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ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

APPENDICES

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

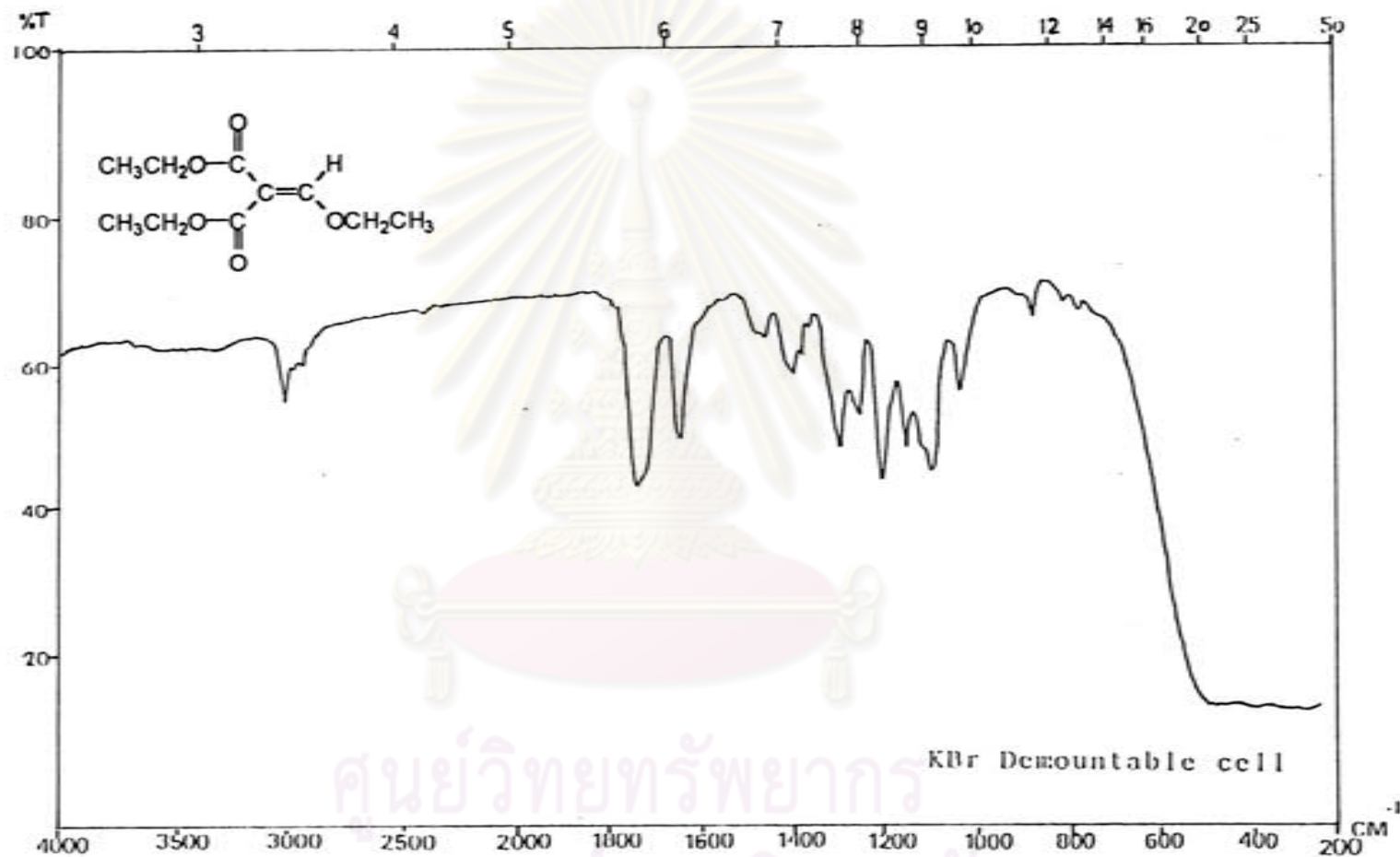


Figure 6. The IR spectrum (KBr Demountable cell) of diethyl ethoxymethylenemalonate.

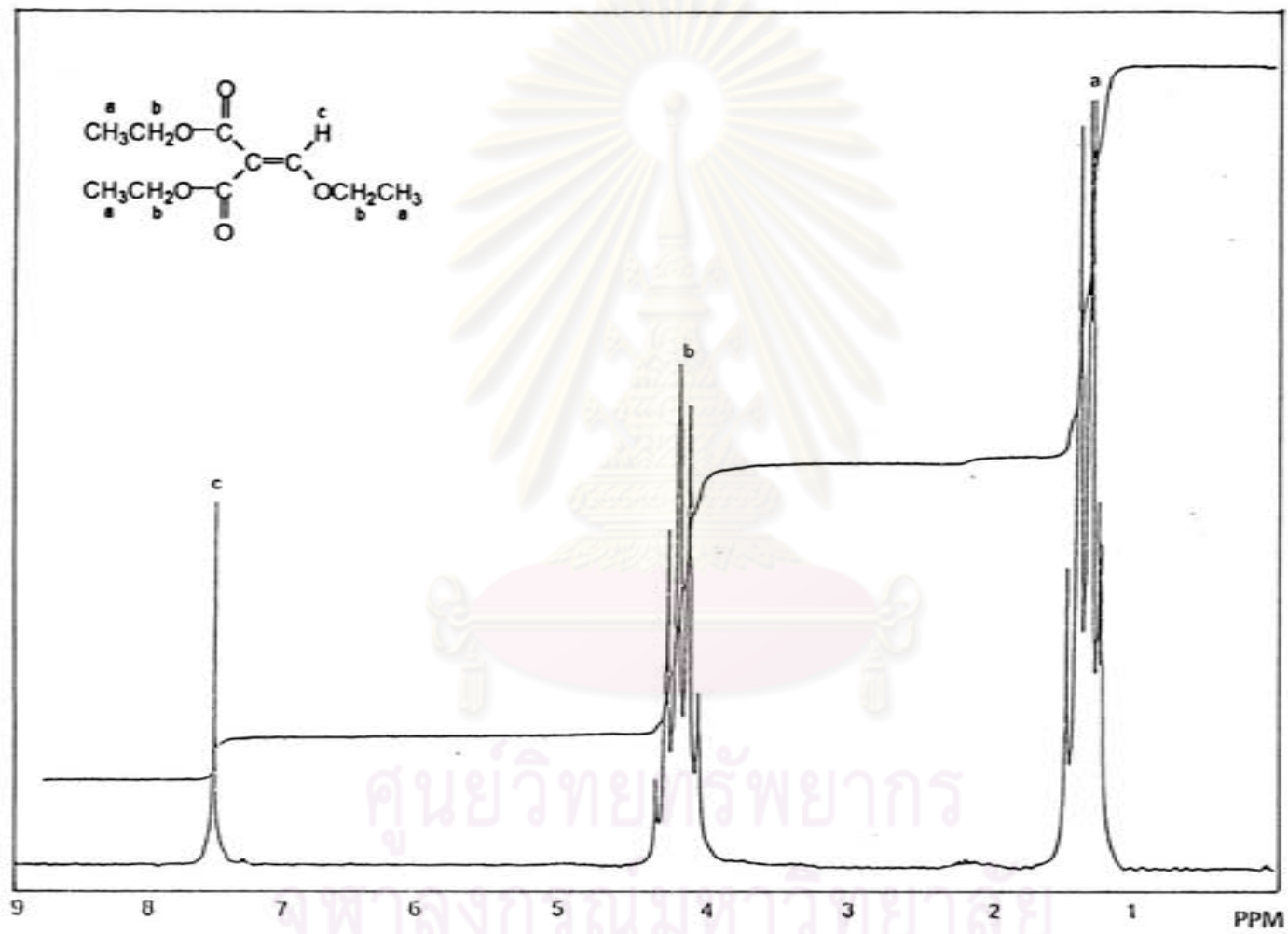


Figure 7. The ¹H-NMR spectrum of Diethyl ethoxymethylenemalonate in CDCl₃.

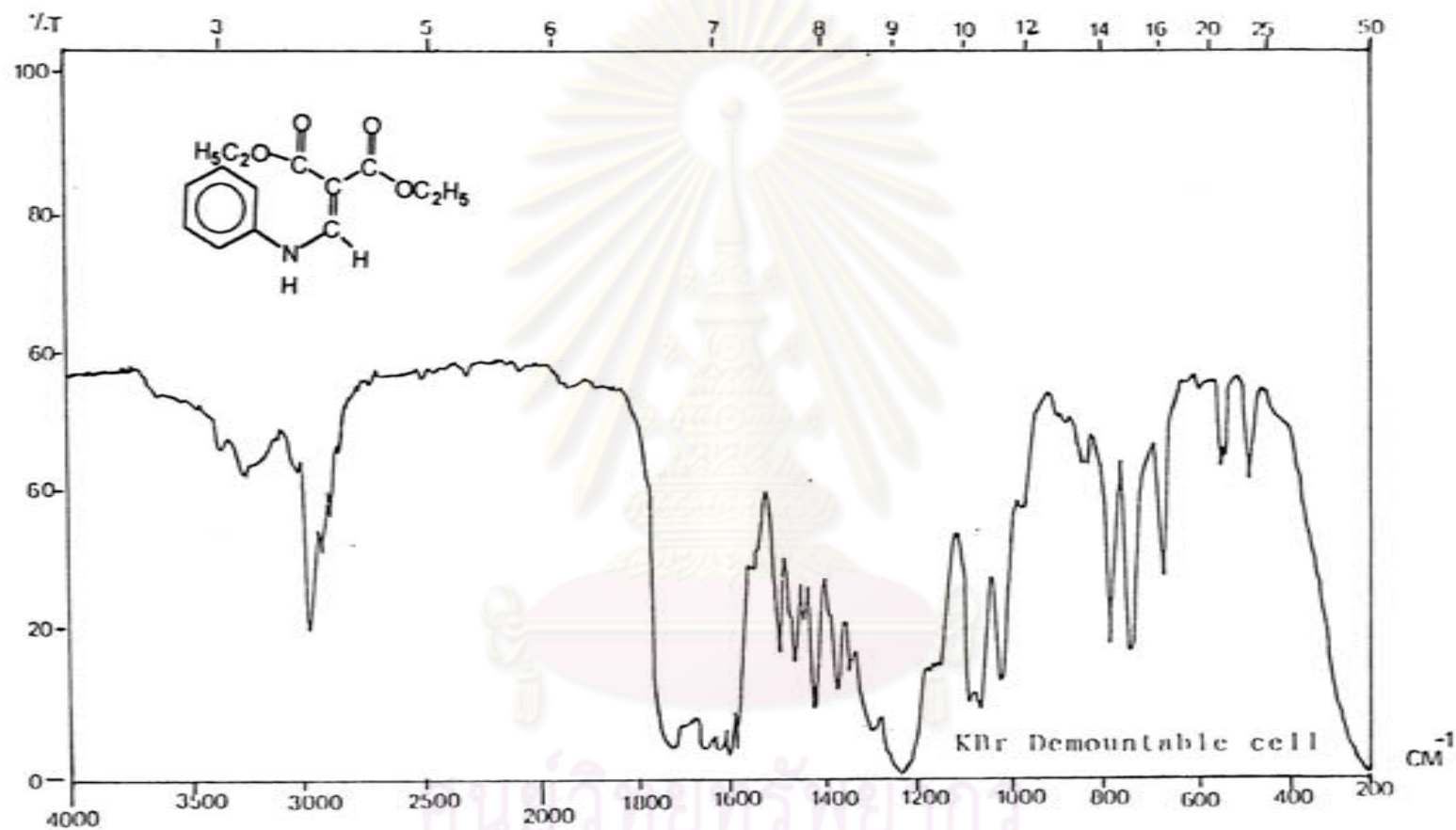


Figure 8. The IR spectrum (KBr Demountable cell) of Ethyl anilinomethylenemalonate.

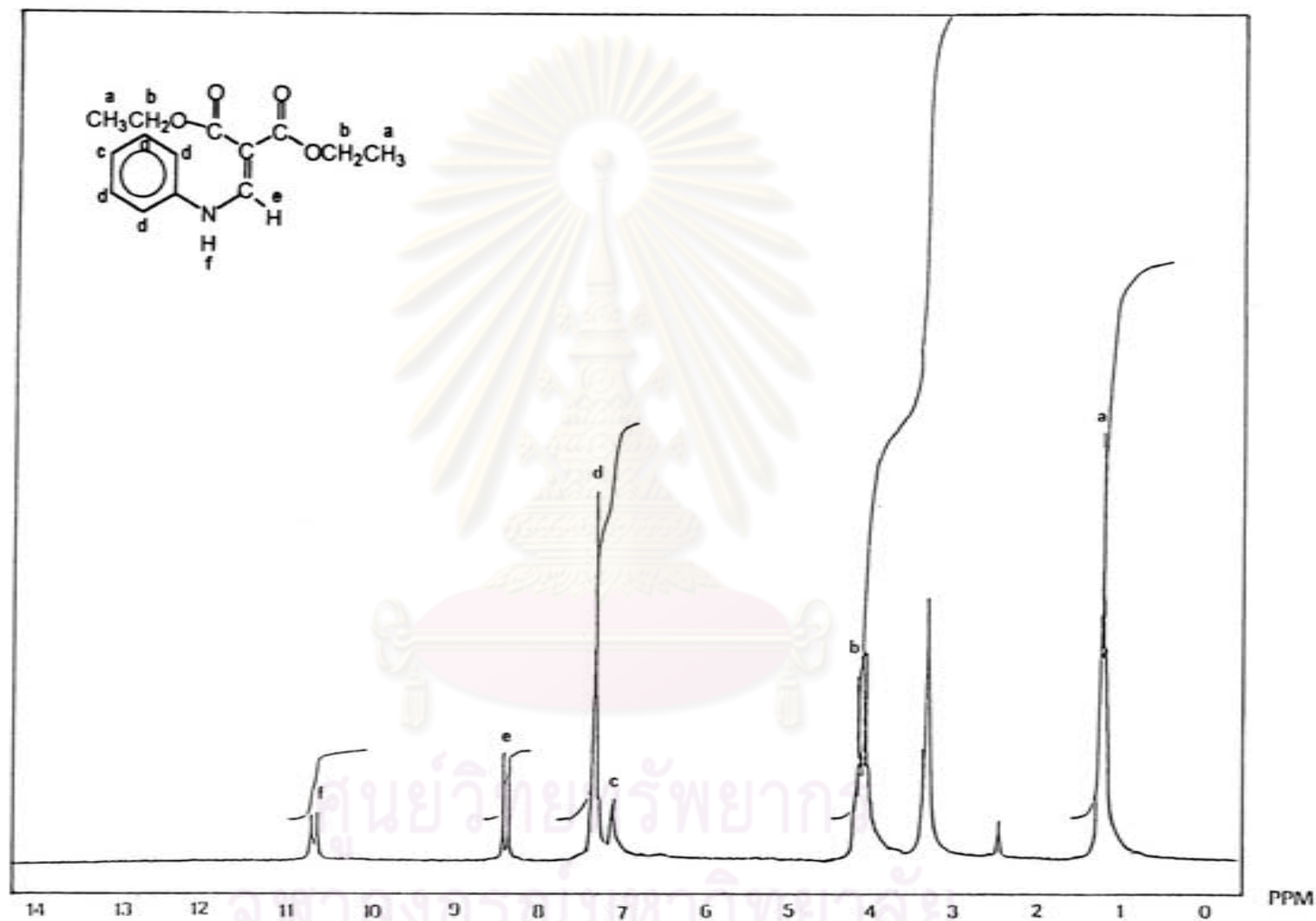


Figure 9. The ¹H-NMR spectrum of Ethyl anilino methylenemalonate in DMSO-d₆.

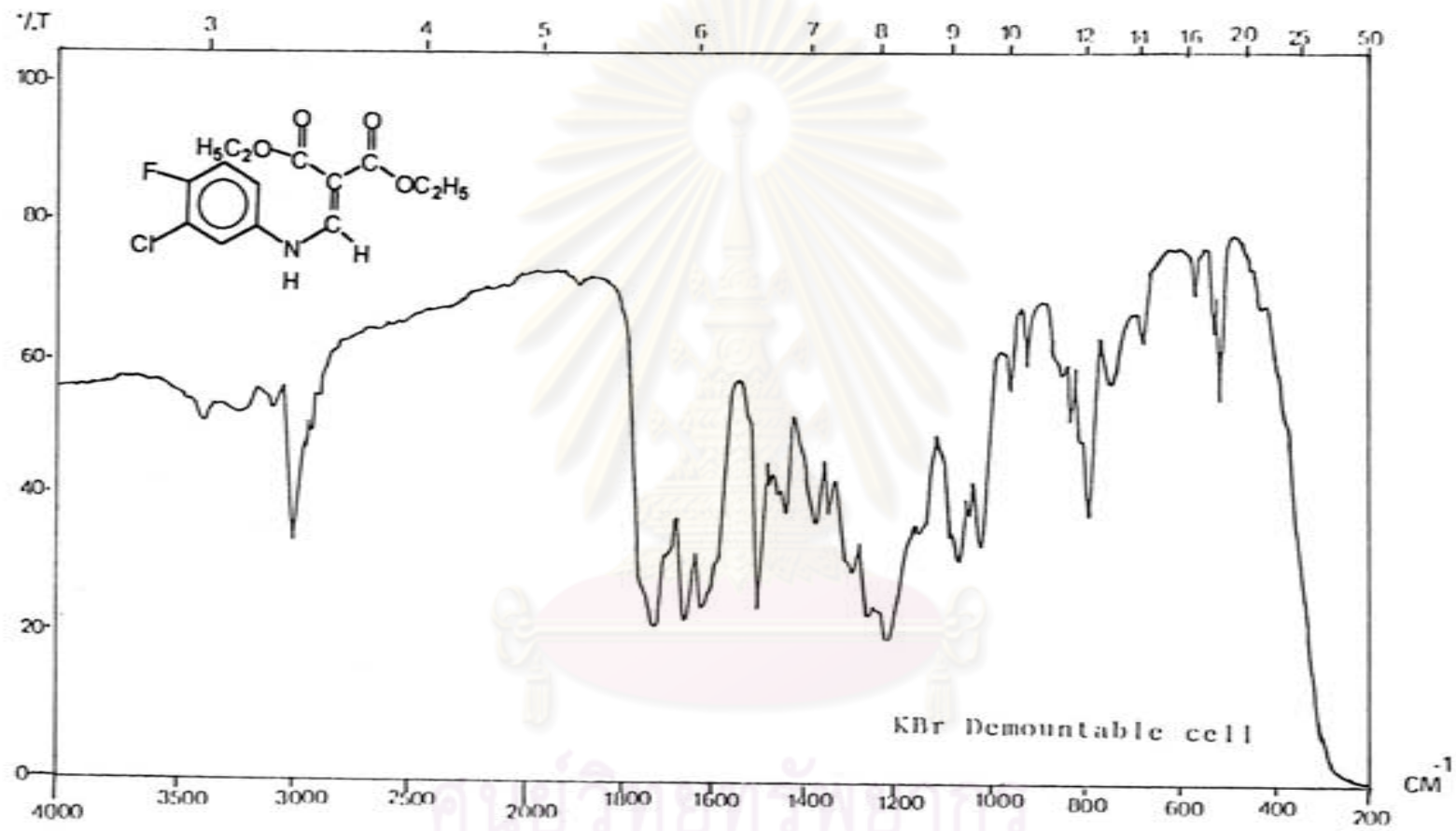


Figure 10. The IR spectrum (KBr Demountable cell) of Ethyl anilino-(3-chloro-4-fluoro)-methylene malonate.

