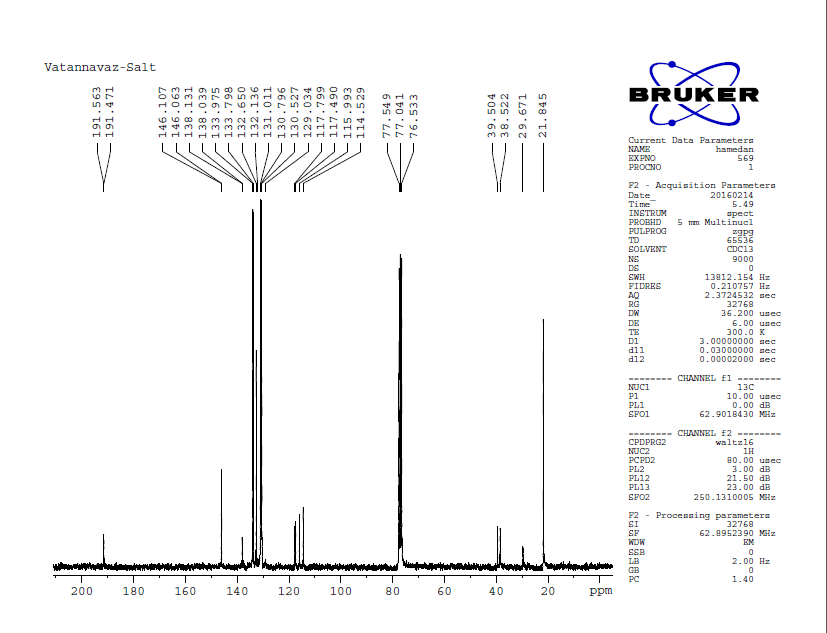
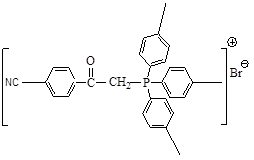
**Supplementary Material**

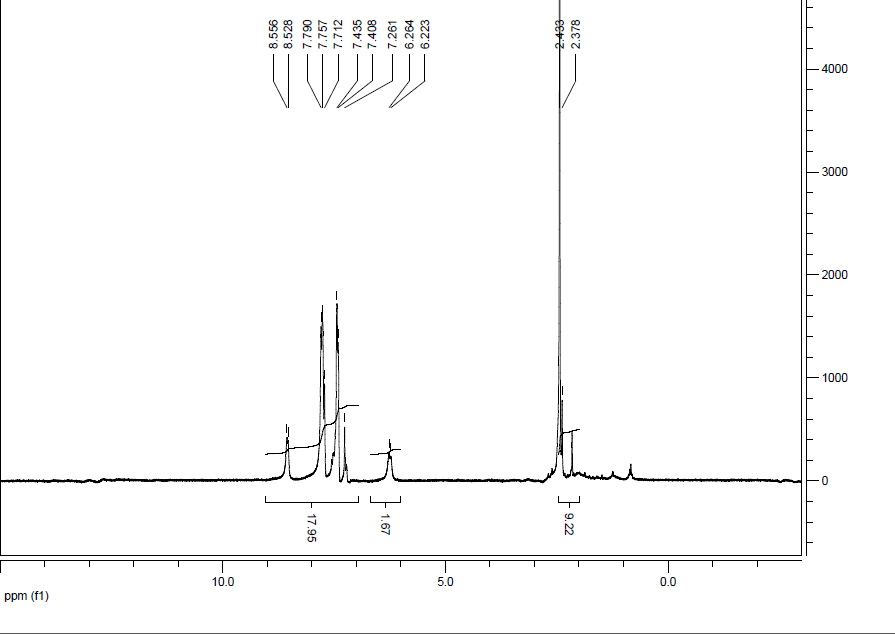
New stable phosphorus ylide (*p*-tolyl)3P=CHCOC6H4(*p*-CN) and its metal complexes: Crystal and molecular structure, theoretical study and antibacterial investigation

