

Supplementary Material

Synthesis of Tröger's base bis(α -aminophosphonate) derivatives

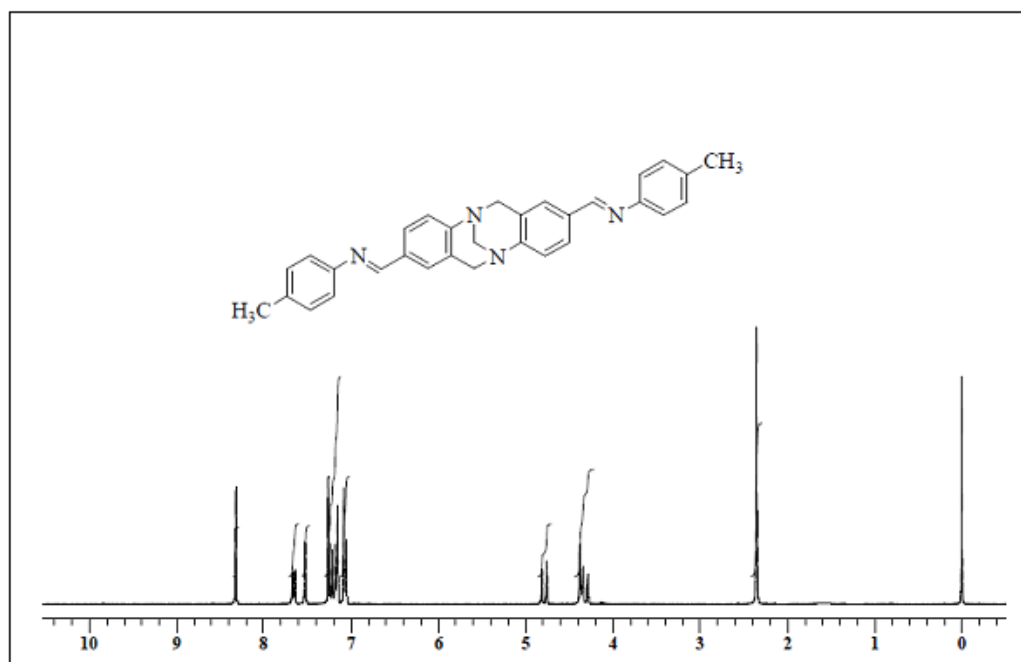
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Hyderabad, India-500007*

E-mail: manjula@iict.res.in, manjula_alla@yahoo.com

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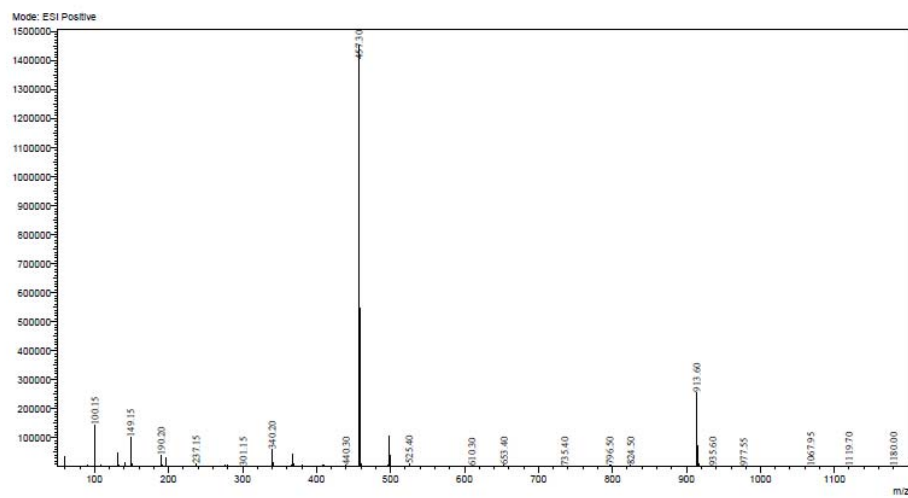
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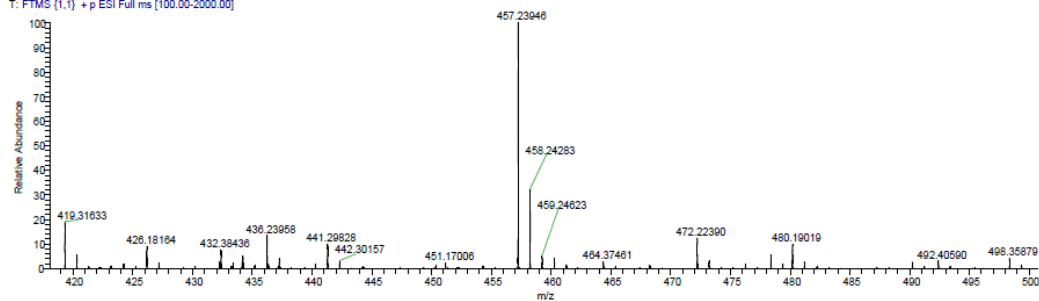
¹H NMR (300 MHz, CDCl₃) spectrum of compound 7a

=== CPC DIVISION @ CSIR-IICIT ===

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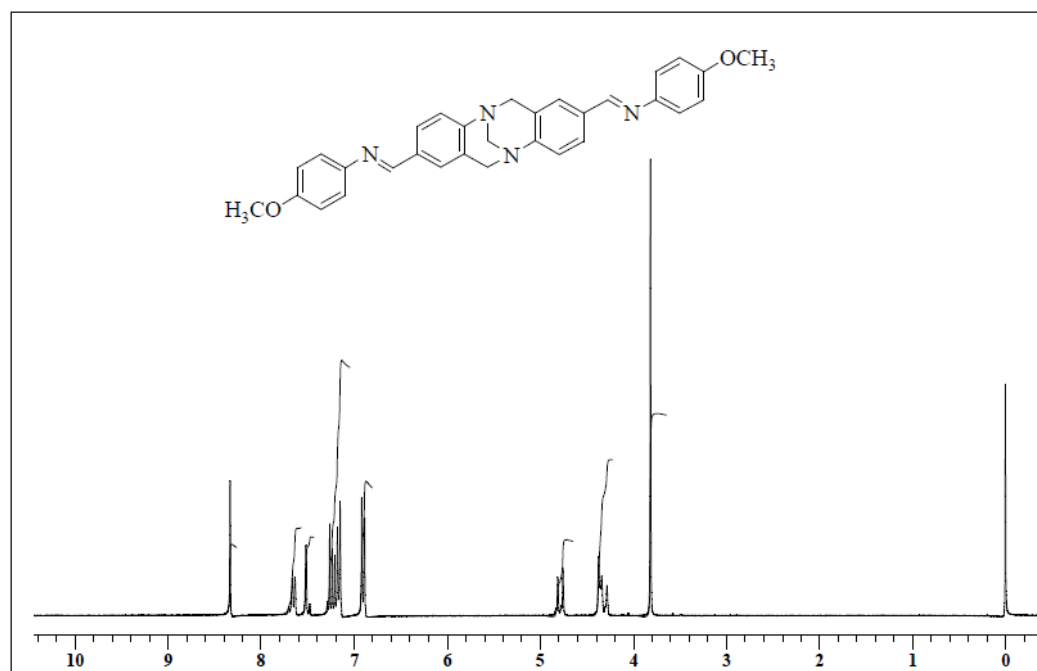
Mass spectrum of compound 7a

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CSIR-Indian Institute of Chemical TechnologyFile Name C:\ICT-HRMS\03.03.2014\AM-IMME
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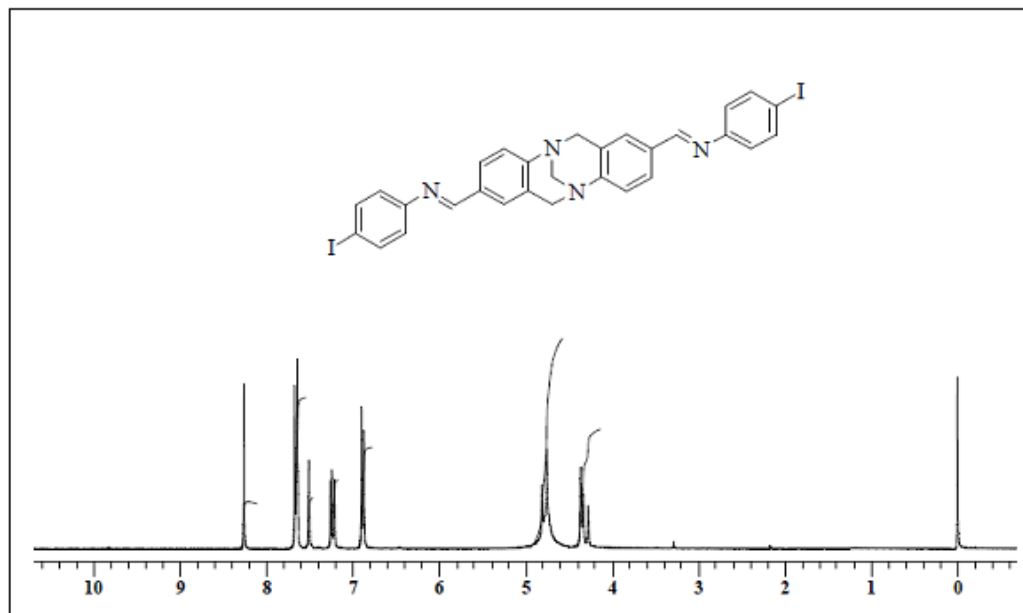
m/z = 454.29-459.02

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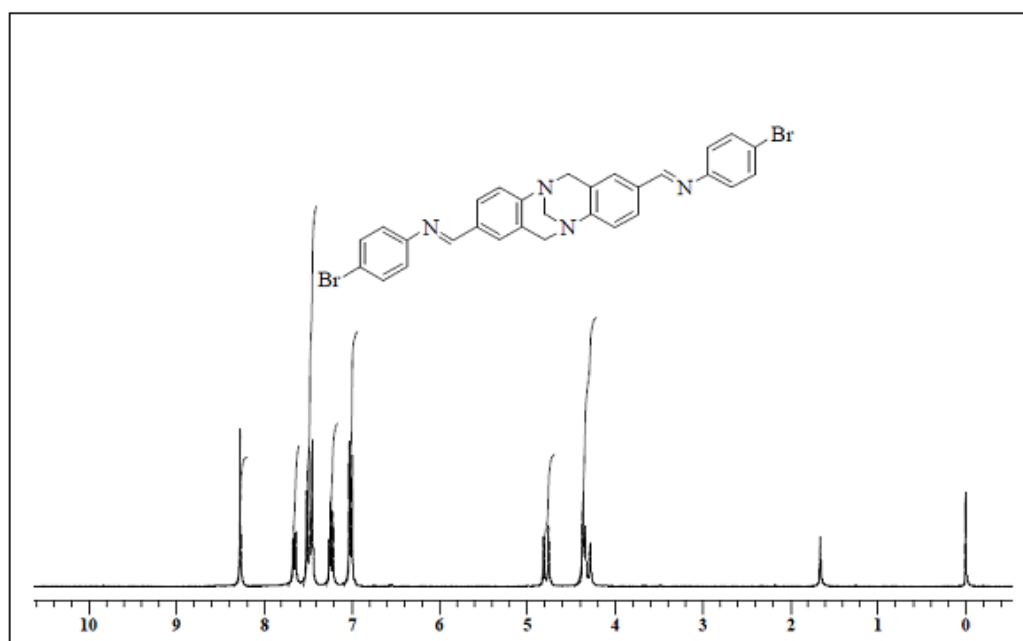
HRMS spectrum of compound 7a