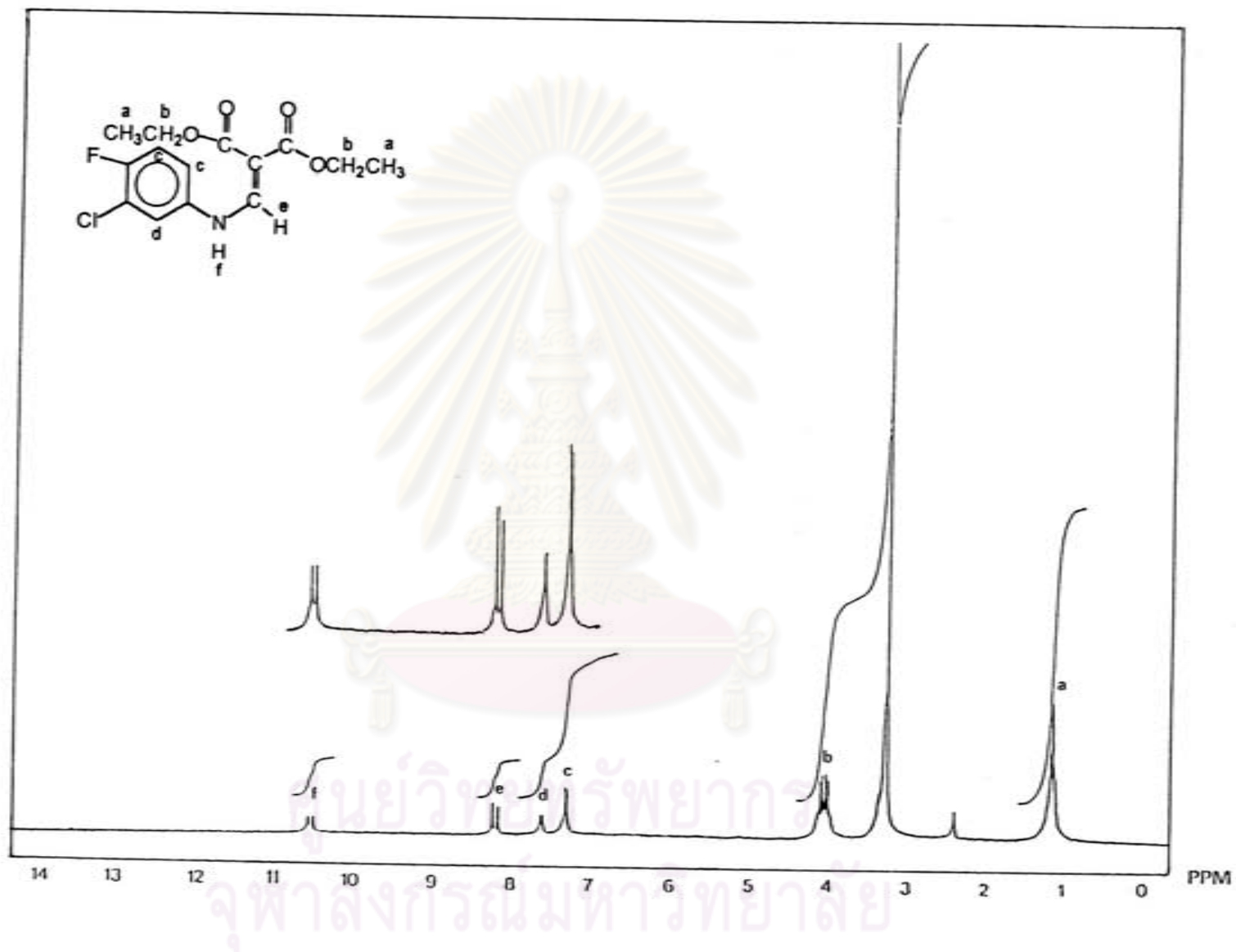


Figure 11. The $^1\text{H-NMR}$ spectrum of Ethyl anilino-(3-chloro-4-fluoro)-methylenemalonate in DMSO-d_6 .

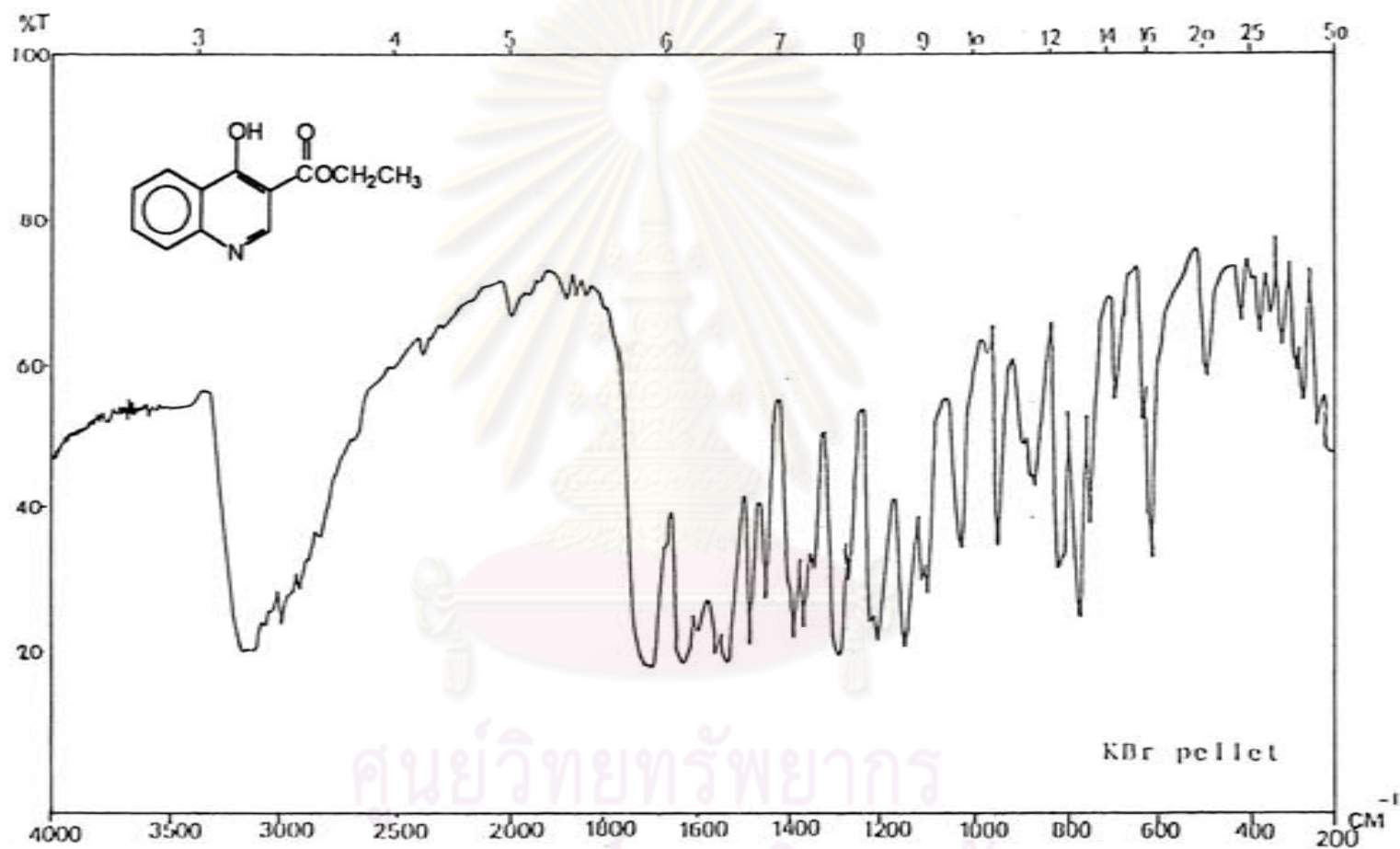


Figure 12. The IR spectrum (KBr pellet) of 3-Carboethoxy-4-hydroxyquinoline.

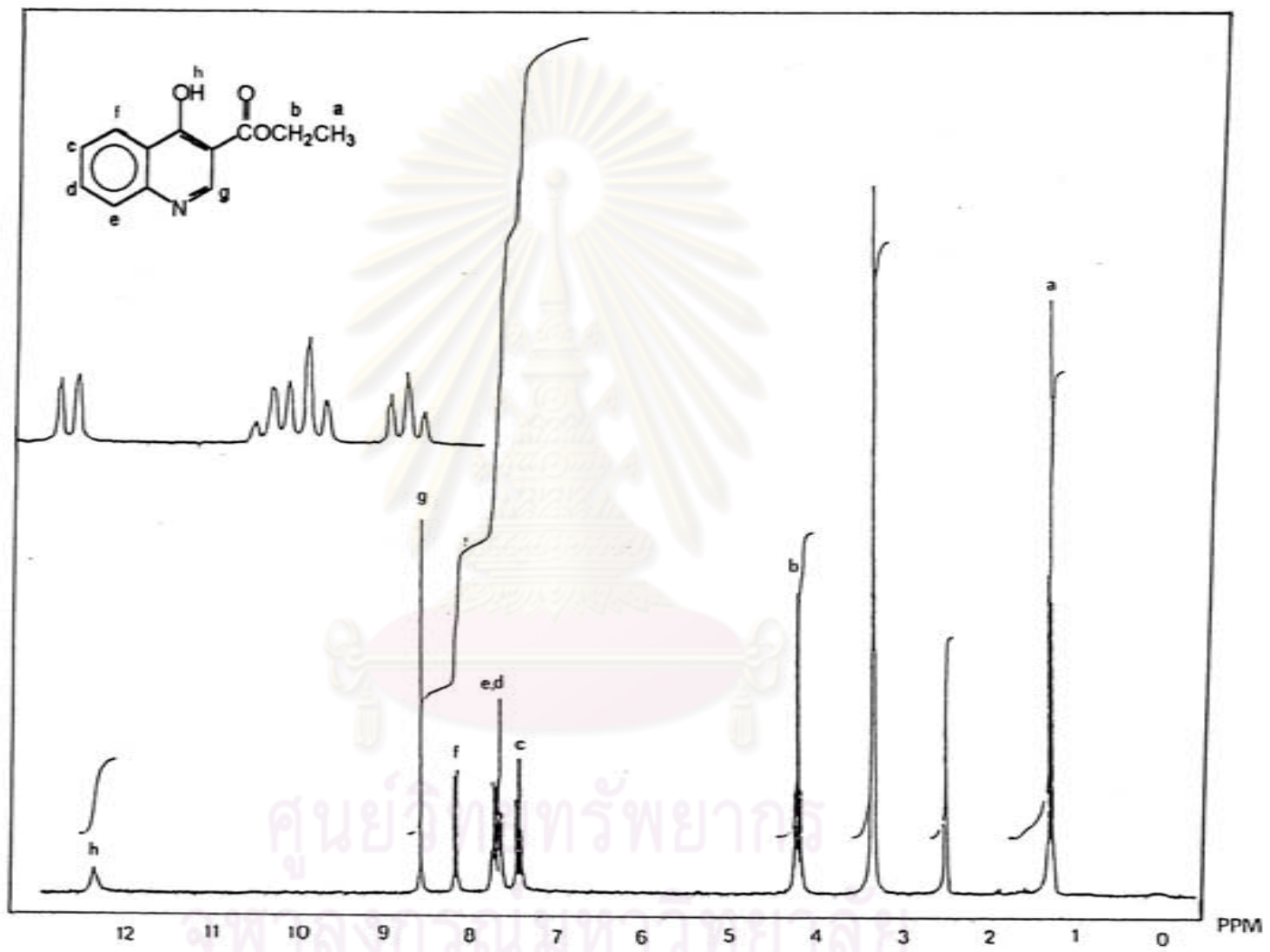


Figure 13. The $^1\text{H-NMR}$ spectrum of 3-Carboethoxy-4-hydroxyquinoline in DMSO-d_6 .

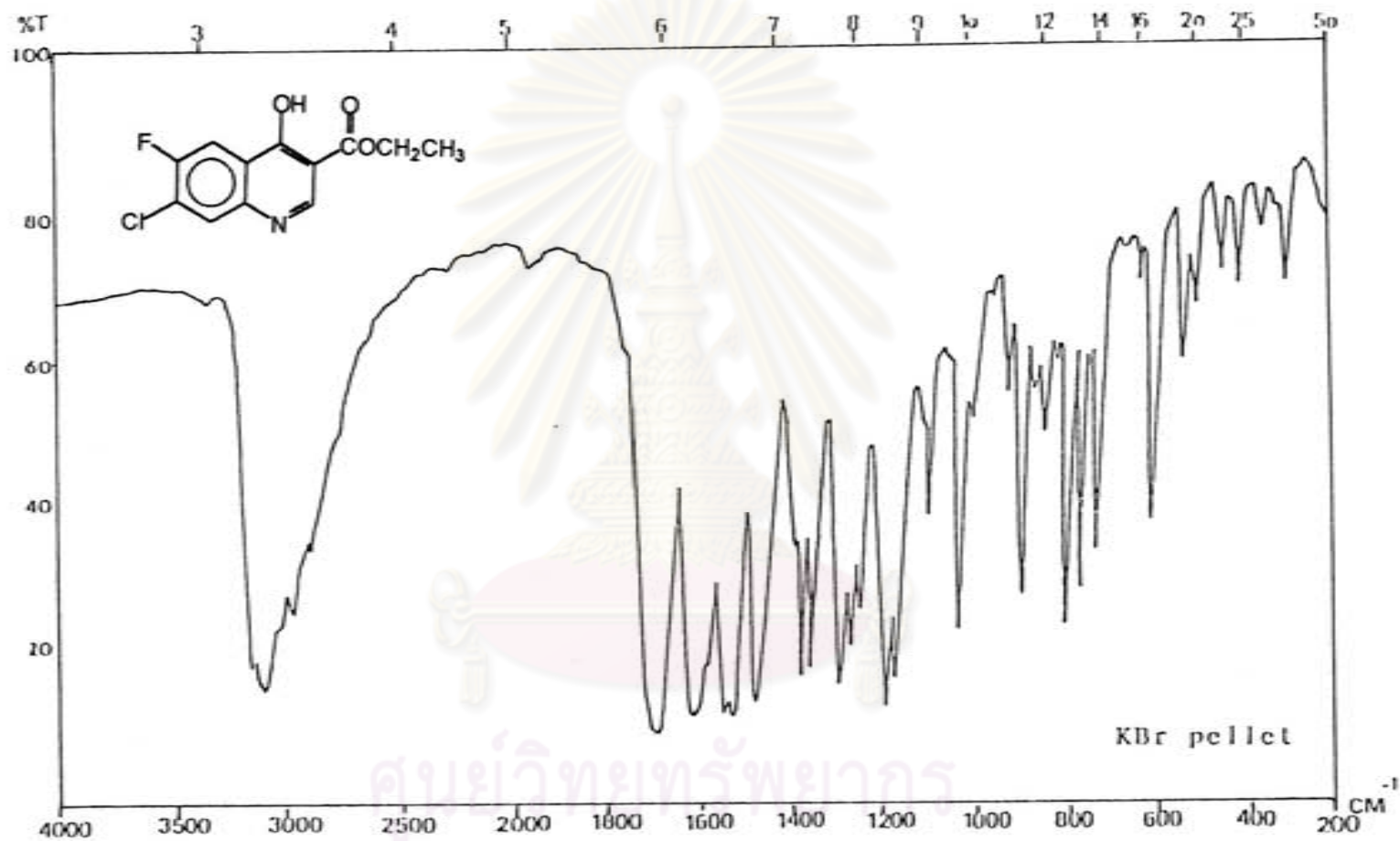


Figure 14. The IR spectrum (KBr pellet) of 3-Carboethoxy-7-chloro-6-fluoro-4-hydroxyquinoline.

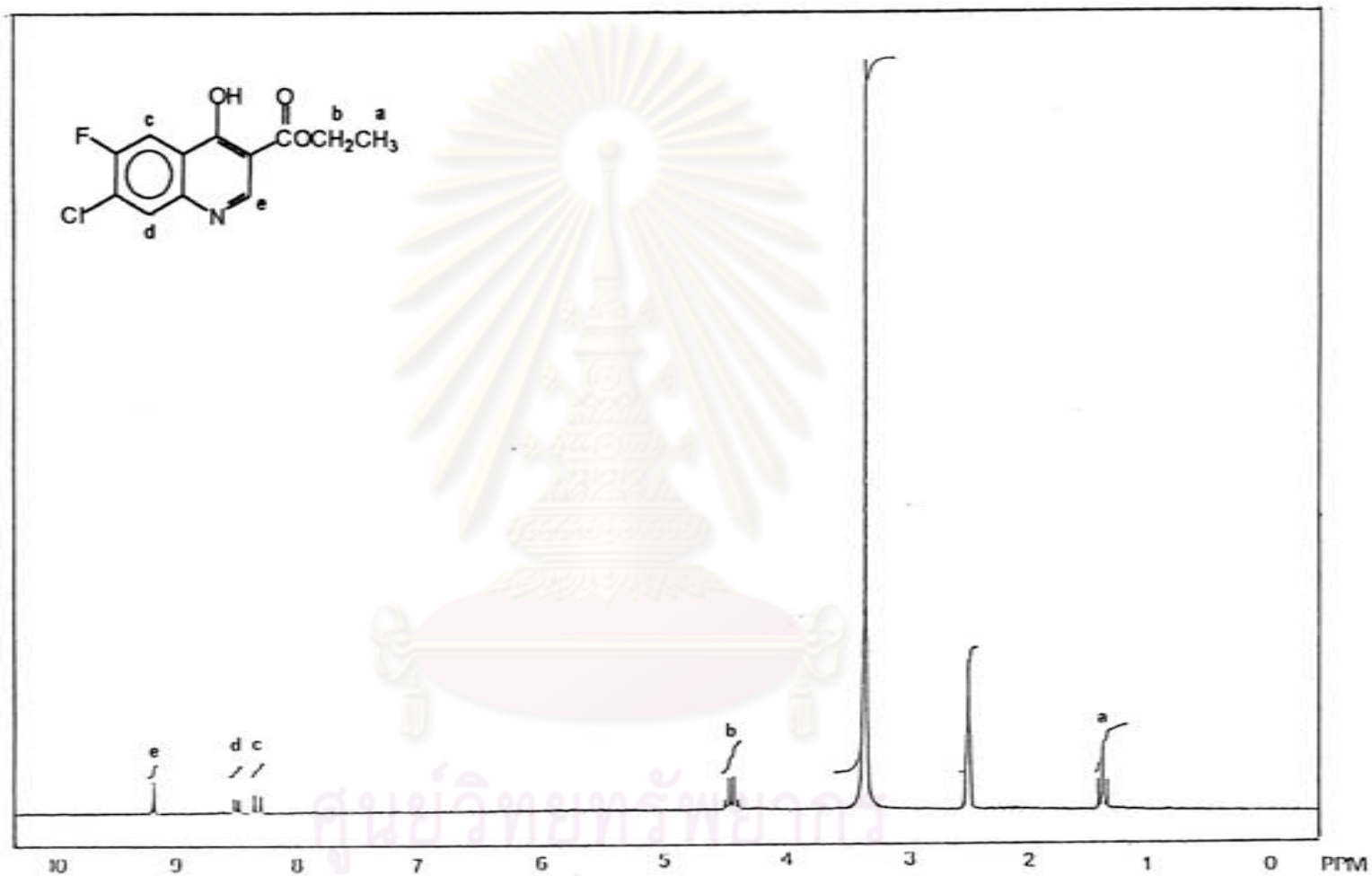


Figure 15. The $^1\text{H-NMR}$ spectrum of 3-Carboethoxy-7-chloro-6-fluoro-4-hydroxyquinoline in DMSO-d_6 .

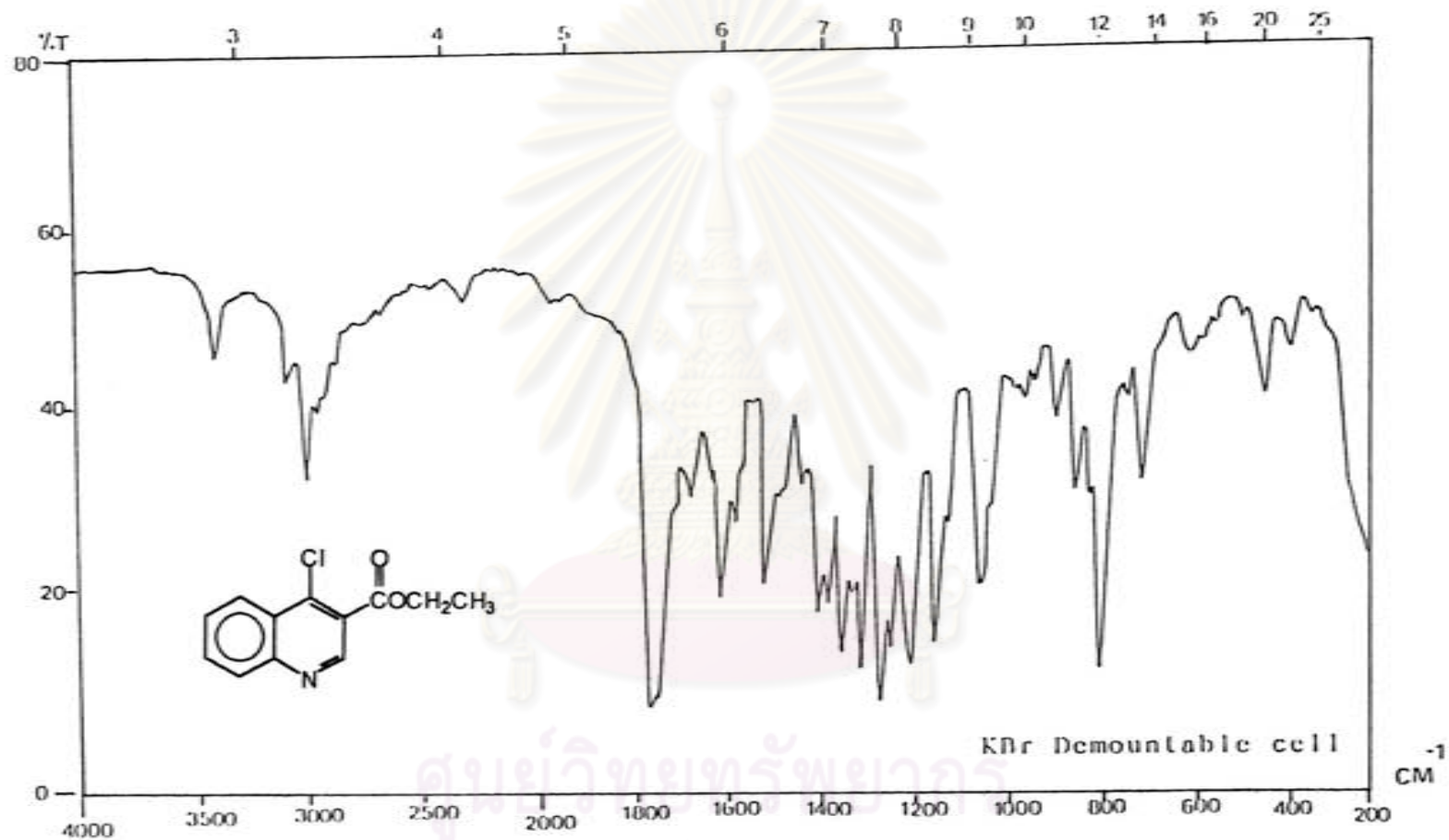


Figure 16. The IR spectrum (KBr demountable cell) of 3-Carboethoxy-4-chloroquinoline.

