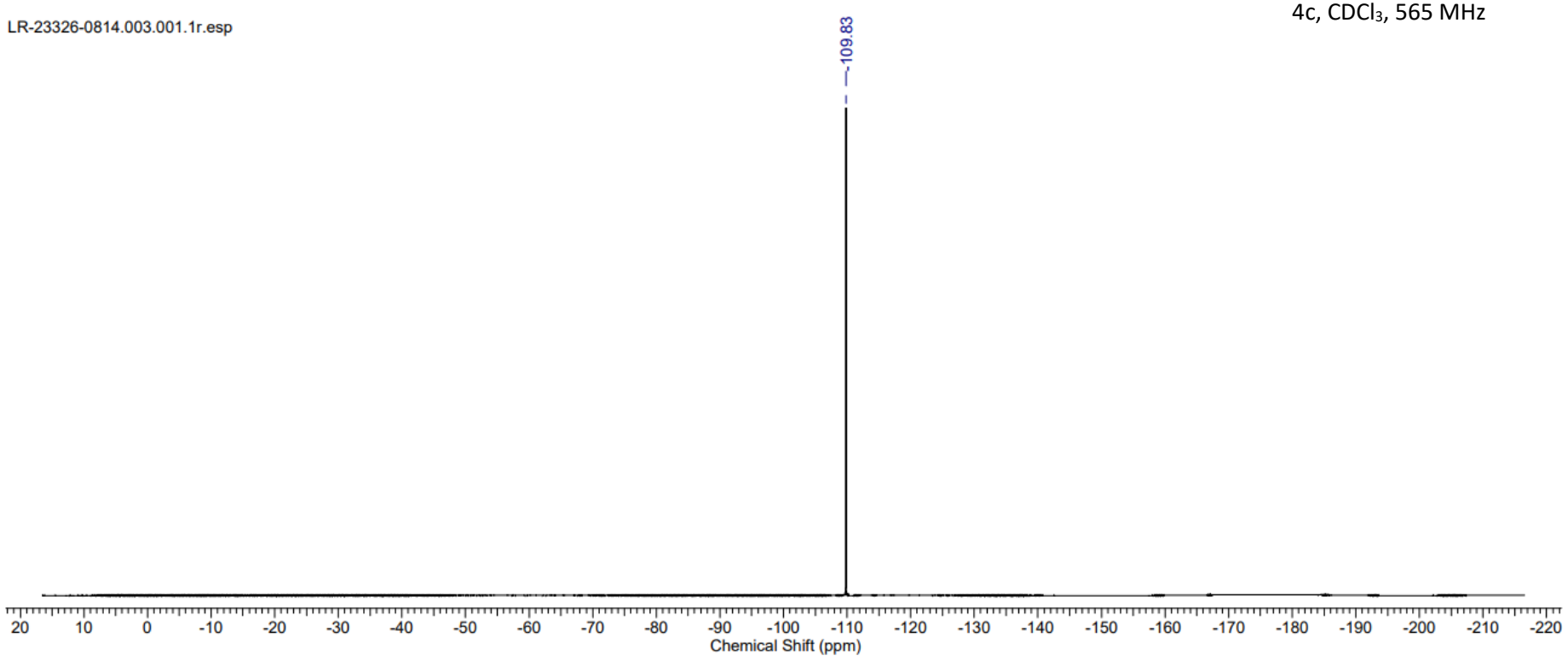

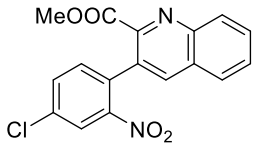


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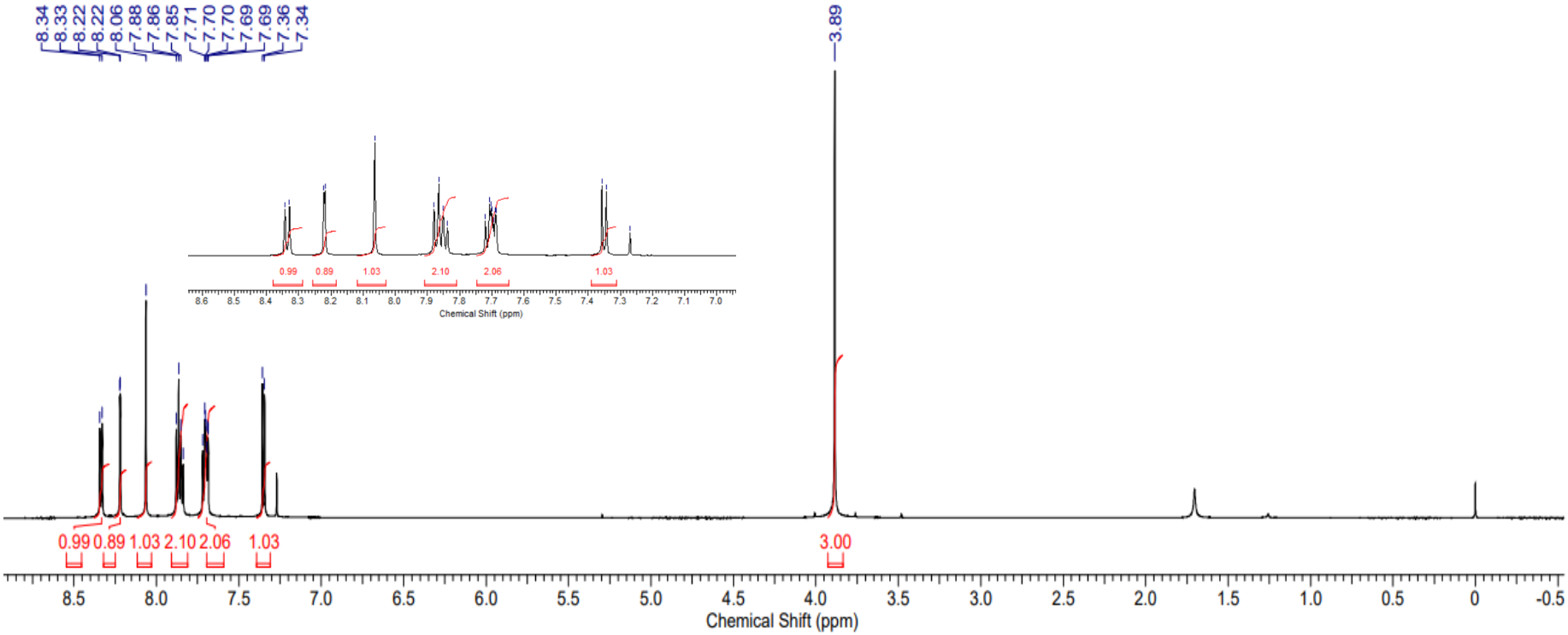
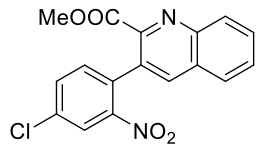
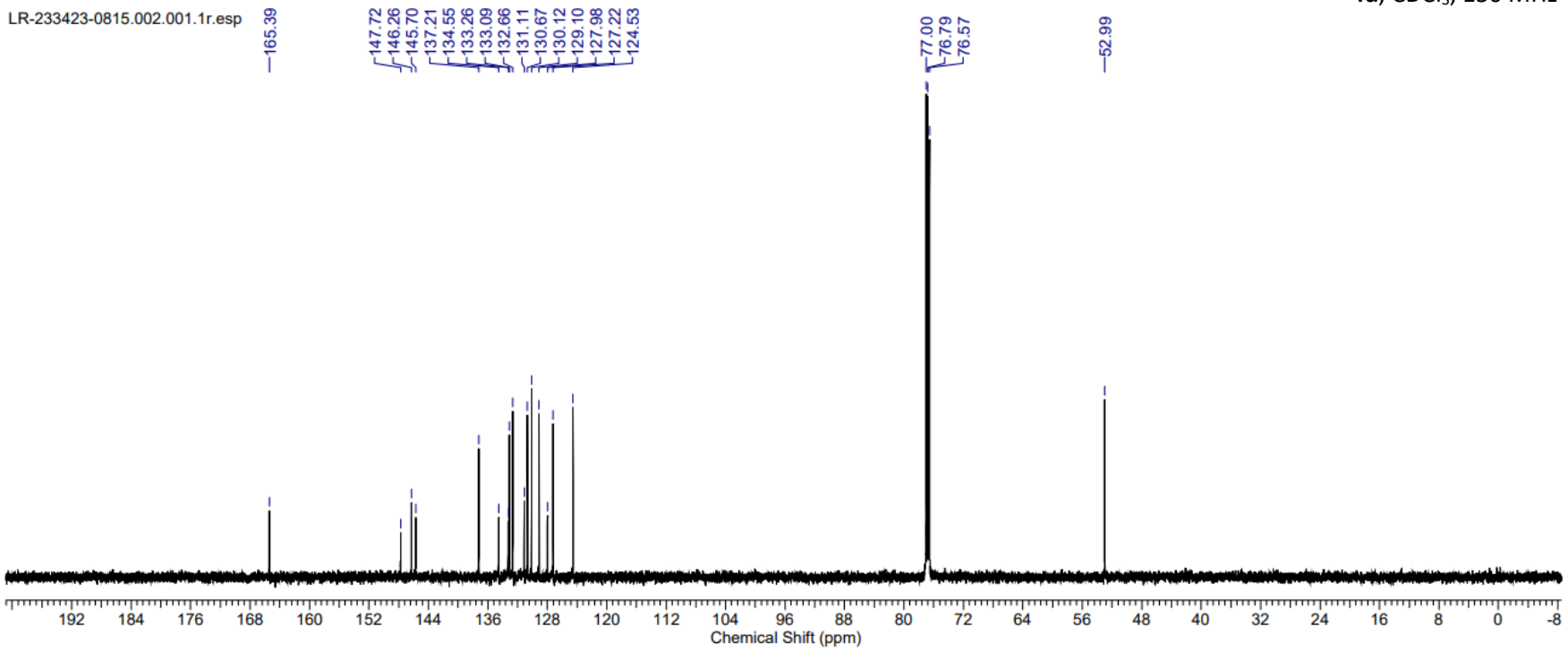
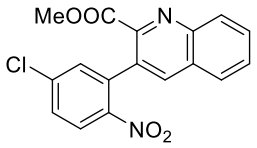





**4d**, $CDCl_3$, 150 MHz



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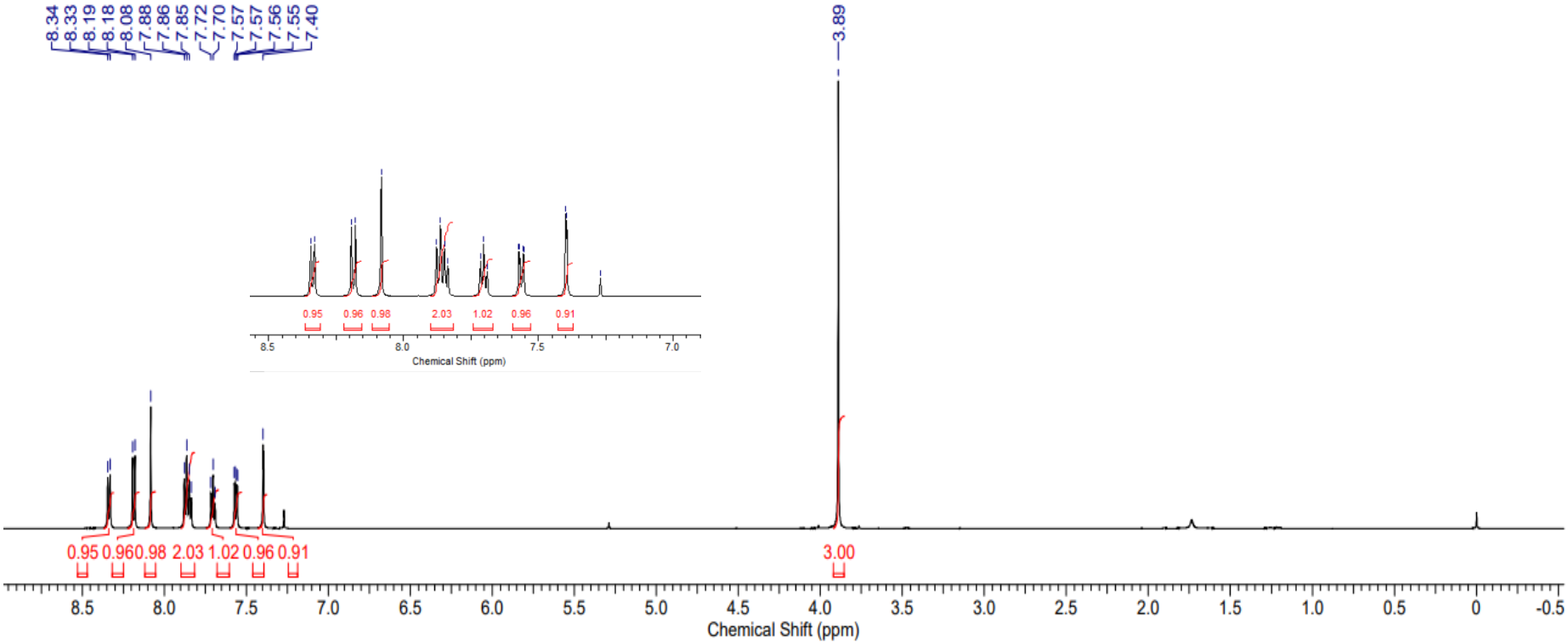
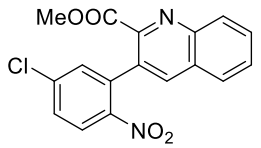
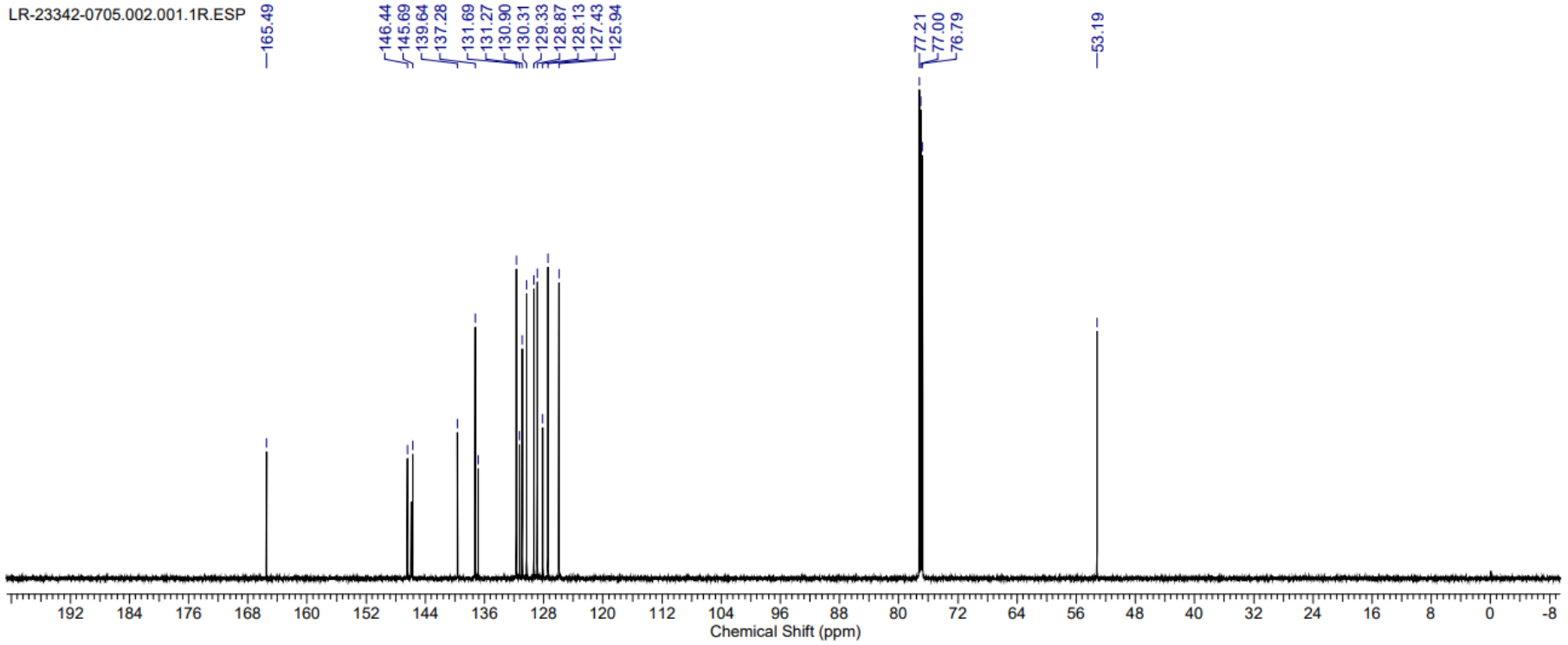
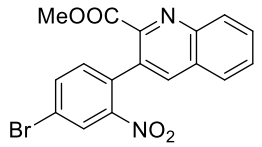





**4e**, $CDCl_3$, 150 MHz



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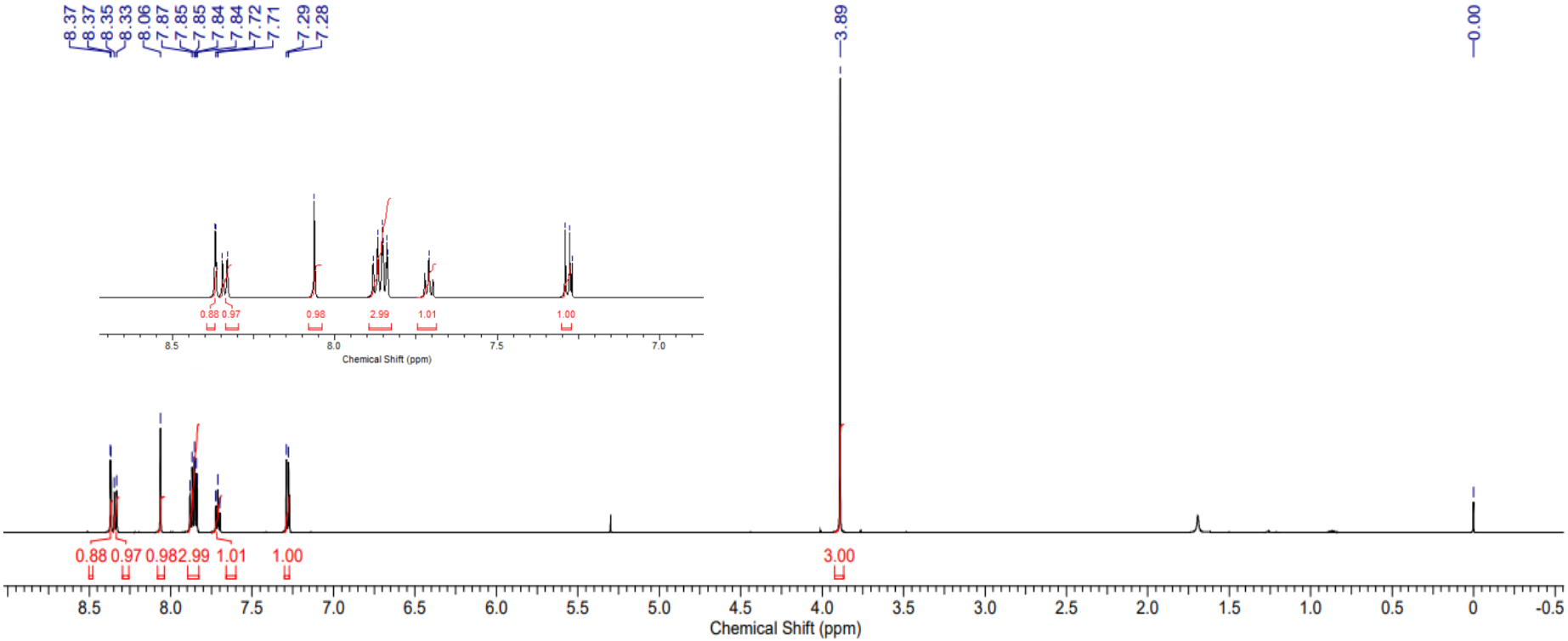

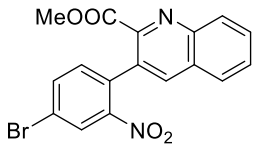


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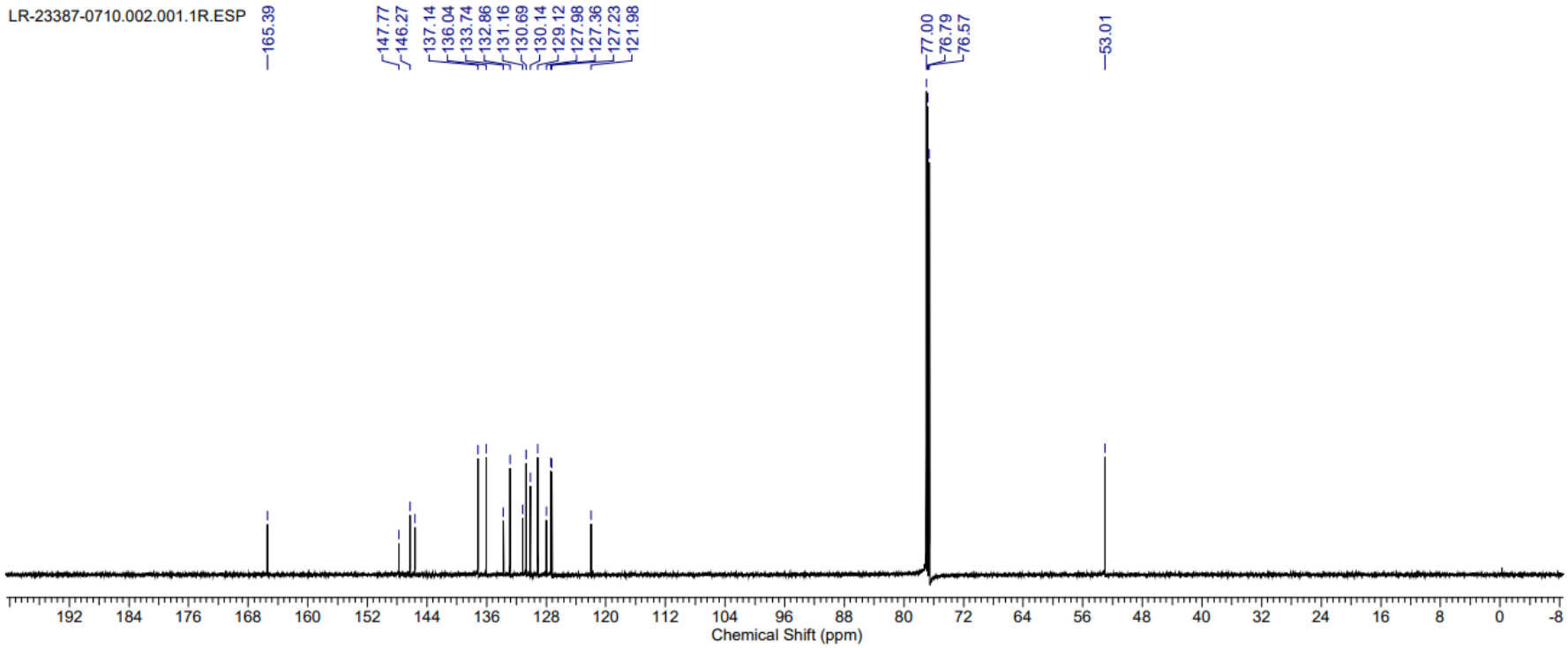