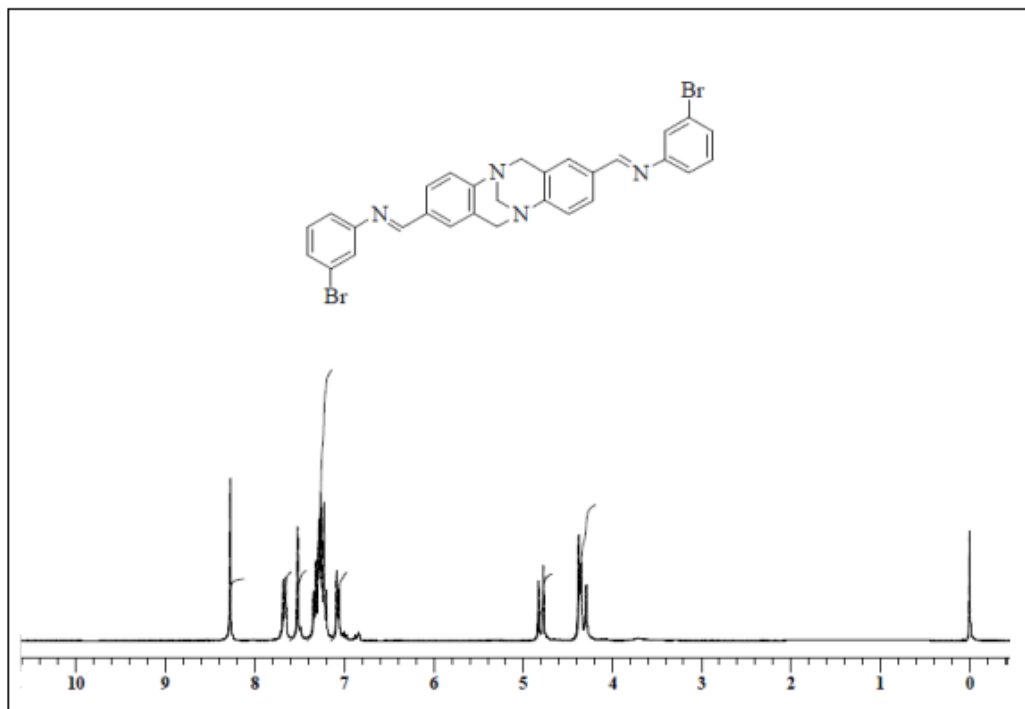
¹H NMR (300 MHz, CDCl₃) spectrum of compound 7b



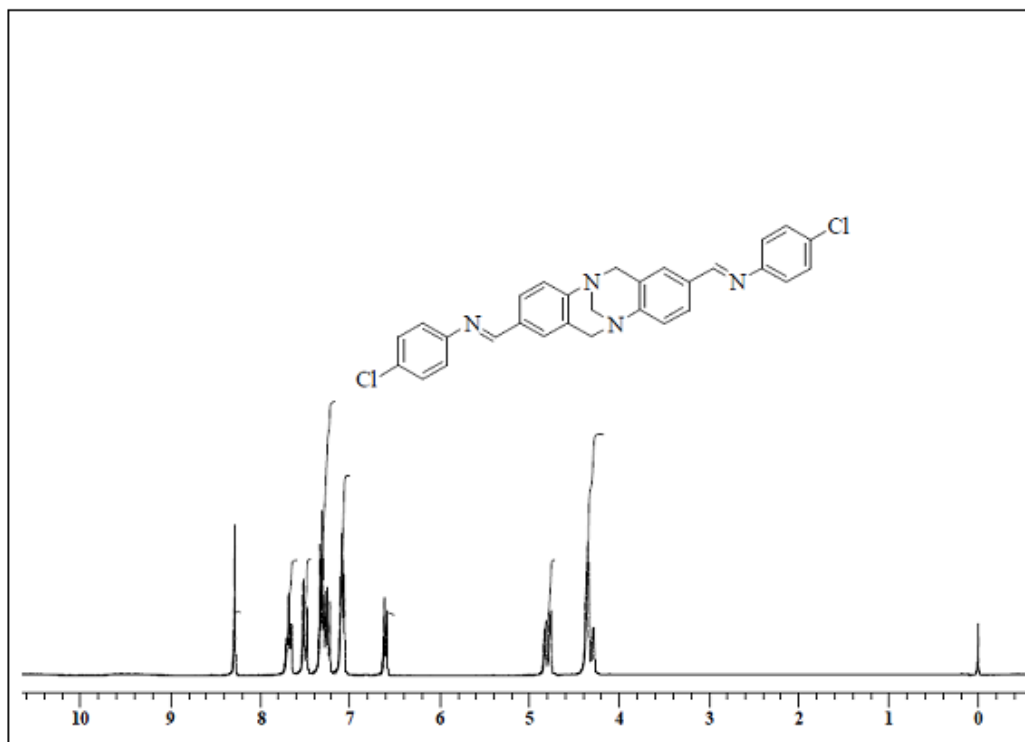
¹H NMR (300 MHz, CDCl₃) spectrum of compound 7c



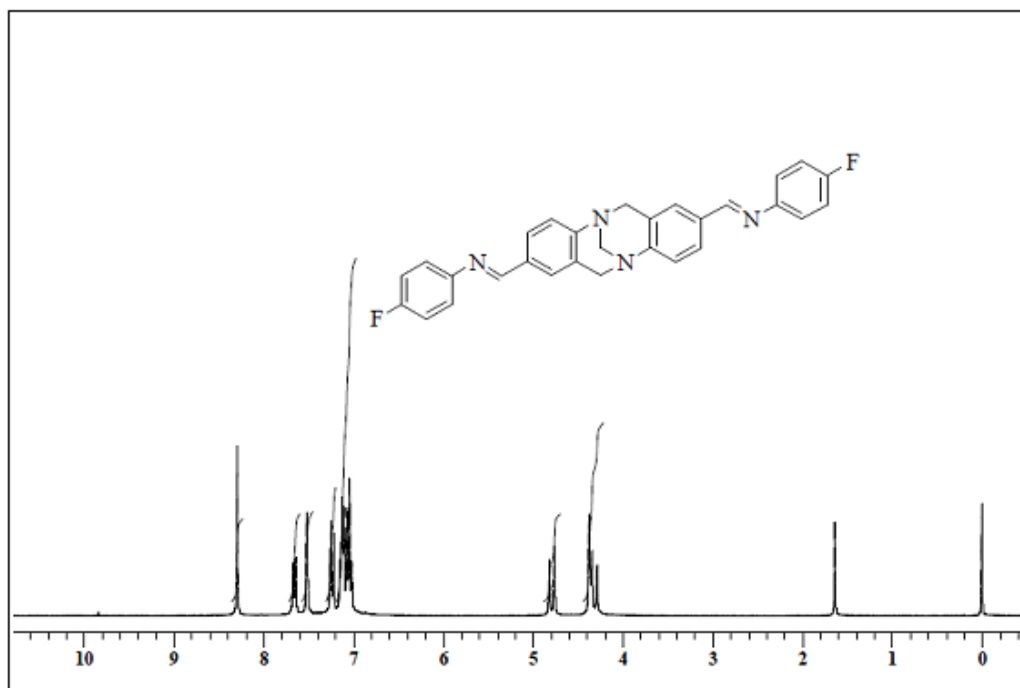
¹H NMR (300 MHz, CDCl₃) spectrum of compound 7d



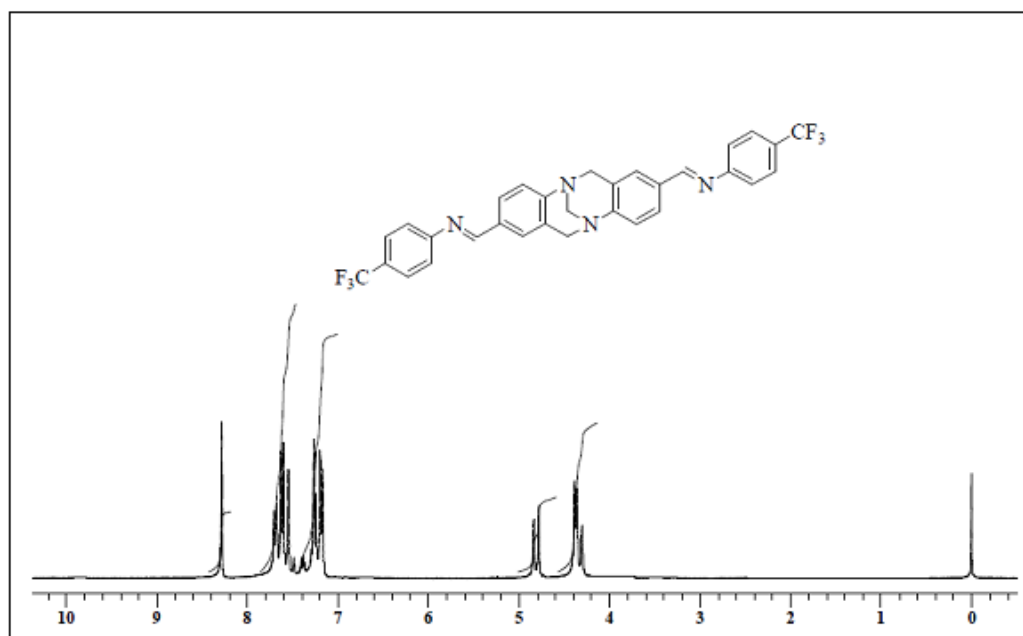
¹H NMR (300 MHz, CDCl₃) spectrum of compound 7e



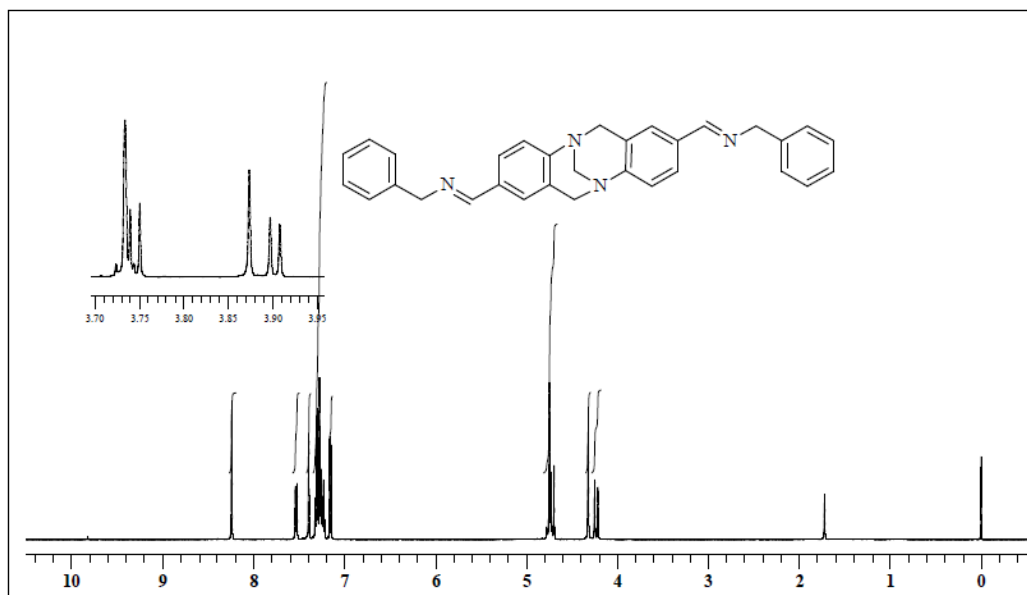
¹H NMR (300 MHz, CDCl₃) spectrum of compound 7f