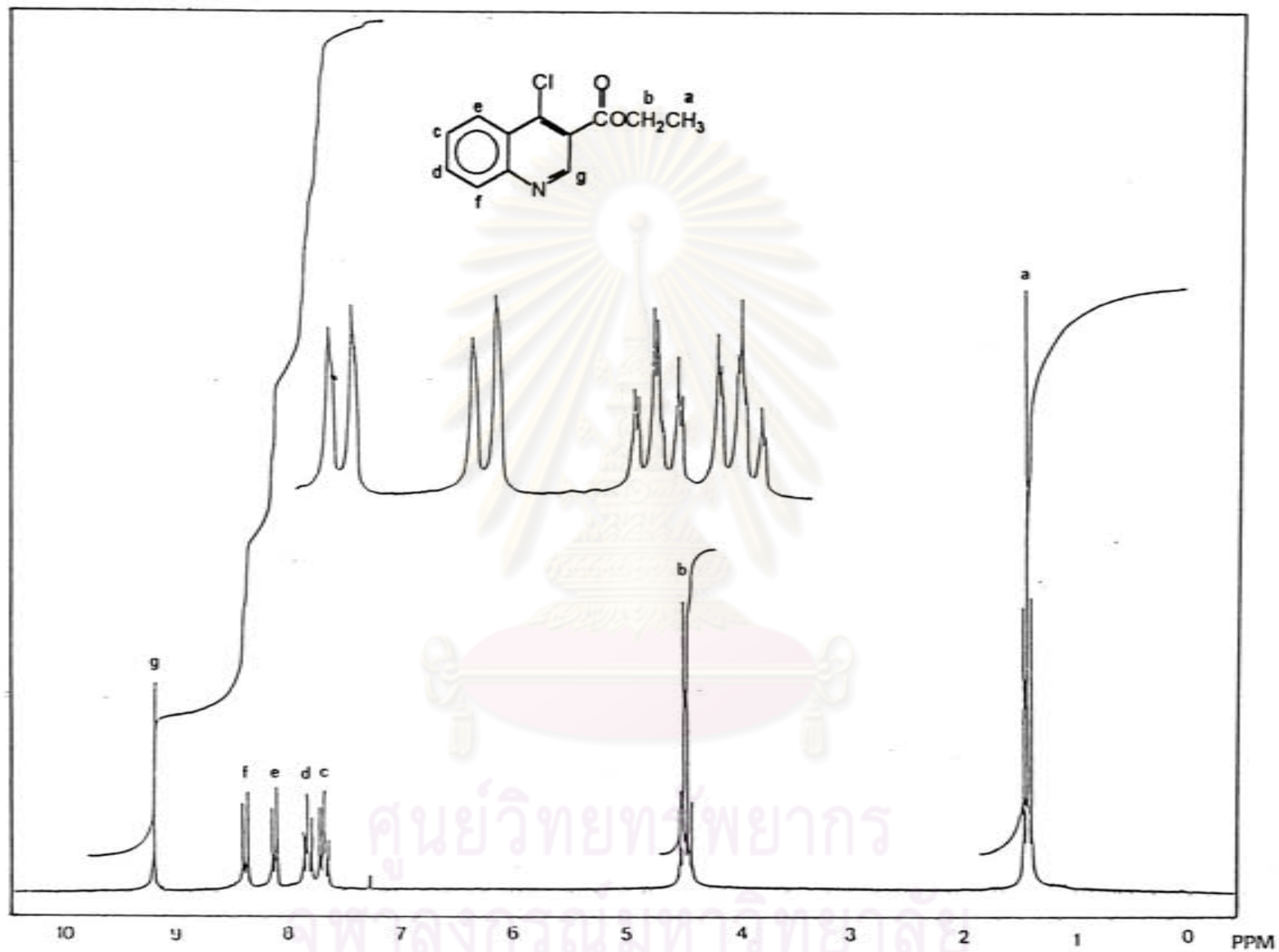


Figure 17. The $^1\text{H-NMR}$ spectrum of 3-Carboethoxy-4-chloroquinoline in CDCl_3 .

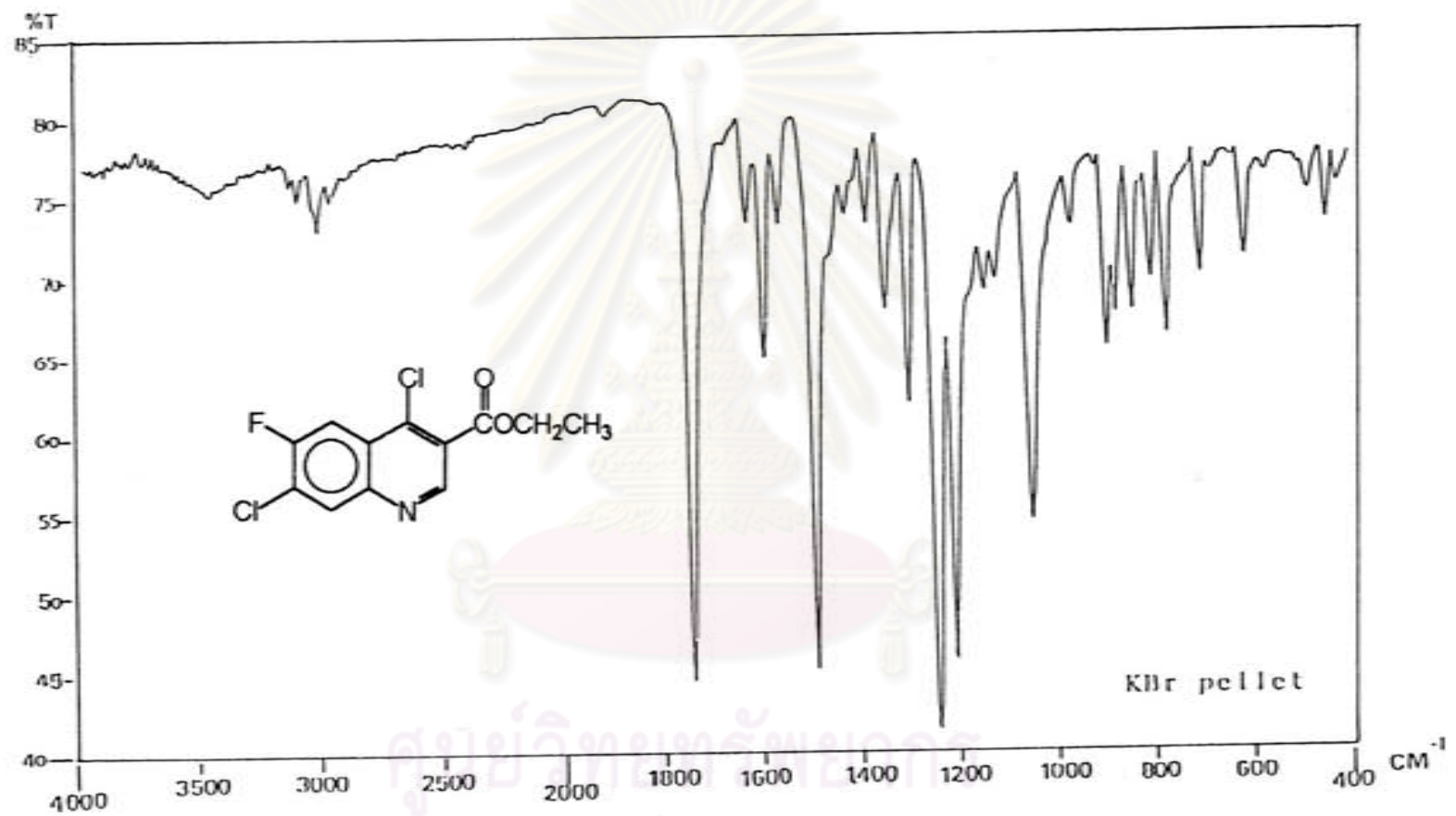


Figure 18. The IR spectrum (KBr pellet) of 3-Carboethoxy-4,7-dichloro-6-fluoroquinoline.

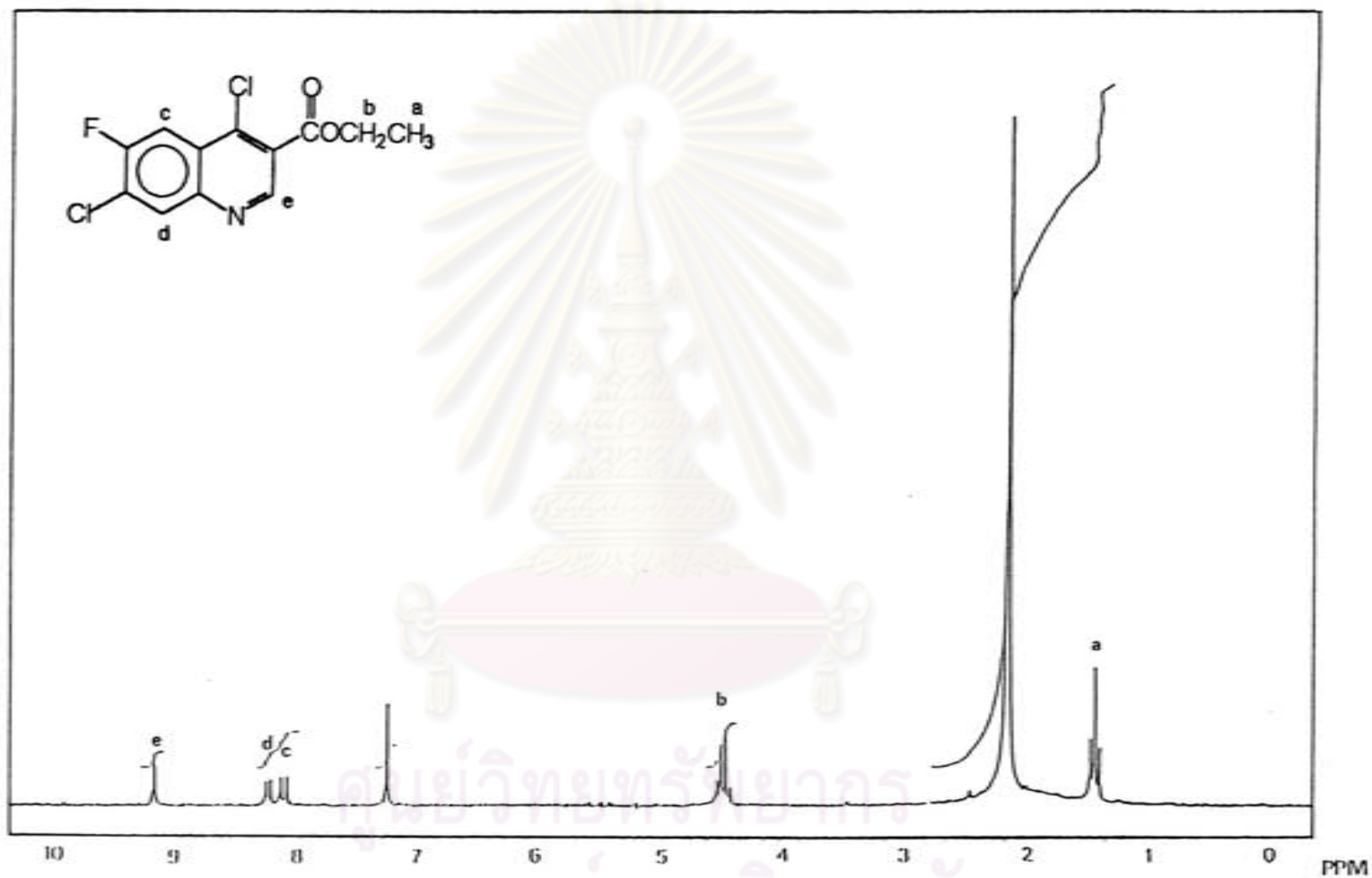


Figure 19. The ¹H-NMR spectrum of 3-Carboethoxy-4,7-dichloro-6-fluoro-quinoline in DMSO-d₆ with CDCl₃.

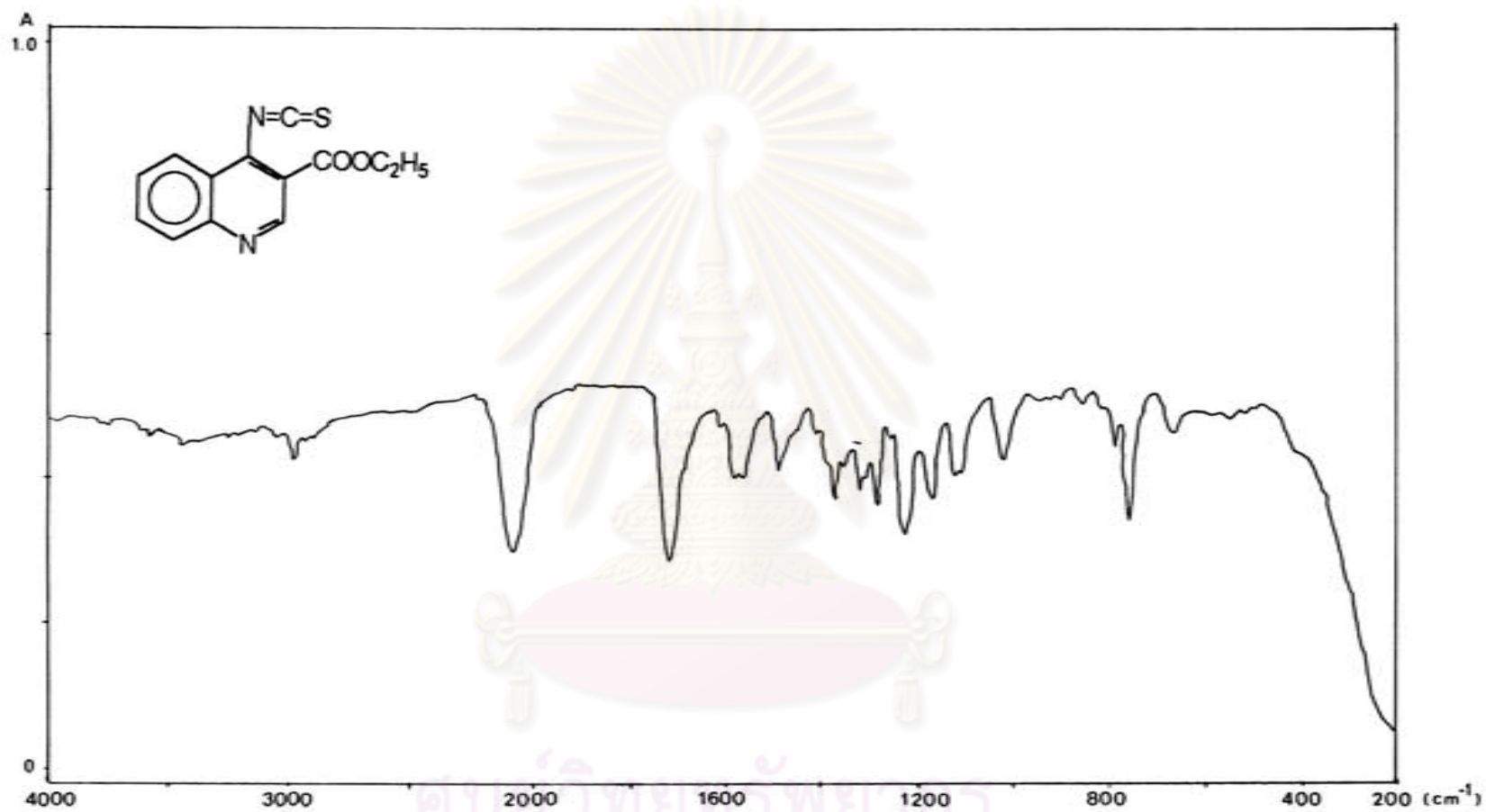


Figure 20. The IR spectrum (KBr pellet) of 3-Carboethoxy-4-isothiocyanatoquinoline.

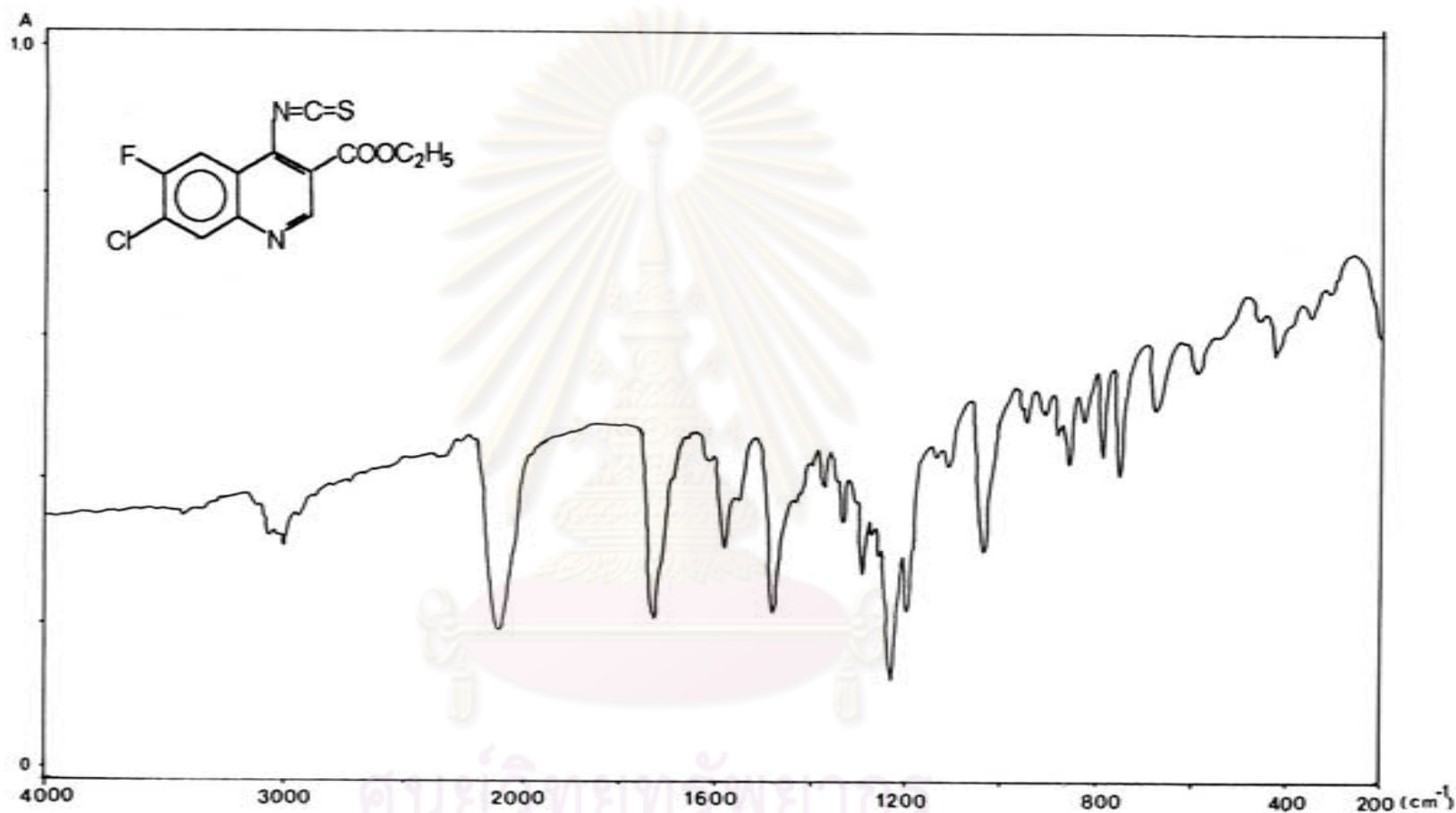


Figure 21. The IR spectrum (KBr pellet) of 3-Carboethoxy-7-chloro-6-fluoro-4-isothiocyanatoquinoline.