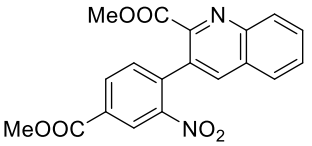


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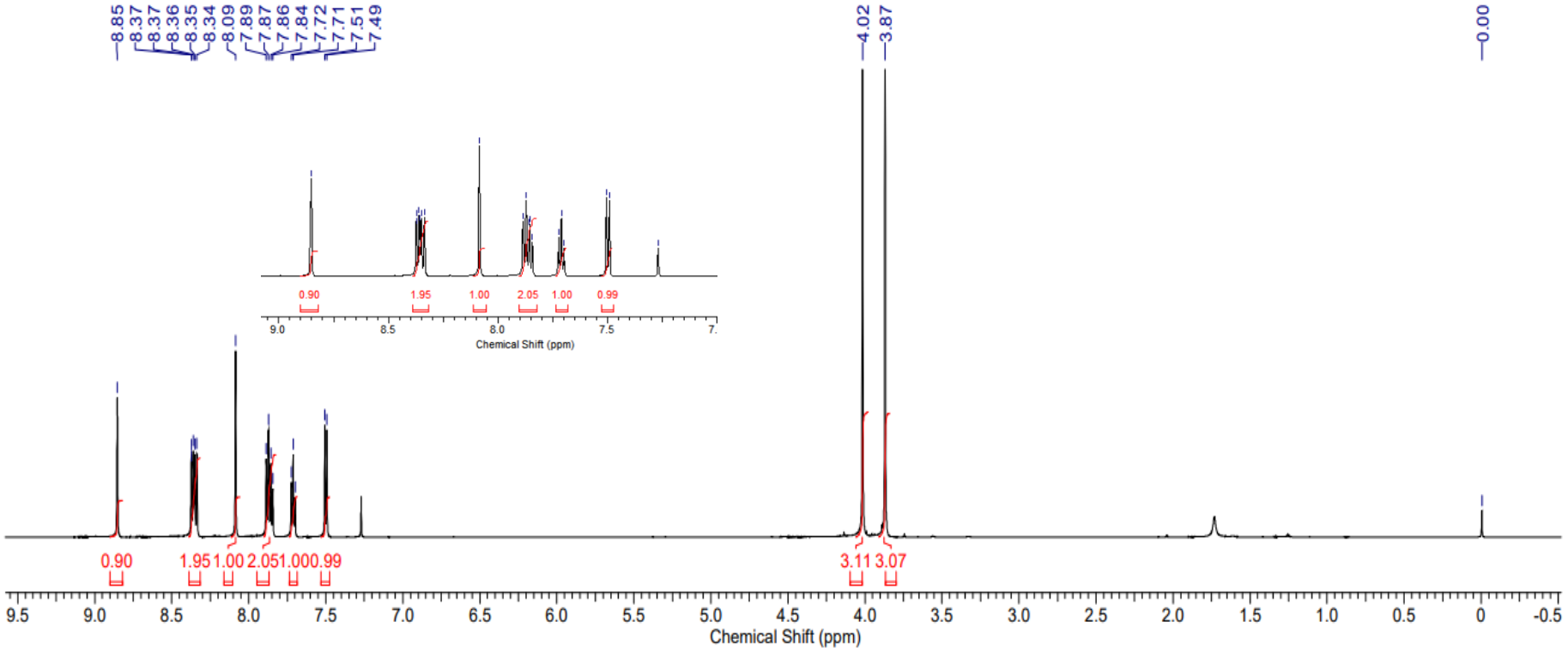
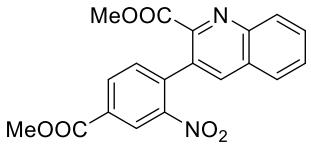
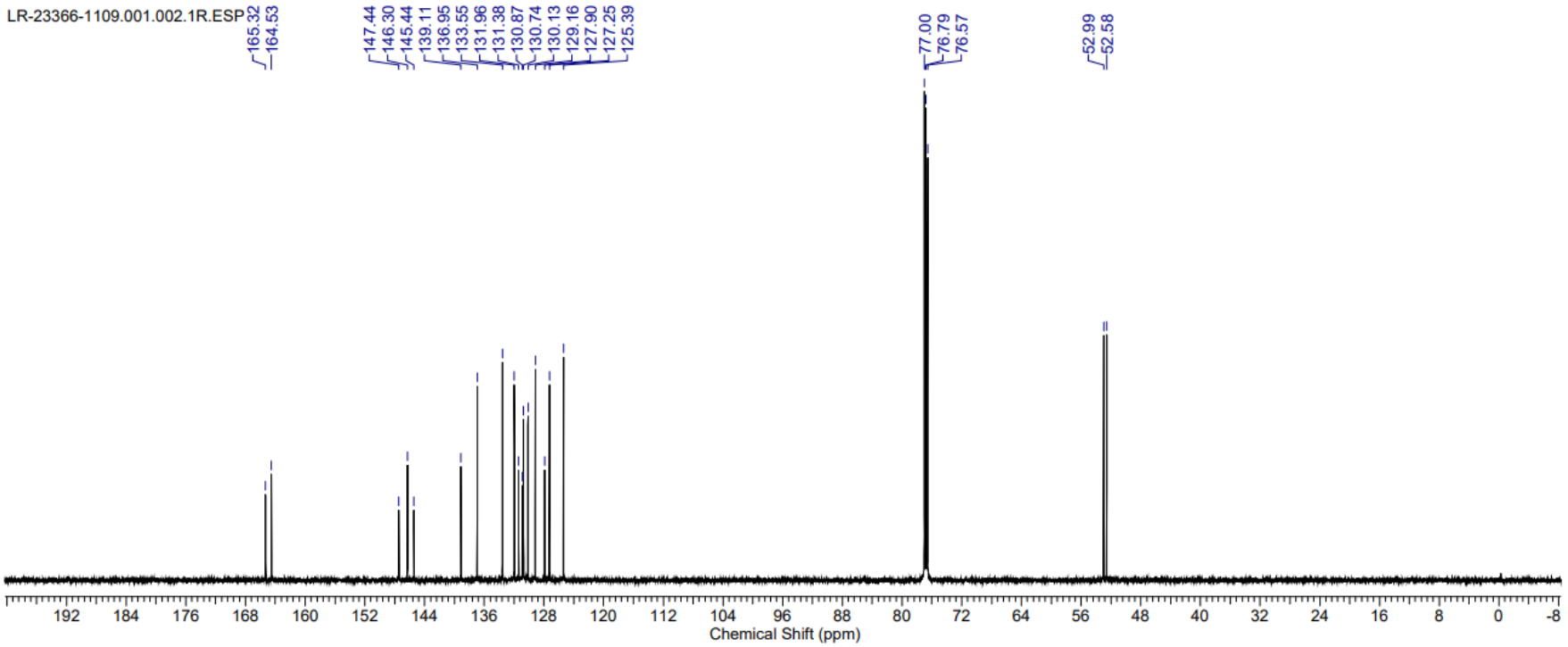
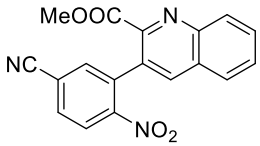





**4g**, $CDCl_3$, 150 MHz



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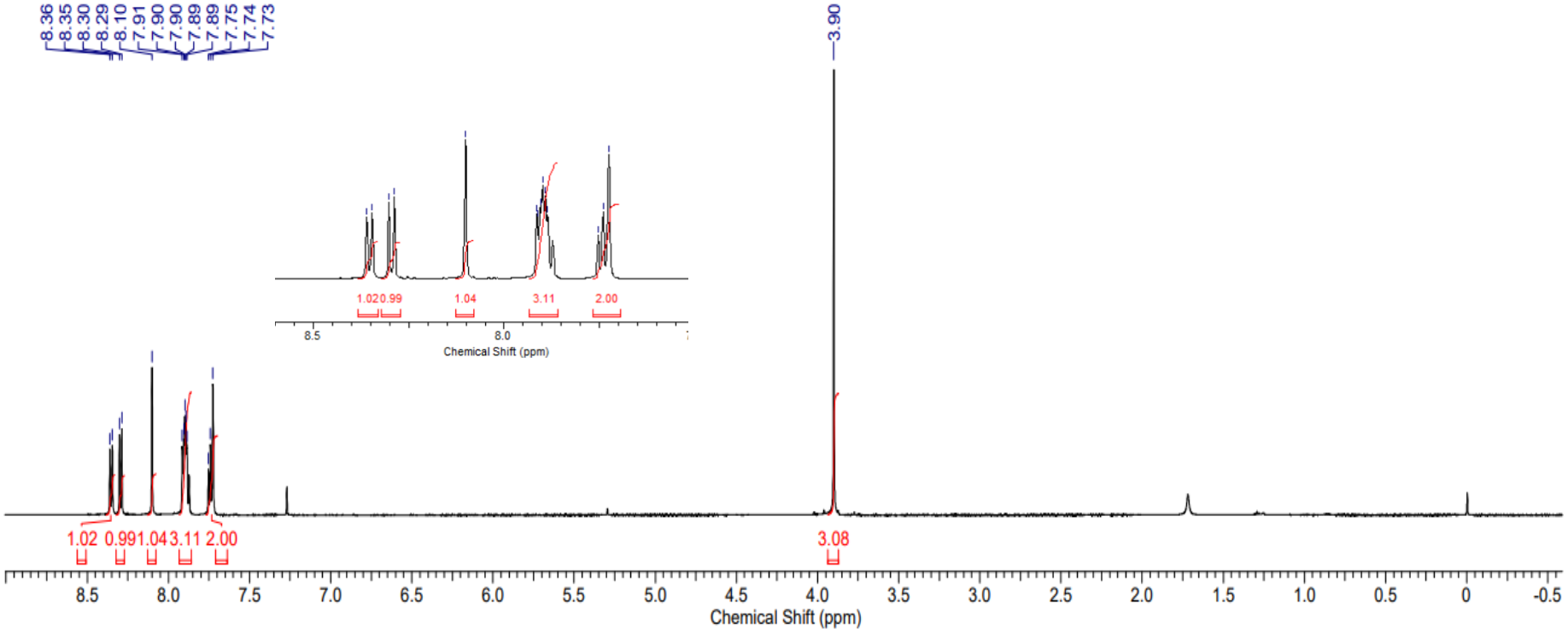
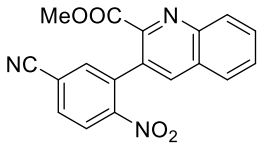
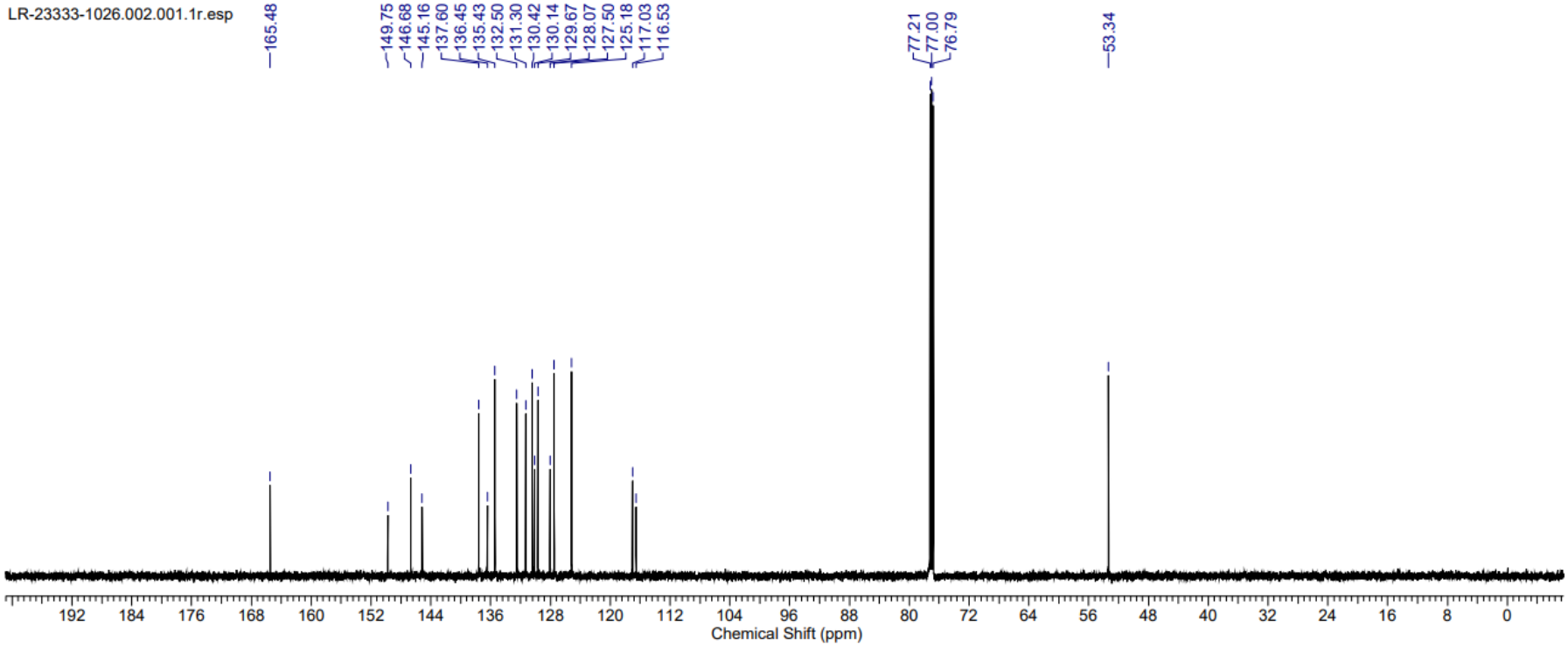
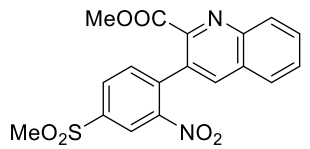





**4h**, $CDCl_3$, 150 MHz



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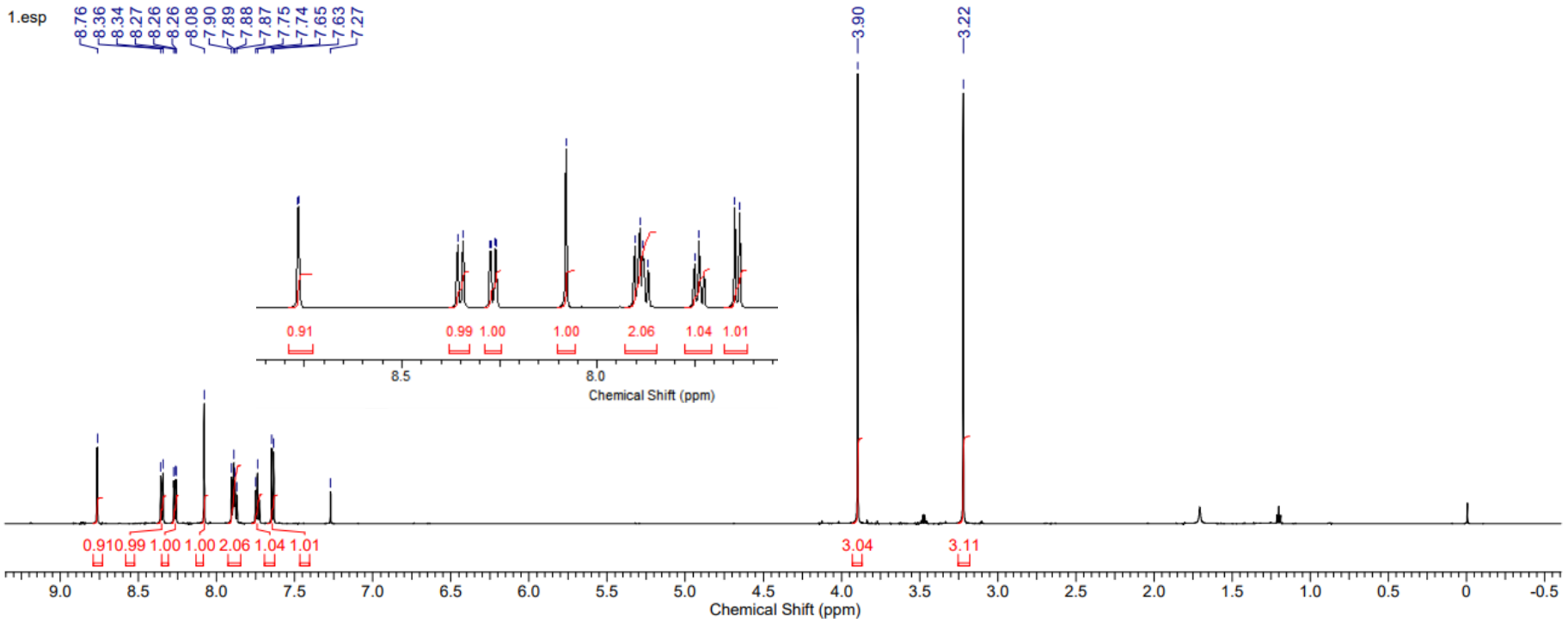

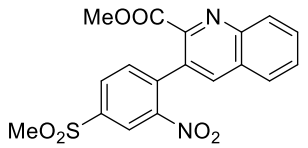


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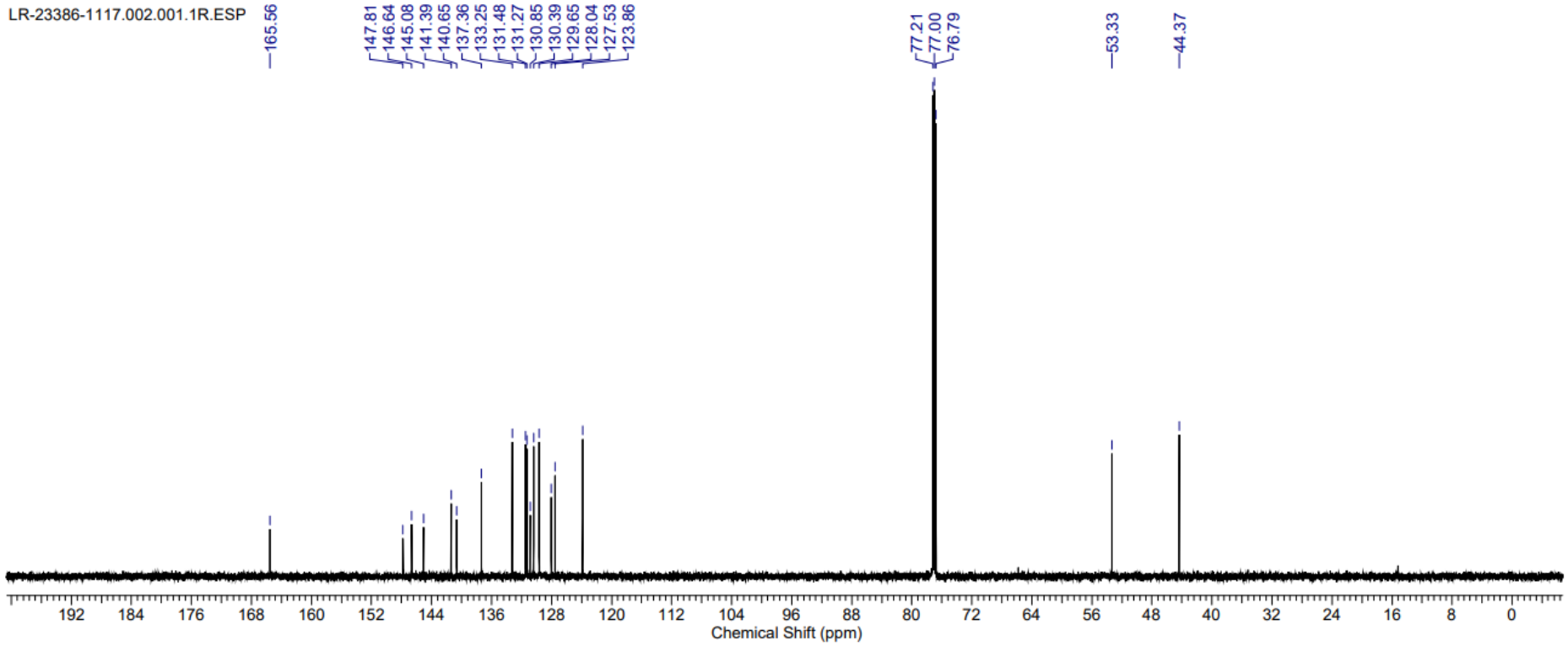
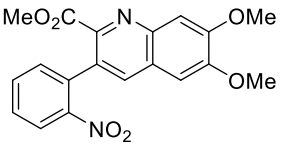
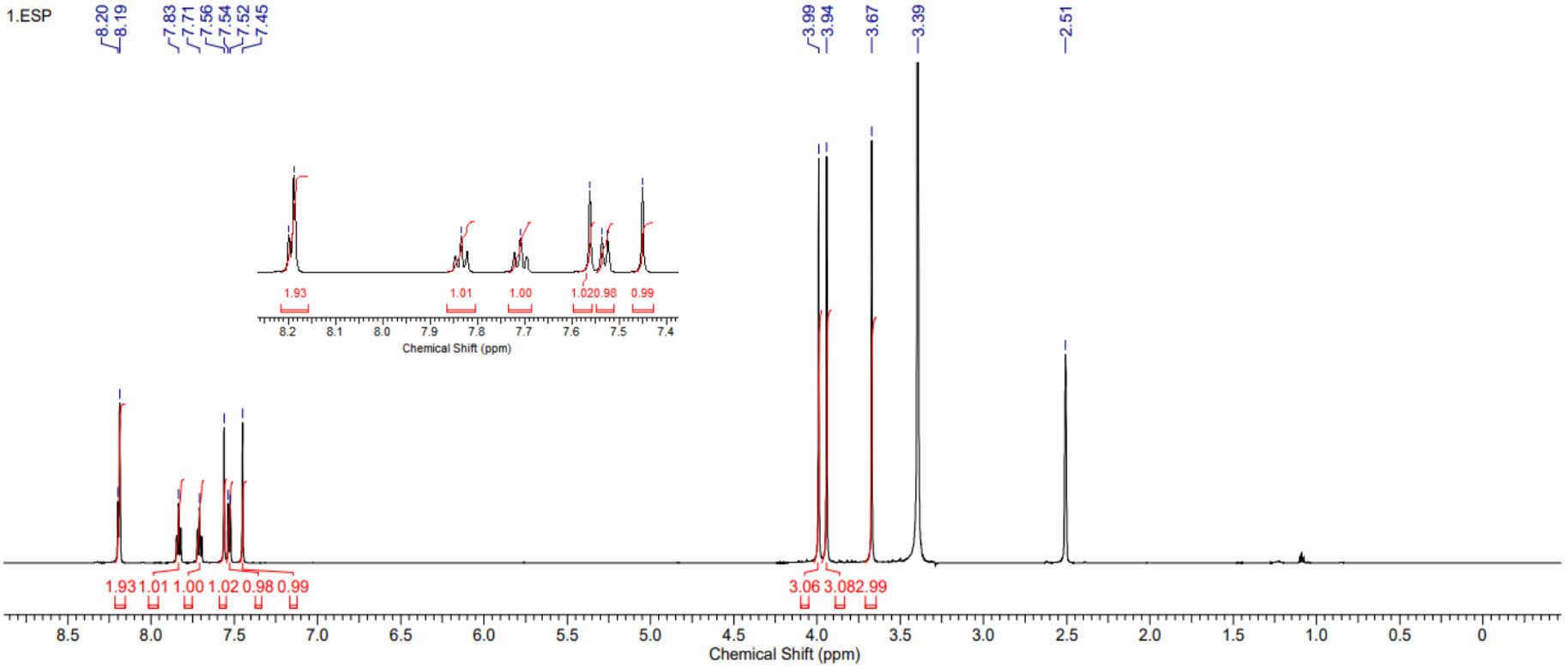
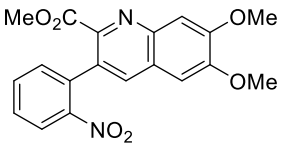