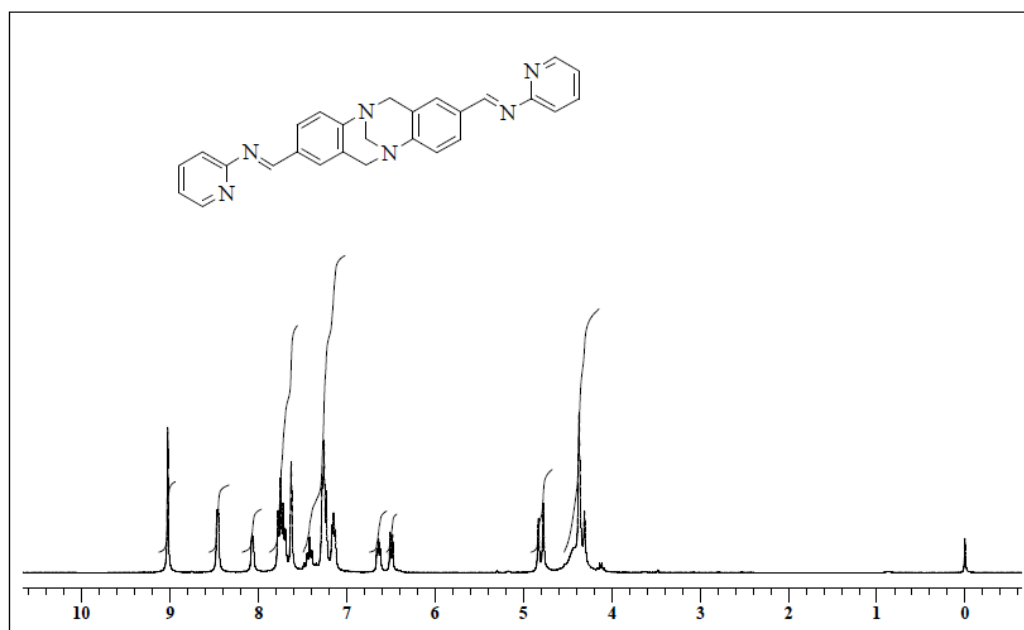
¹H NMR (300 MHz, CDCl₃) spectrum of compound 7g



¹H NMR (300 MHz, CDCl₃) spectrum of compound 7h

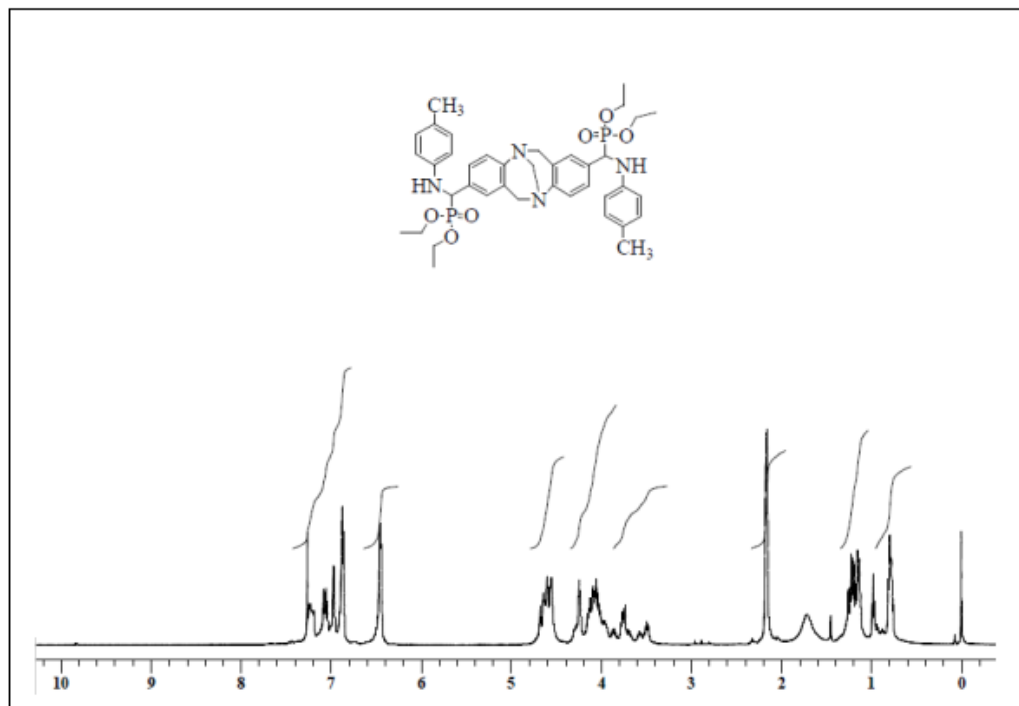
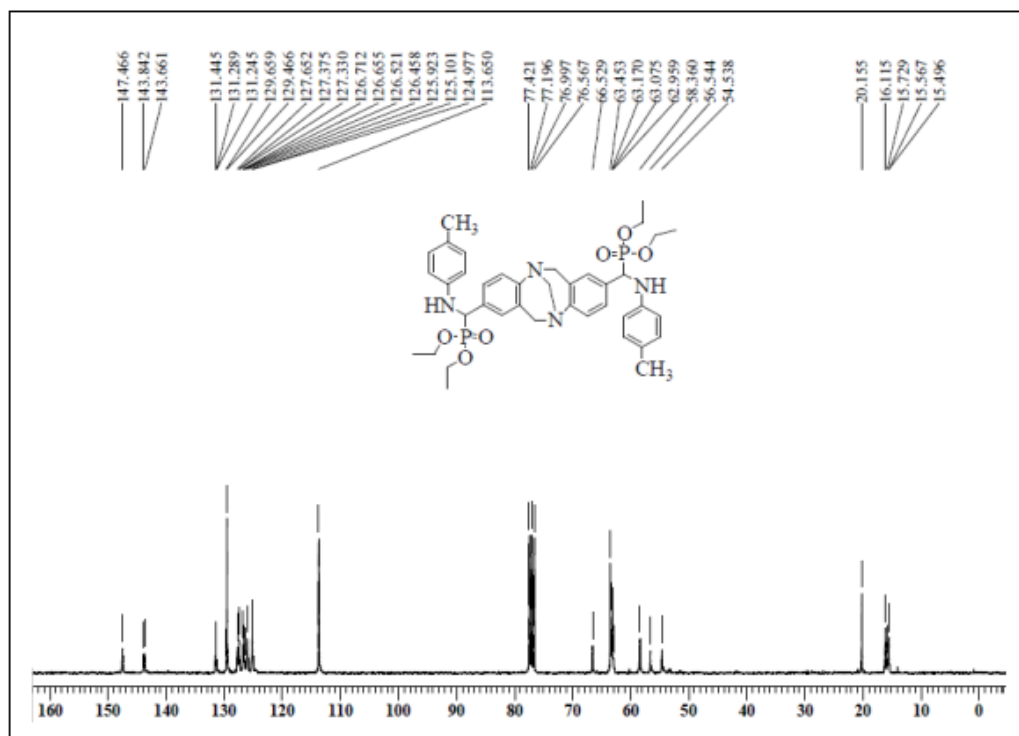


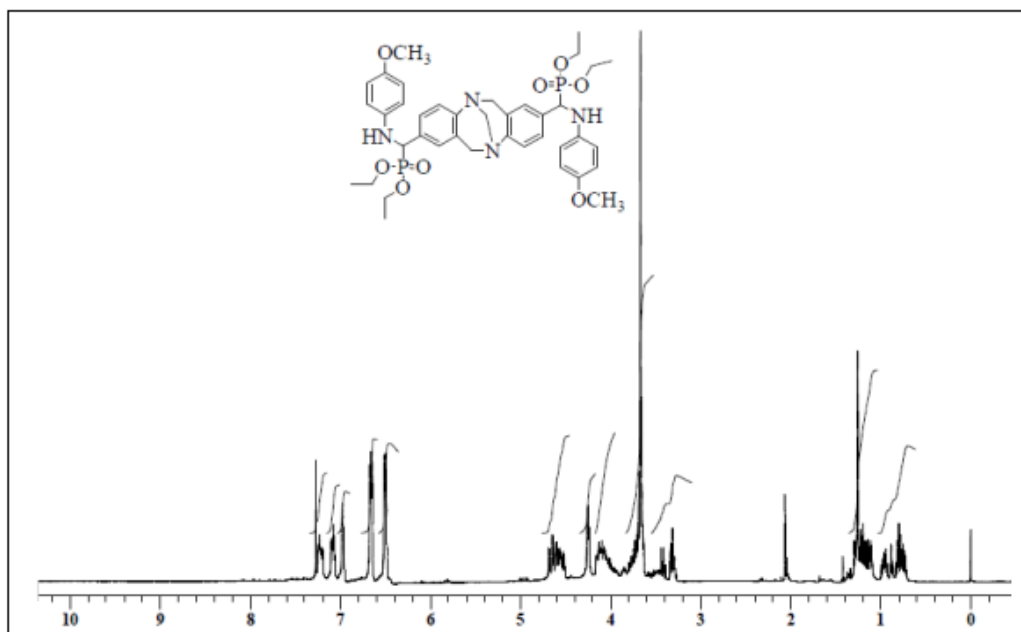
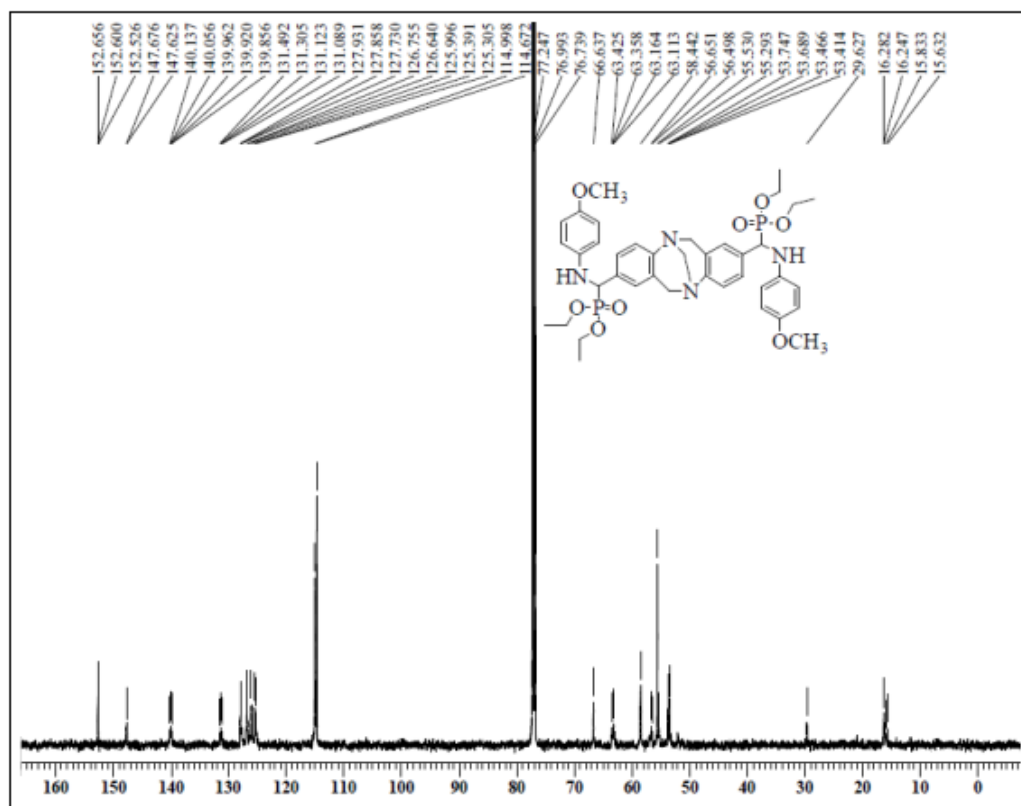
¹H NMR (500 MHz, CDCl₃) spectrum of compound 7i