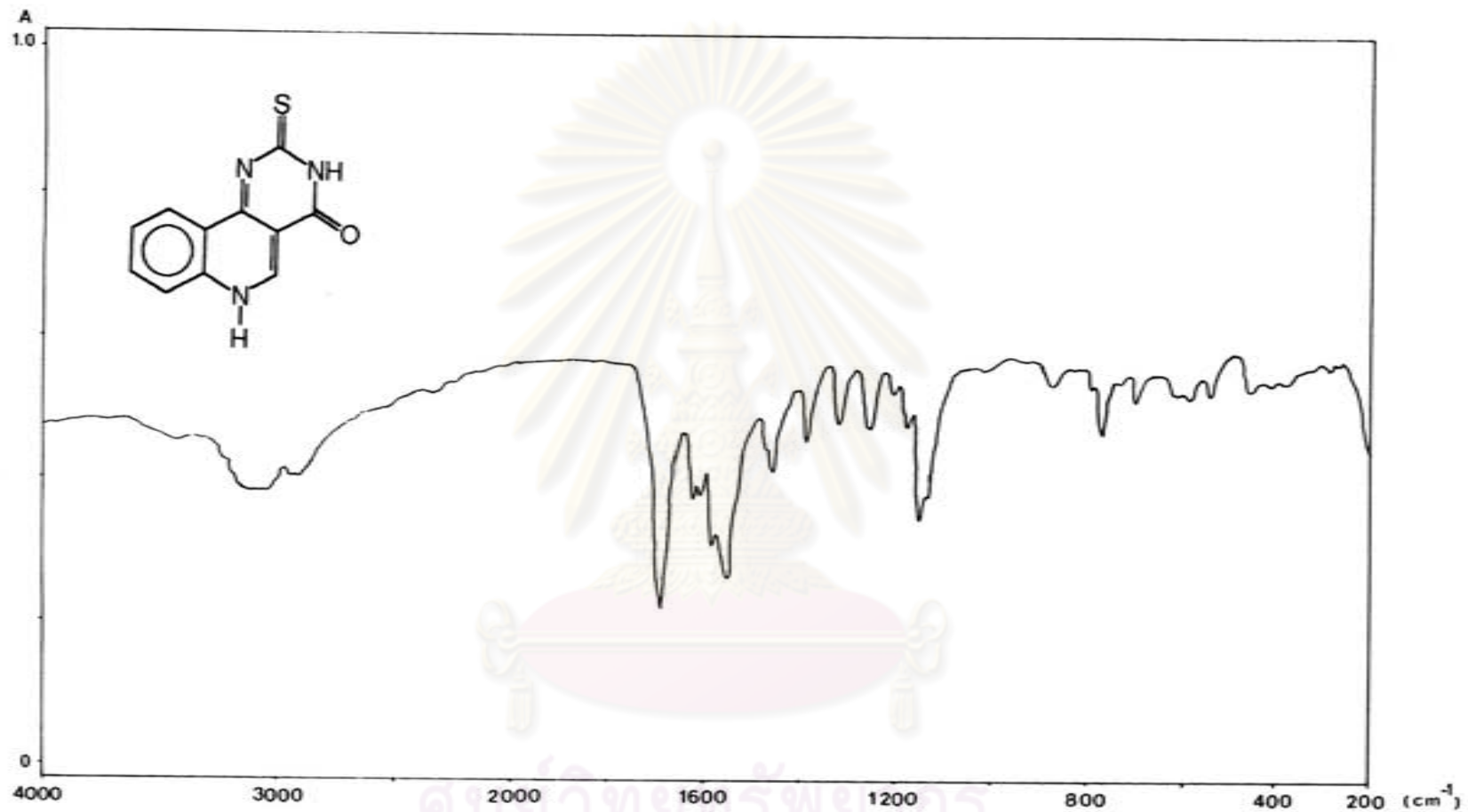


Figure 22. The IR spectrum (KBr pellet) of 2-Thioxopyrimido-[4,3-d]-quinoline-4-one.

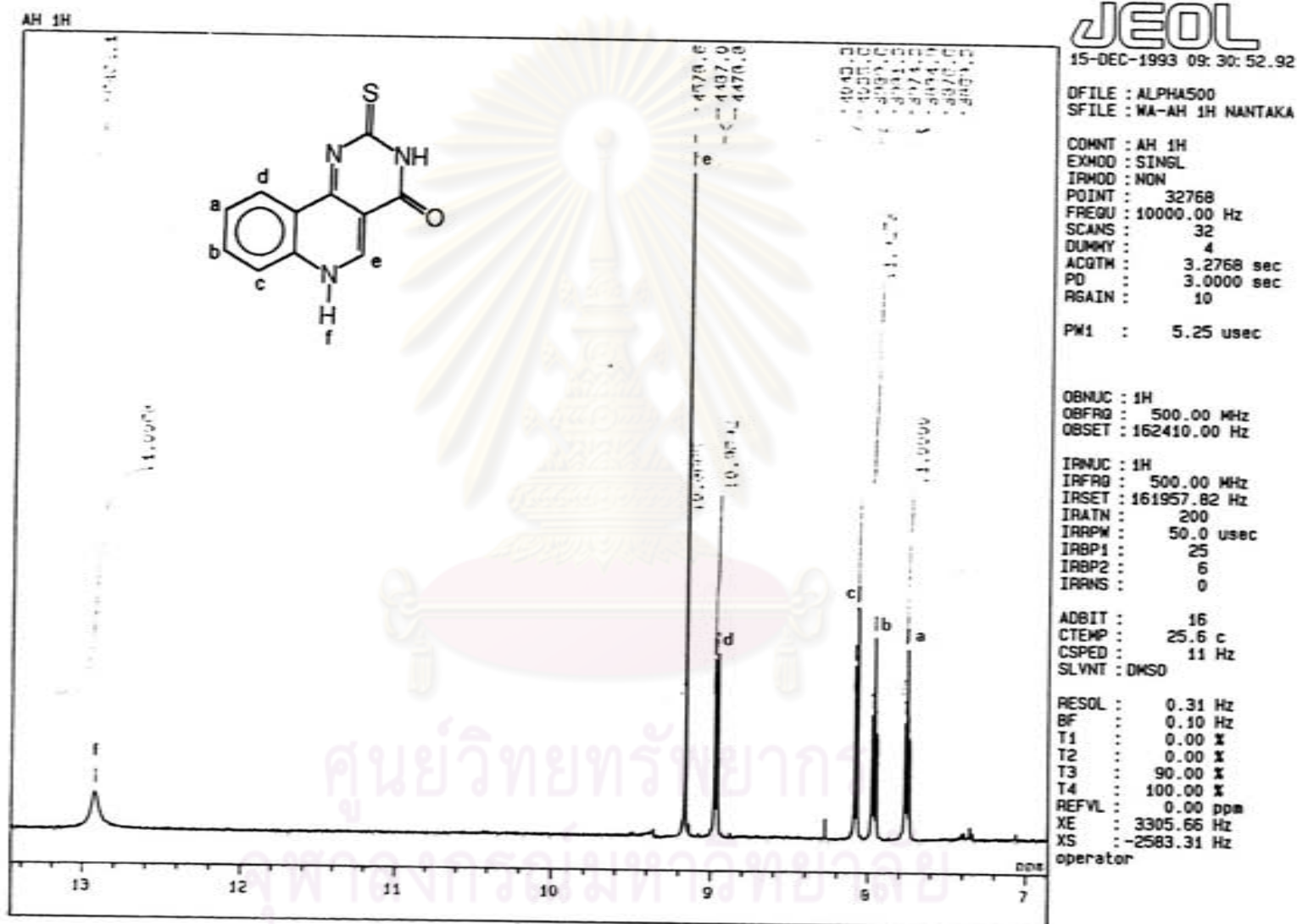


Figure 23. The ^1H -NMR spectrum of 2-Thioxopyrimido-[4,3-d]-quinoline-4-one in DMSO-d_6 .

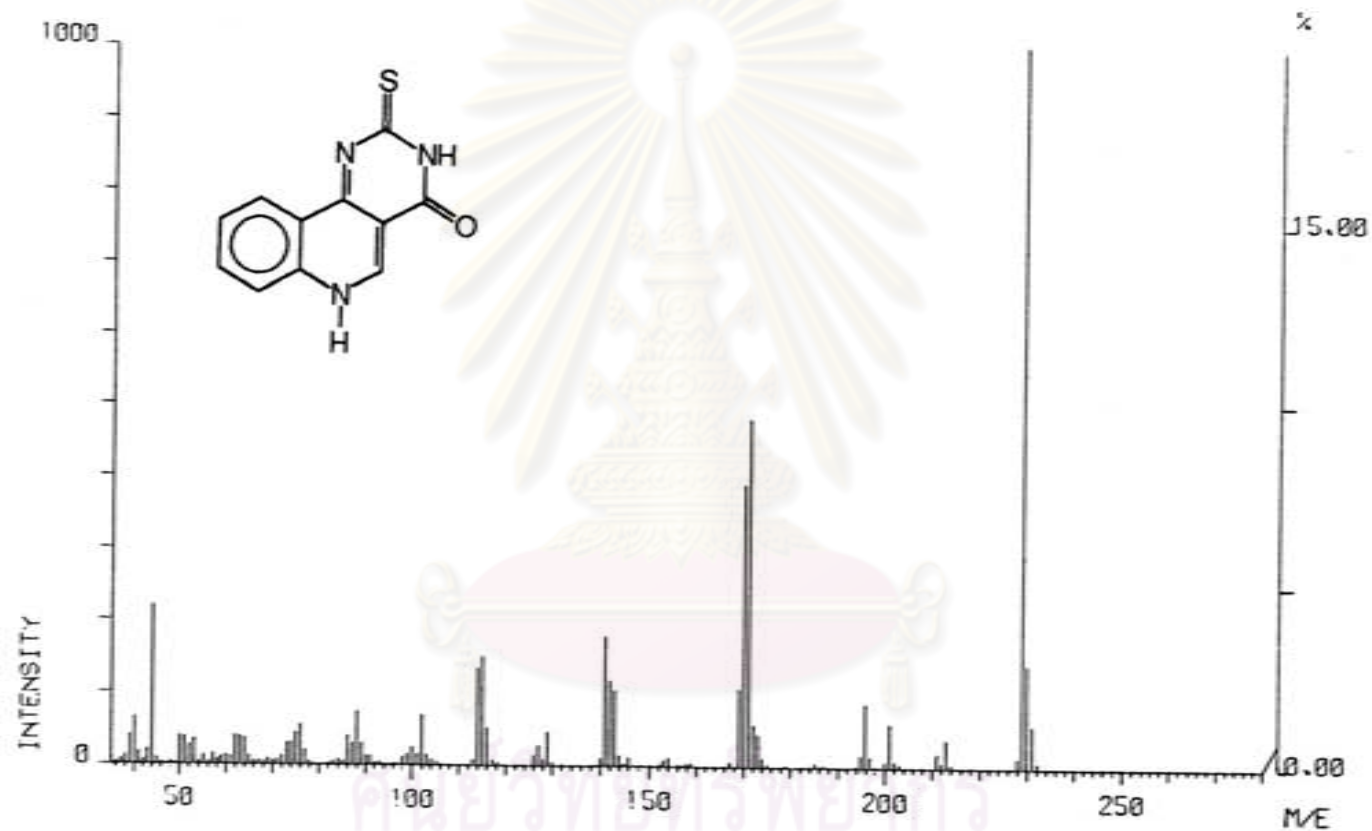


Figure 24. The MS spectrum of 2-Thioxopyrimido-[4,3-d]-quinoline-4-one.

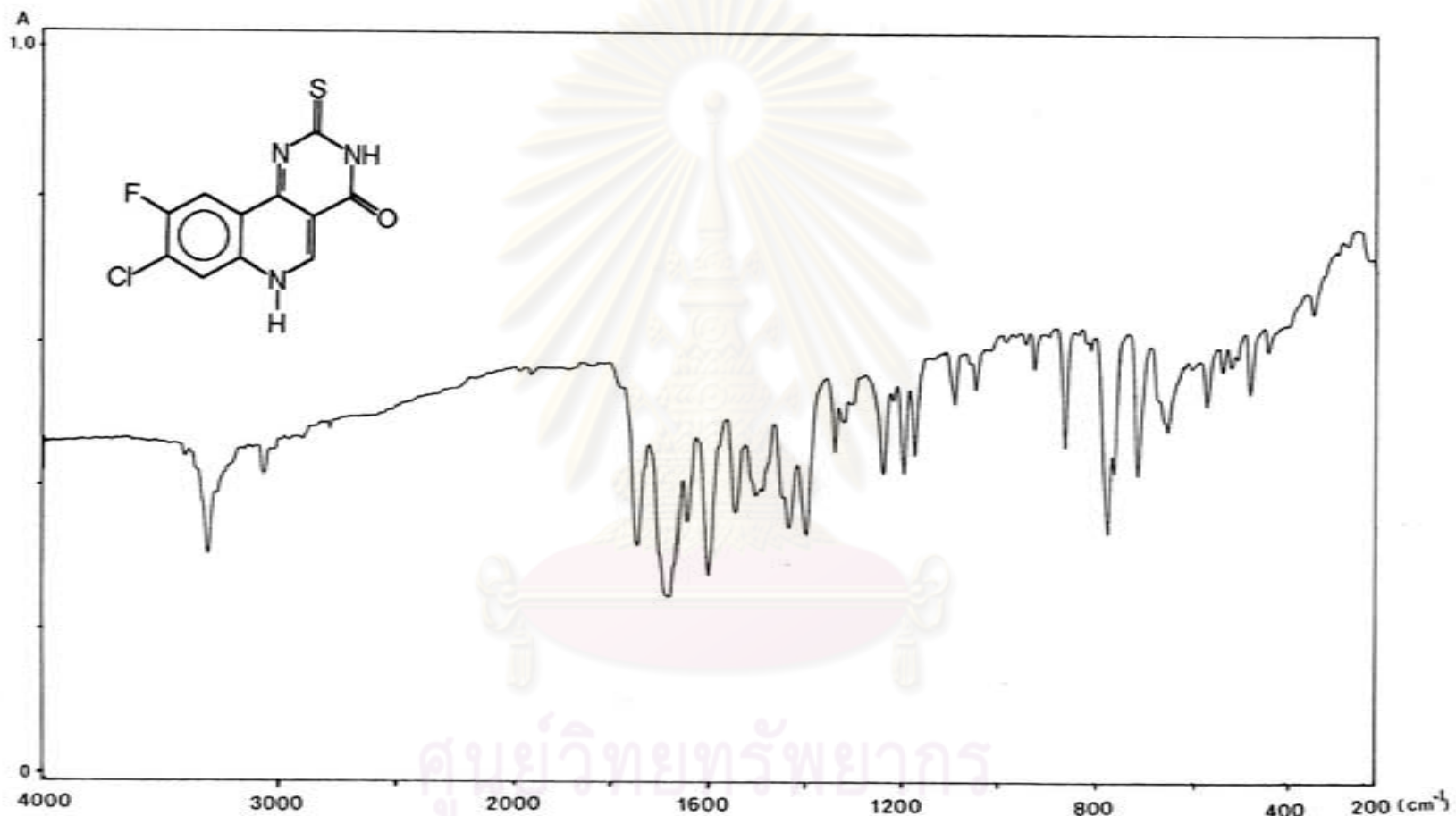


Figure 25. The IR spectrum (KBr pellet) of 8-Chloro-9-fluoro-2-thioxopyrimido-[4,3-d]-quinoline-4-one.

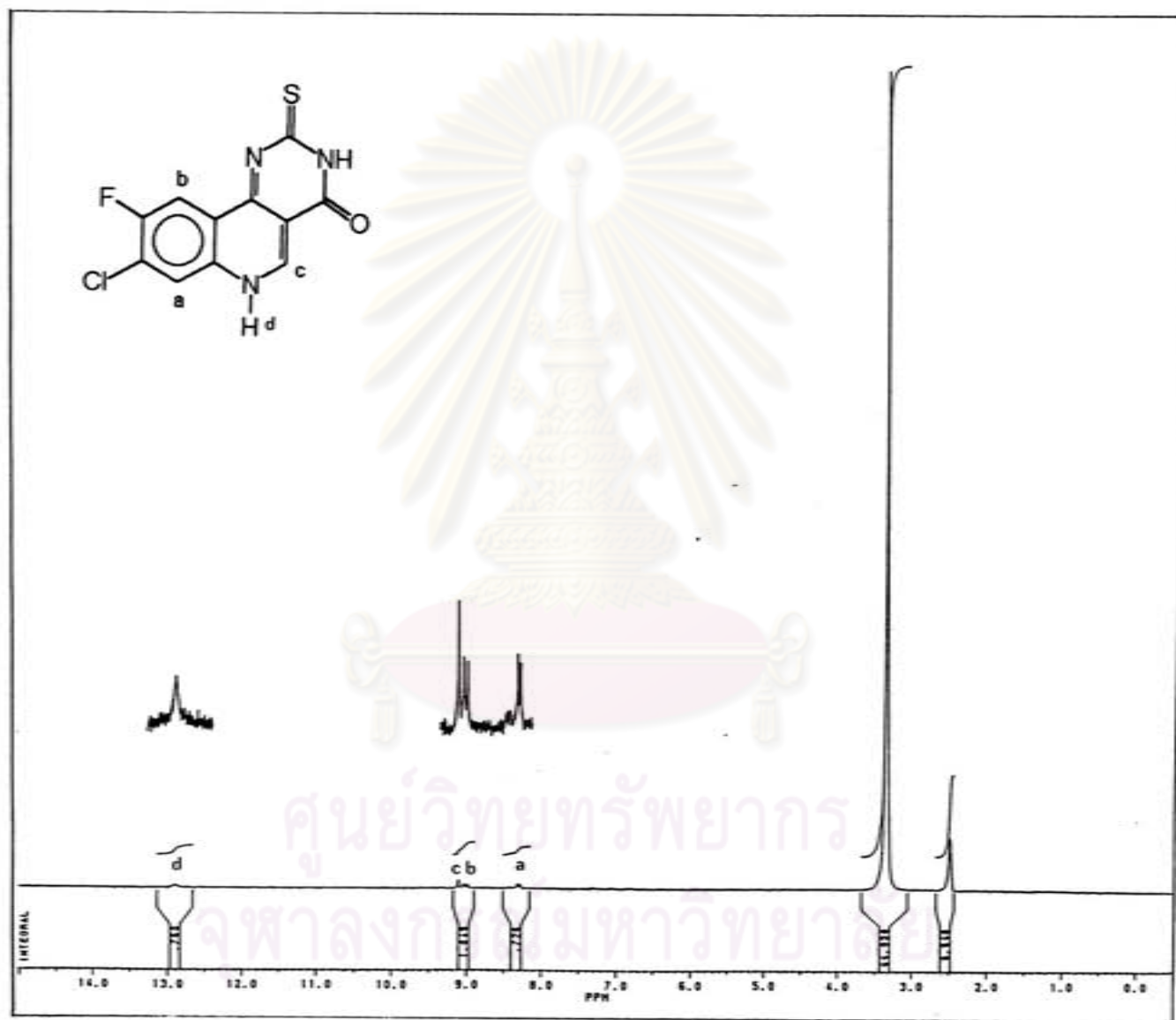


Figure 26. The ¹H-NMR spectrum of 8-Chloro-9-fluoro-2-thioxopyrimido-[4,3-d]-quinoline-4-one in DMSO-d₆.