**4j**, $CDCl_3$, 600 MHz



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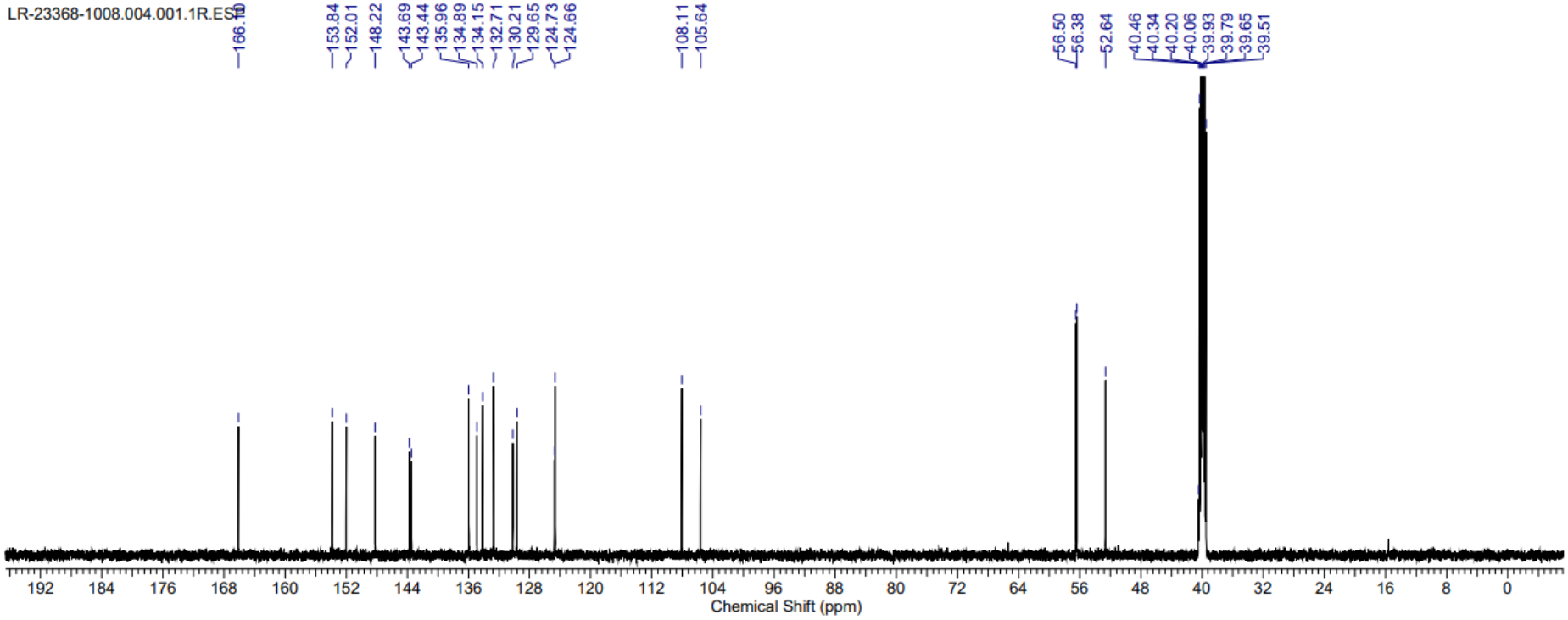
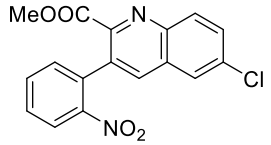
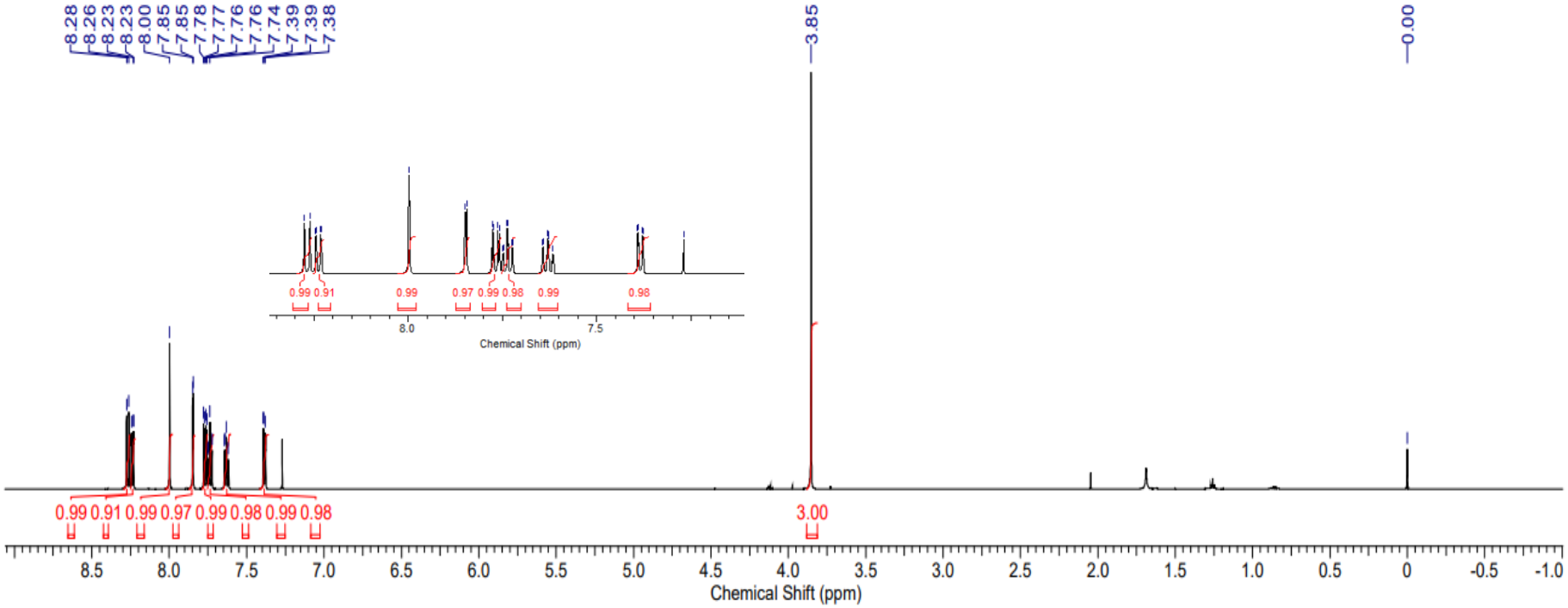
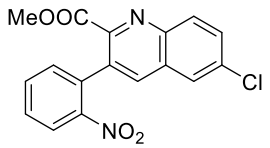


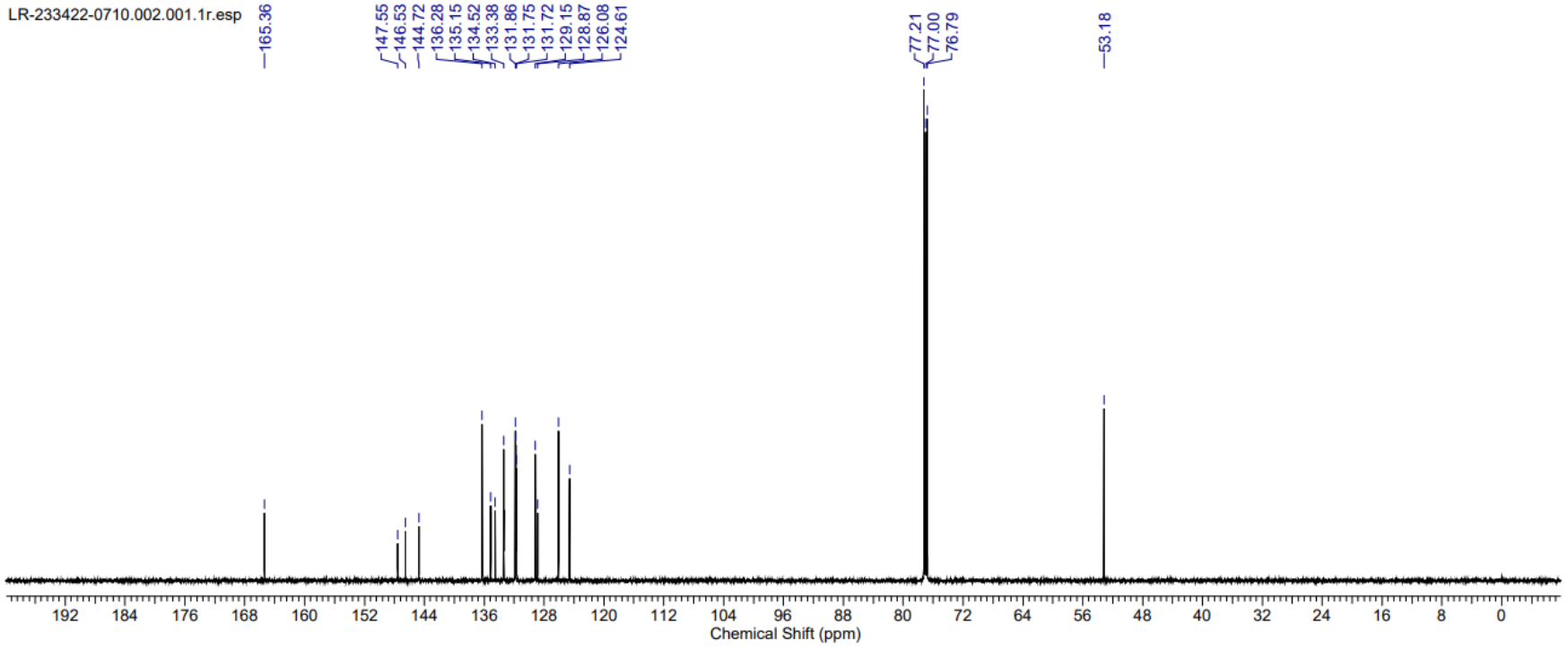


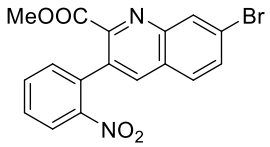

**4k**, $CDCl_3$, 600 MHz



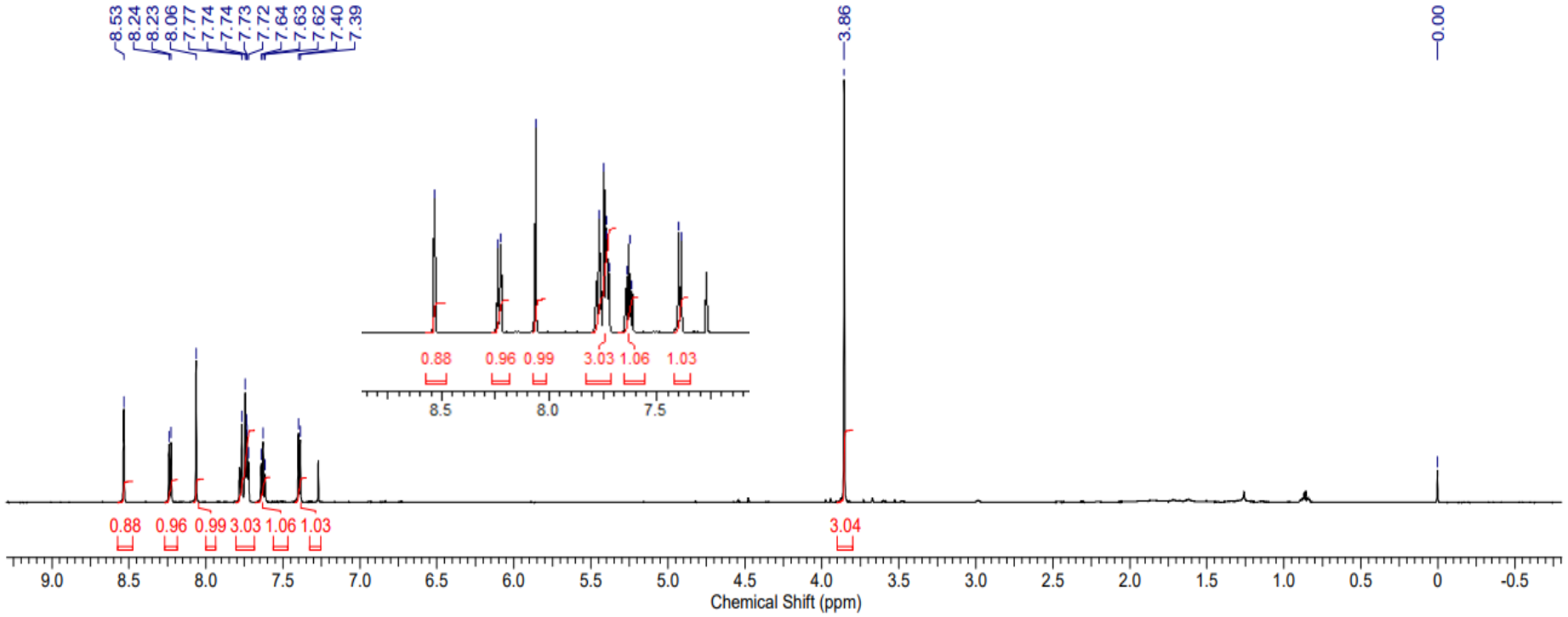


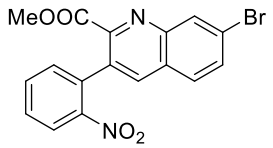

**4k**, $CDCl_3$, 150 MHz






**4l**, $CDCl_3$, 600 MHz



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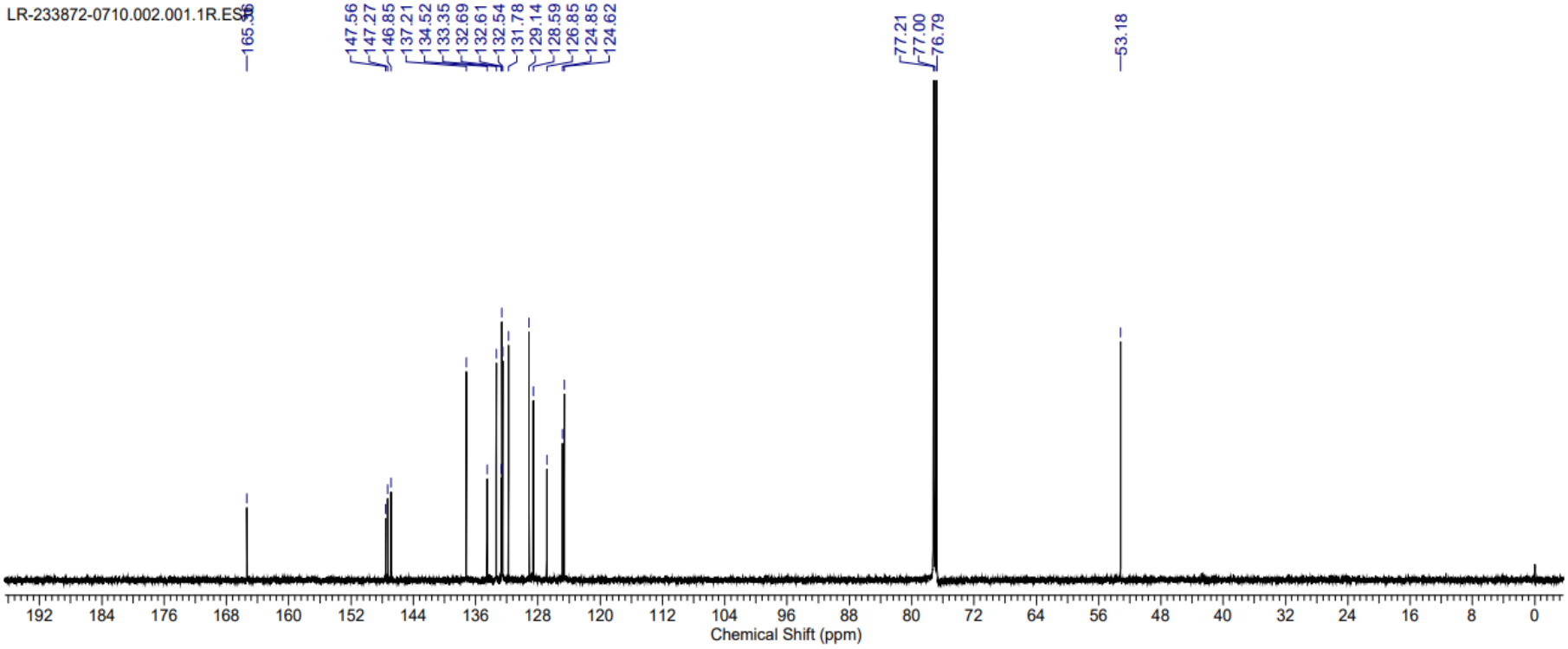

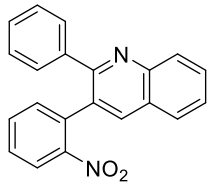


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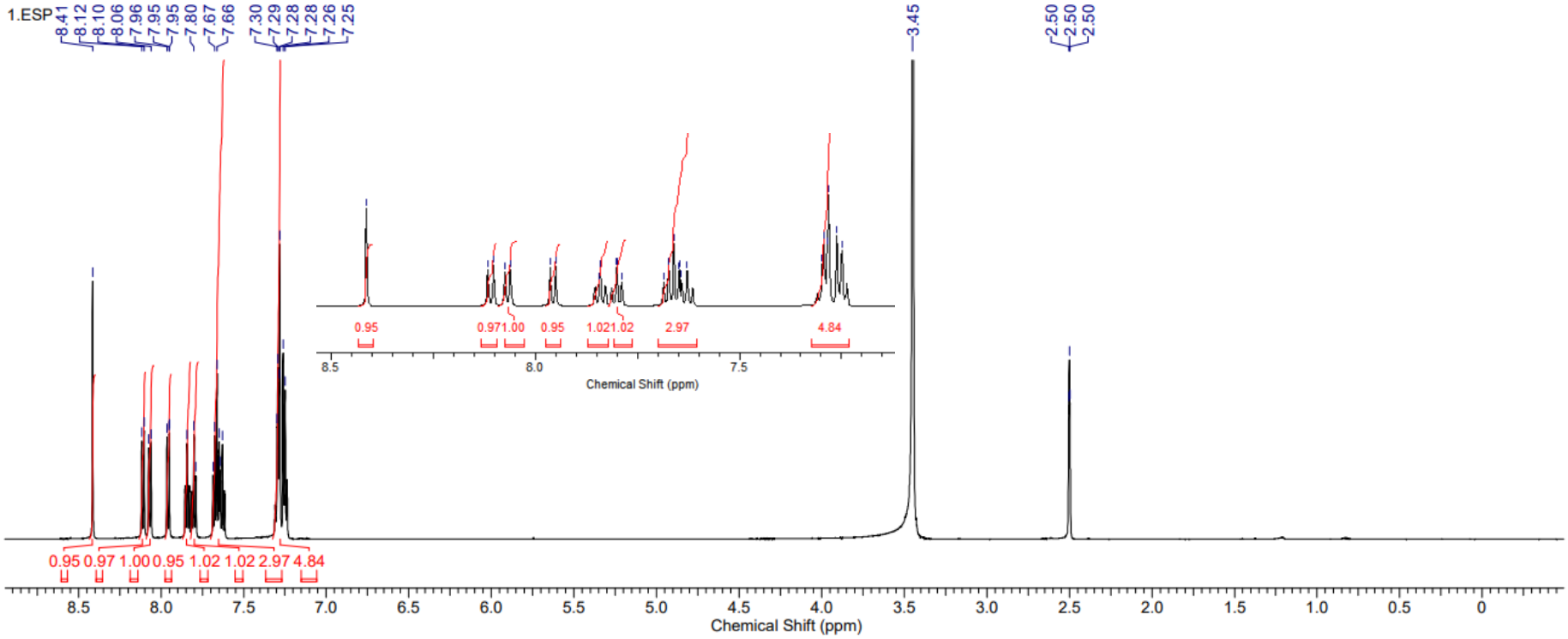

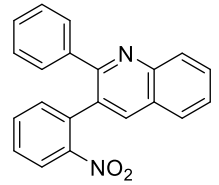


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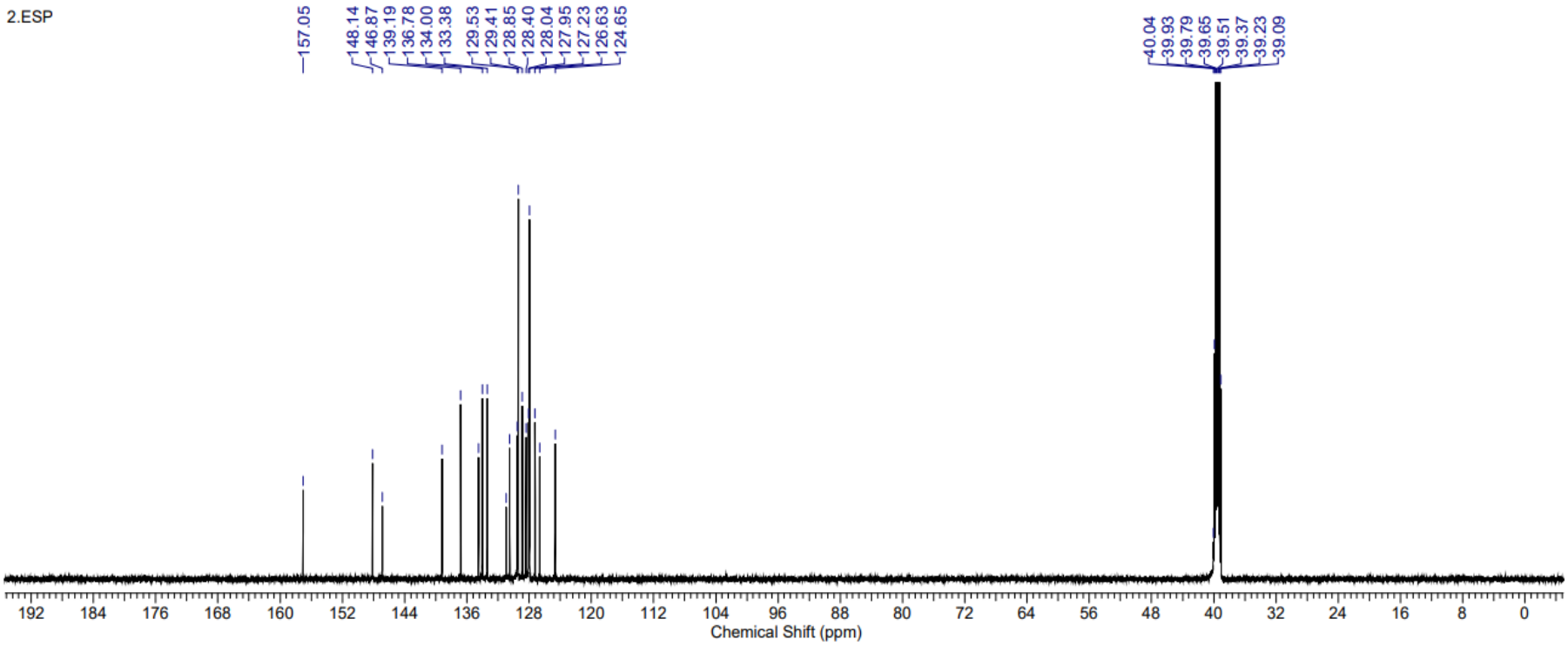
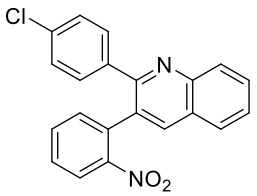
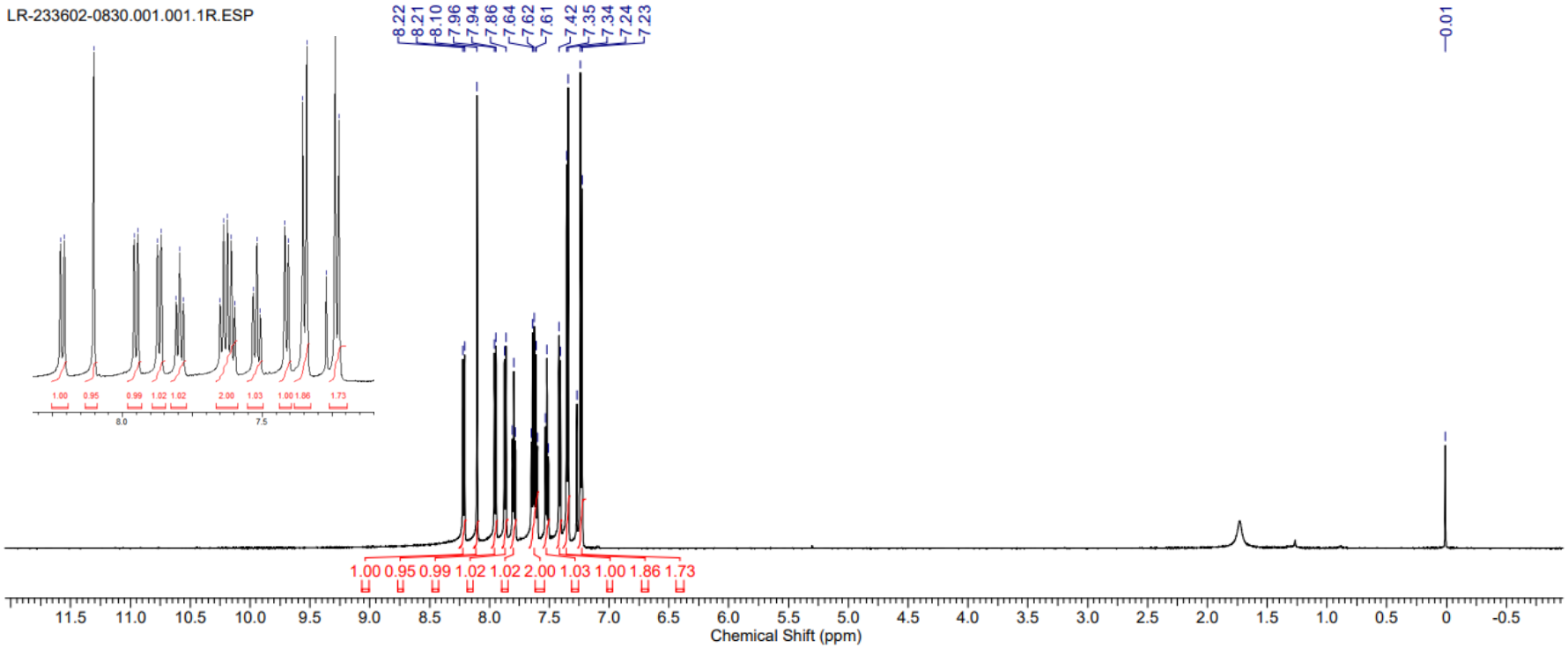
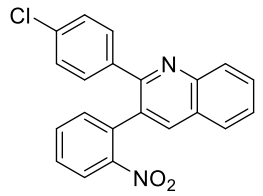