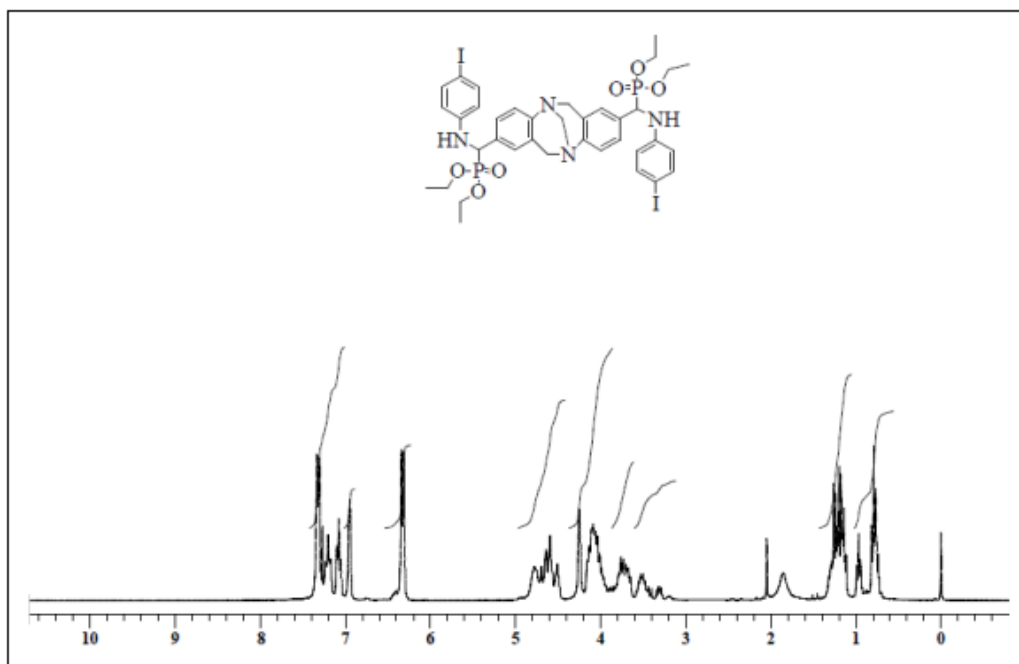
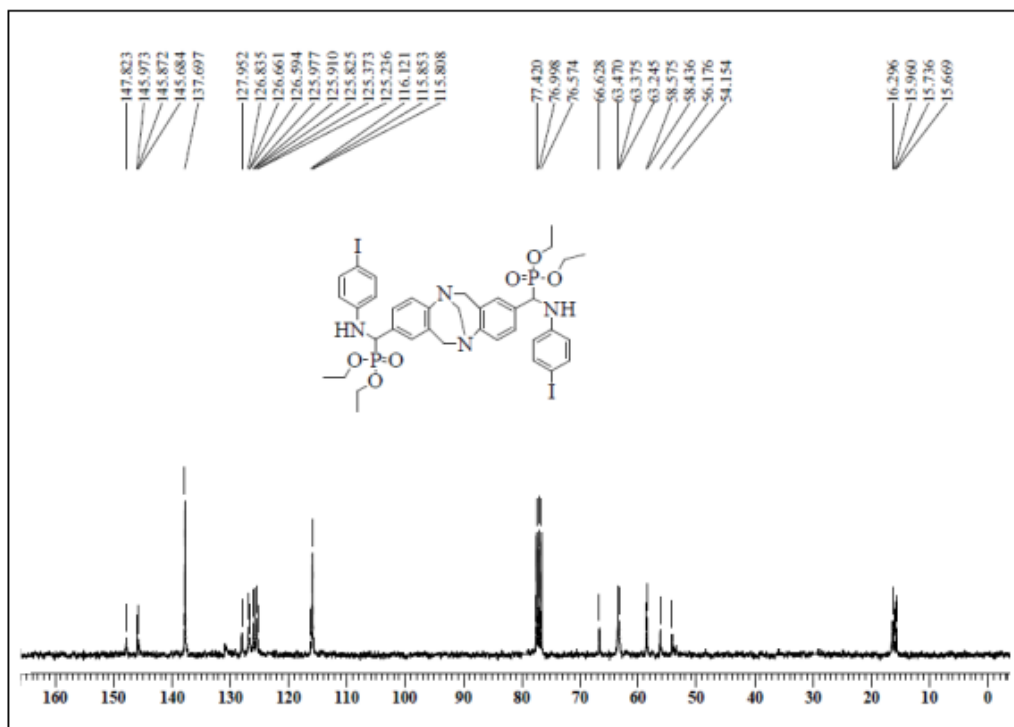


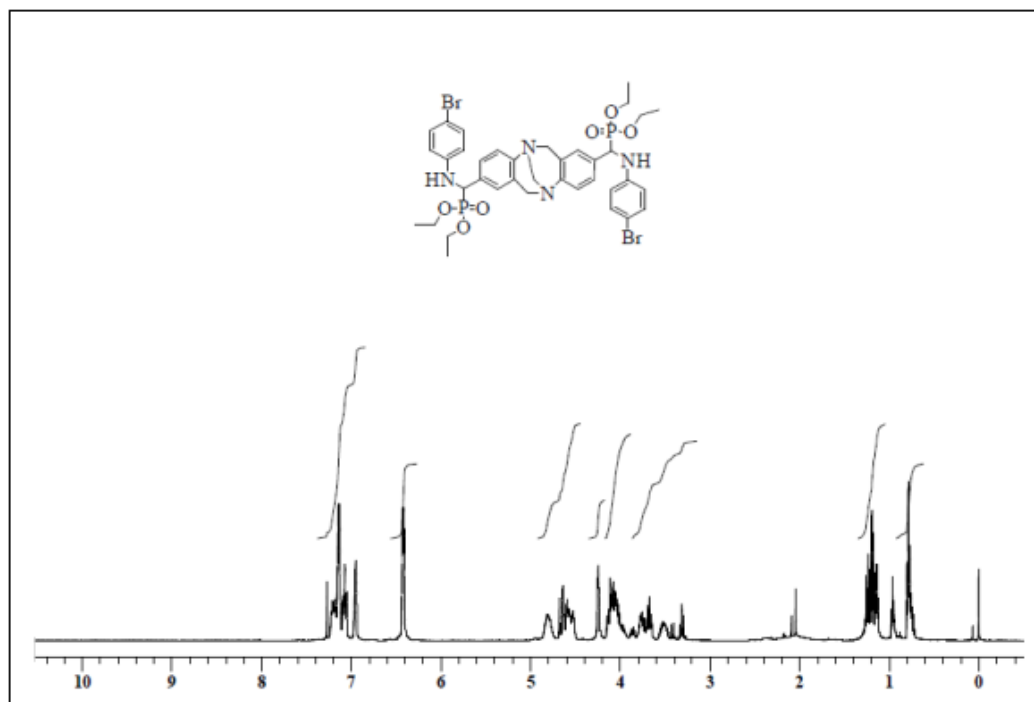
¹H NMR (300 MHz, CDCl₃) spectrum of compound 7j

Tröger's base bis(aminophosphonate) spectras:

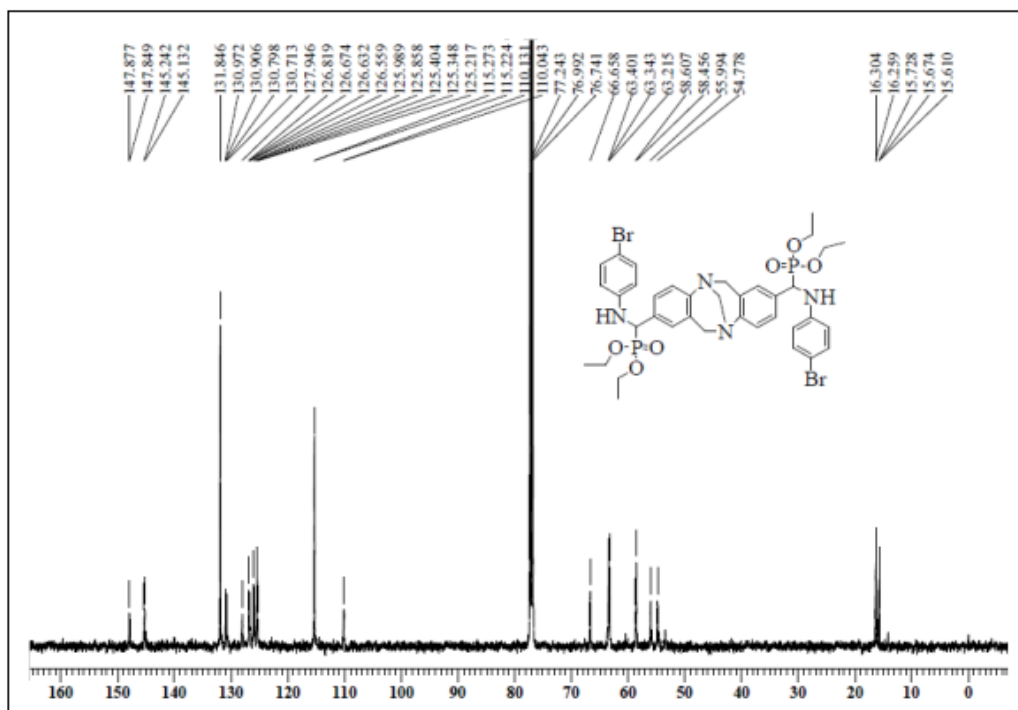
¹H NMR (500 MHz, CDCl₃) spectrum of compound 5a