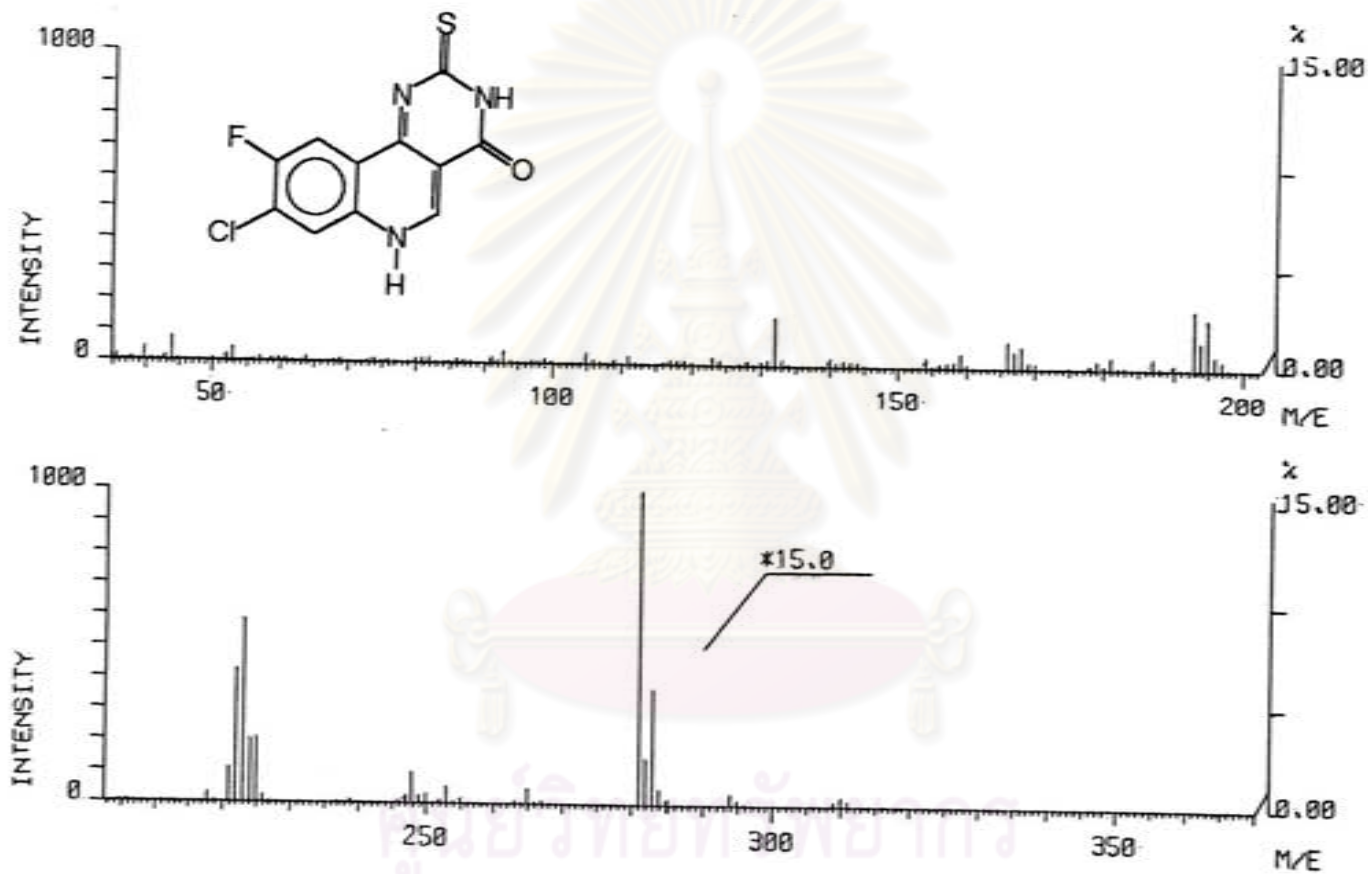


Figure 27. The MS spectrum of 8-Chloro-9-fluoro-2-thioxopyrimido-[4,3-d]-quinoline-4-one.

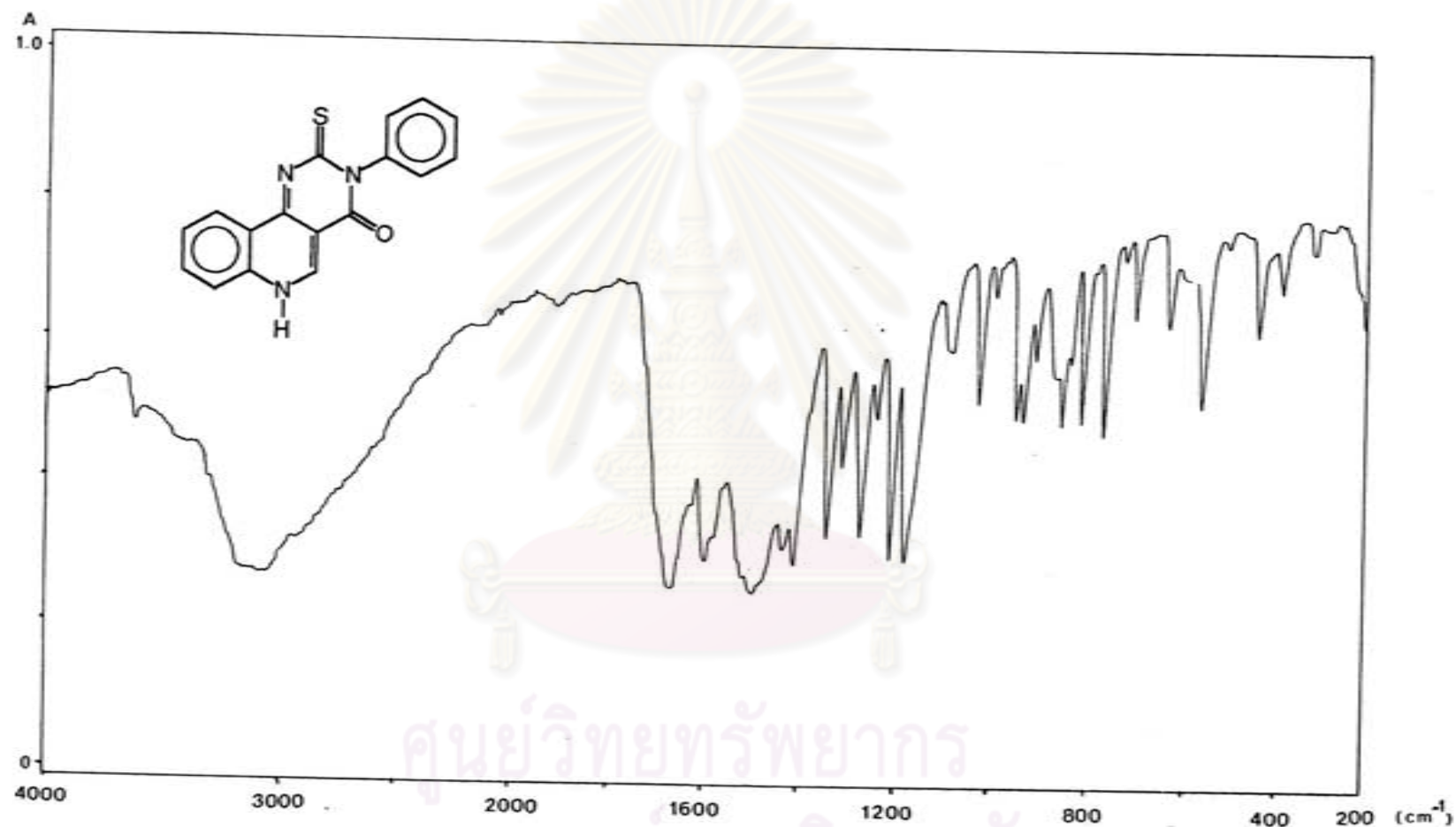


Figure 28. The IR spectrum (KBr pellet) of 3-Phenyl-2-thioxopyrimido-[4,3-d]-quinoline-4-one.

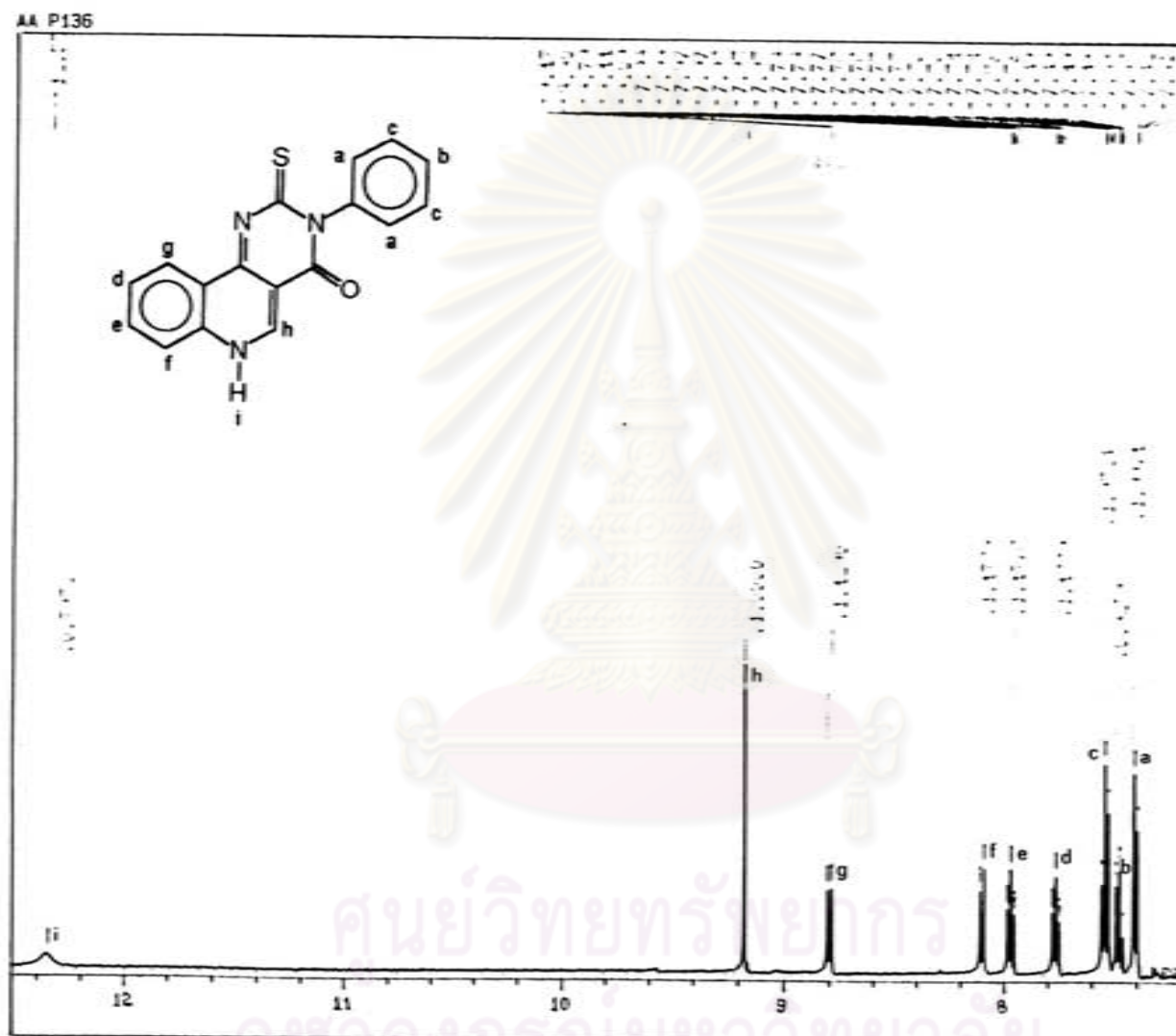


Figure 29. The ¹H-NMR spectrum of 3-Phenyl-2-thioxopyrimido-[4,3-d]-quinoline-4-one in DMSO-d₆.

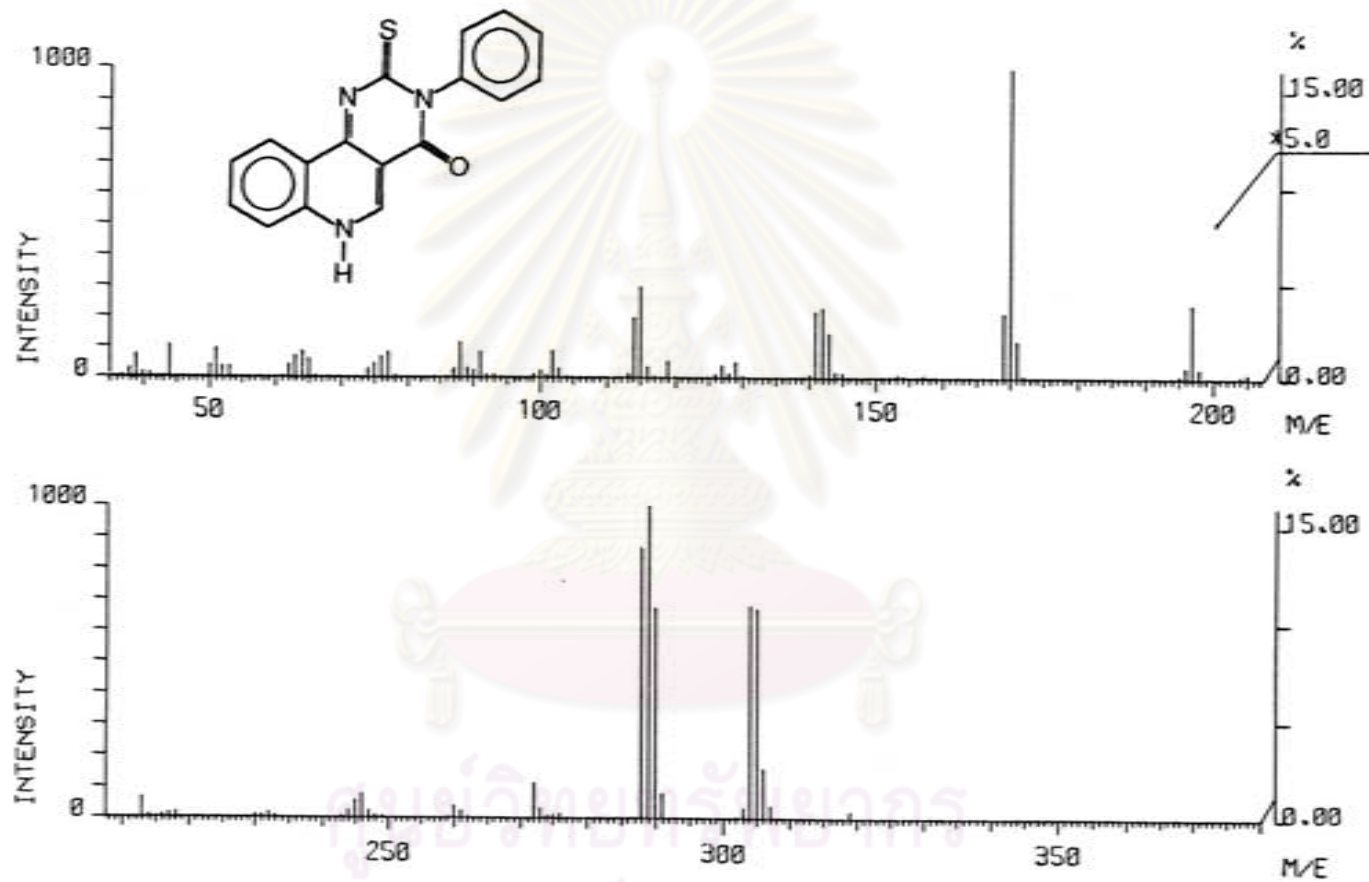


Figure 30. The MS spectrum of 3-Phenyl-2-thioxopyrimido-[4,3-d]-quinoline-4-one.

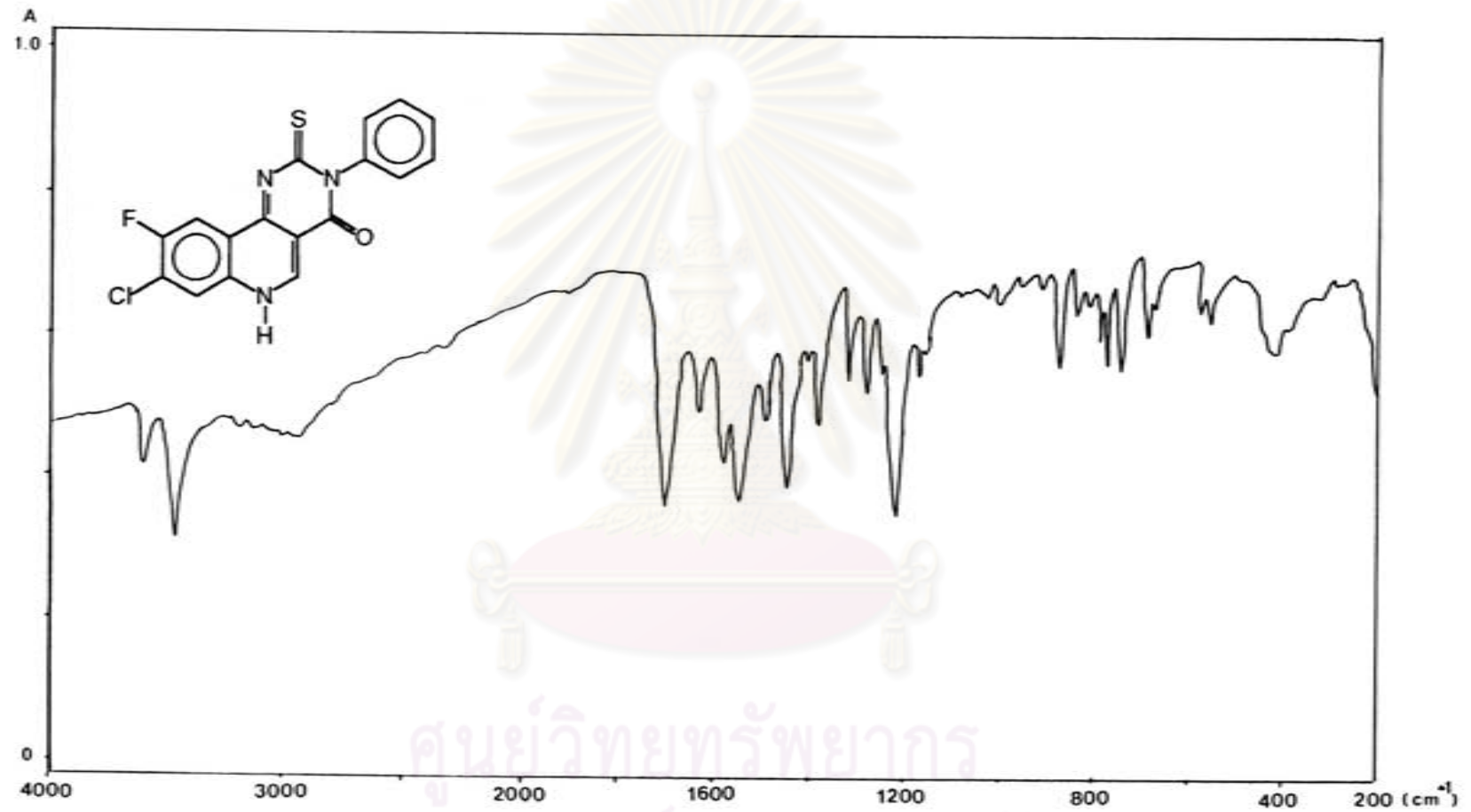


Figure 31. The IR spectrum (KBr pellet) of 8-Chloro-9-fluoro-3-phenyl-2-thioxopyrimido-[4,3-d]-quinoline-4-one.