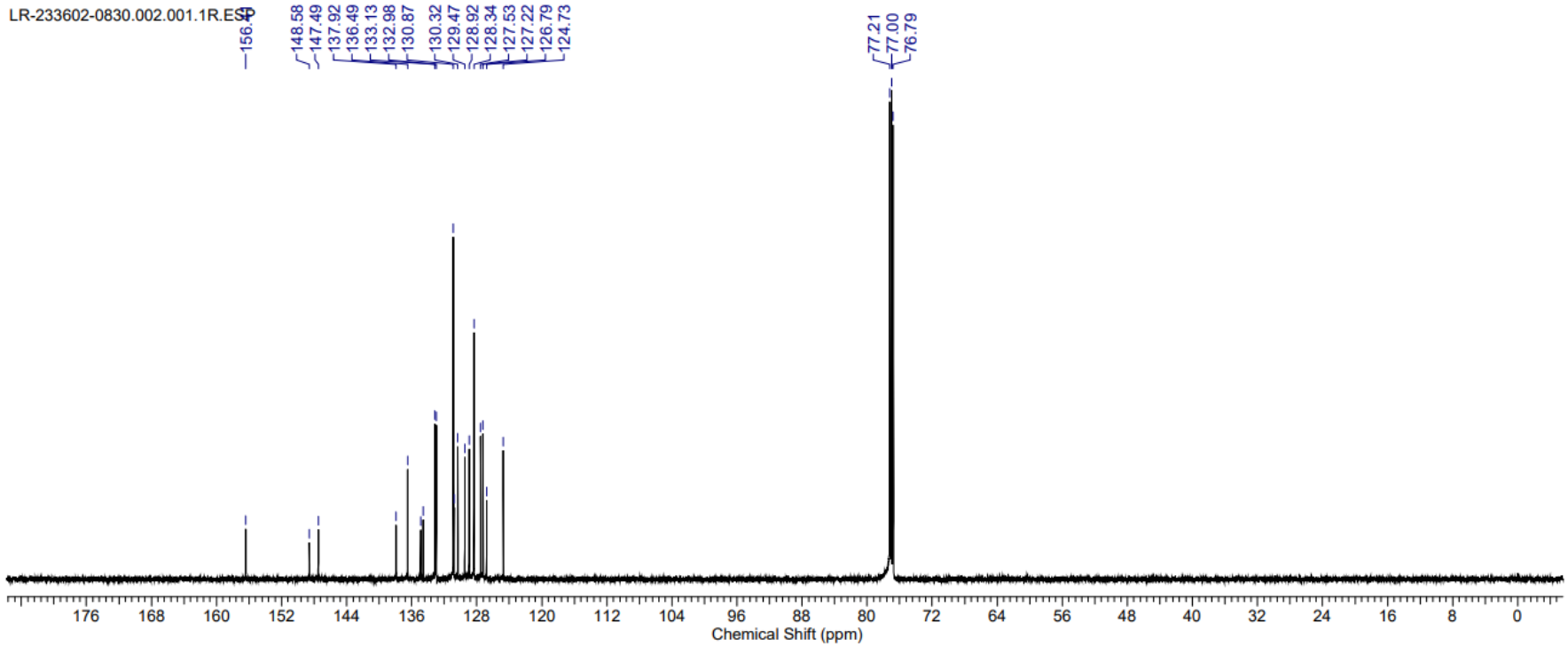


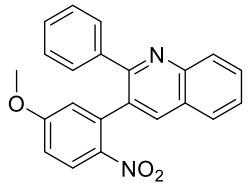

**4n**, $CDCl_3$, 600 MHz



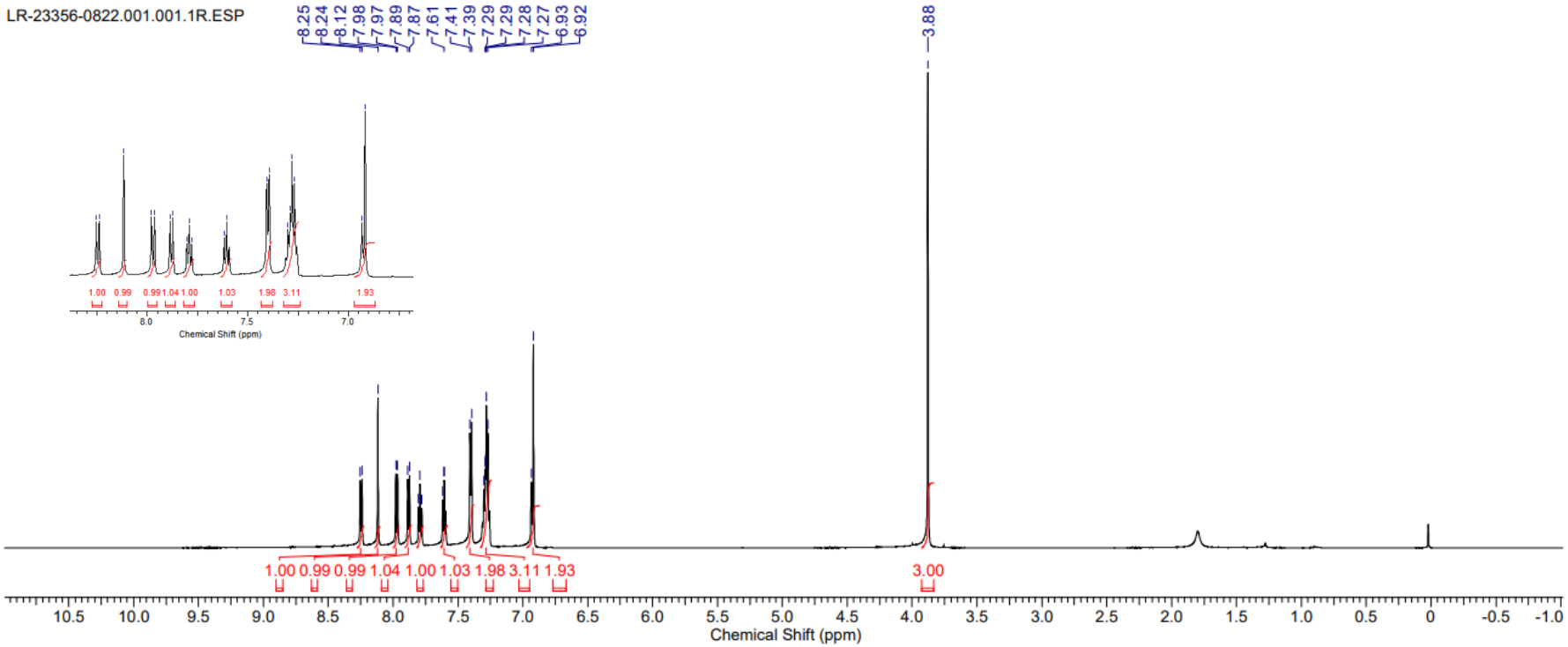


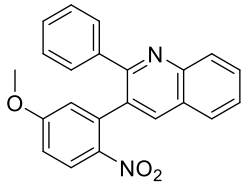

**4n**, $CDCl_3$, 150 MHz



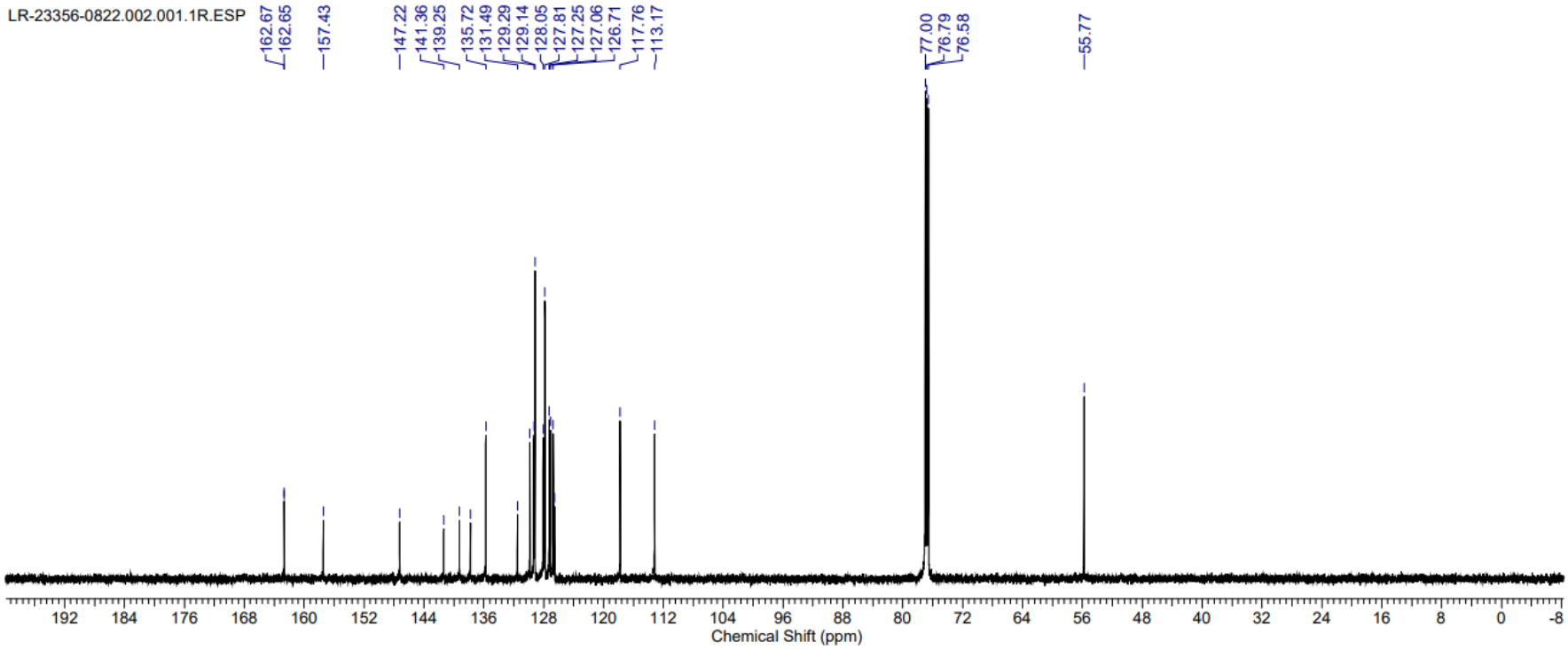


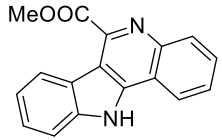

**4o**, $CDCl_3$, 600 MHz



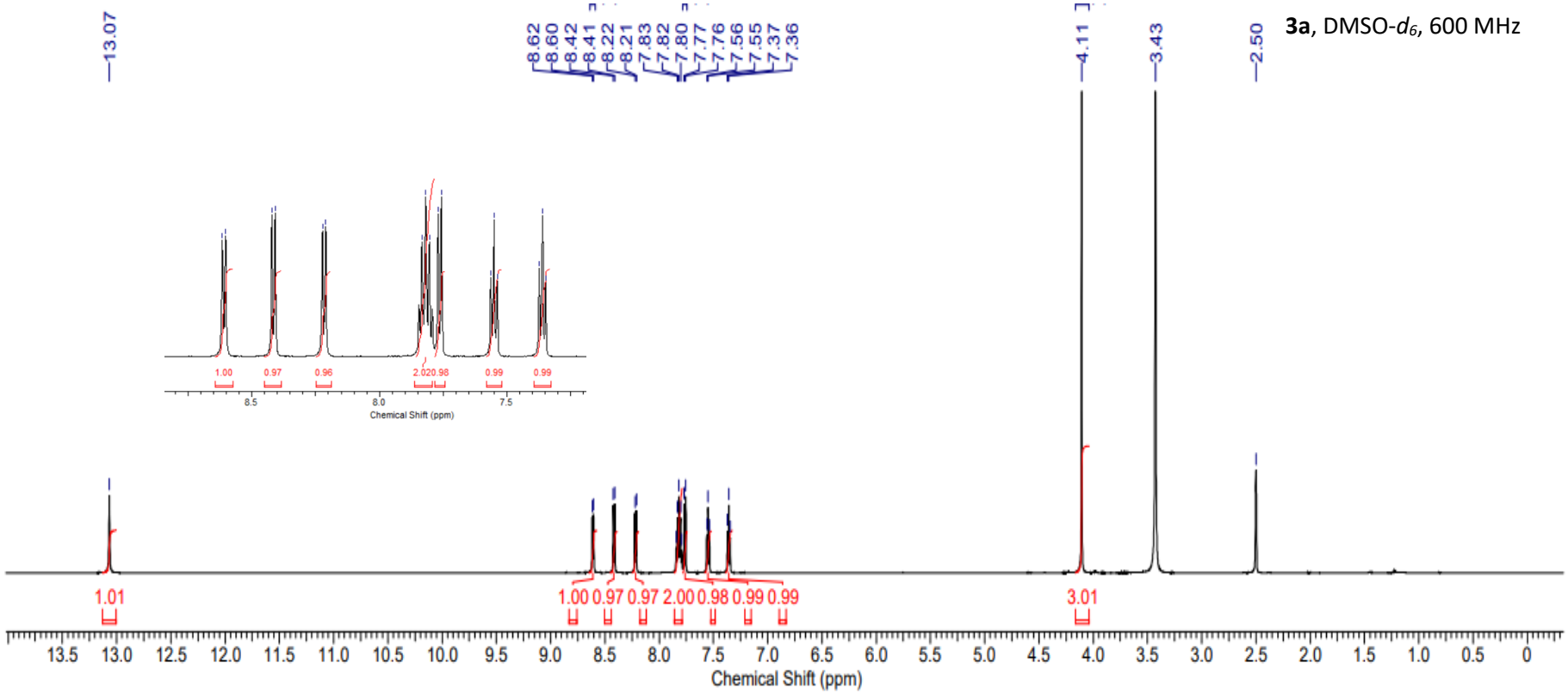


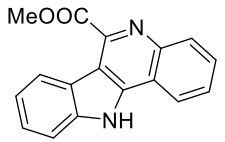

**4o**, $CDCl_3$, 150 MHz



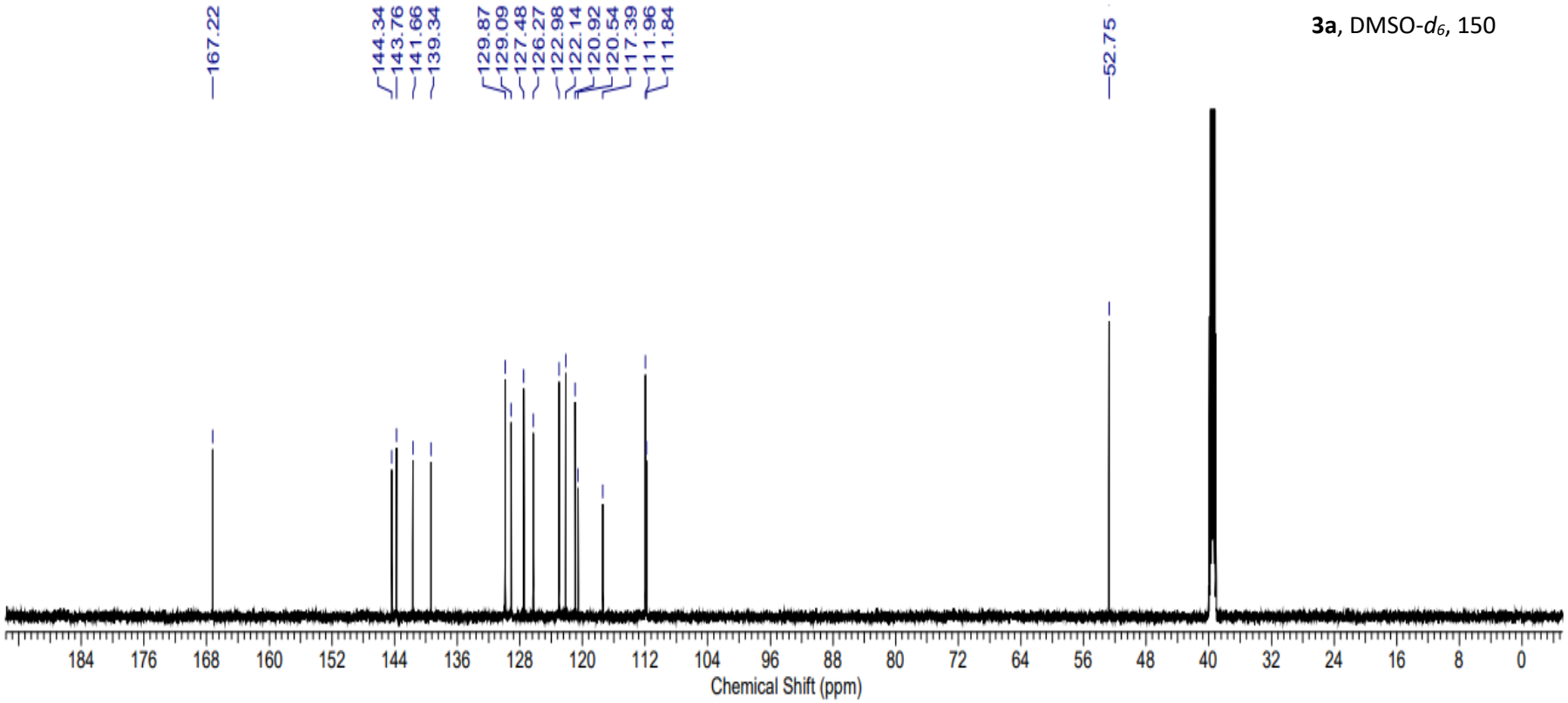


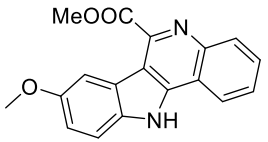

**3a**, DMSO-$d_6$, 600 MHz



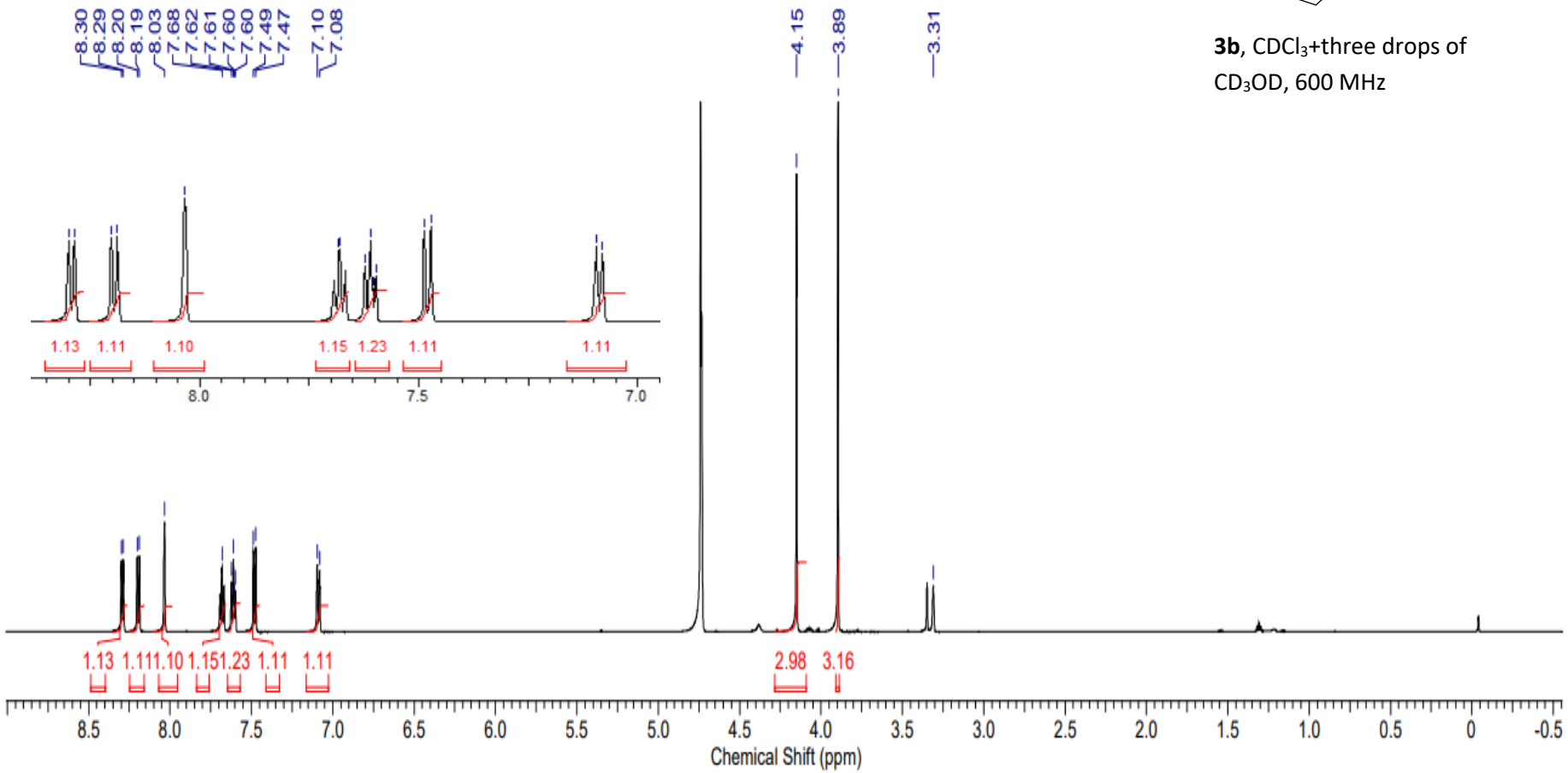


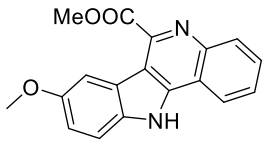

**3a**, DMSO-$d_6$, 150



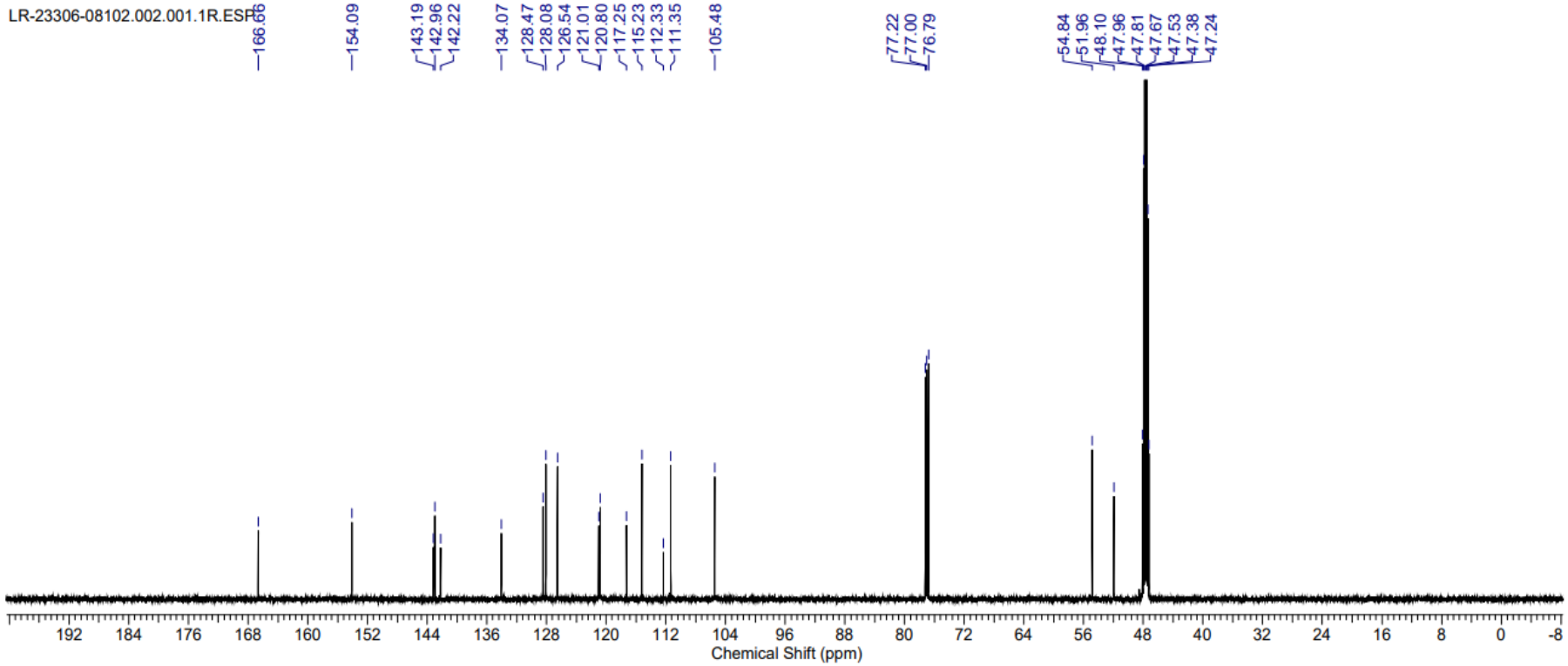


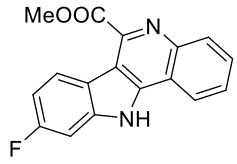

**3b**, $CDCl_3$+three drops of $CD_3OD$, 600 MHz



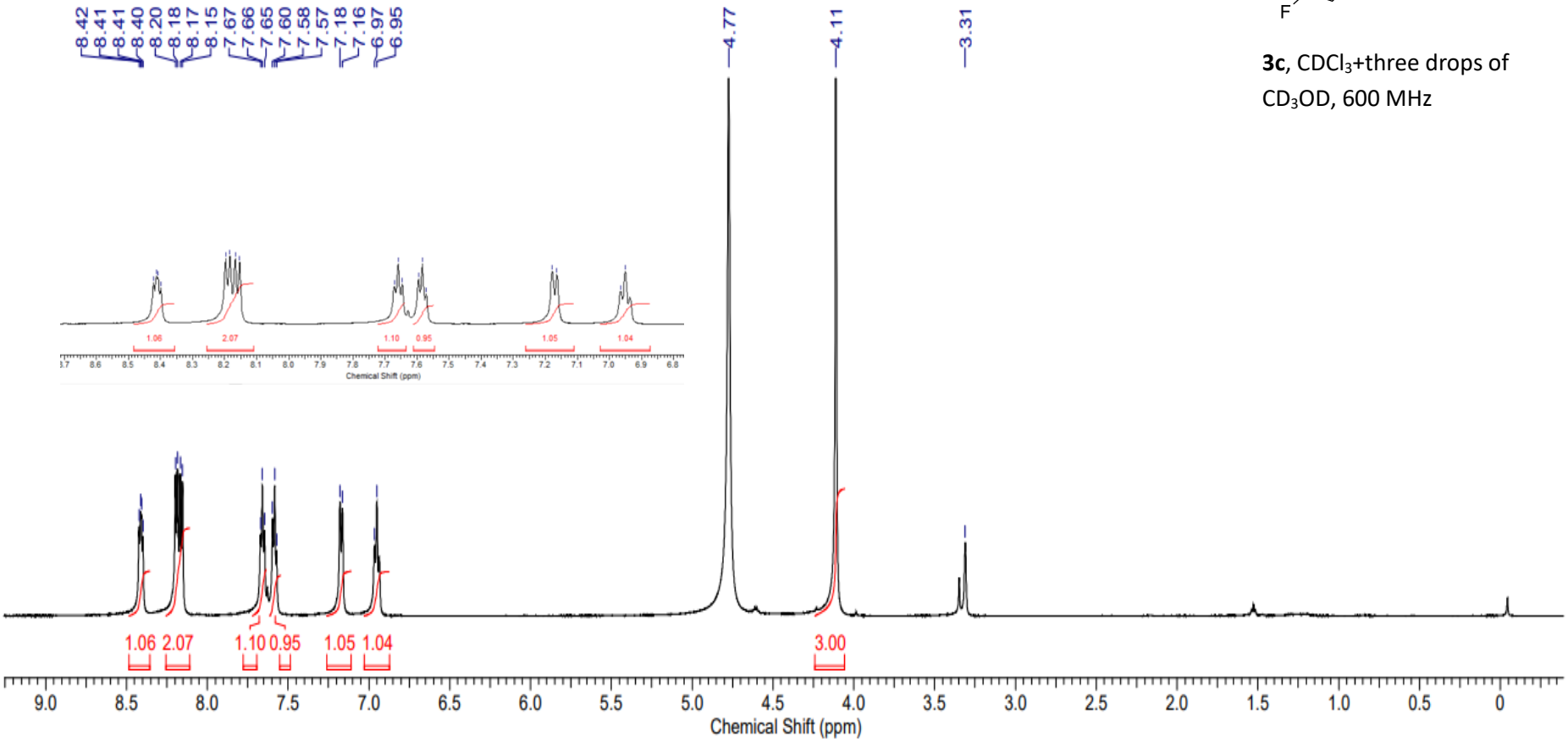