^{13}C NMR (75 MHz, CDCl_3) spectrum of compound 5a **^1H NMR (500 MHz, CDCl_3) spectrum of compound 5b**

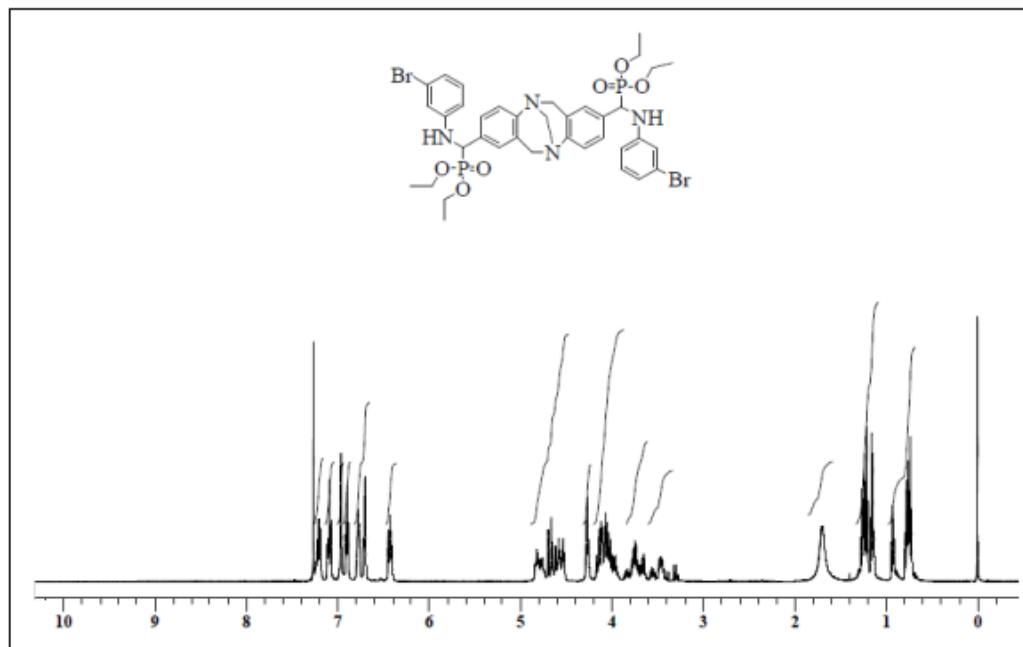
^{13}C NMR (75 MHz, CDCl_3) spectrum of compound 5b **^1H NMR (300 MHz, CDCl_3) spectrum of compound 5c** **^{13}C NMR (75 MHz, CDCl_3) spectrum of compound 5c**



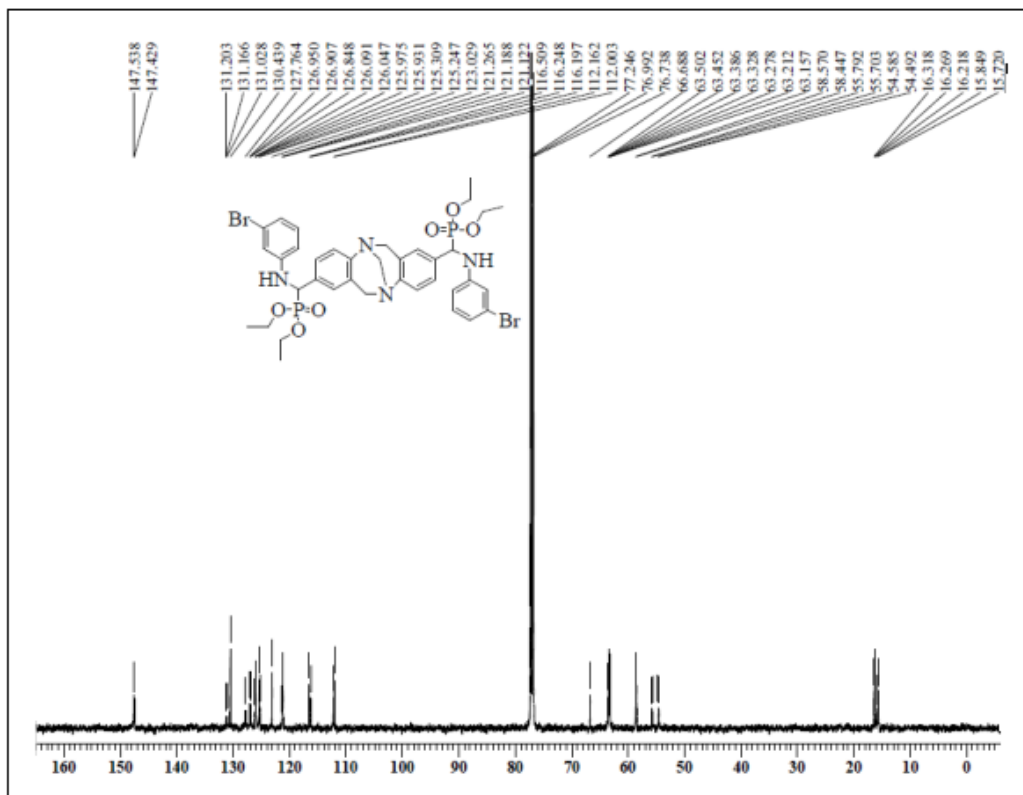
¹H NMR (500 MHz, CDCl₃) spectrum of compound 5d



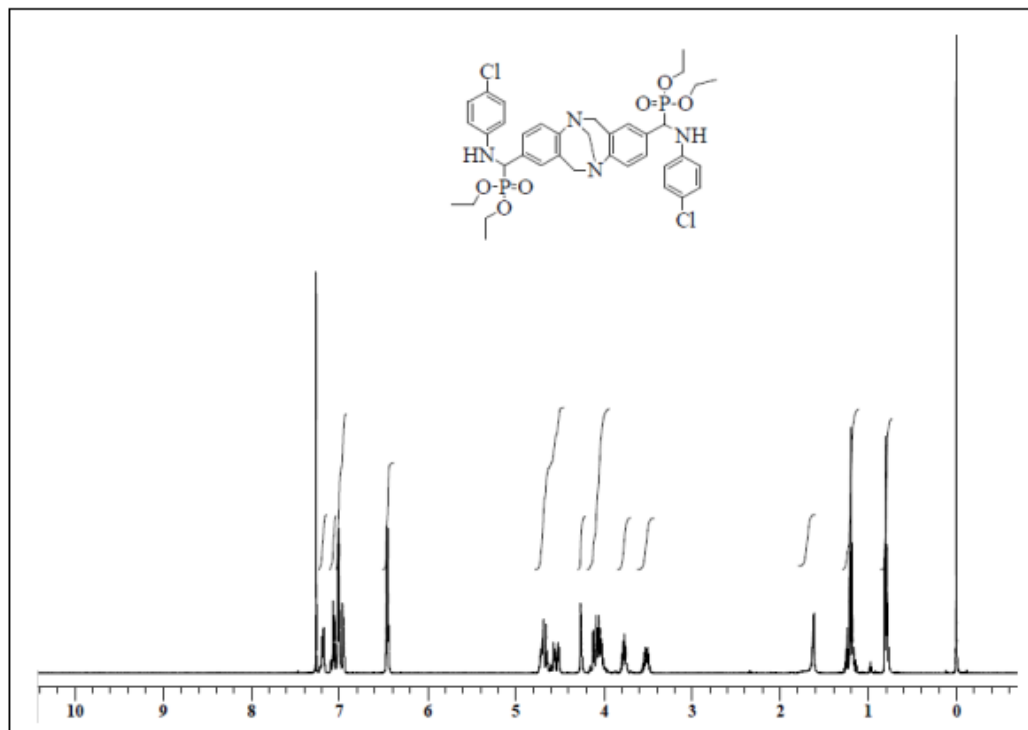
¹³C NMR (75 MHz, CDCl₃) spectrum of compound 5d



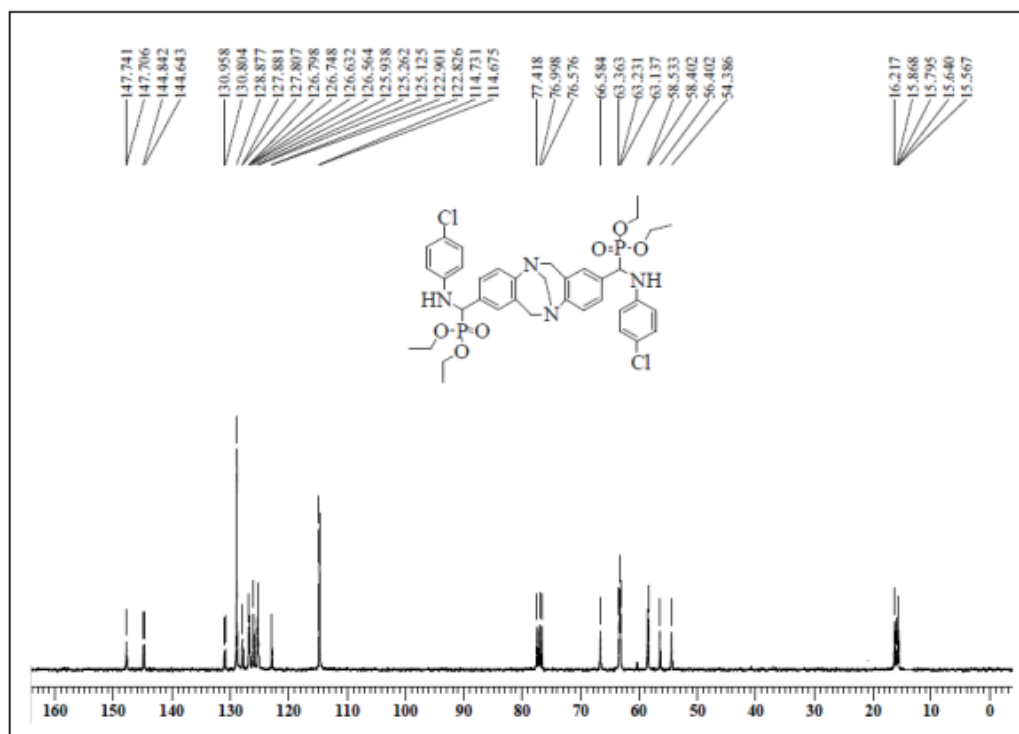
¹H NMR (500 MHz, CDCl₃) spectrum of compound 5e