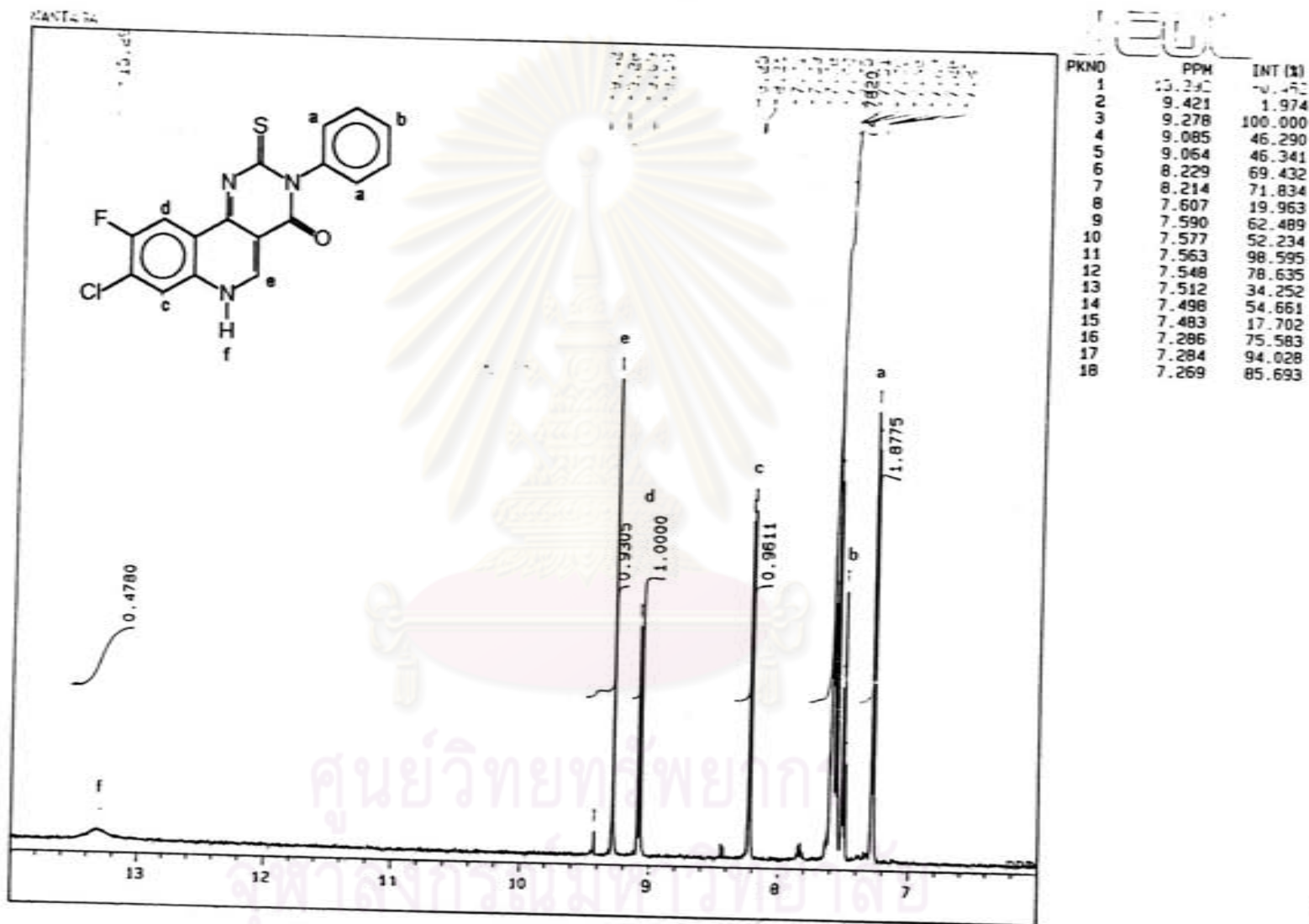


Figure 32. The $^1\text{H-NMR}$ spectrum of 8-Chloro-9-fluoro-3-phenyl-2-thioxopyrimido[4,3-d]quinoline-4-one in $\text{CDCl}_3 + \text{DMSO-d}_6$.

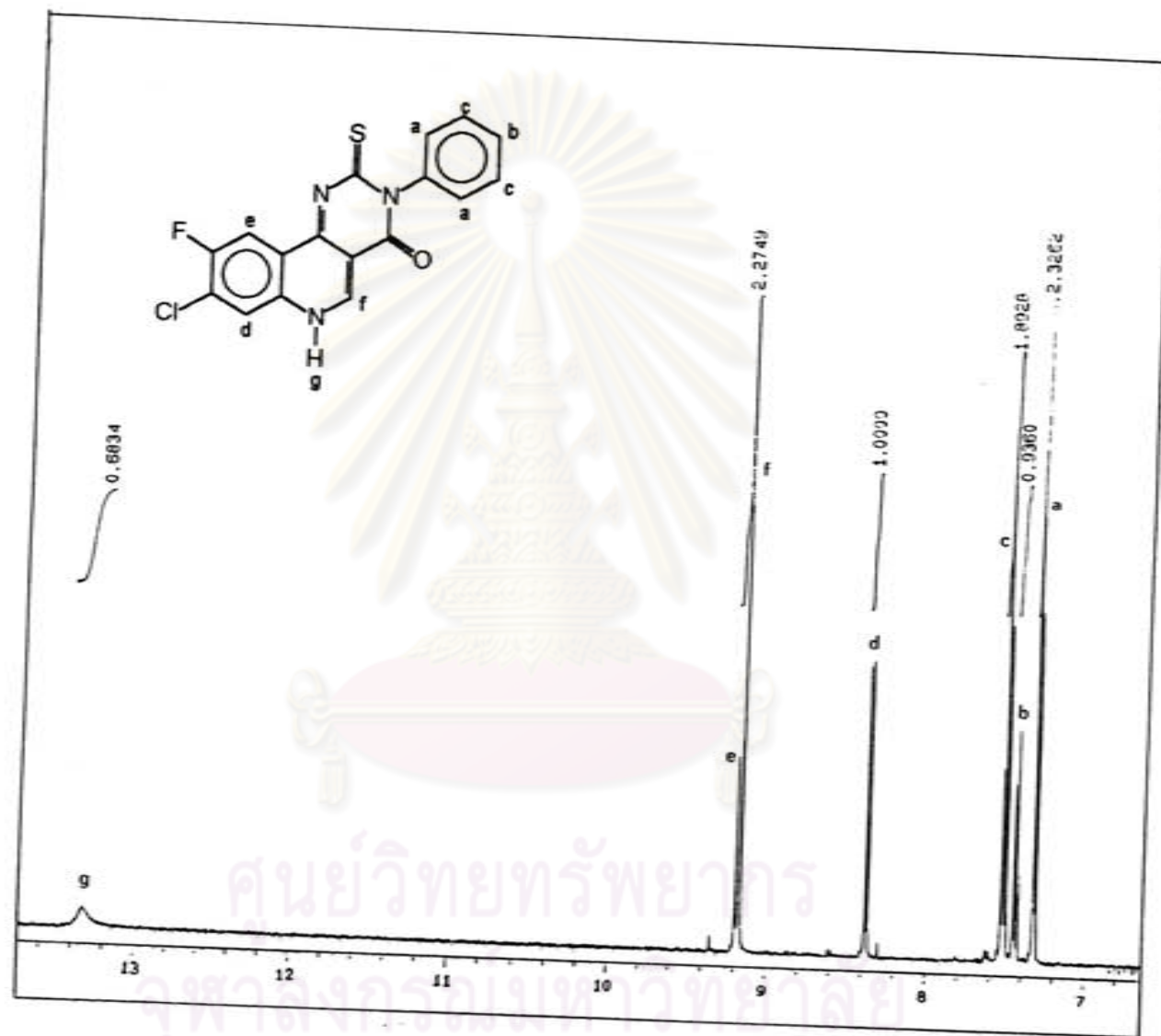


Figure 33. The ¹H-NMR spectrum of 8-Chloro-9-fluoro-3-phenyl-2-thioxopyrimido-[4,3-d]-quinoline-4-one in DMSO-d₆.

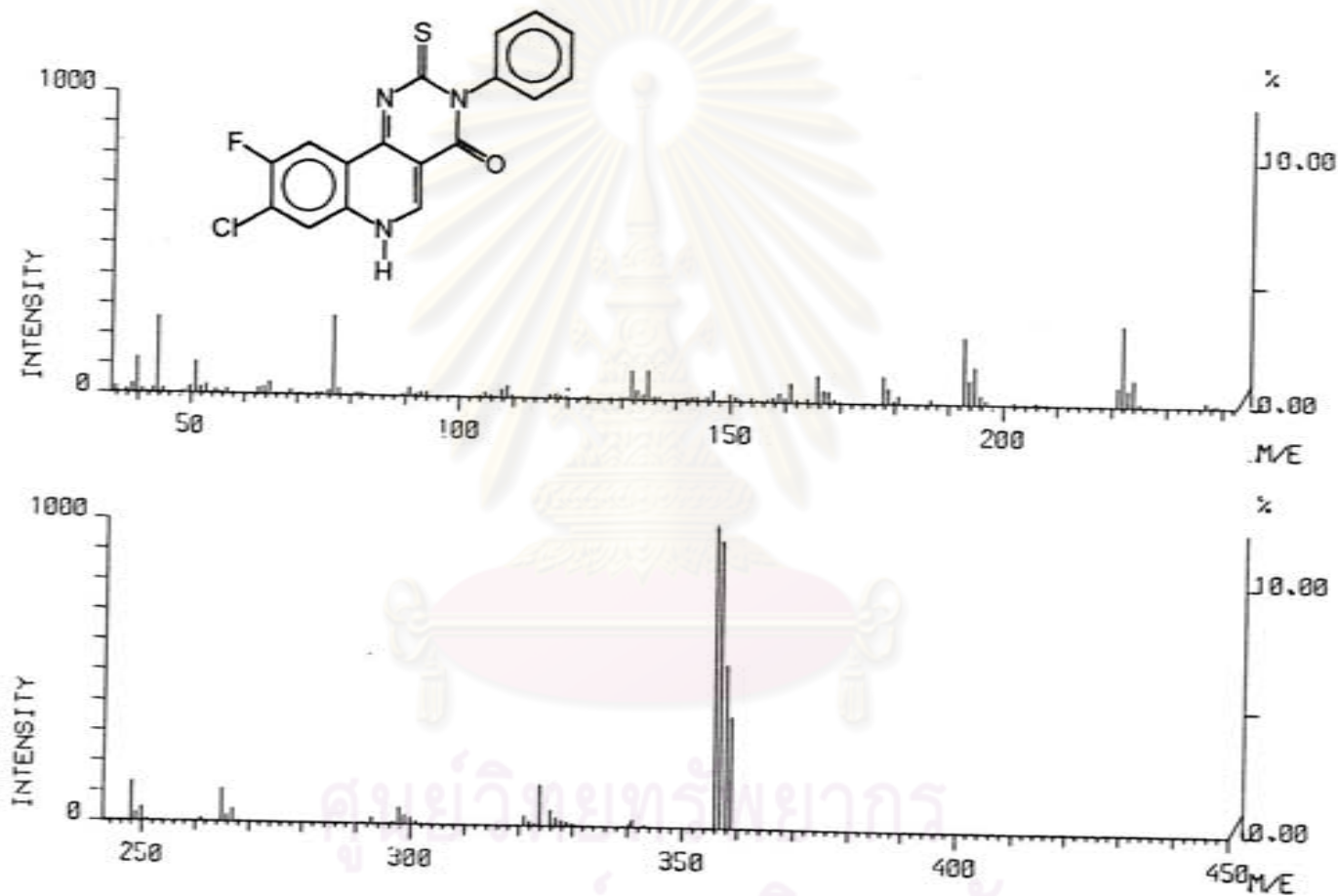


Figure 34. The MS spectrum of 8-Chloro-9-fluoro-3-phenyl-2-thioxopyrimido-[4,3-d]-quinoline-4-one.

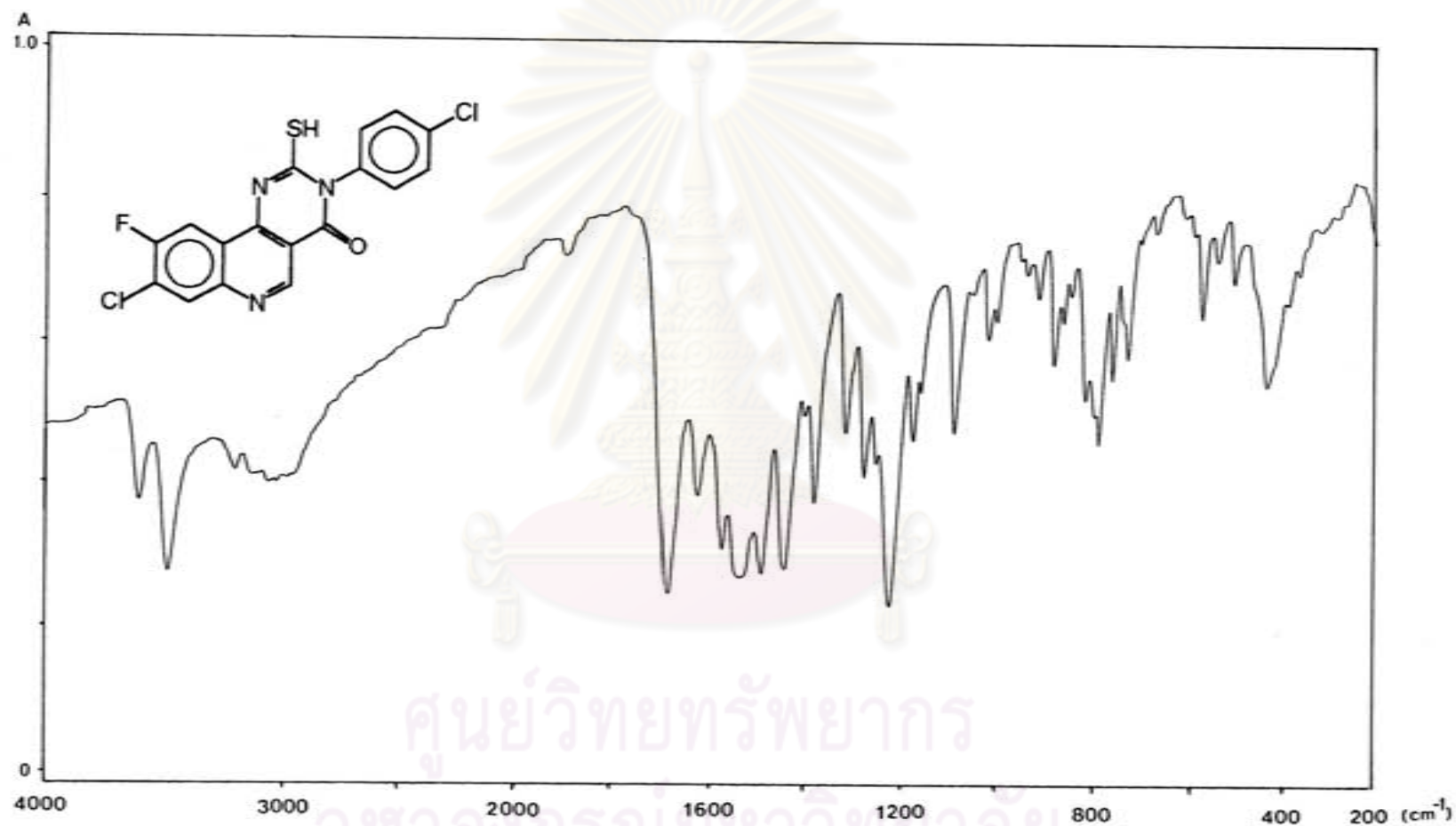


Figure 35. The IR spectrum (KBr pellet) of 8-Chloro-3-(4'-chloro phenyl)-9-fluoro-2-mercapto-pyrimido-[4,3-d]-quinoline-4-one.

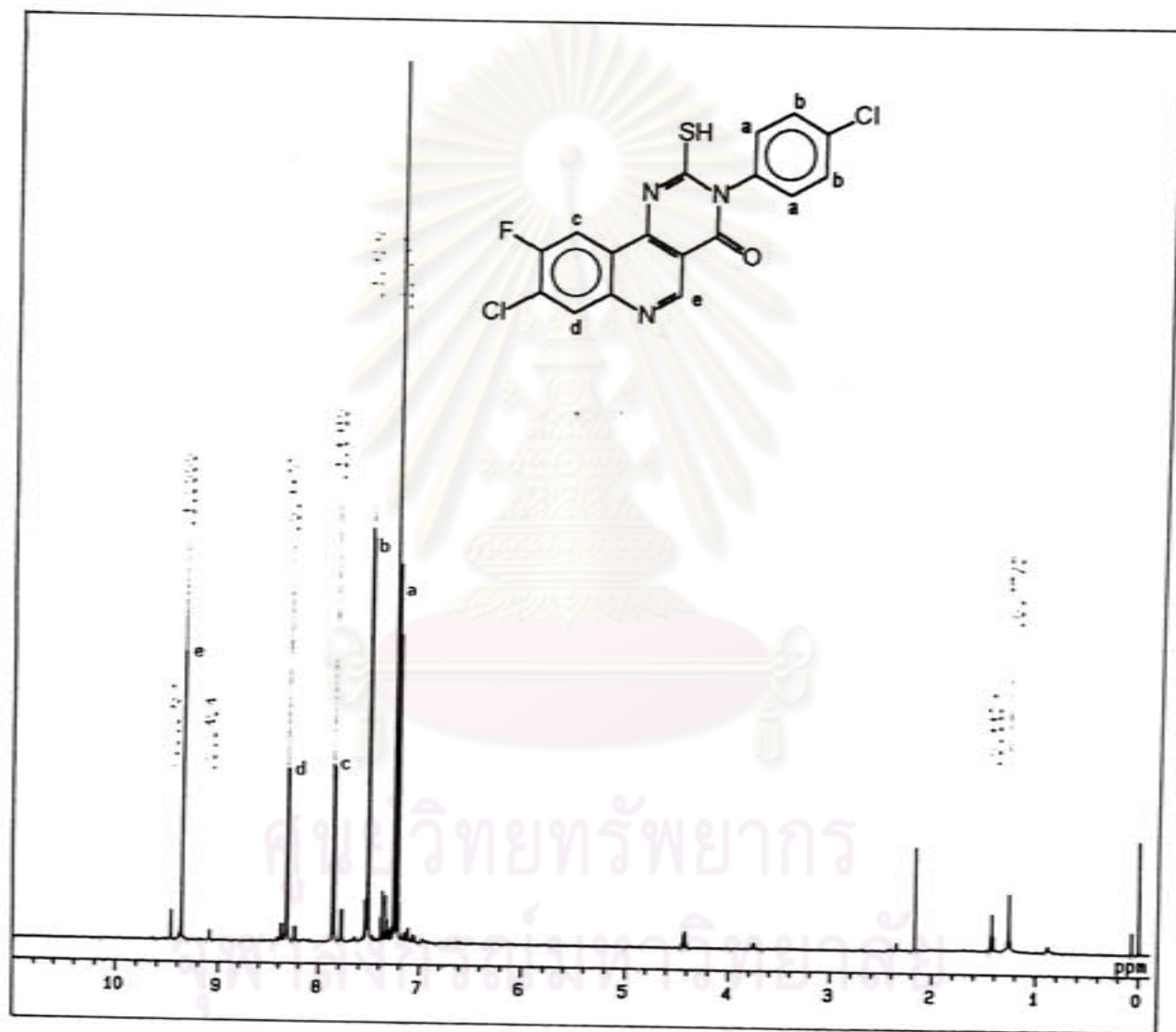


Figure 36. The $^1\text{H-NMR}$ spectrum of 8-Chloro-3-(4'-chloro phenyl)-9-fluoro-2-mercapto-pyrimido-[4,3-d]-quinoline-4-one in CHCl_3 .

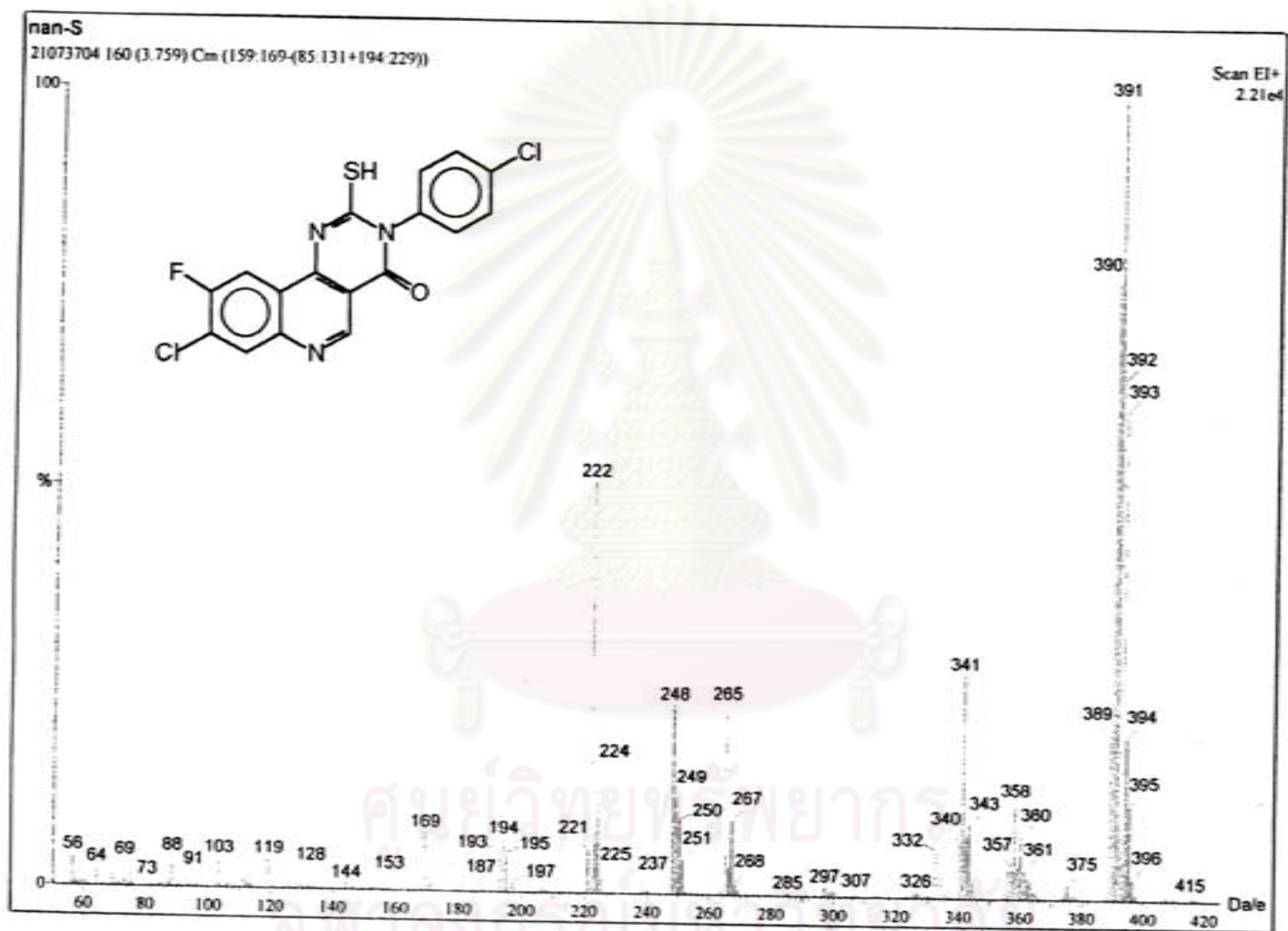


Figure 37. The MS spectrum of 8-Chloro-3-(4'-chloro phenyl)-9-fluoro-2-mercapto-pyrimido-[4,3-d]-quinoline-4-one.