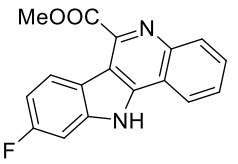

**3b**, $CDCl_3$+three drops of $CD_3OD$, 150 MHz



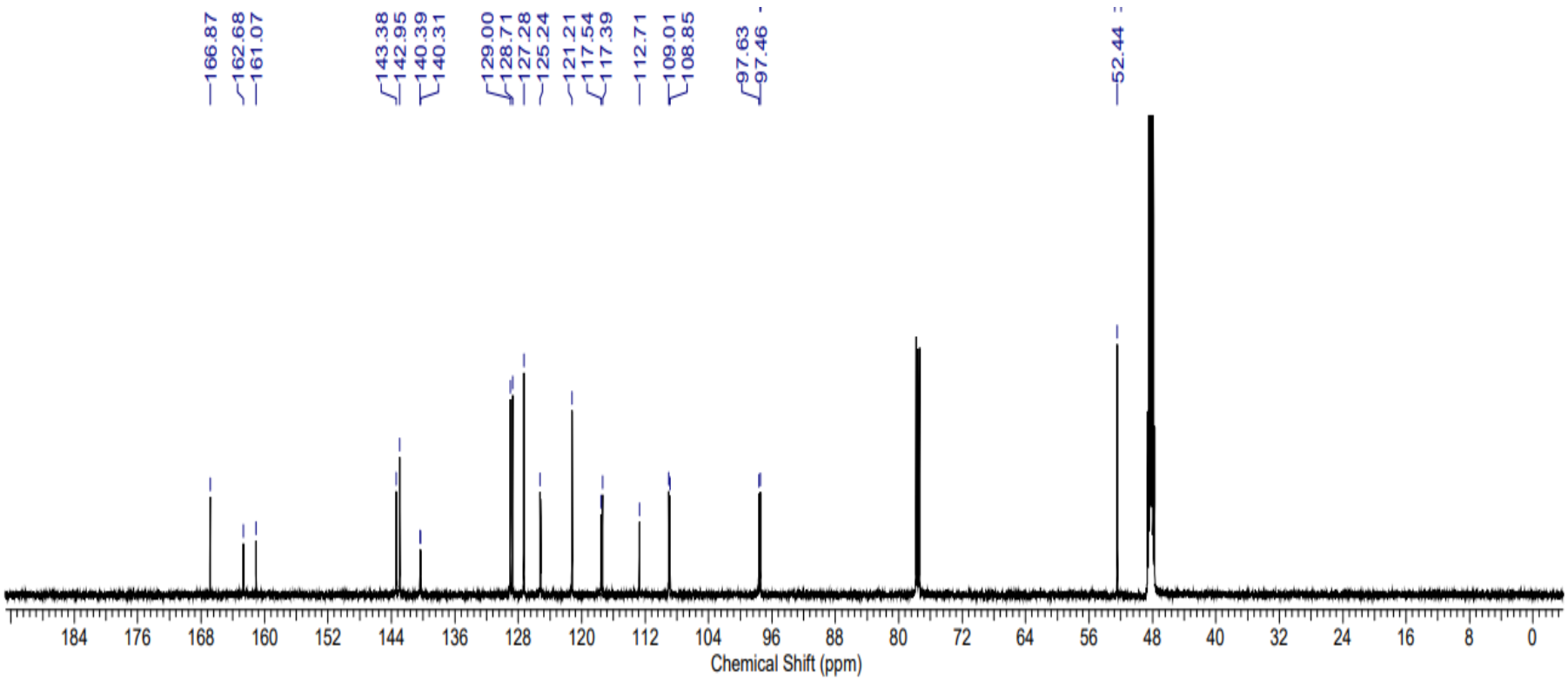


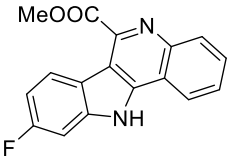

**3c**, $CDCl_3$+three drops of $CD_3OD$, 600 MHz

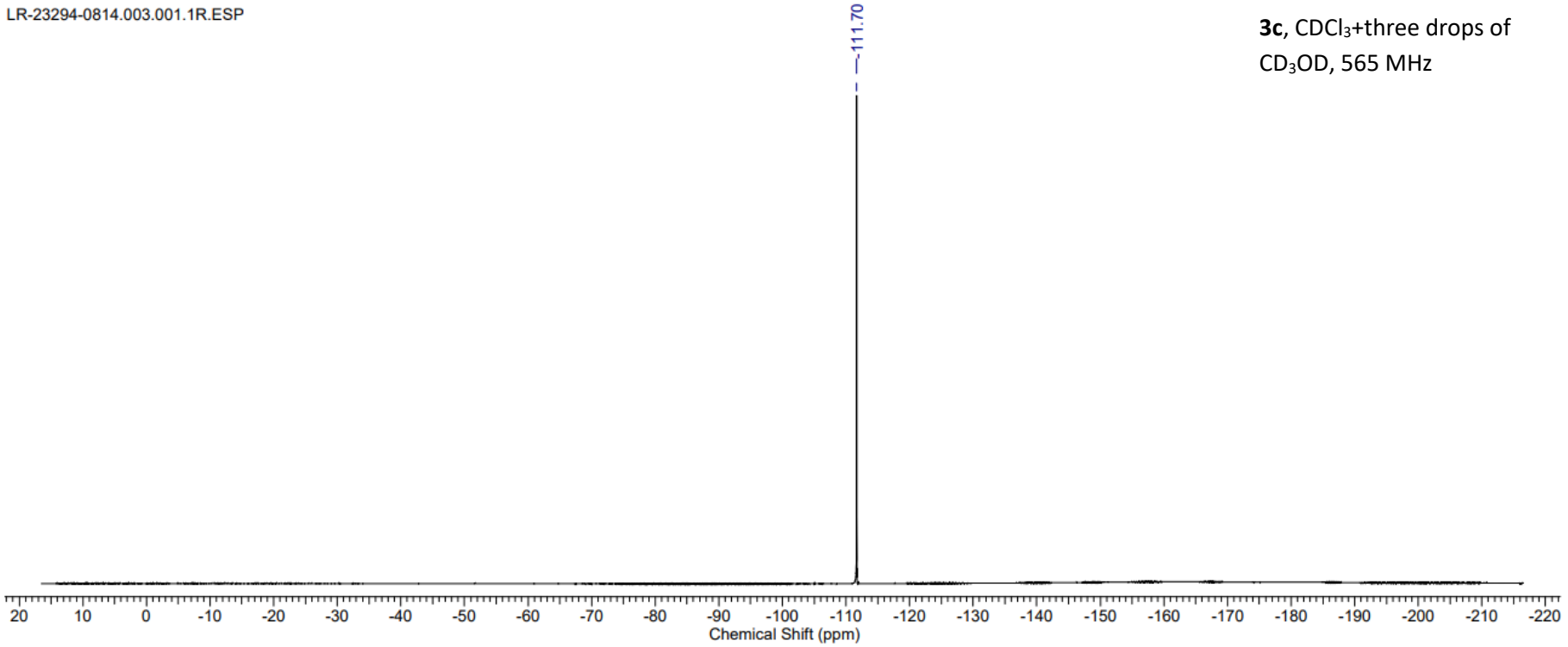




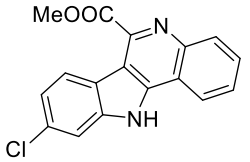

**3c**, $CDCl_3$+three drops of $CD_3OD$, 150 MHz



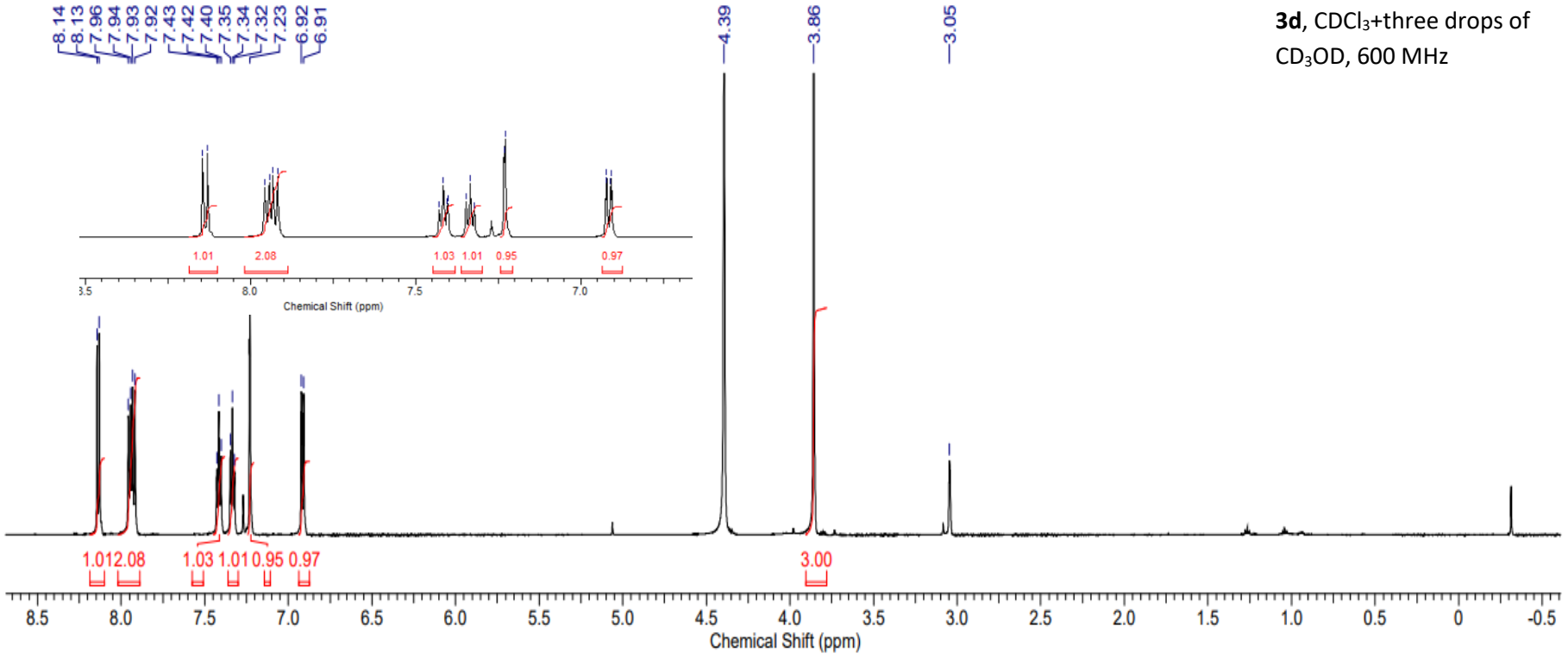


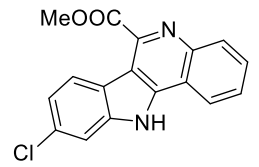




**3c**, $CDCl_3$+three drops of $CD_3OD$, 565 MHz

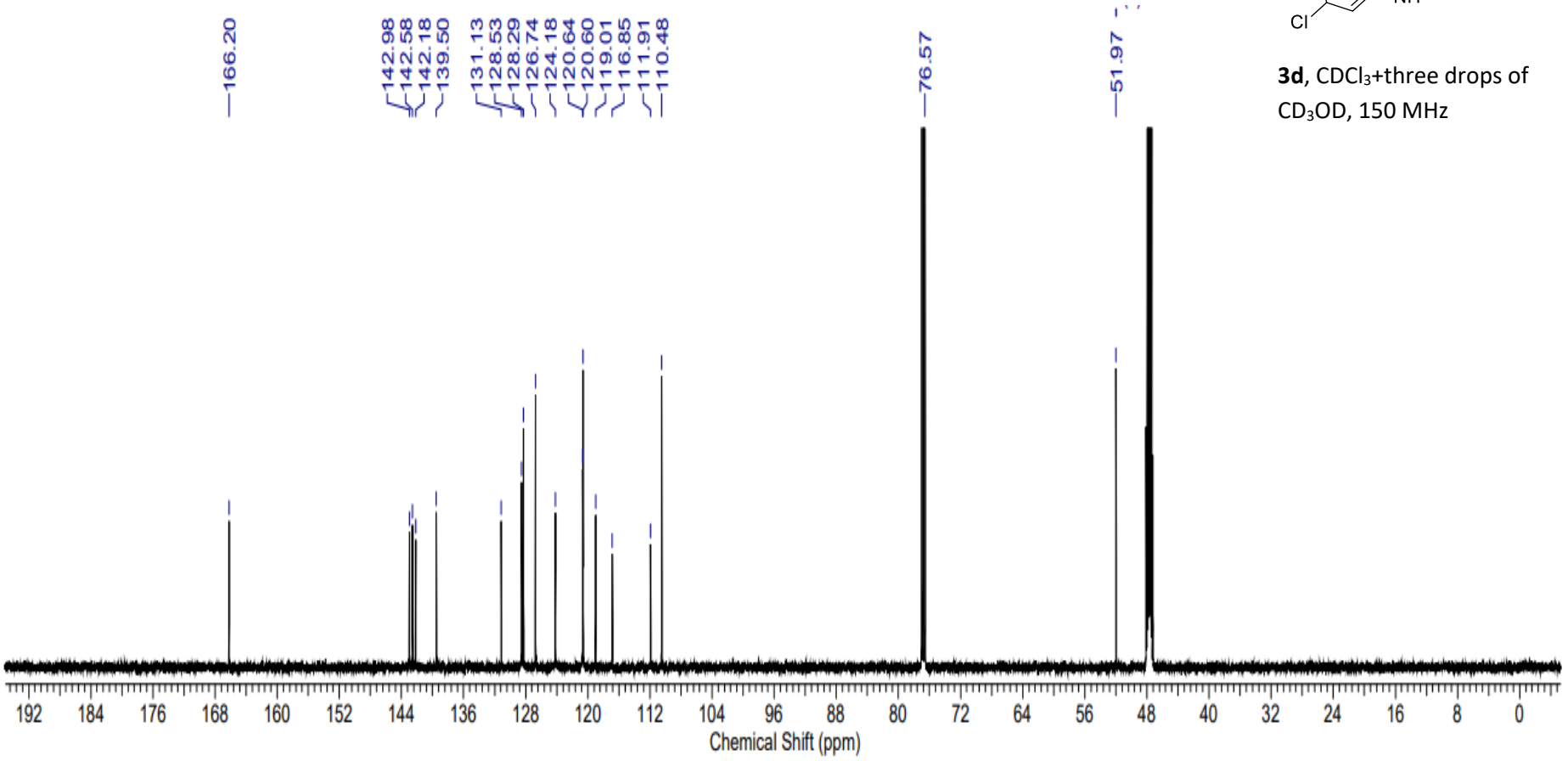


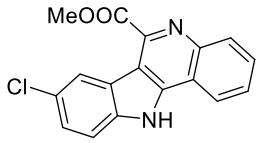

**3d**, $CDCl_3$+three drops of $CD_3OD$, 600 MHz



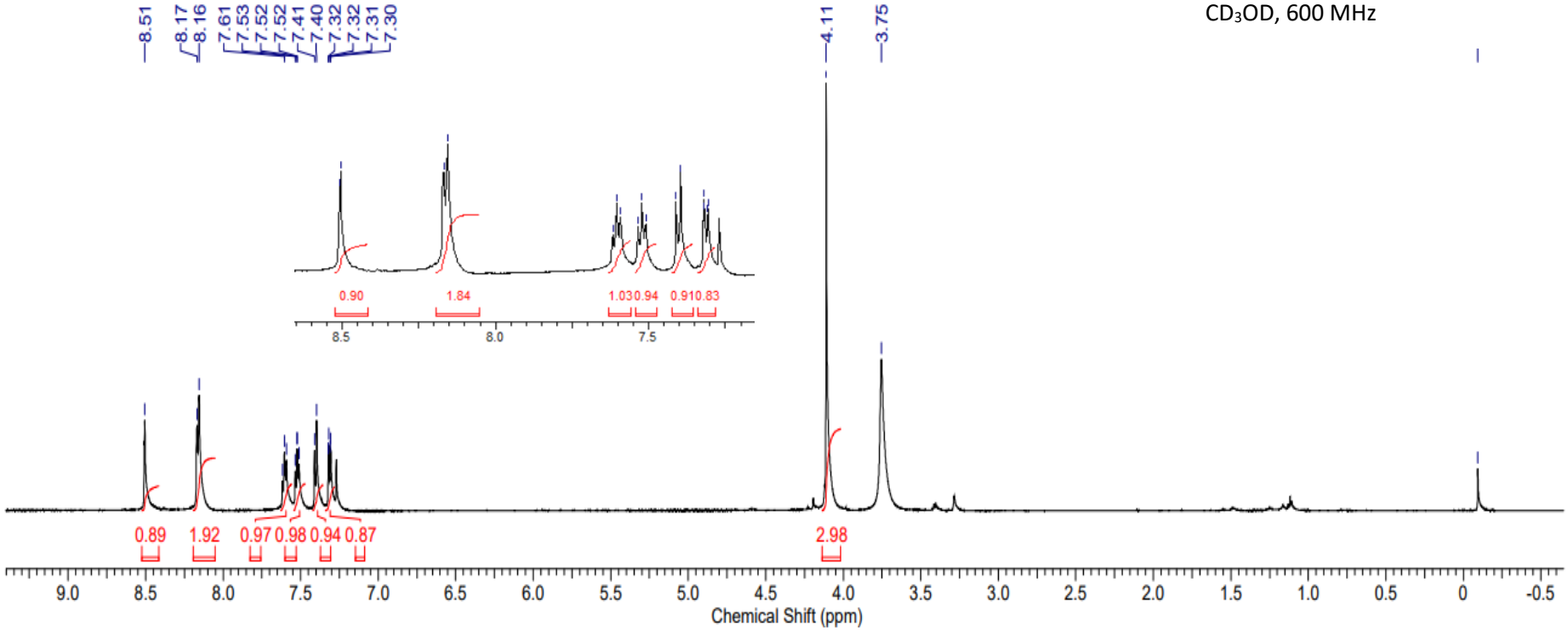


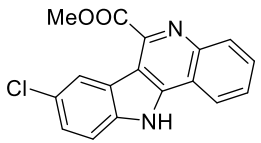

**3d**, $CDCl_3$+three drops of $CD_3OD$, 150 MHz



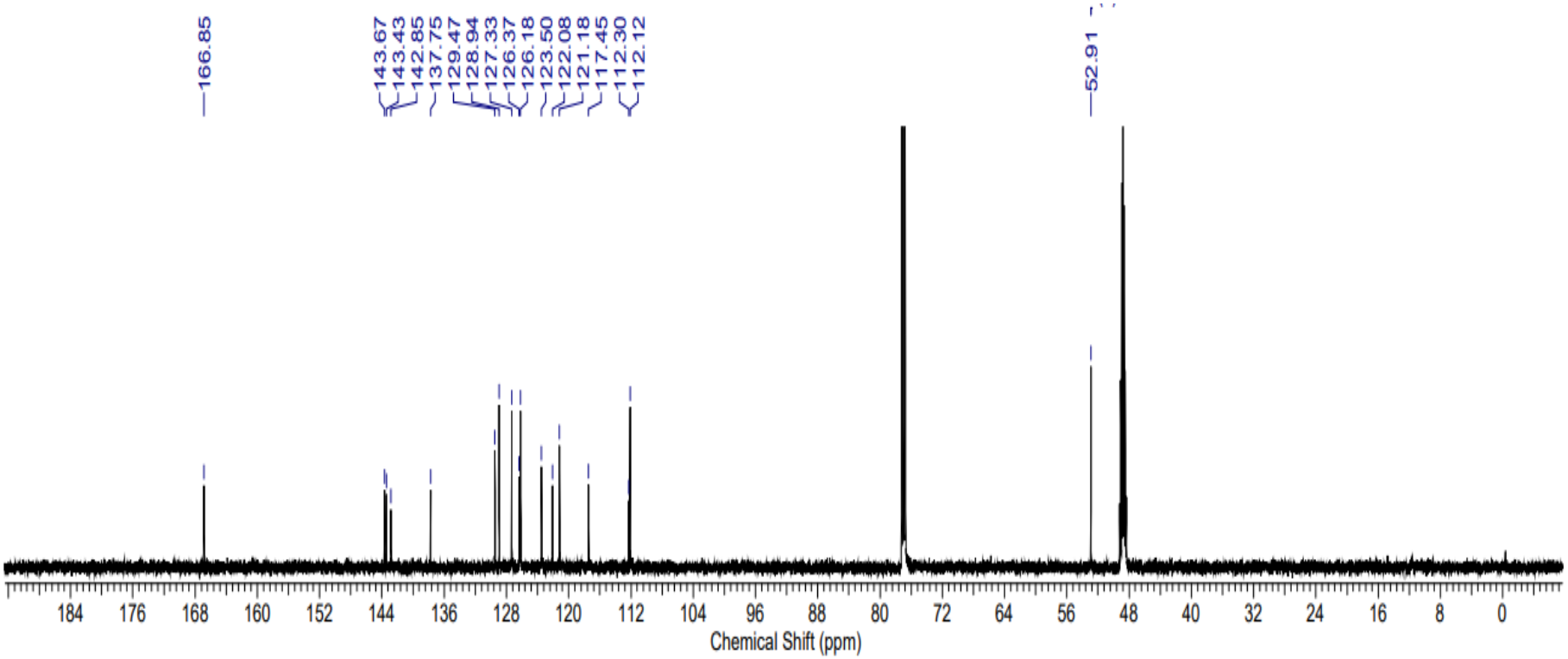