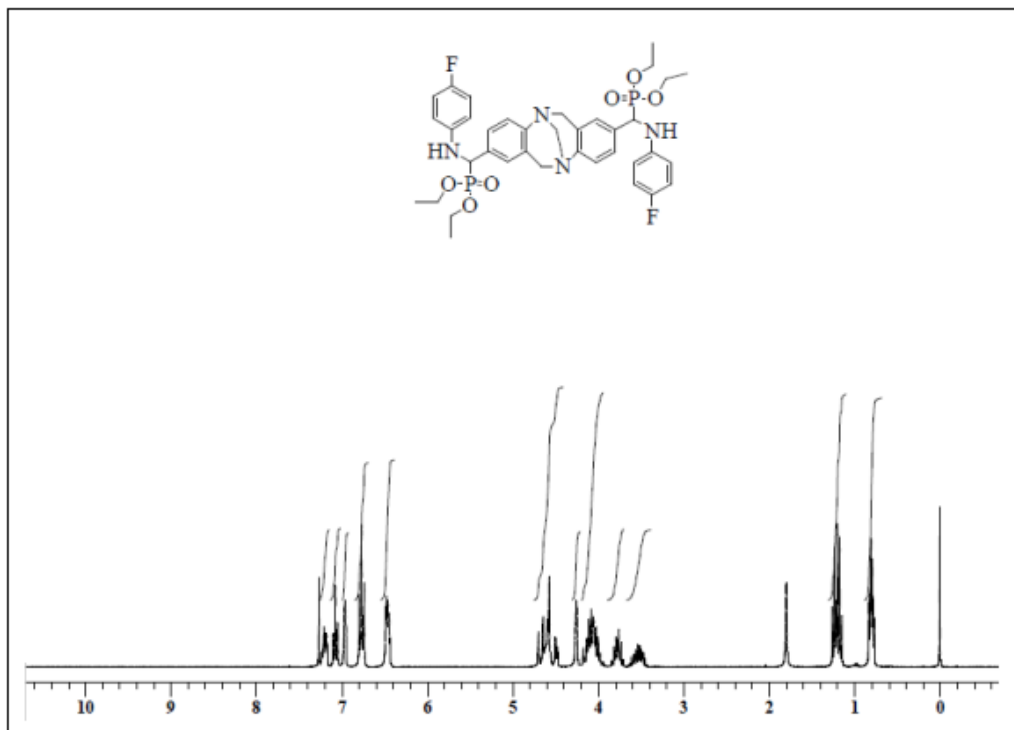
¹³C NMR (75 MHz, CDCl₃) spectrum of compound 5e



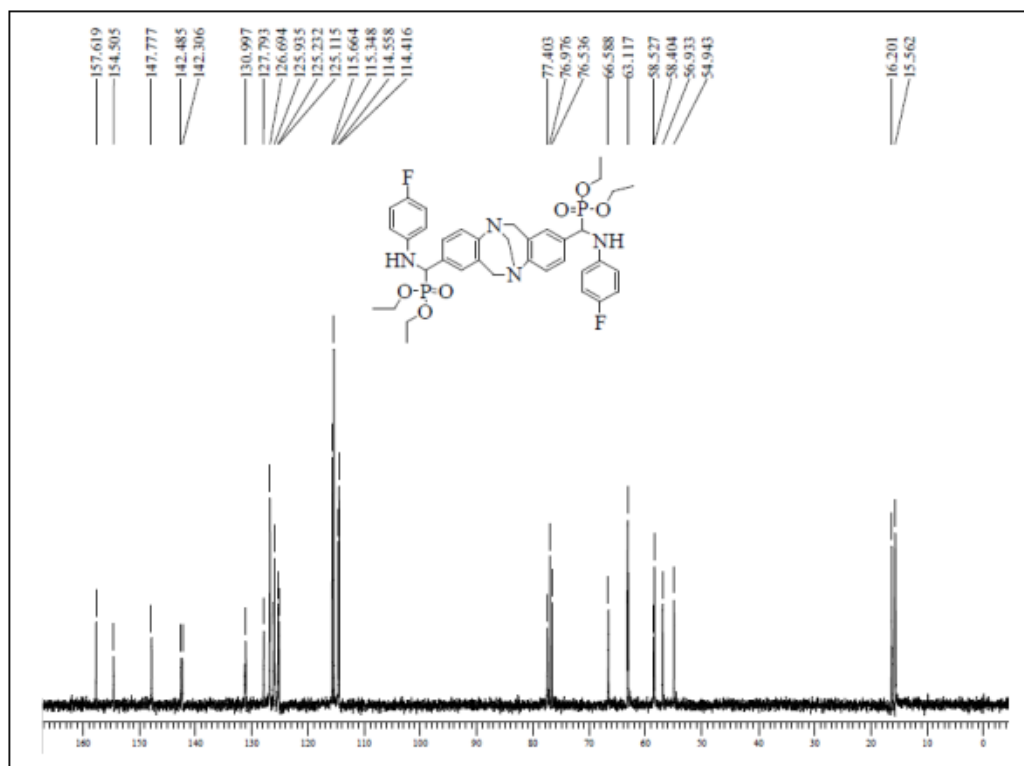
¹H NMR (500 MHz, CDCl₃) spectrum of compound 5f



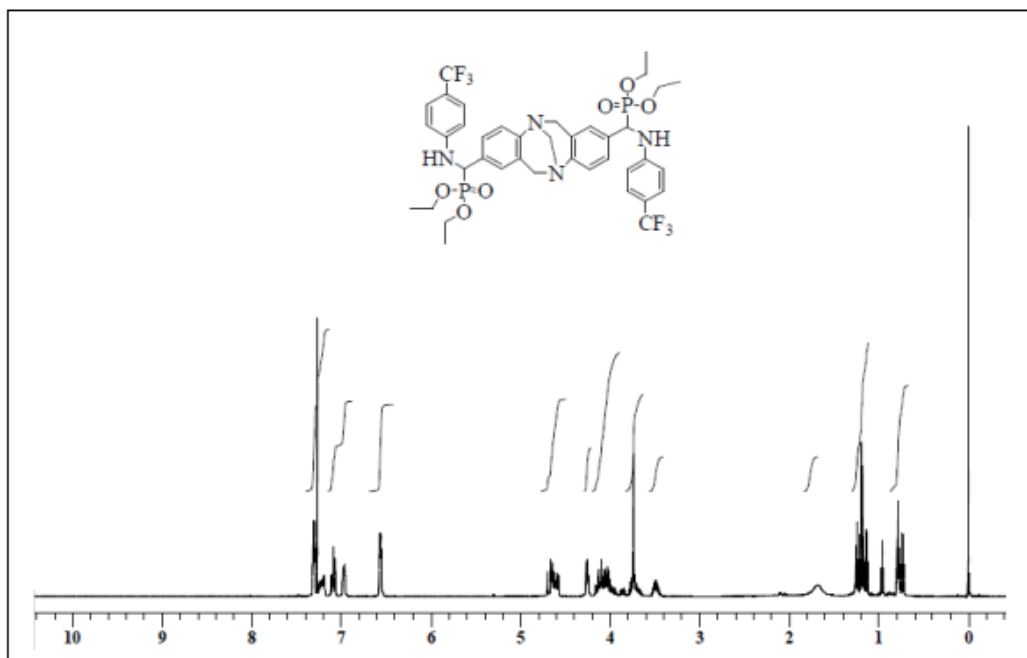
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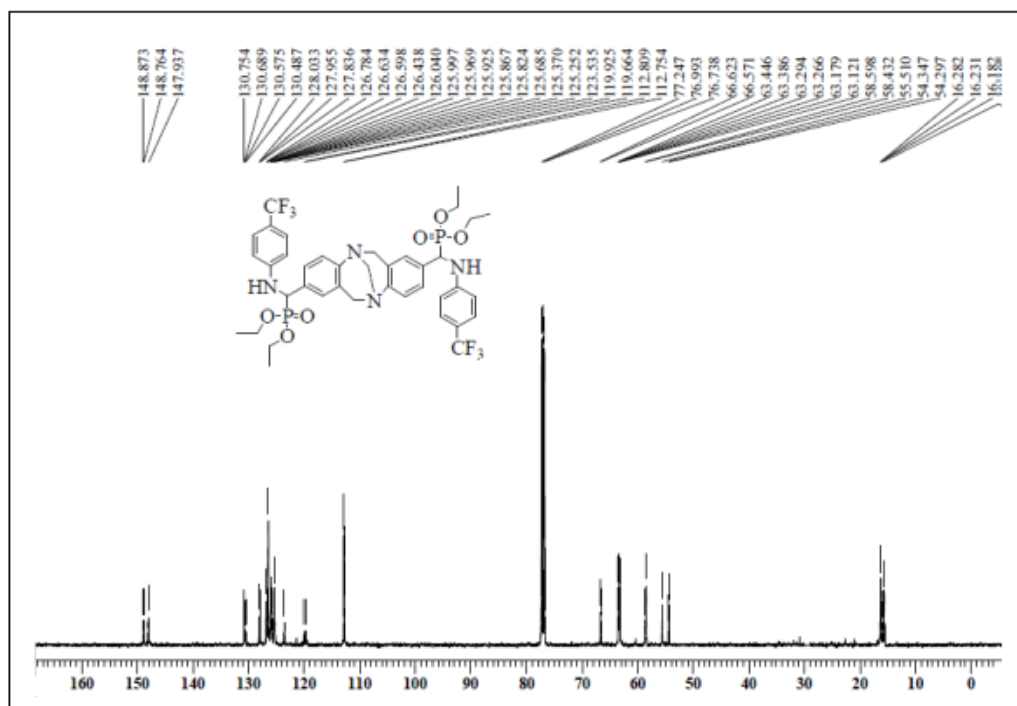
¹H NMR (300 MHz, CDCl₃) spectrum of compound 5g



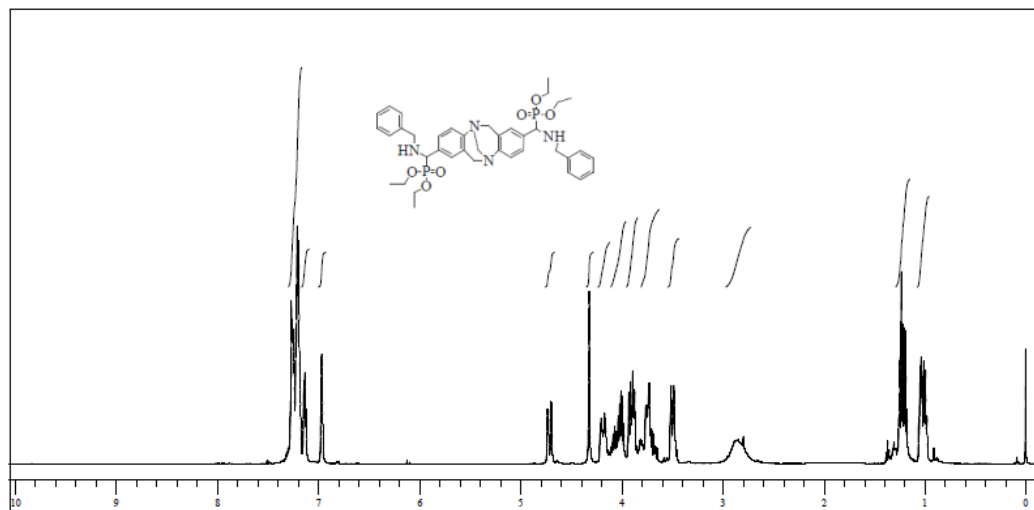
¹³C NMR (75 MHz, CDCl₃) spectrum of compound 5g