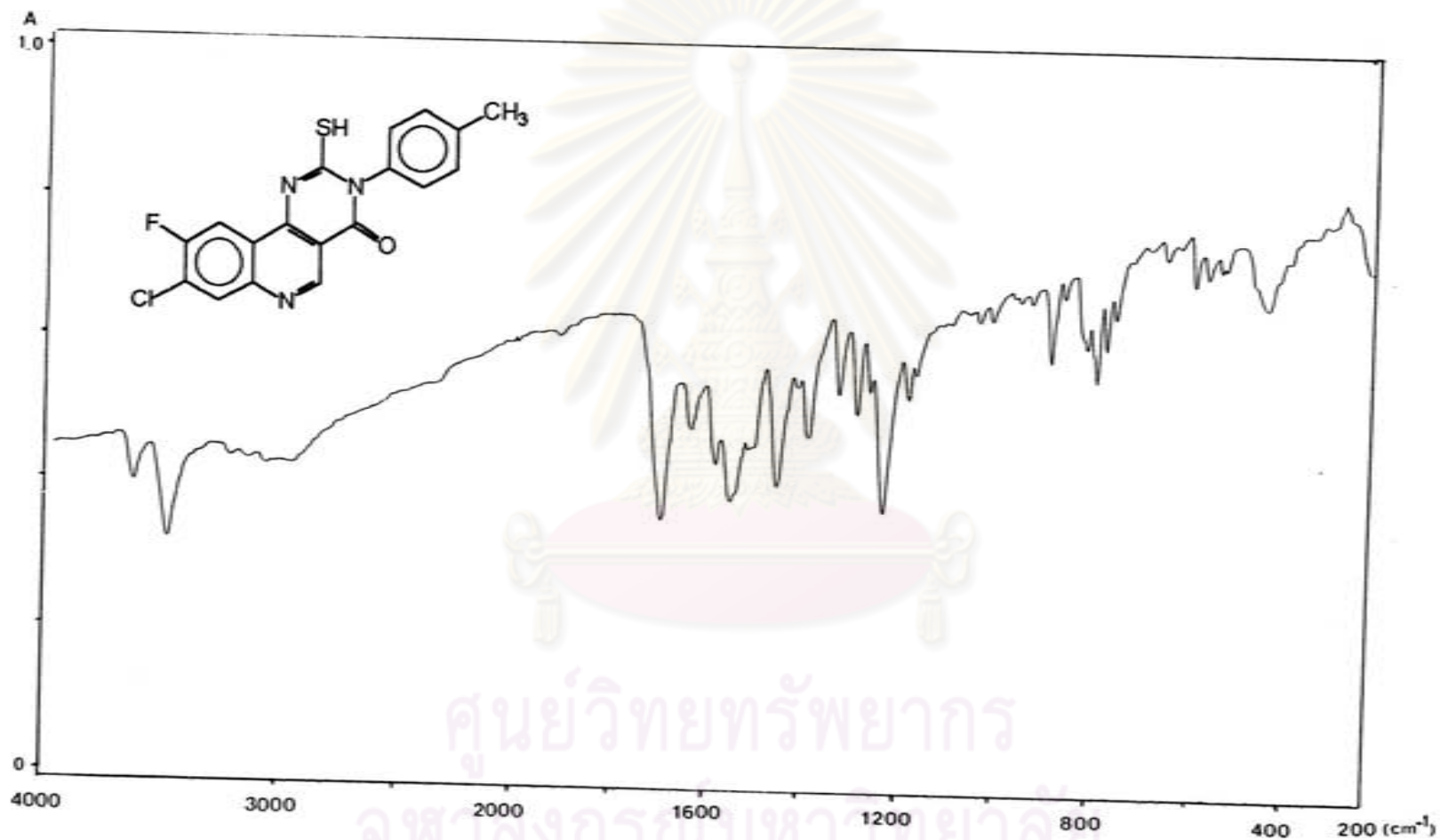


Figure 38. The IR spectrum (KBr pellet) of 8-Chloro-9-fluoro-2-mercapto-3-(4'-methyl phenyl)-pyrimido-[4,3-d]-quinoline-4-one.

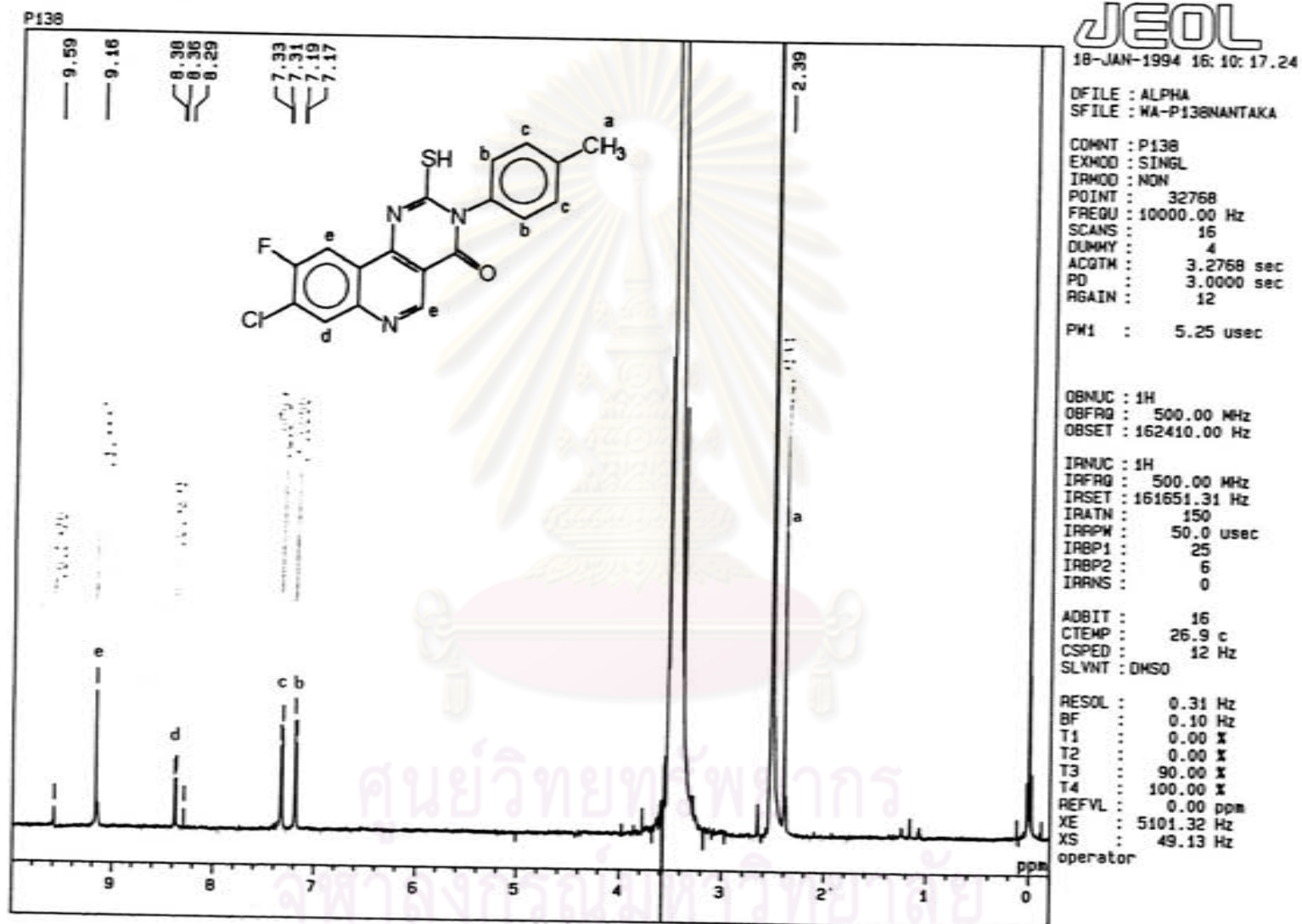


Figure 39. The ^1H -NMR spectrum of 8-Chloro-9-fluoro-2-mercapto-3-(4'-methylphenyl)-pyrimido-[4,3-d]-quinoline-4-one in DMSO-d_6 .

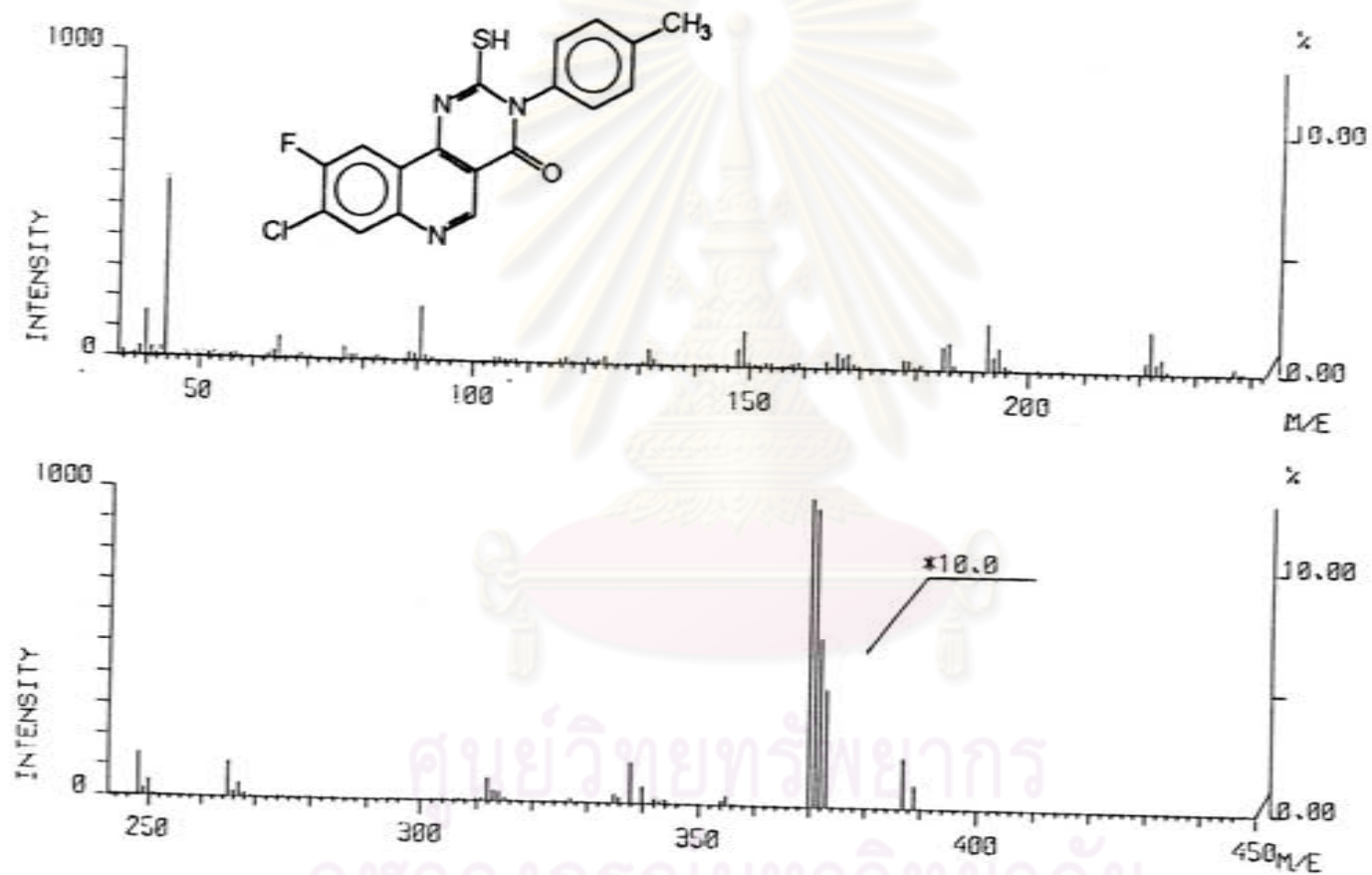


Figure 40. The MS spectrum of 8-Chloro-9-fluoro-2-mercapto-3-(4'-methyl phenyl)-pyrimido-[4,3-d]-quinoline-4-one.

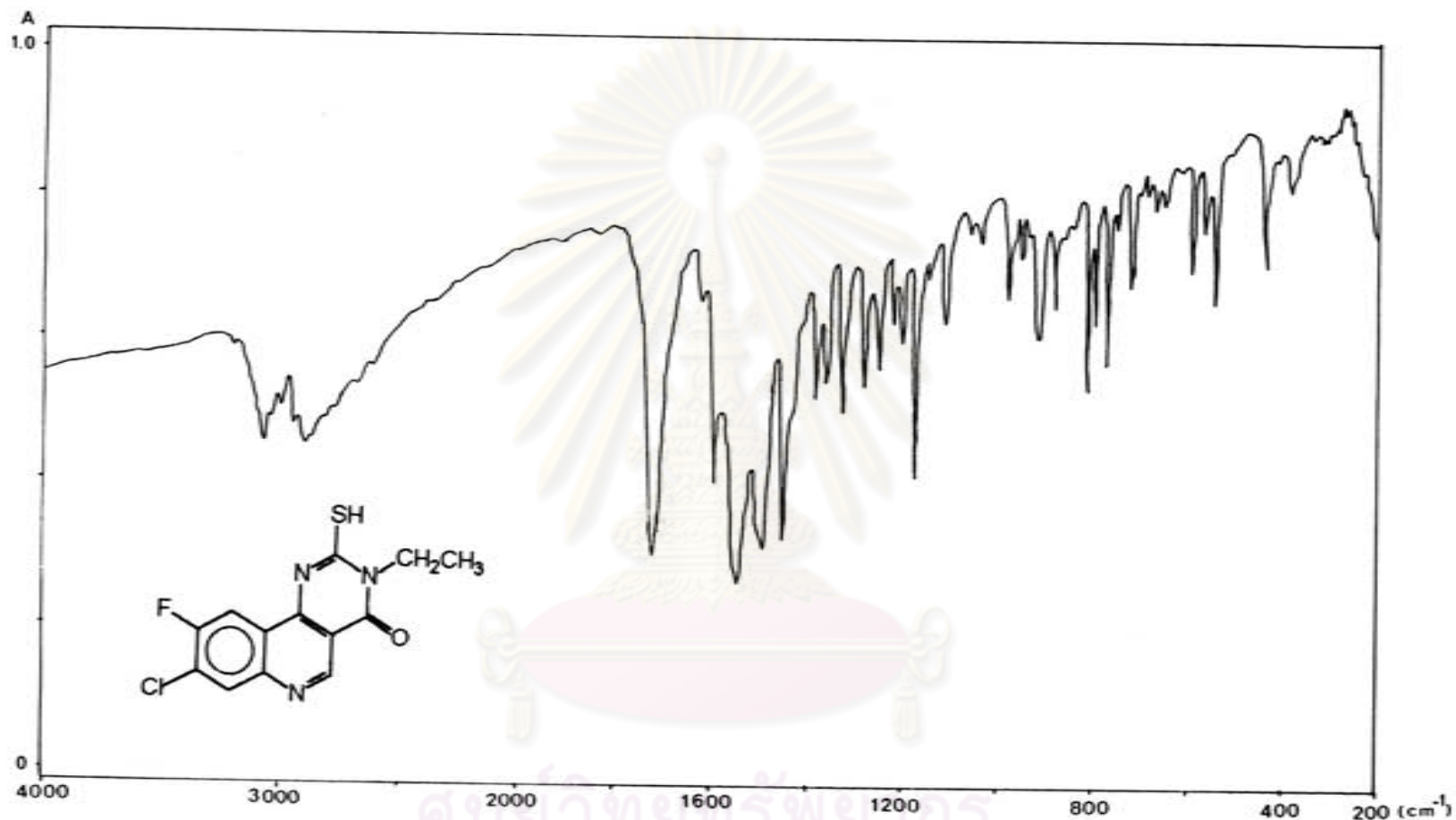


Figure 41. The IR spectrum (KBr pellet) of 8-Chloro-3-ethyl-9-fluoro-2-mercapto-pyrimido-[4,3-d]-quinoline-4-one.

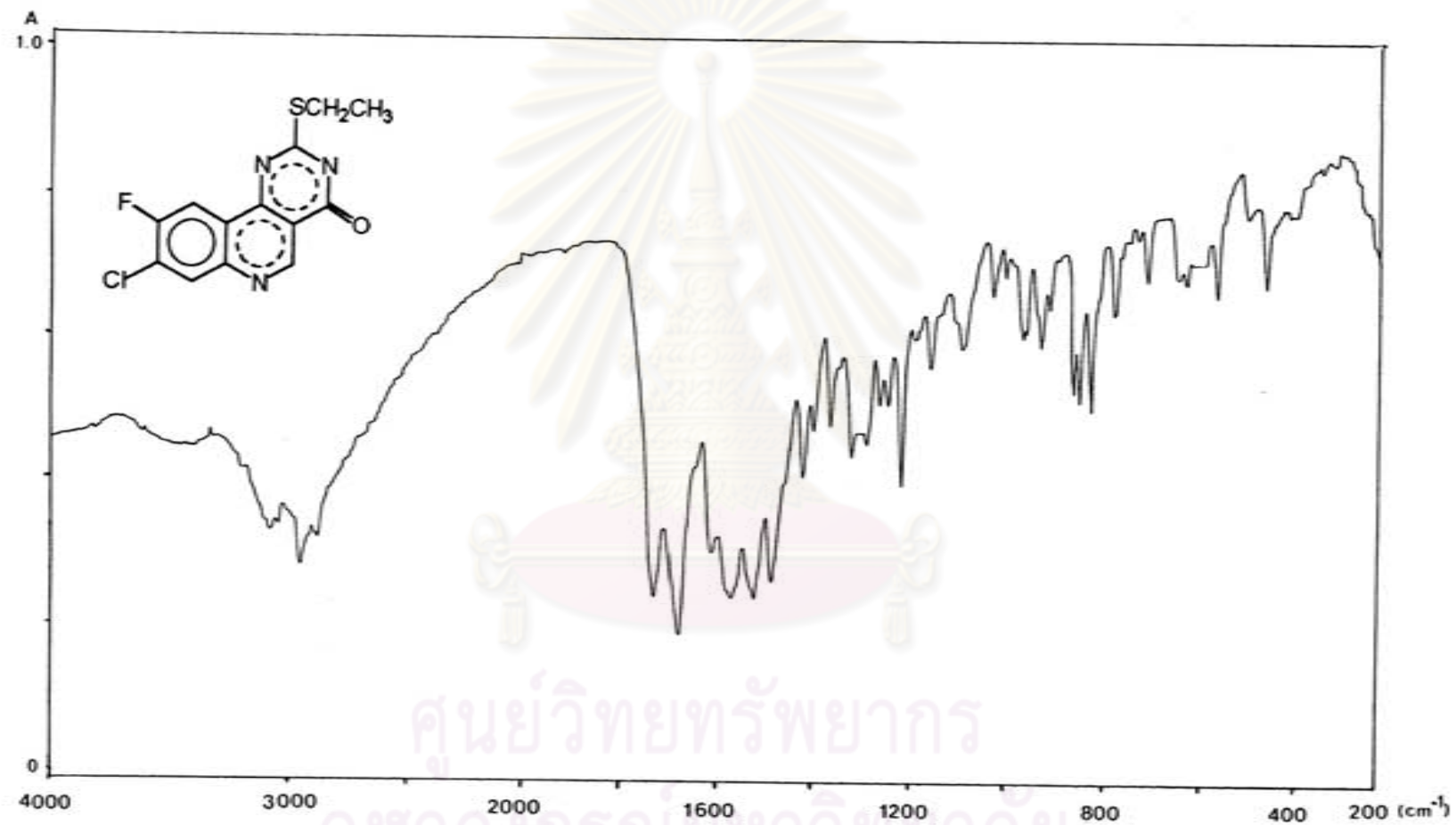


Figure 42. The IR spectrum (KBr pellet) of 8-Chloro-2-ethylthio-9-fluoro-pyrimido-[4,3-d]-quinoline-4-one.