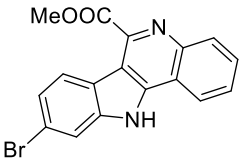

**3e**, $CDCl_3$+three drops of $CD_3OD$, 600 MHz



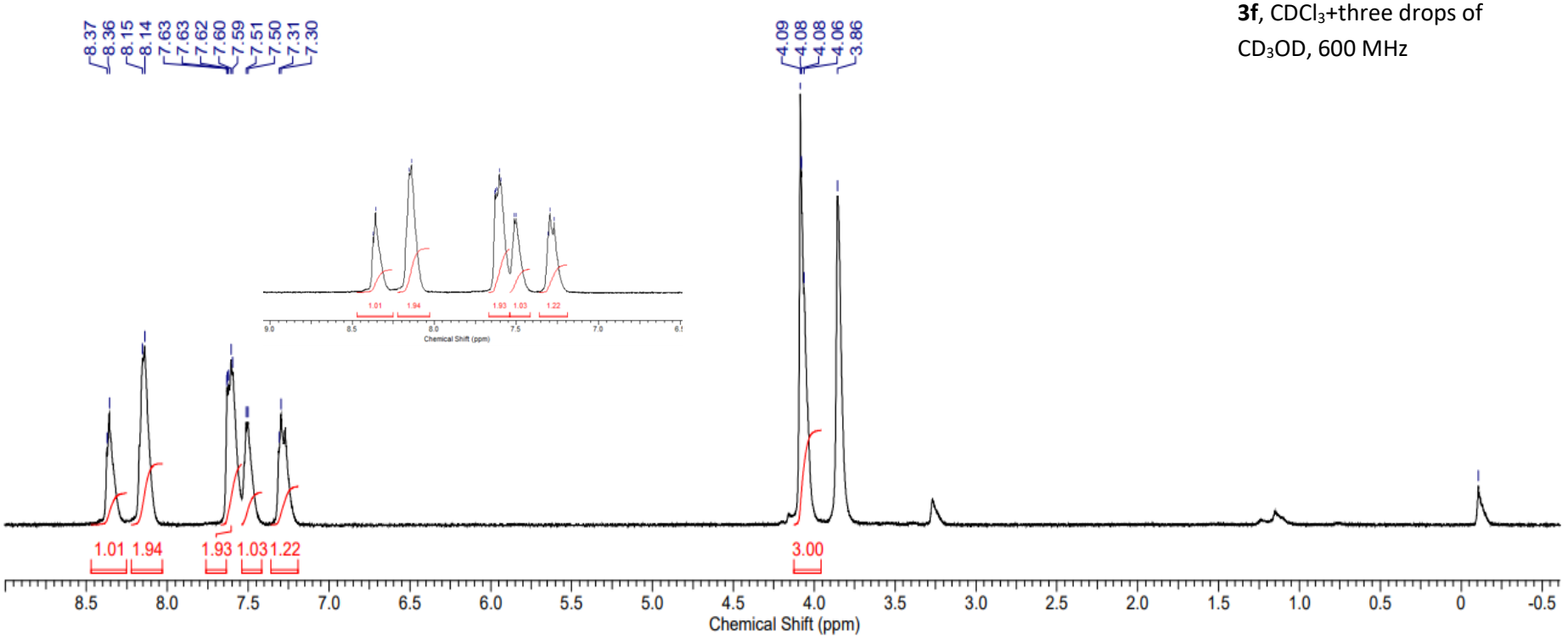


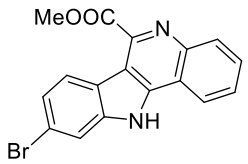

**3e**, $CDCl_3$+three drops of $CD_3OD$, 150 MHz



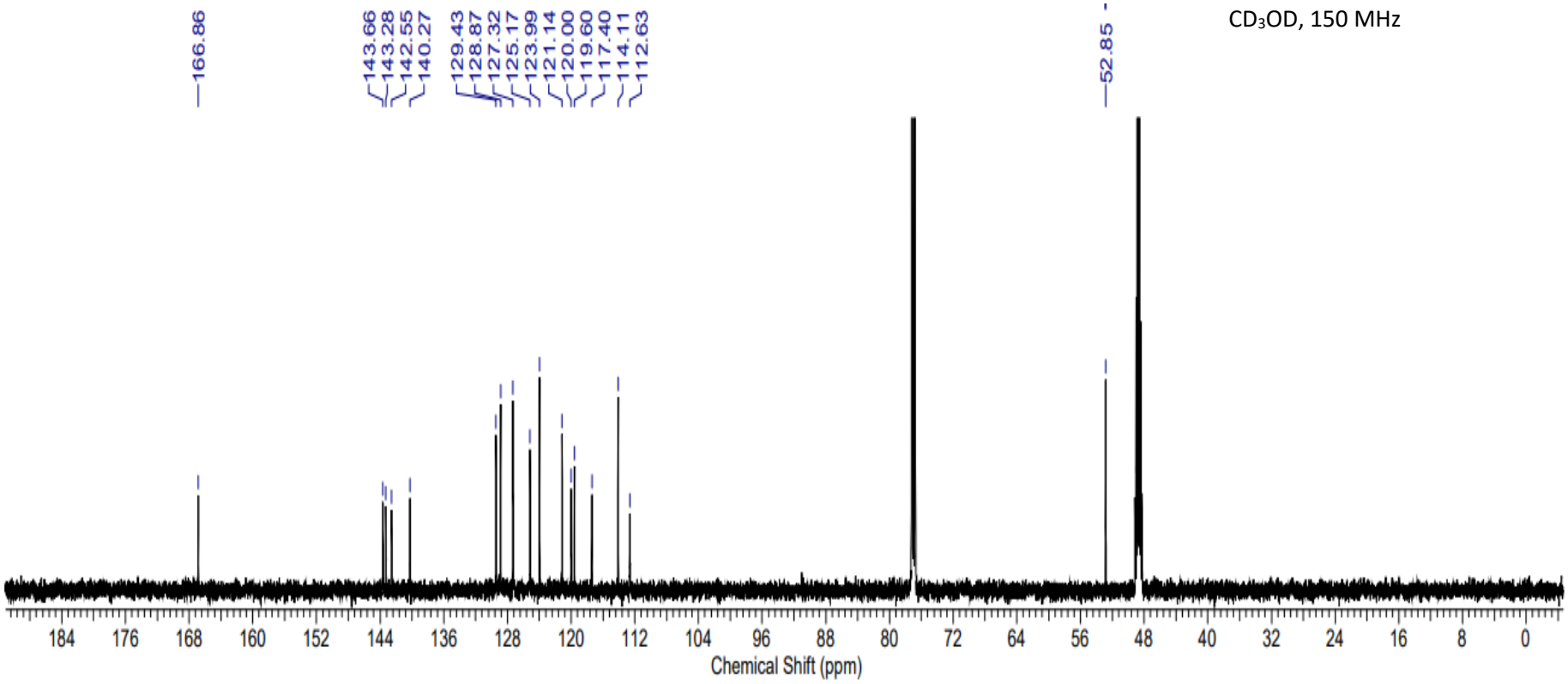


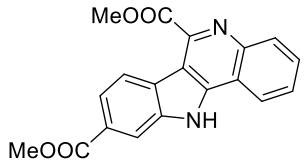

**3f**, $CDCl_3$+three drops of $CD_3OD$, 600 MHz



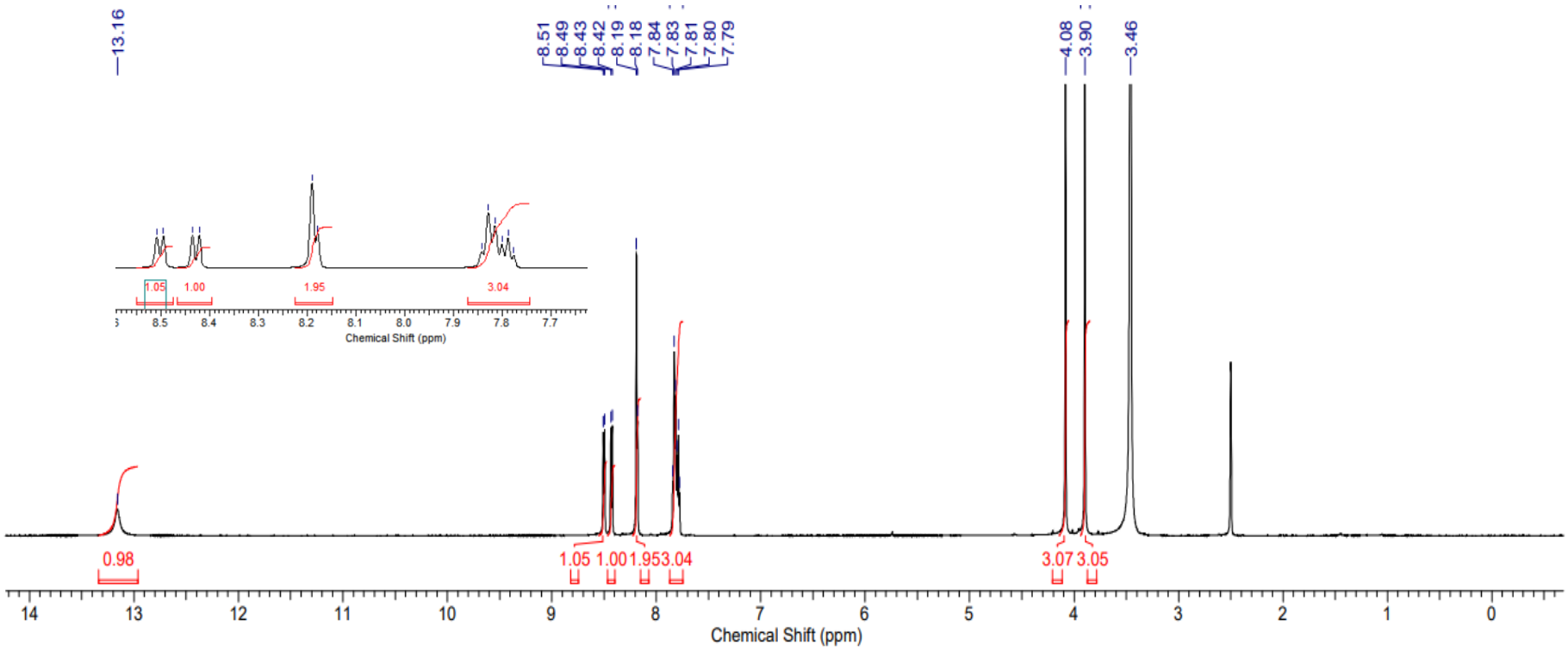


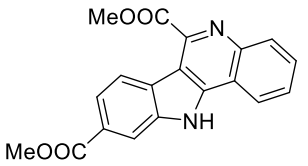

**3f**, $CDCl_3$+three drops of $CD_3OD$, 150 MHz



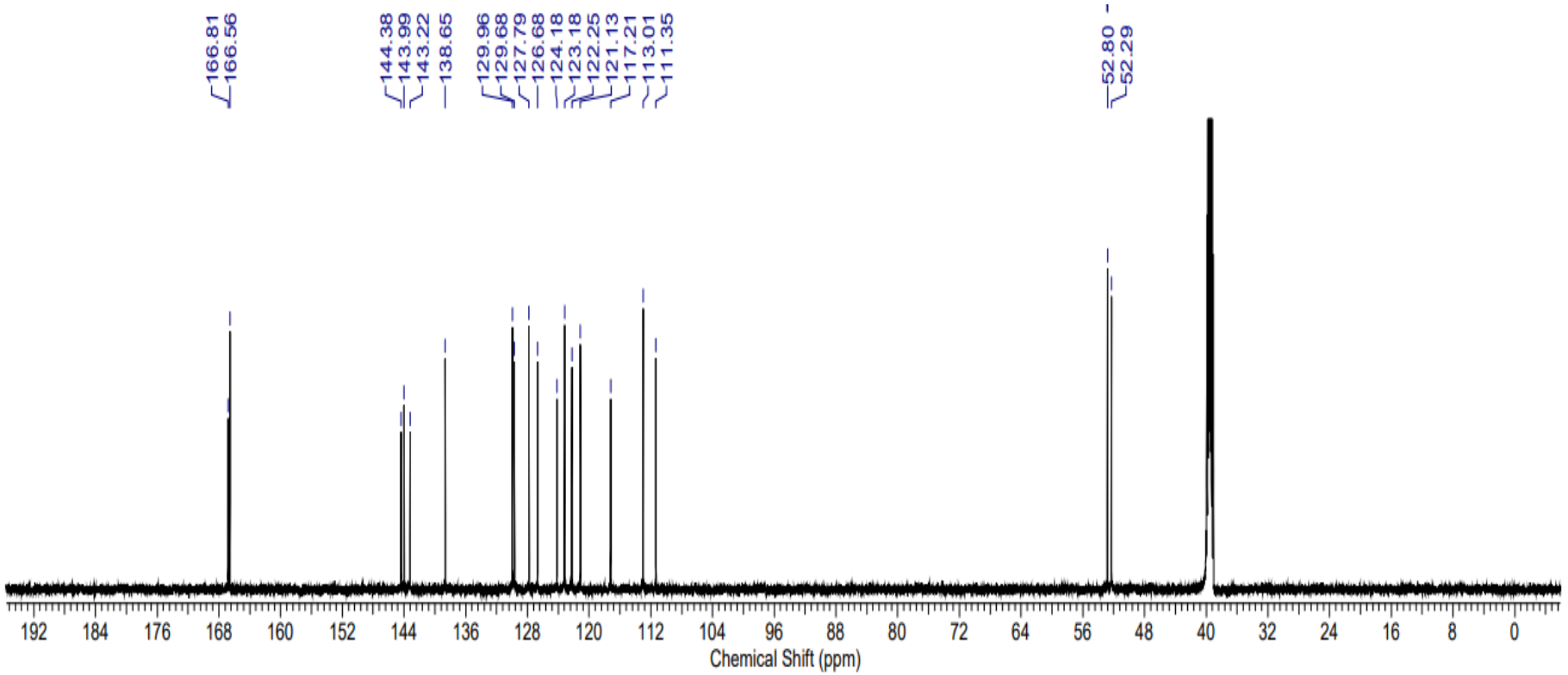


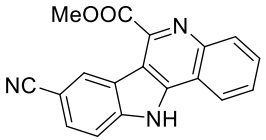

**3g**, DMSO-$d_6$ , 600 MHz



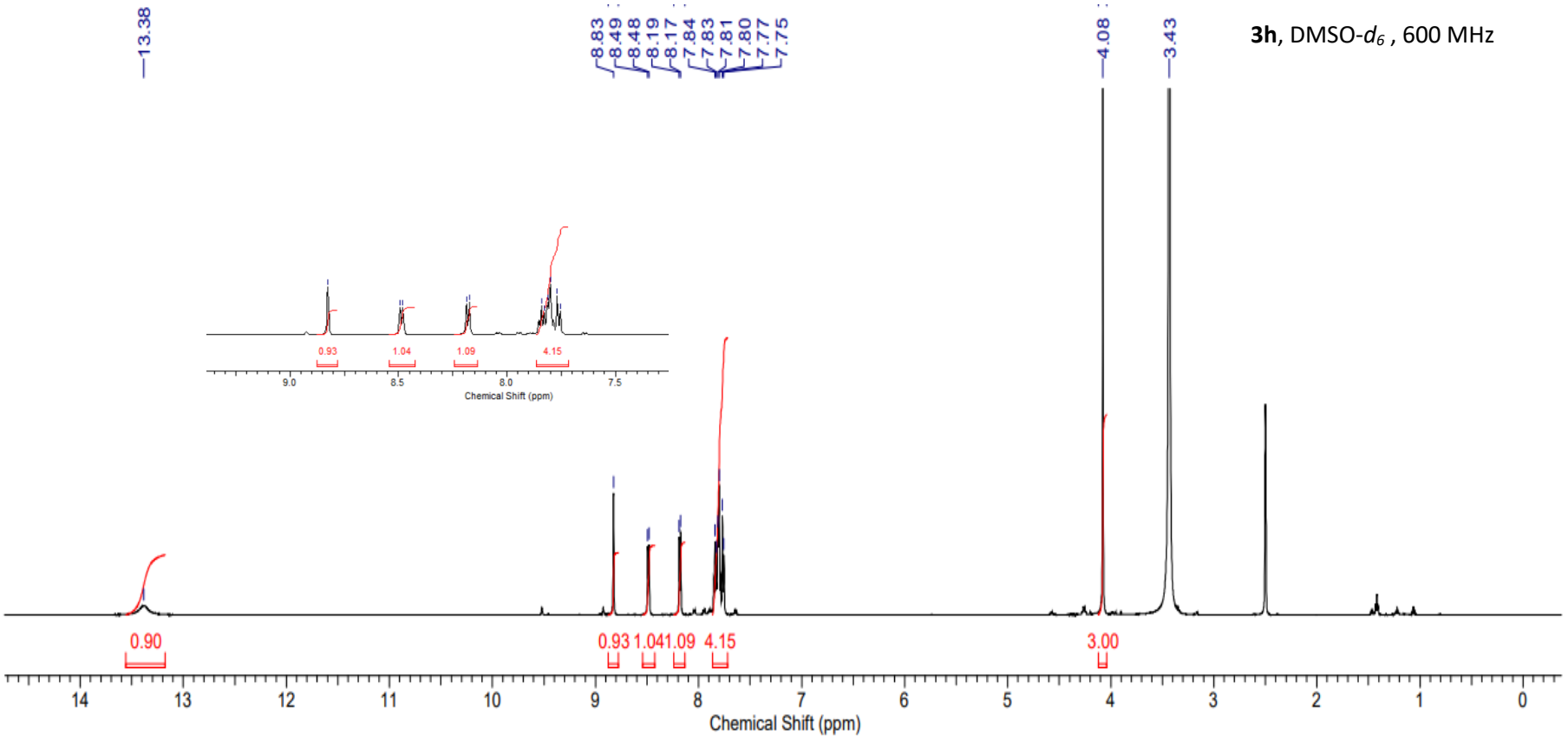


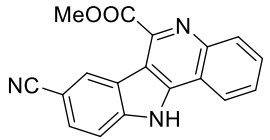

**3g**, DMSO-$d_6$ , 150 MHz



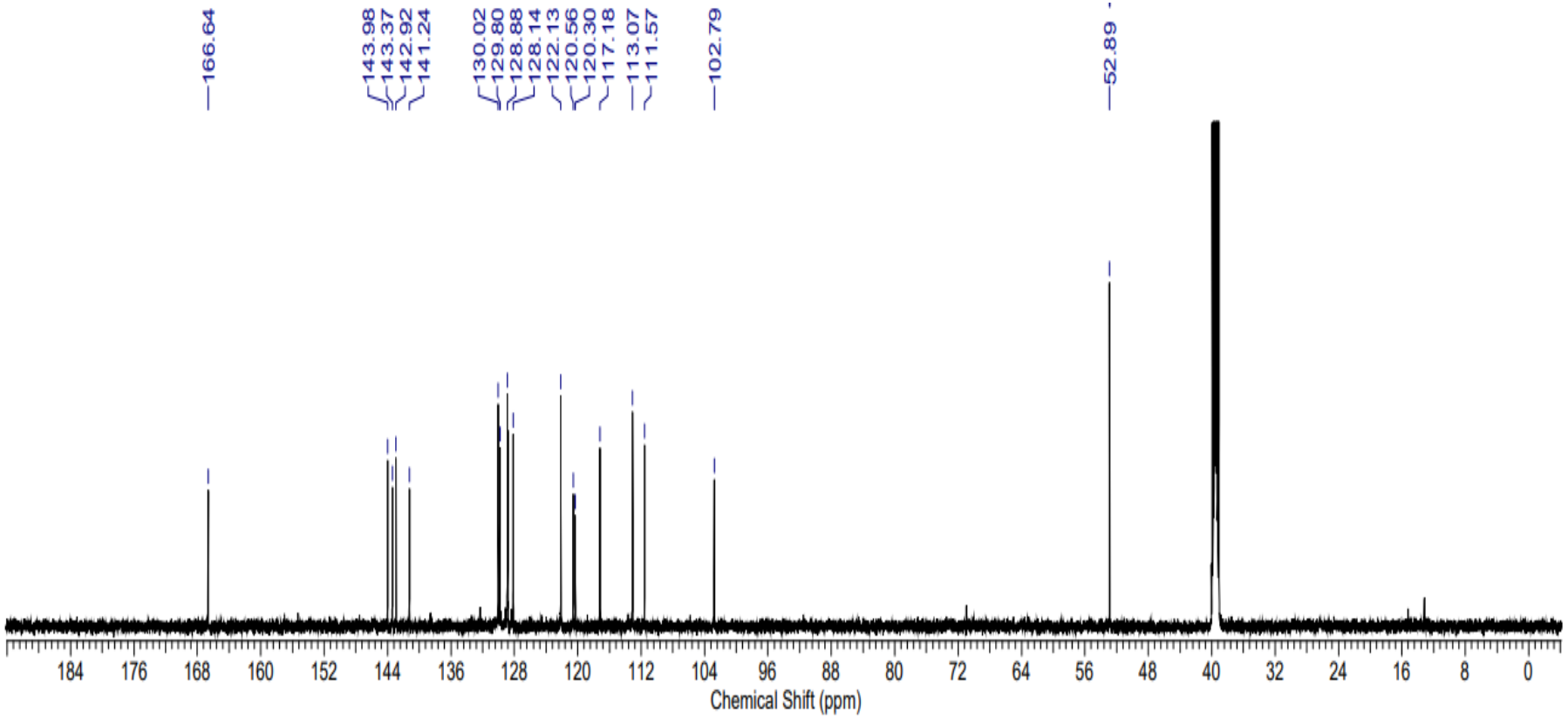


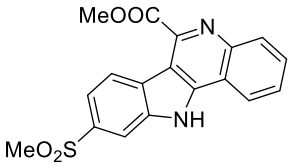