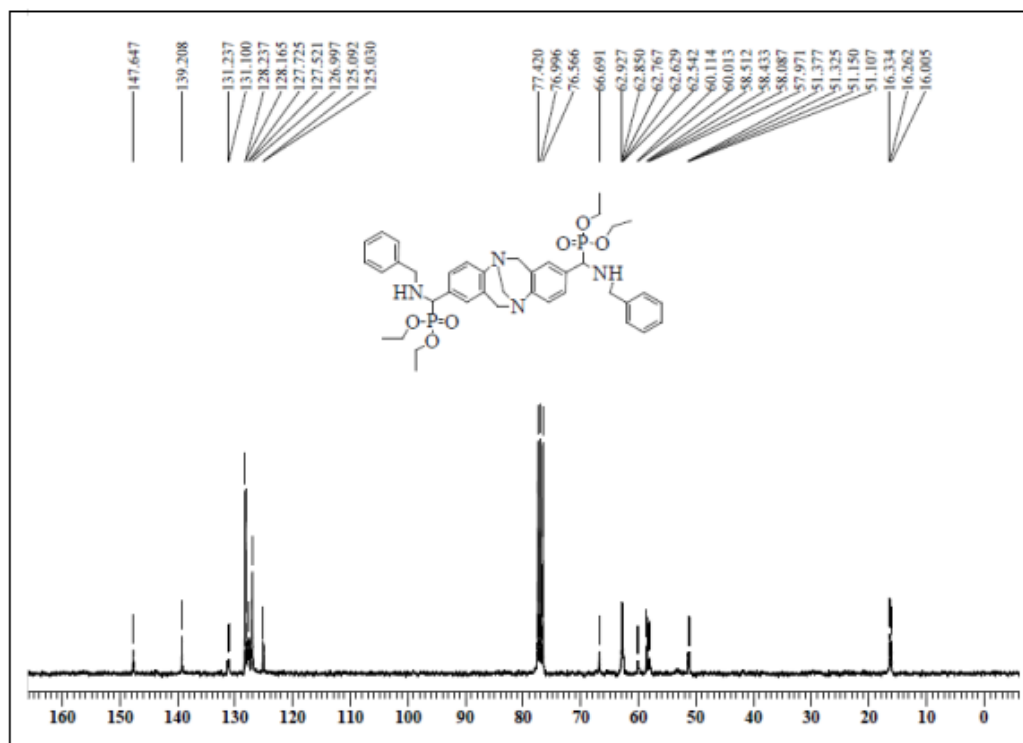
¹H NMR (500 MHz, CDCl₃) spectrum of compound 5h



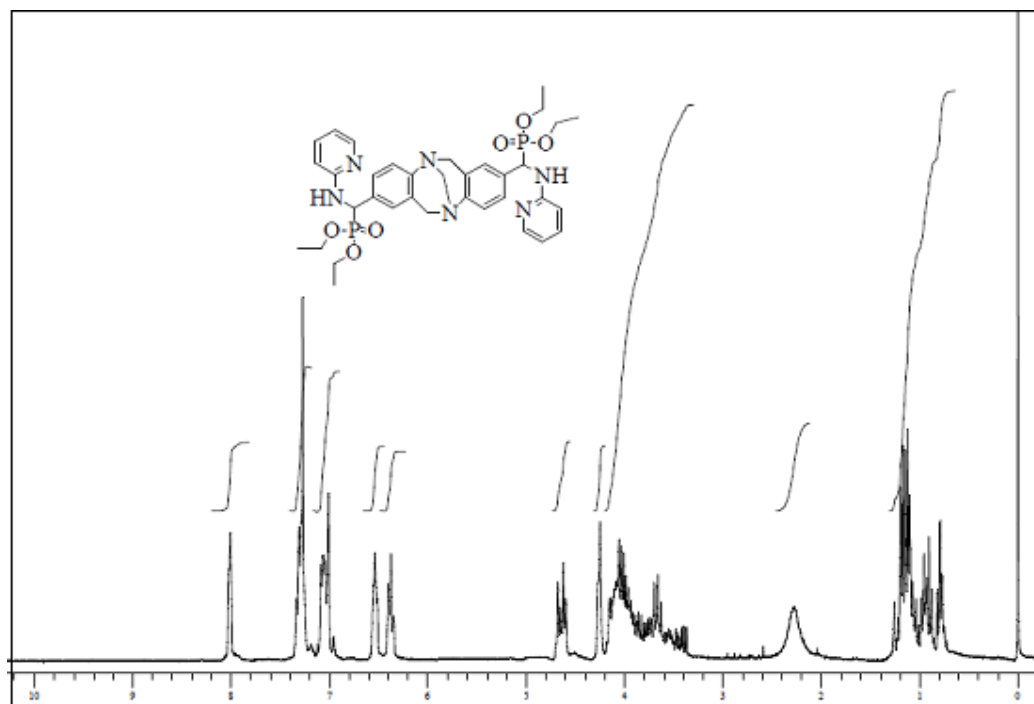
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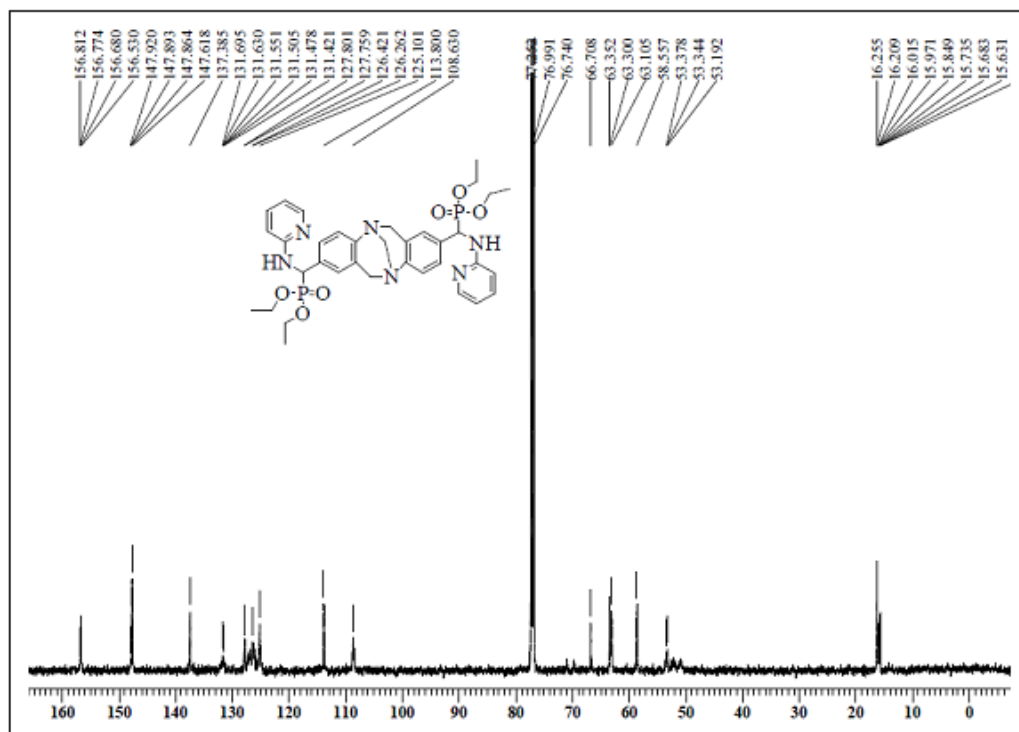
¹H NMR (500 MHz, CDCl₃) spectrum of compound 5i



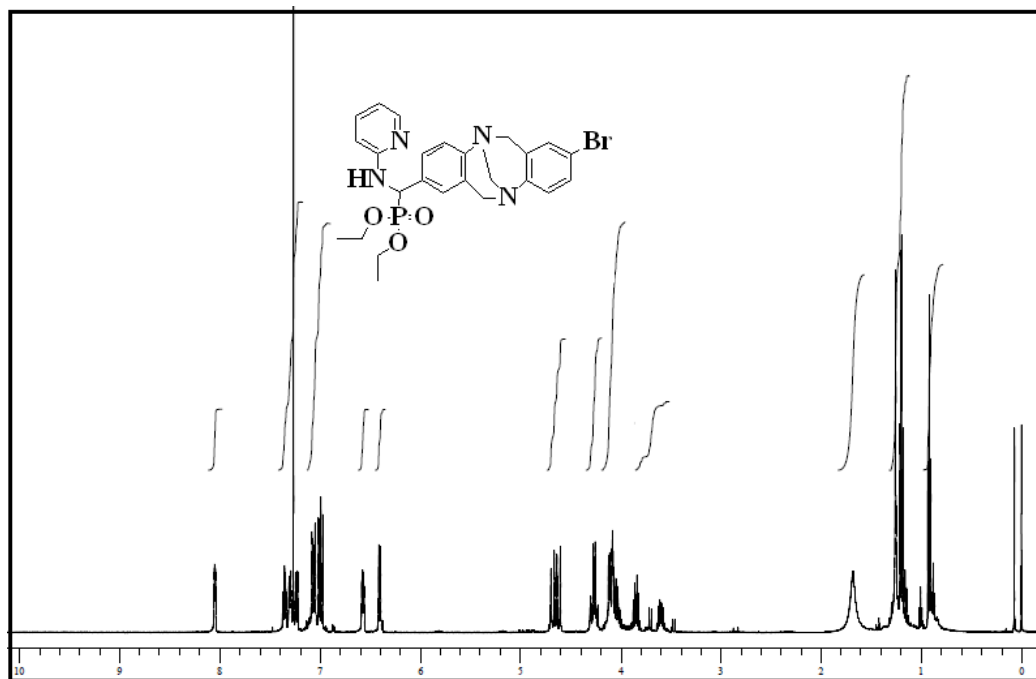
¹³C NMR (75 MHz, CDCl₃) spectrum of compound 5i



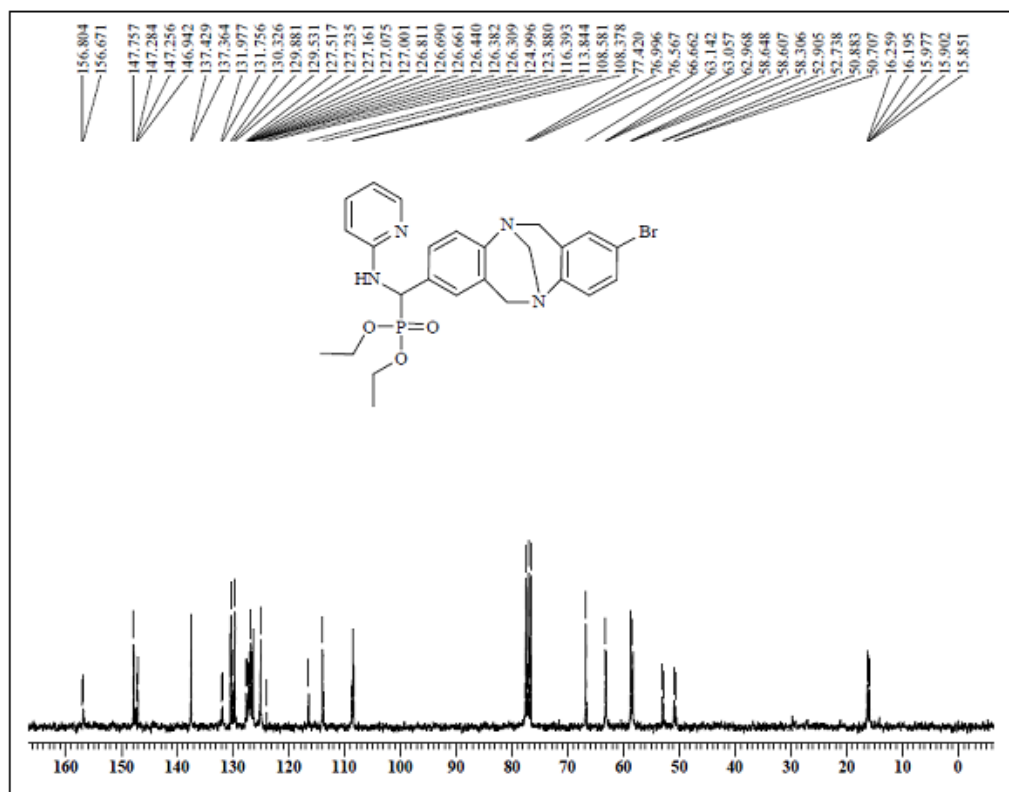
¹H NMR (300 MHz, CDCl₃) spectrum of compound 5j