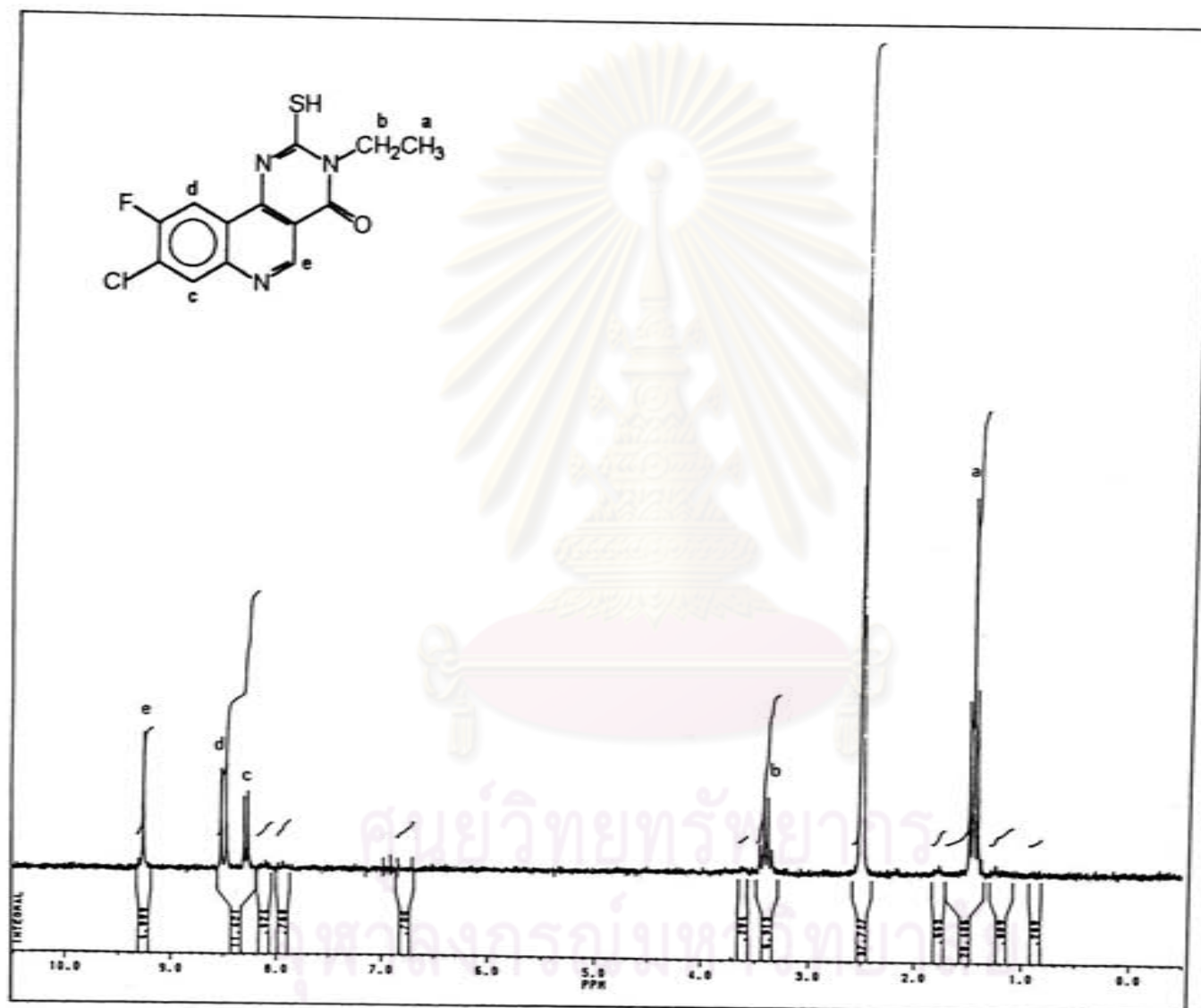


Figure 43. The $^1\text{H-NMR}$ spectrum of 8-Chloro-3-ethyl-9-fluoro-2-mercapto-pyrimido-[4,3-d]-quinoline-4-one in DMSO-d_6 heat at 100°C .

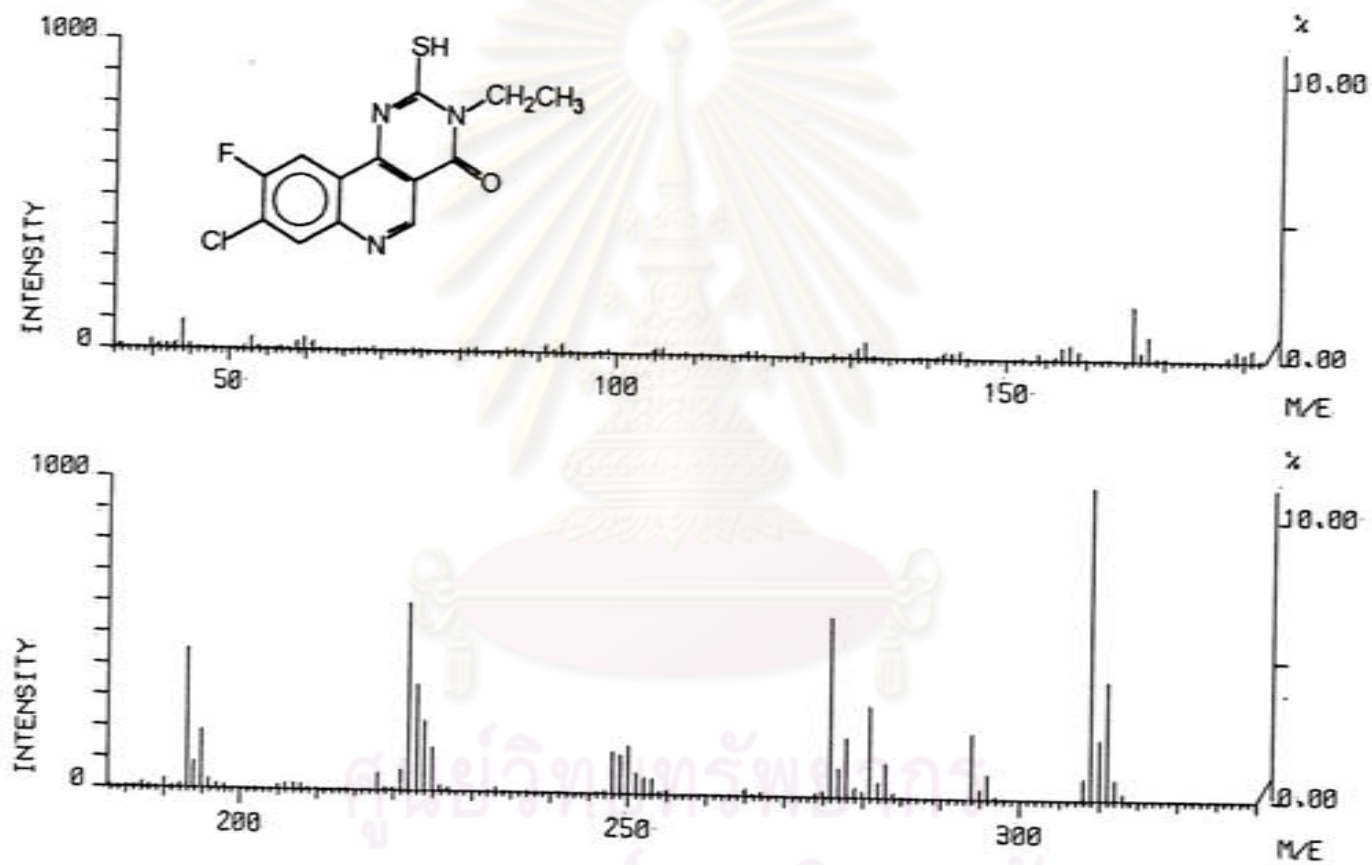


Figure 44. The MS spectrum of 8-Chloro-3-ethyl-9-fluoro-2-mercapto-pyrimido-[4,3-d]-quinoline-4-one.

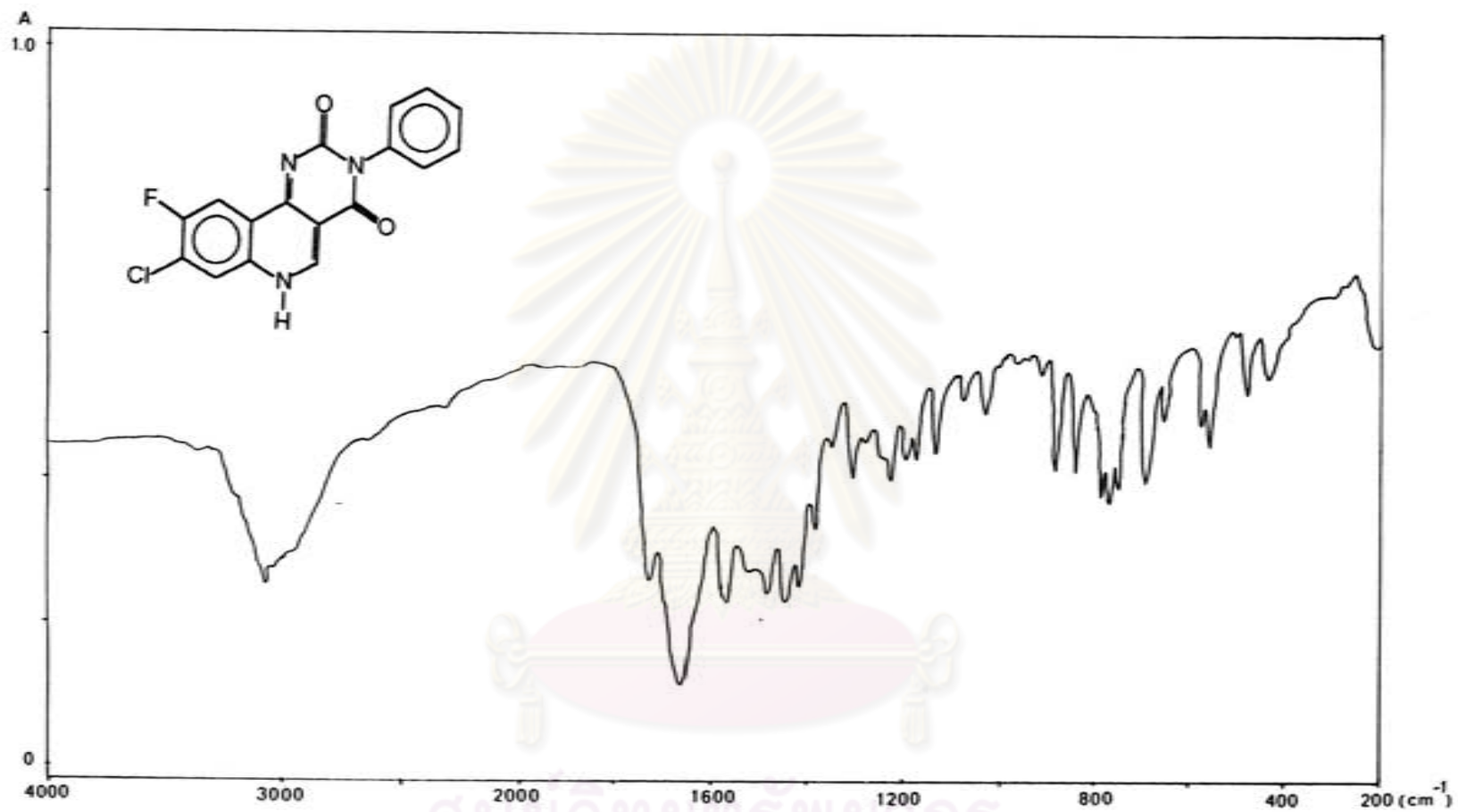


Figure 45. The IR spectrum (KBr pellet) of 8-Chloro-9-fluoro-3-phenyl-2-pyrimido-[4,3-d]-quinoline-2,4-dione.

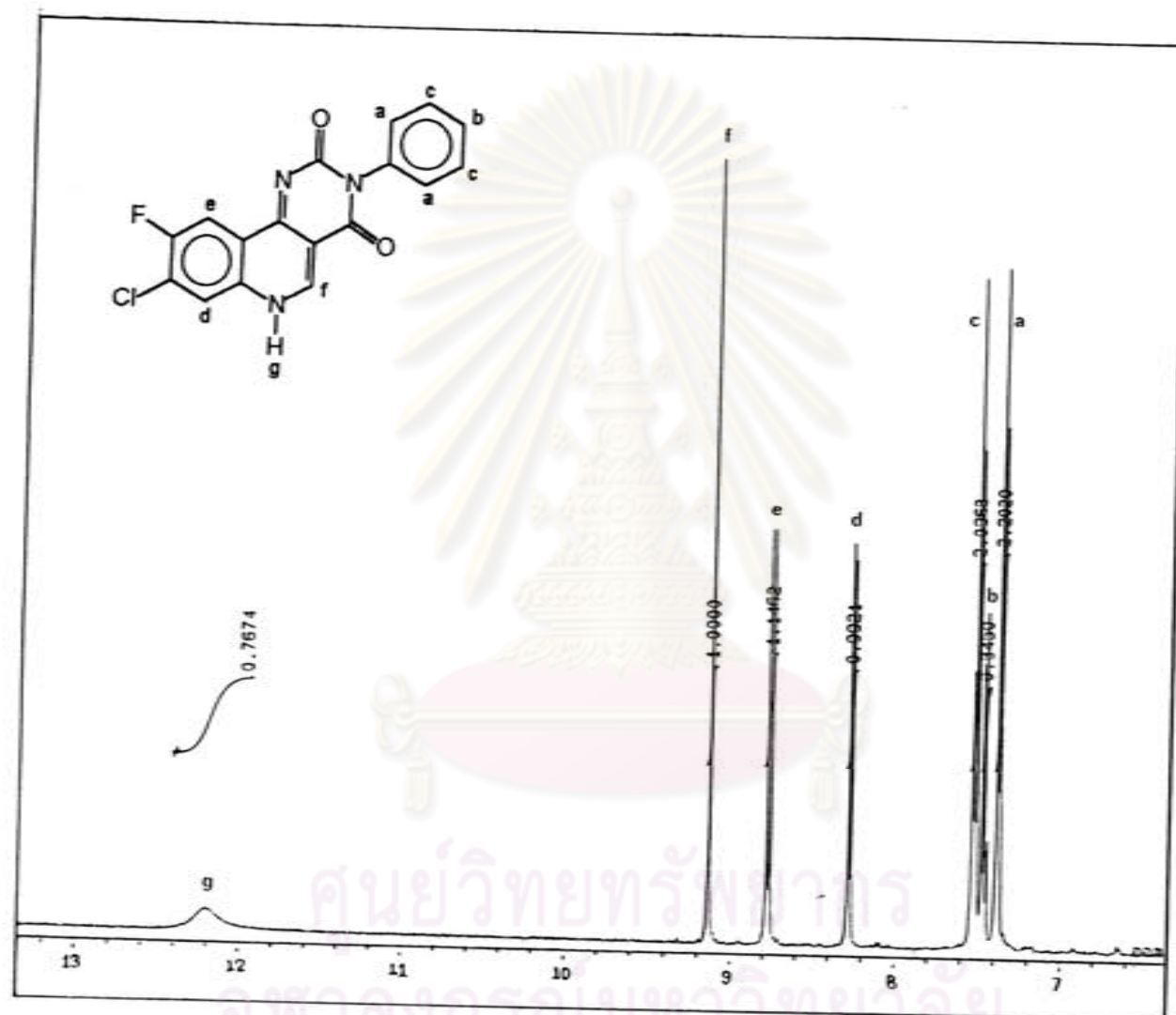


Figure 46. The ¹H-NMR spectrum of 8-Chloro-9-fluoro-3-phenyl-2-pyrimido-[4,3-d]-quinoline-2,4-dione in DMSO-d₆.

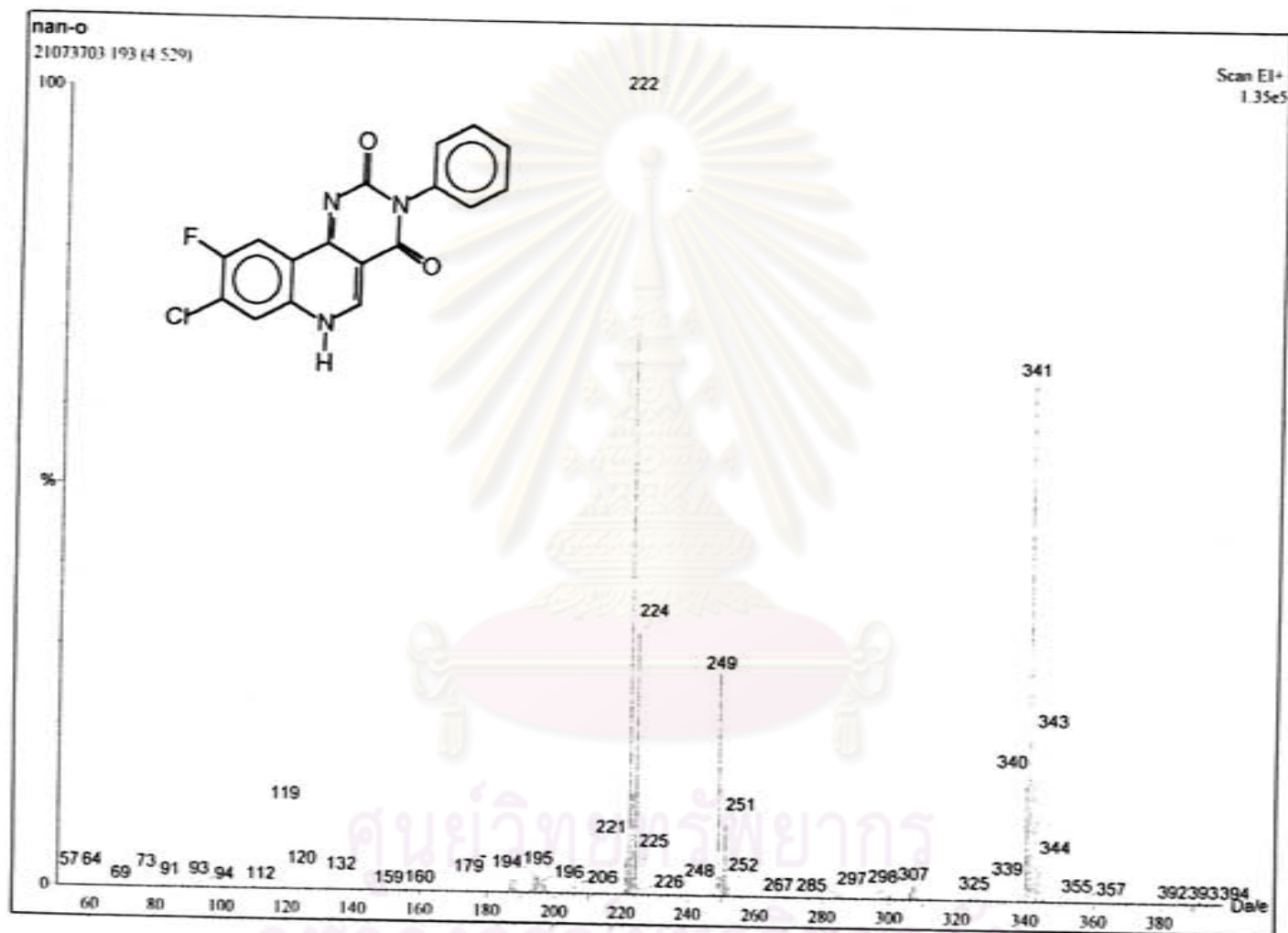


Figure 47. The MS spectrum of 8-Chloro-9-fluoro-3-phenyl-2-pyrimido-[4,3-d]-quinoline-2,4-dione.



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