**3h**, DMSO-$d_6$ , 600 MHz



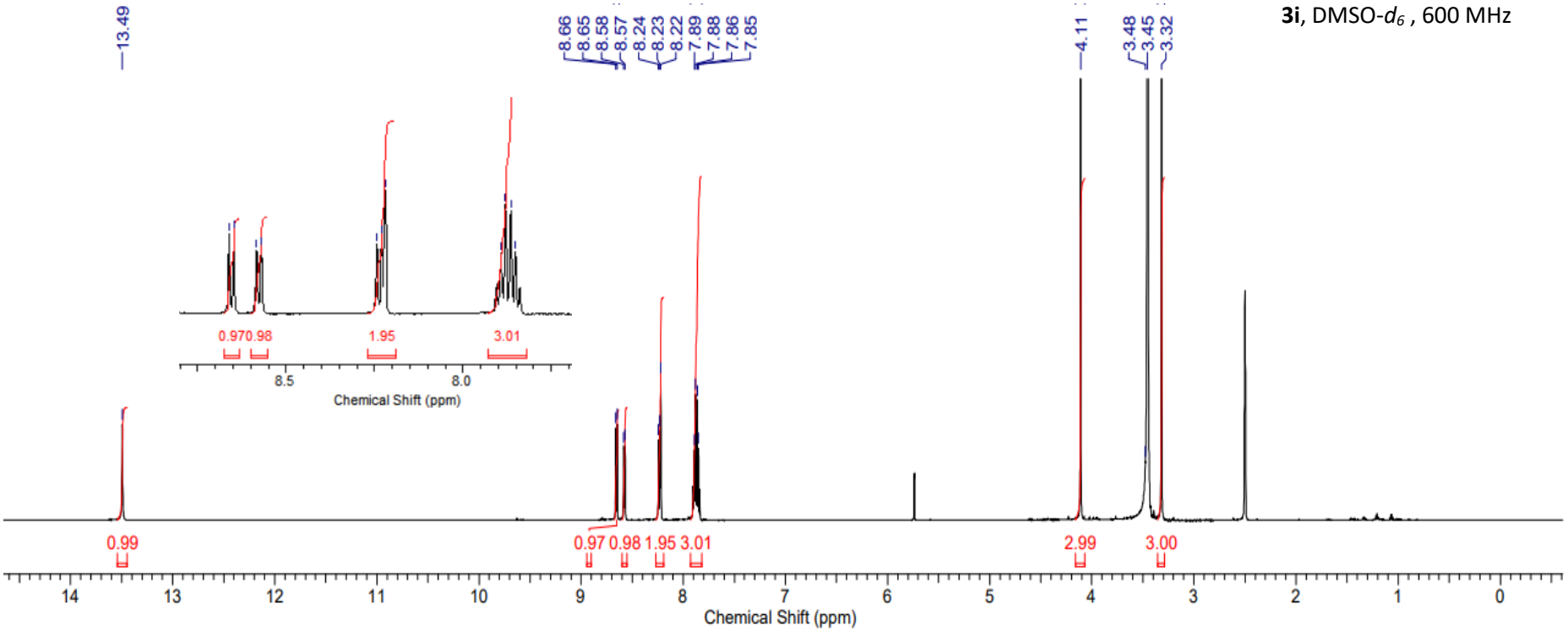


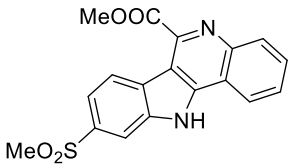

**3h**, DMSO-*d6* , 150 MHz



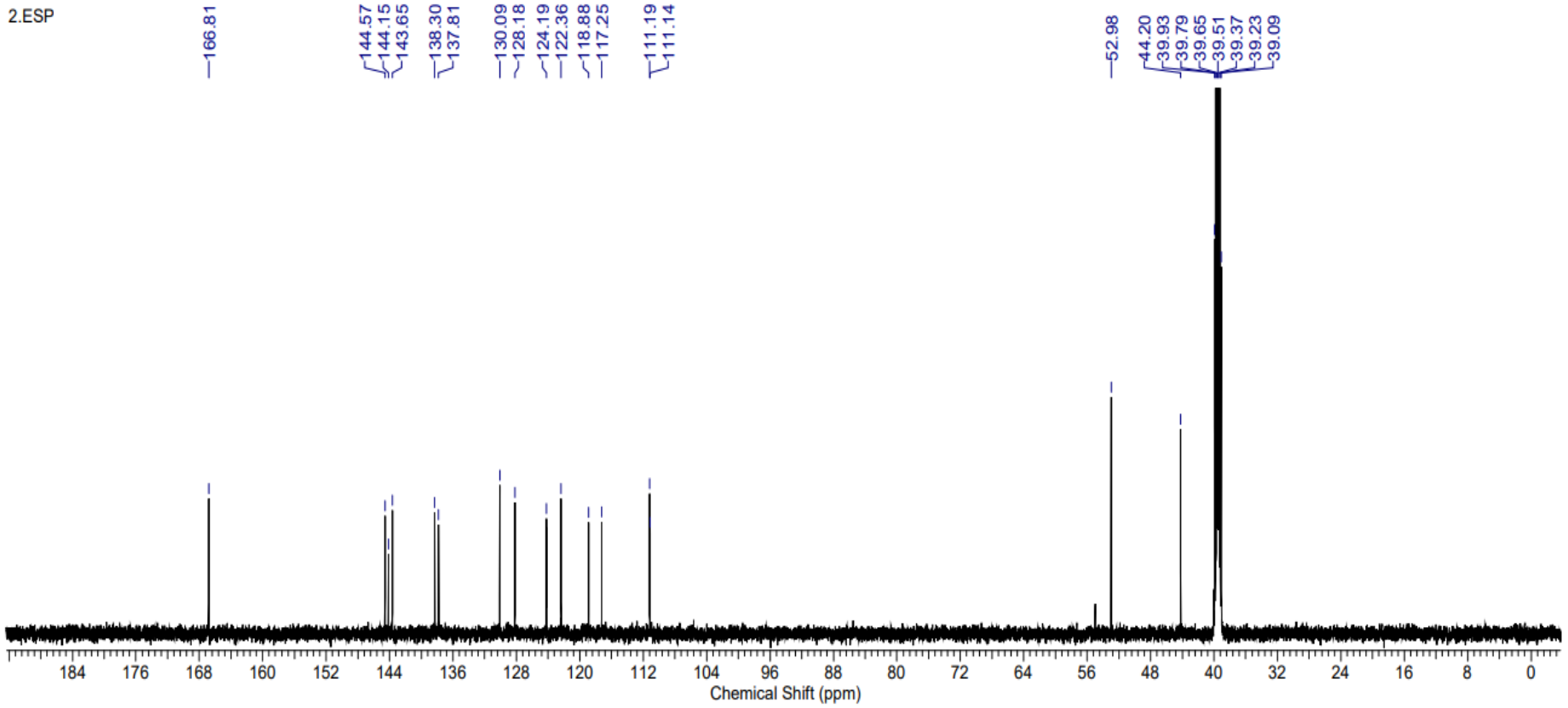


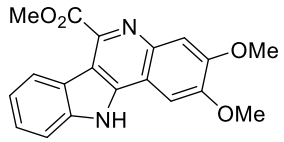

**3i**, DMSO-$d_6$ , 600 MHz



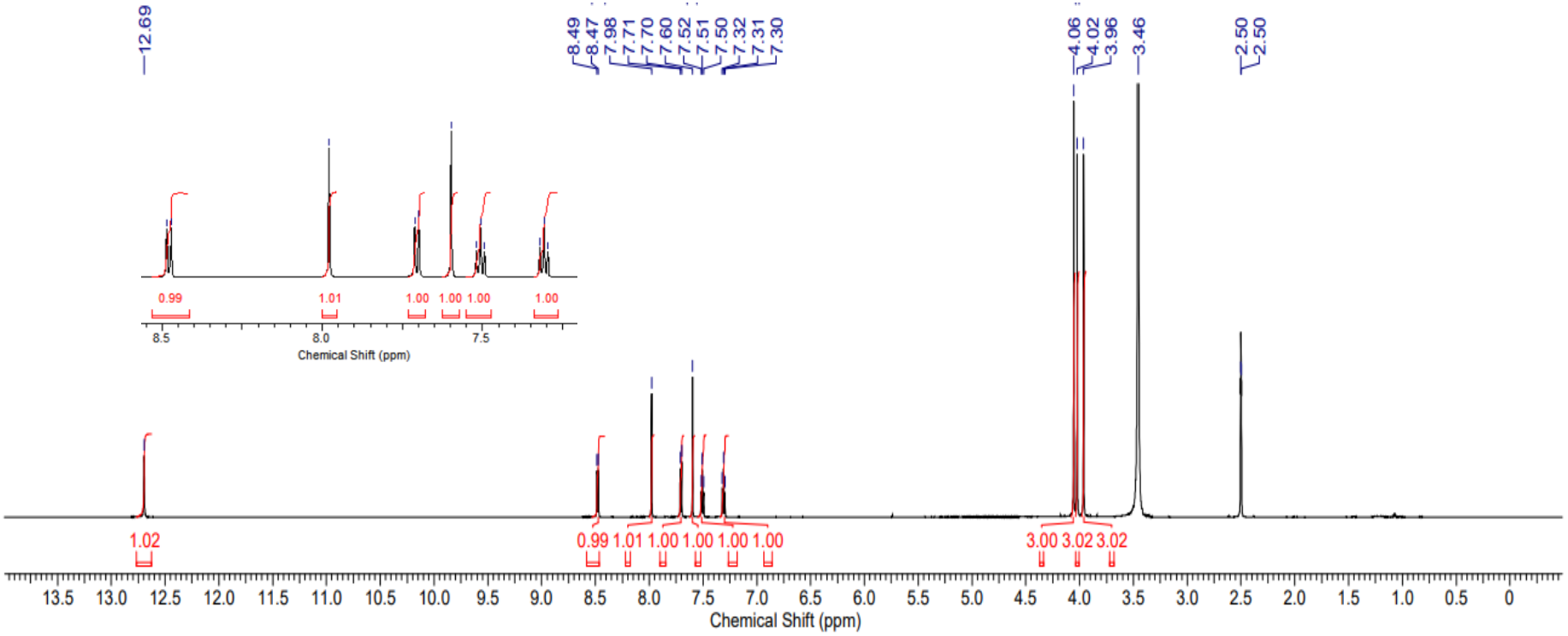


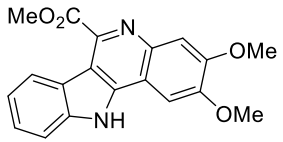

**3i**, DMSO-$d_6$, 150 MHz



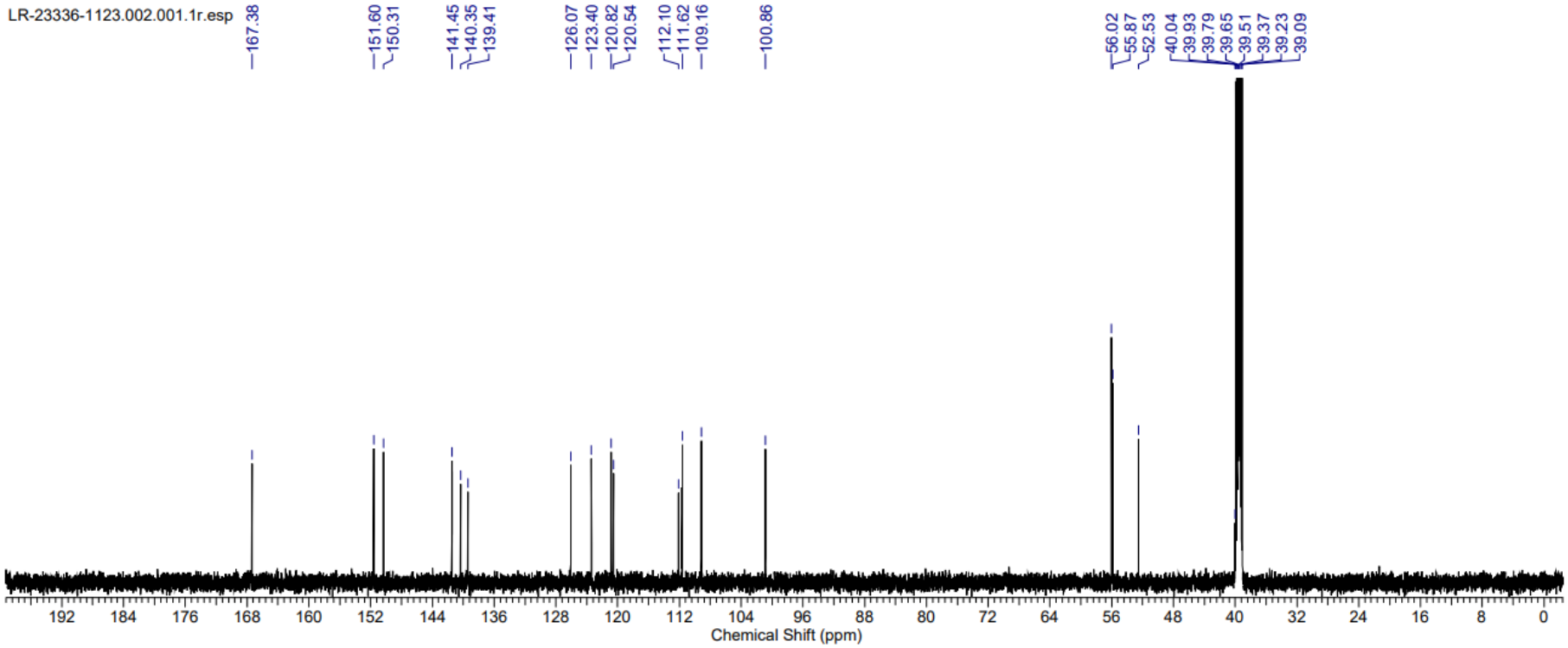


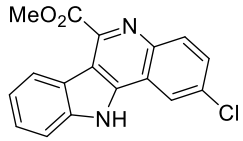

**3j**, DMSO-$d_6$ , 600 MHz



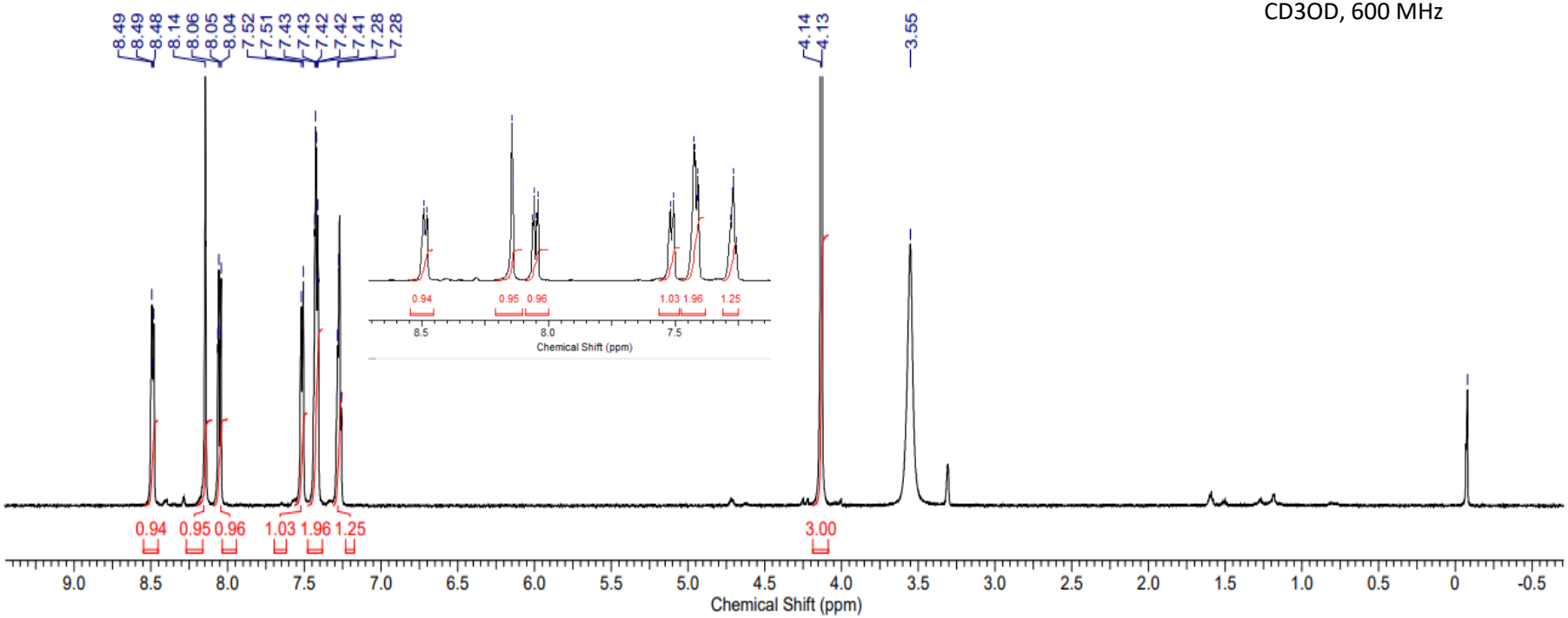


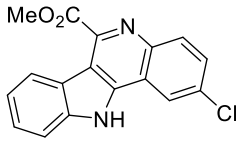

**3j**, DMSO-$d_6$ , 150 MHz



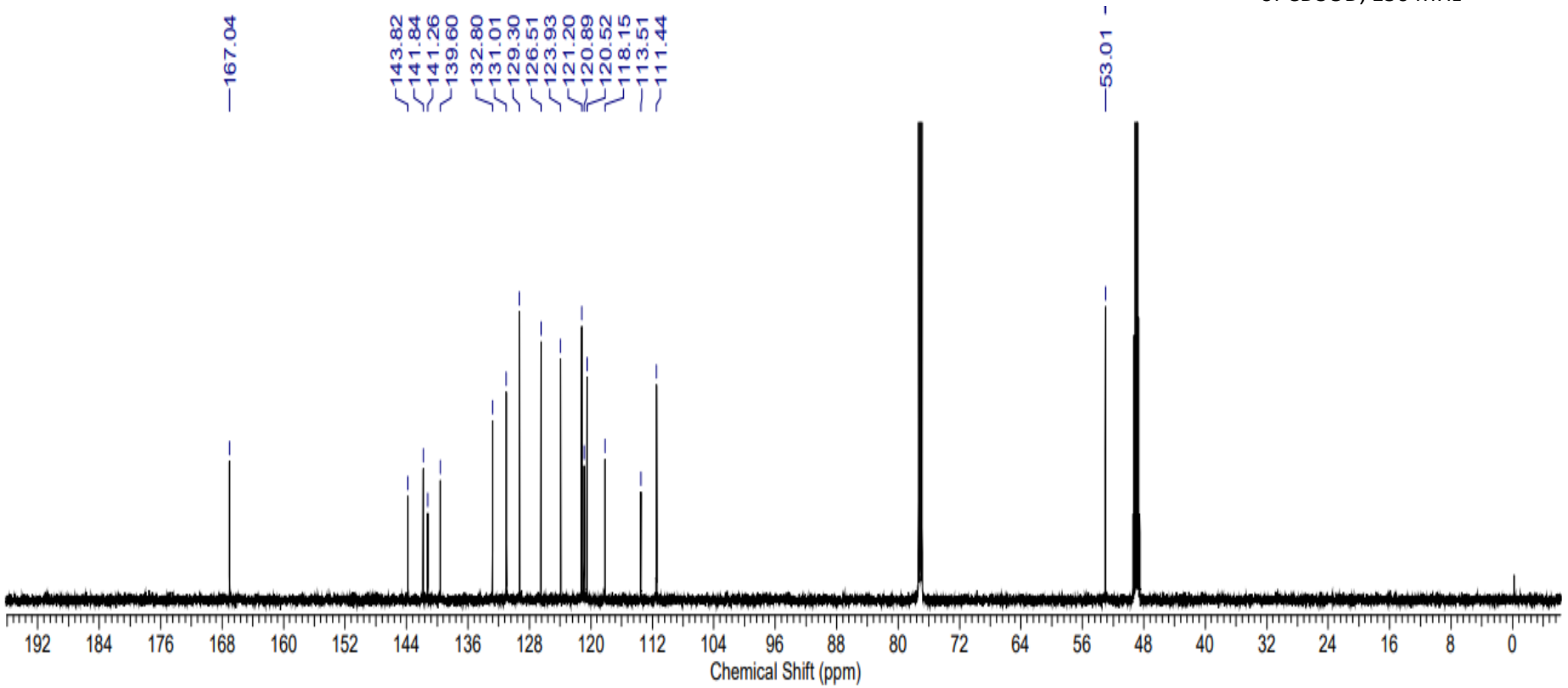


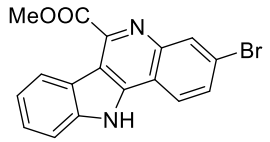

**3k**, CDCl3+three drops of CD3OD, 600 MHz



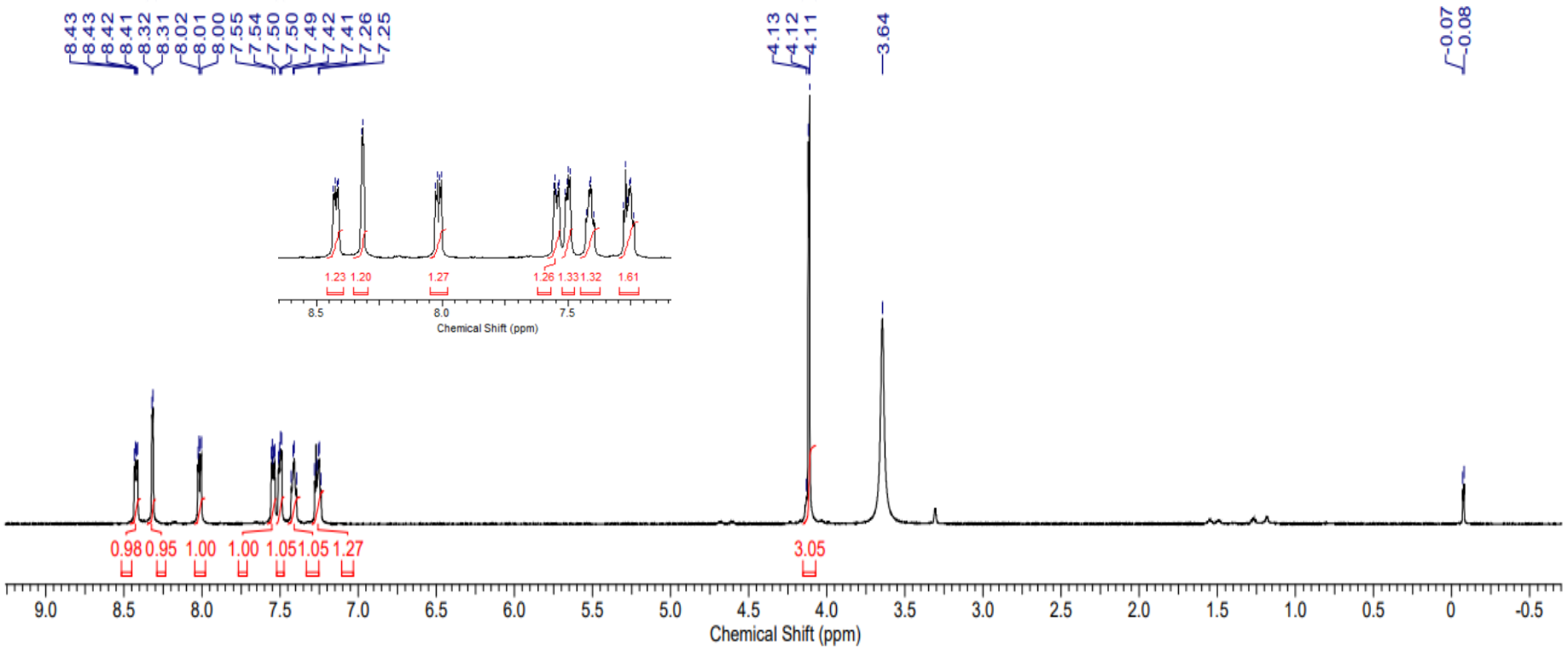


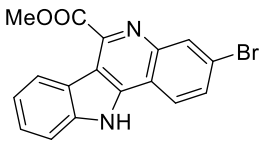