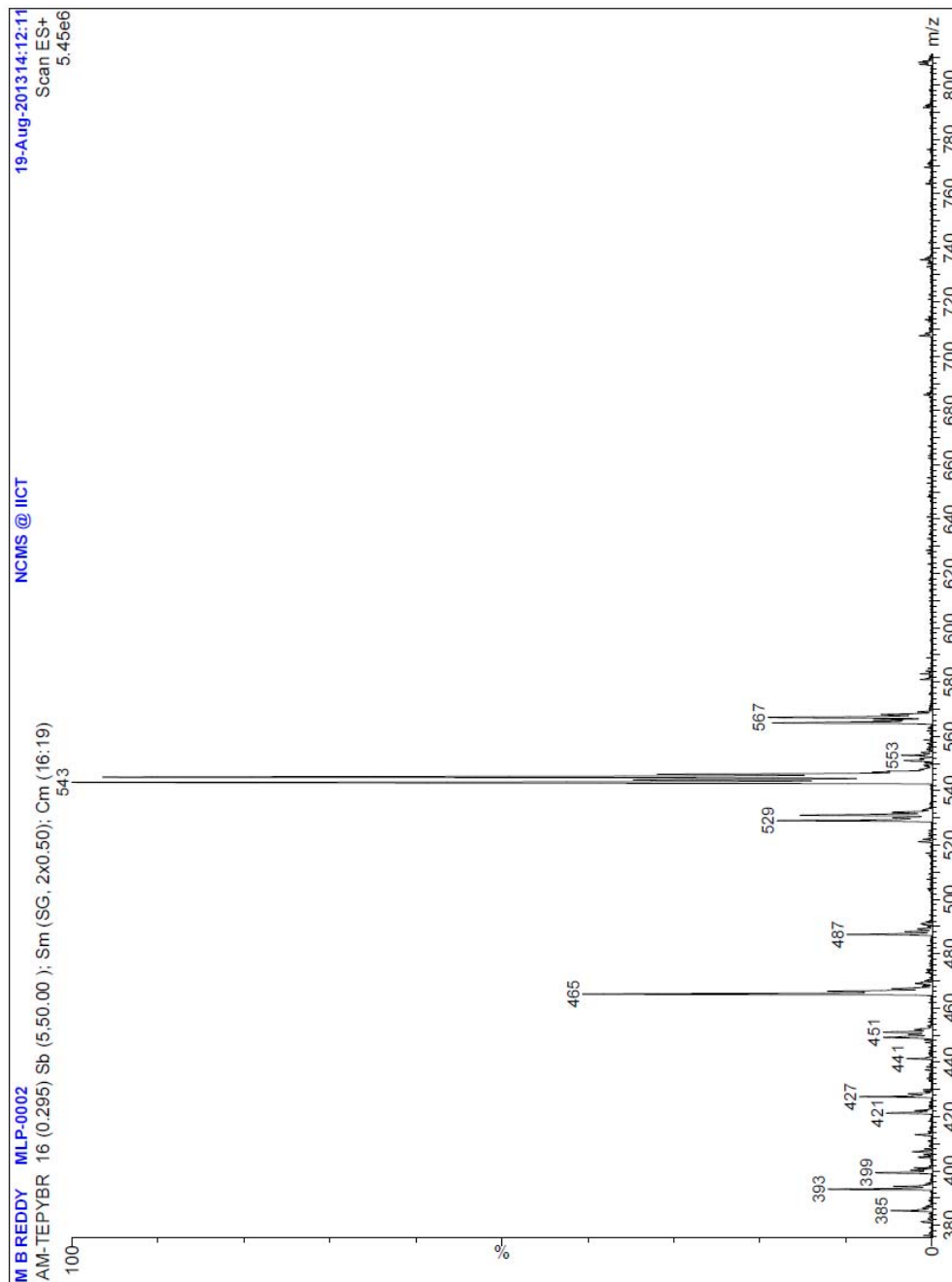
¹³C NMR (75 MHz, CDCl₃) spectrum of compound 5j



¹H NMR (300 MHz, CDCl₃) spectrum of compound 6

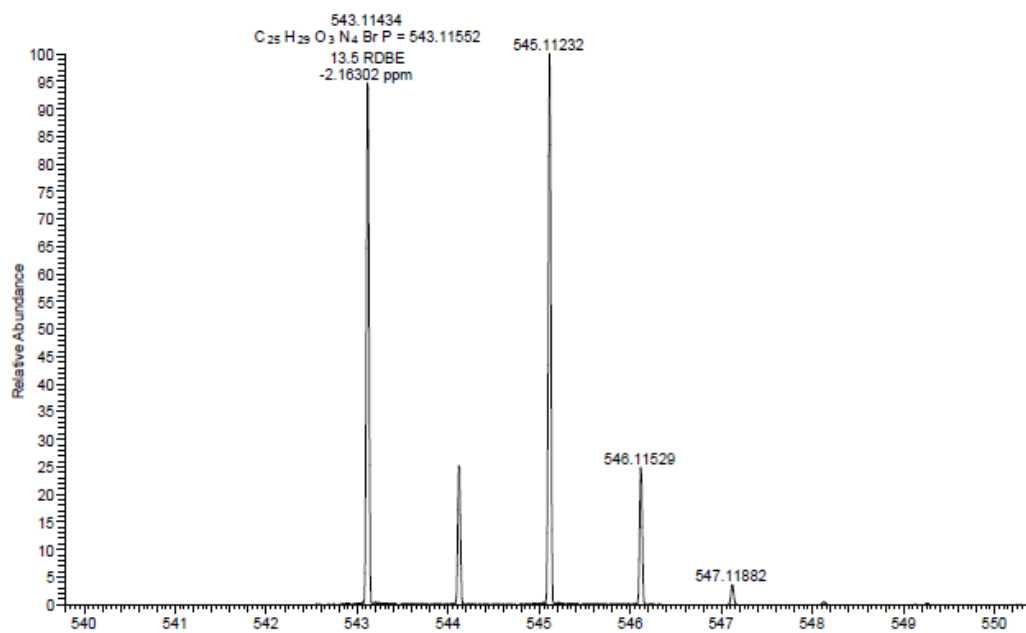


¹³C NMR (75 MHz, CDCl₃) spectrum of compound 6

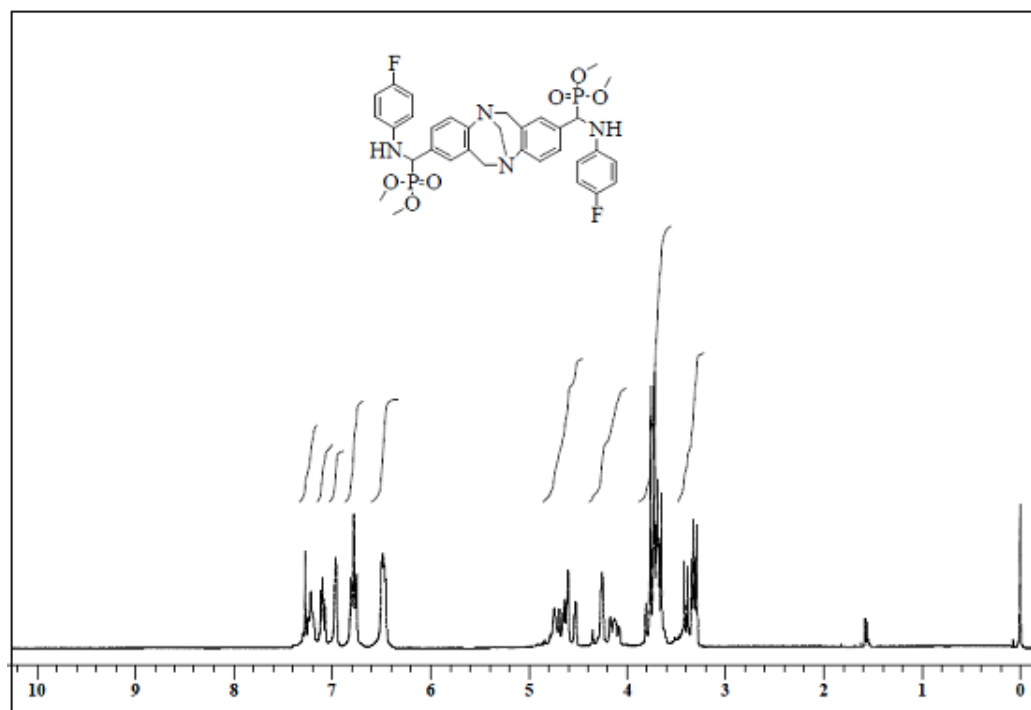


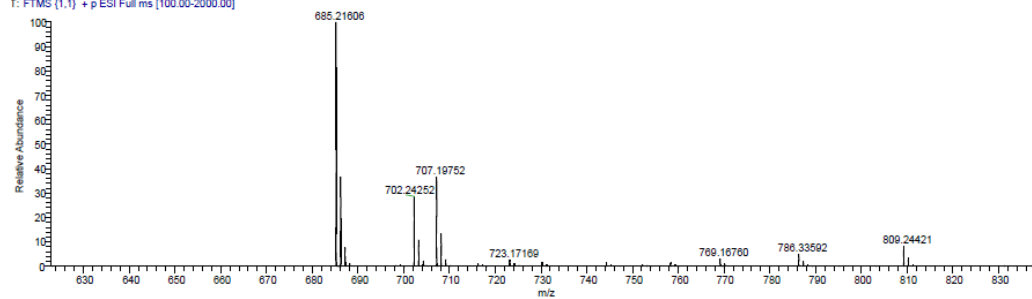
Mass Spectrum of compound 6

NATIONAL CENTRE FOR MASS SPECTROMETRY

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HRMS Spectrum of compound 6

¹H NMR (300 MHz, CDCl₃) spectrum of compound 8

National Centre for Mass Spectrometry
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Sample Name M S REDDY
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HRMS Spectrum of compound 8