**3k**, CDCl3+three drops of CD3OD, 150 MHz



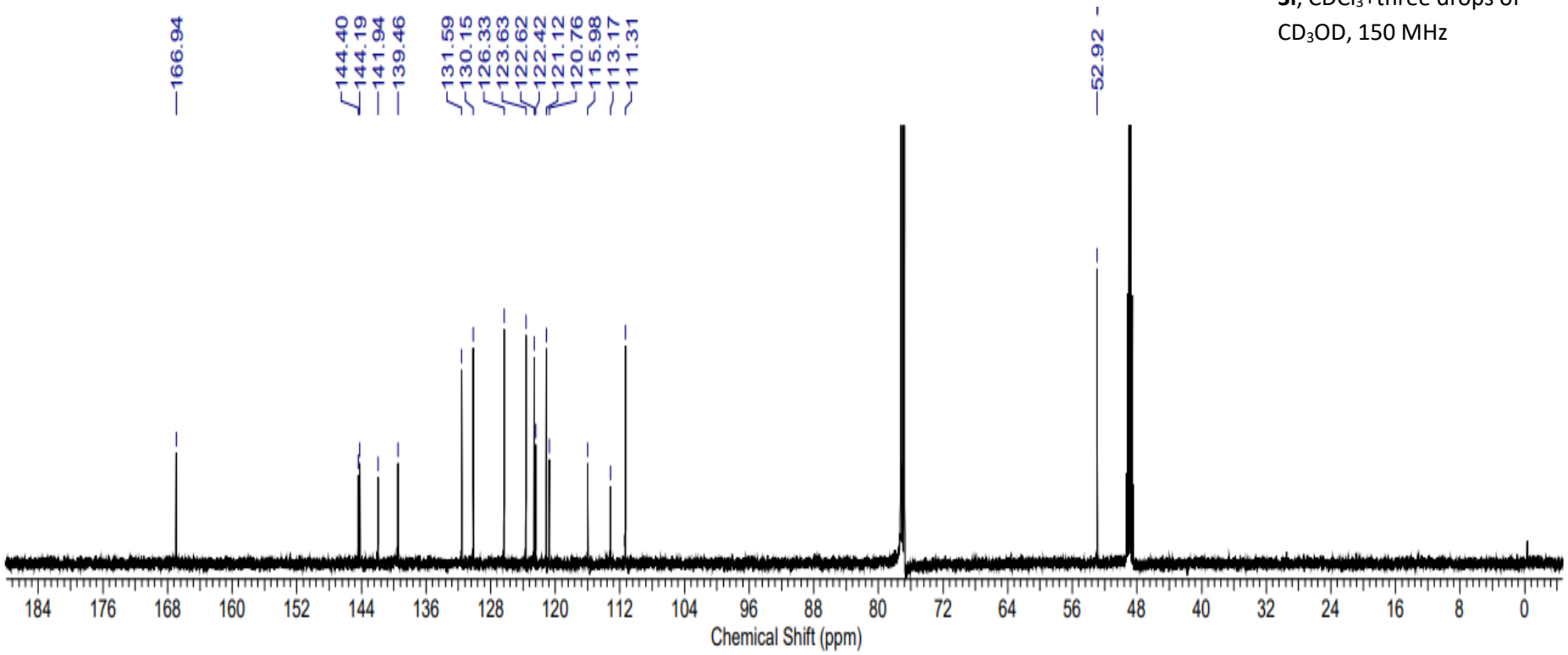


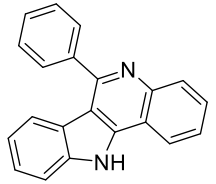

**3l**, $CDCl_3$+three drops of $CD_3OD$, 600 MHz



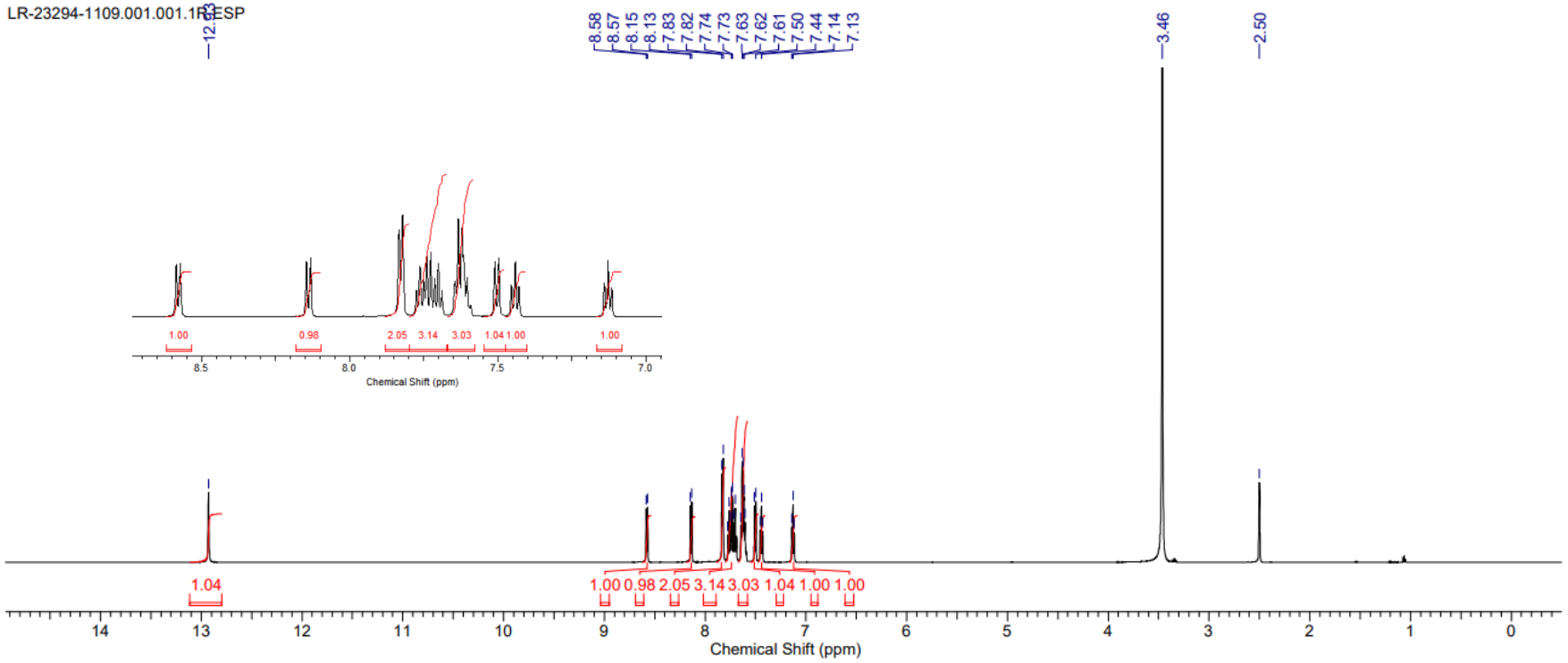


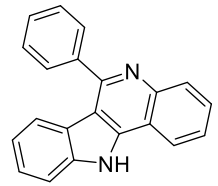

**3l**, $CDCl_3$+three drops of $CD_3OD$, 150 MHz



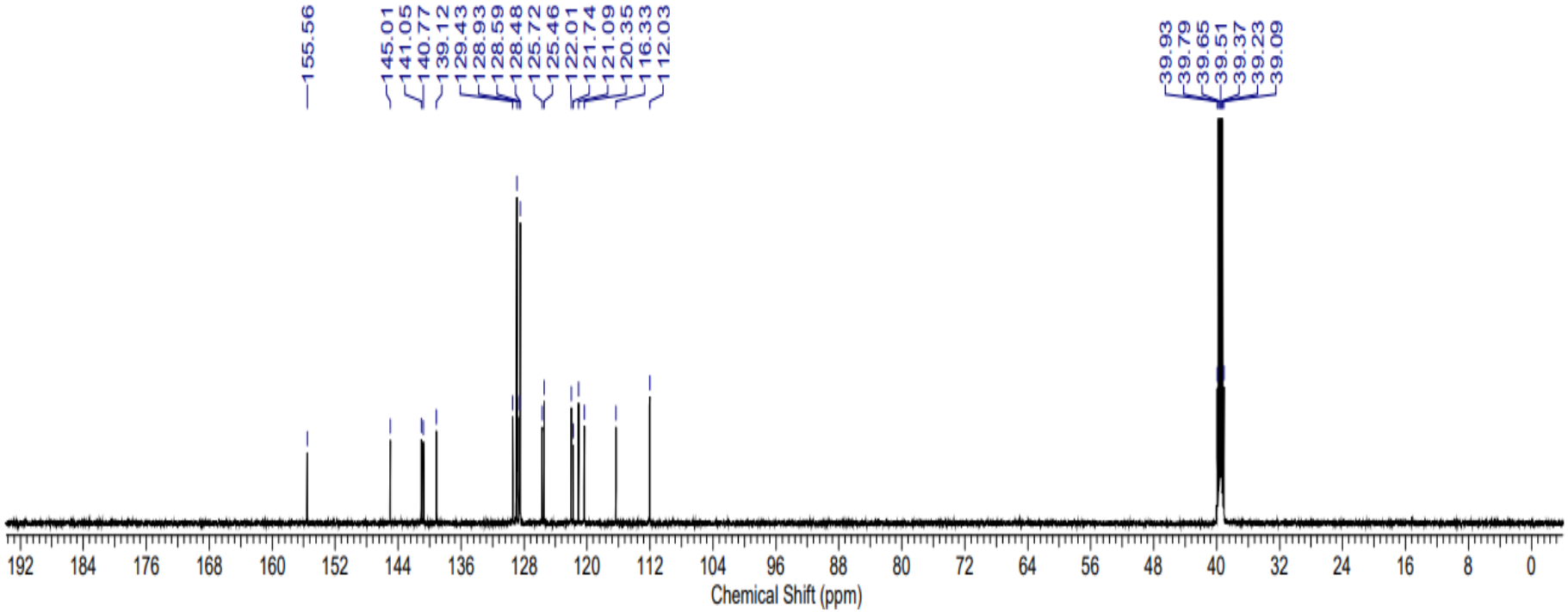


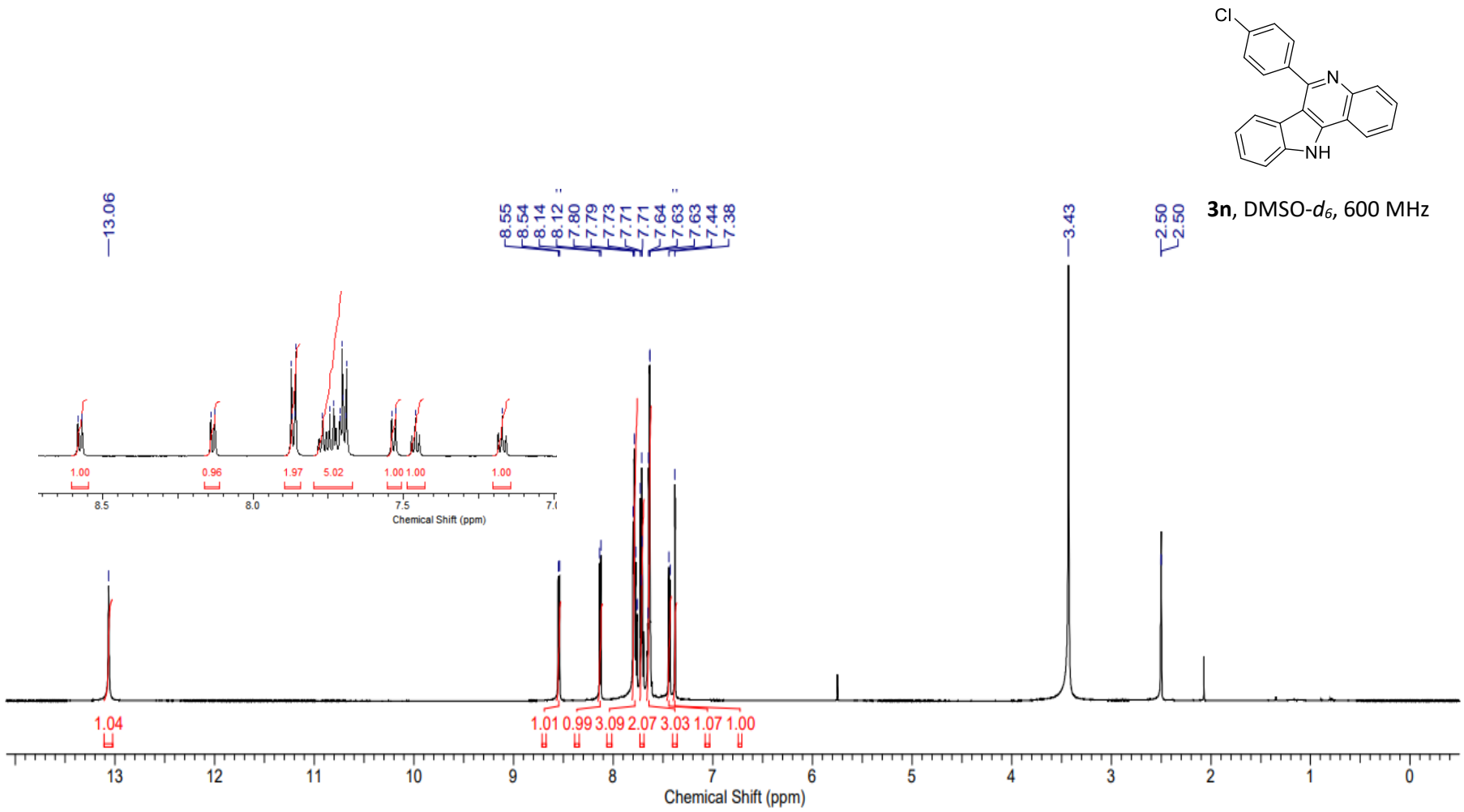

**3m**, DMSO-*d6*, 600 MHz



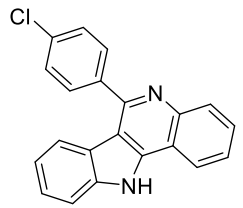



**3m**, DMSO-*d6* , 150 MHz

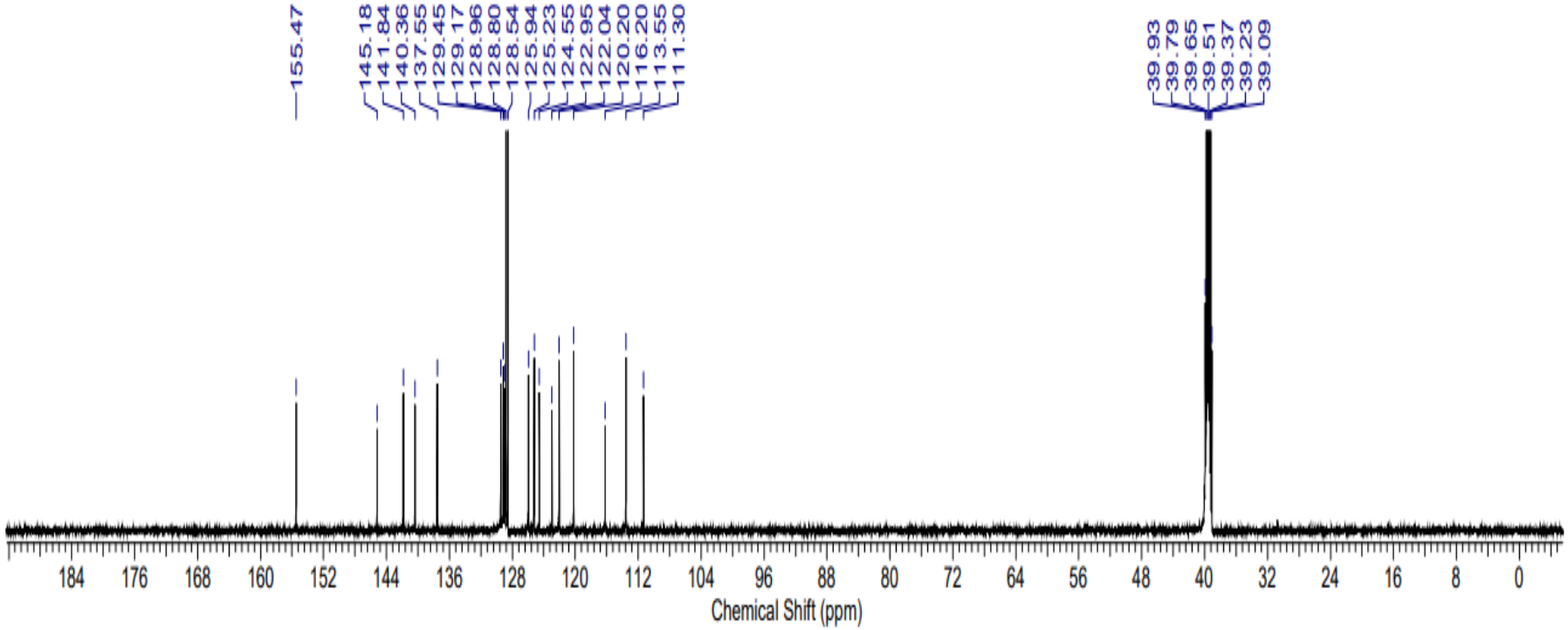


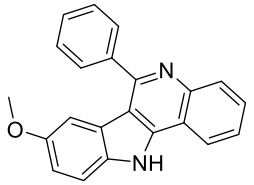



**3n**, DMSO-$d_6$, 600 MHz

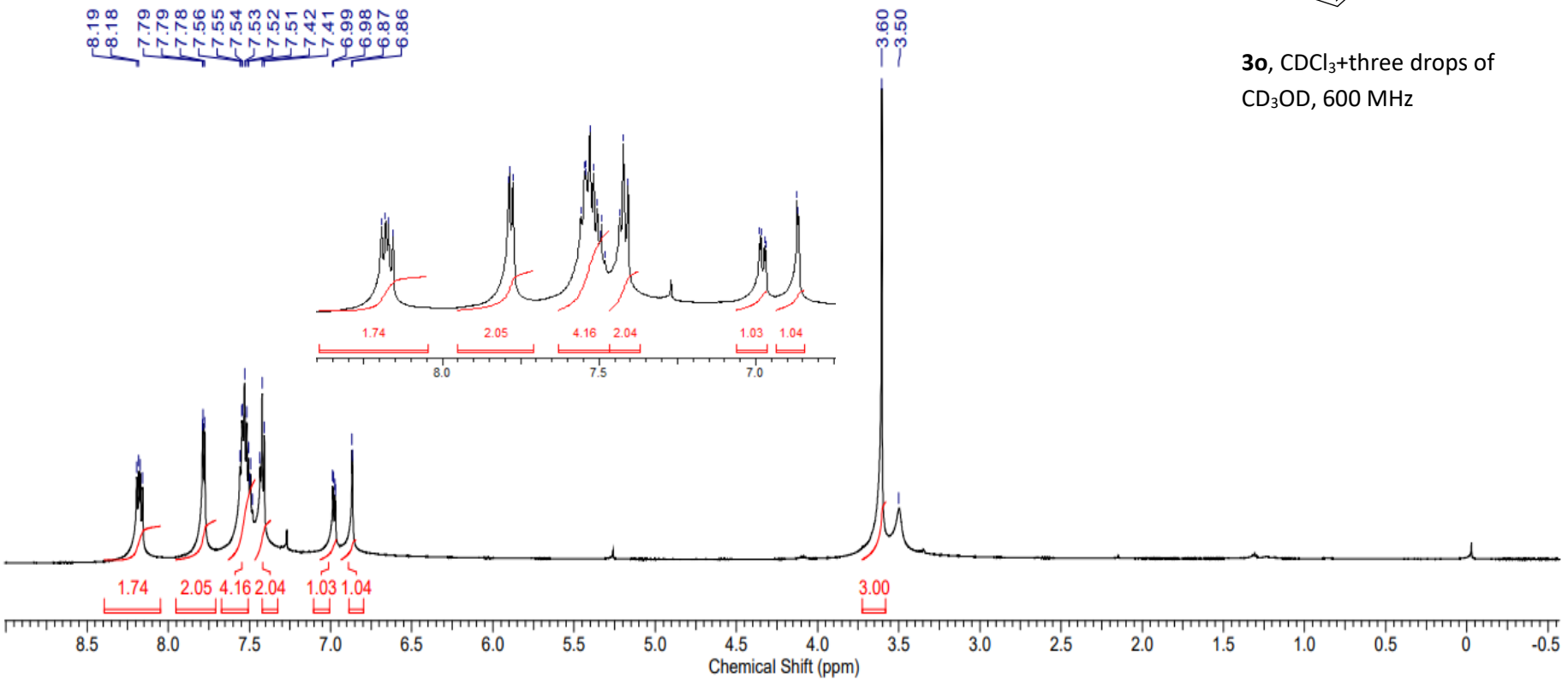


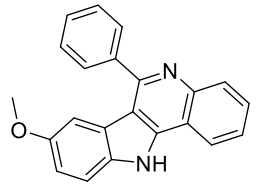

**3n**, DMSO-$d_6$, 150 MHz






**3o**, $CDCl_3$+three drops of $CD_3OD$, 600 MHz






**3o**, $CDCl_3$+three drops of $CD_3OD$, 150 MHz