LEILA VATANNAVAZ, SEYYED JAVAD SABOUNCHEI\*, ASIEH SEDGHI, MEHDI BAYAT, KRISTOF VAN HECKE and ABDOLKARIM CHEHREGANI RAD

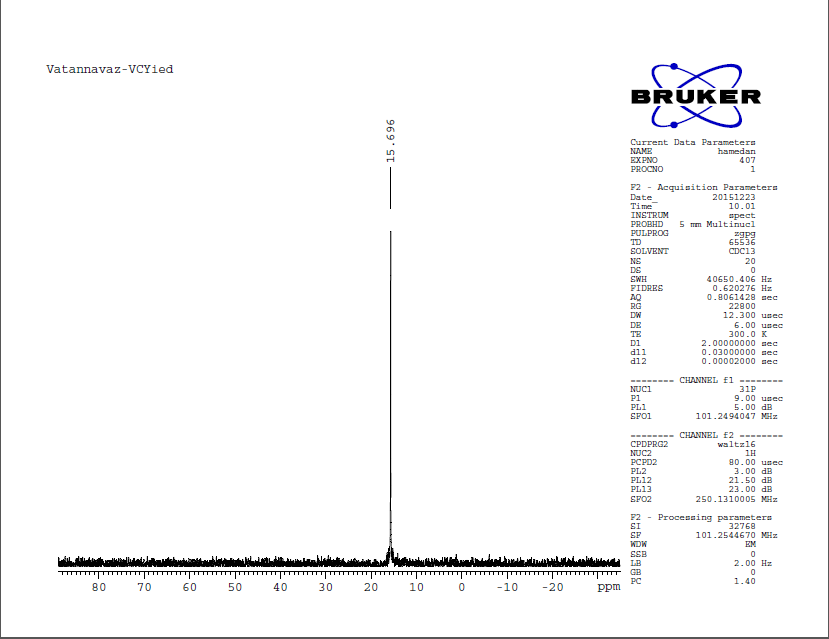
The 13C NMR spectrum synthesis of phosphonium salt (p-tolyl)3PCH2COC6H4 (p-CN) (**1**)



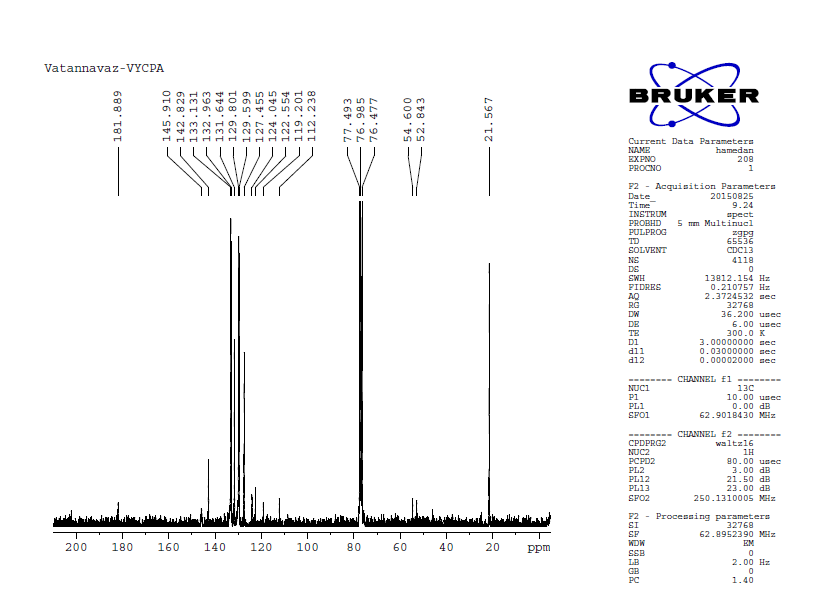
The 1H NMR spectrum synthesis of phosphonium salt (p-tolyl)3PCH2COC6H4 (p-CN) (**1**)



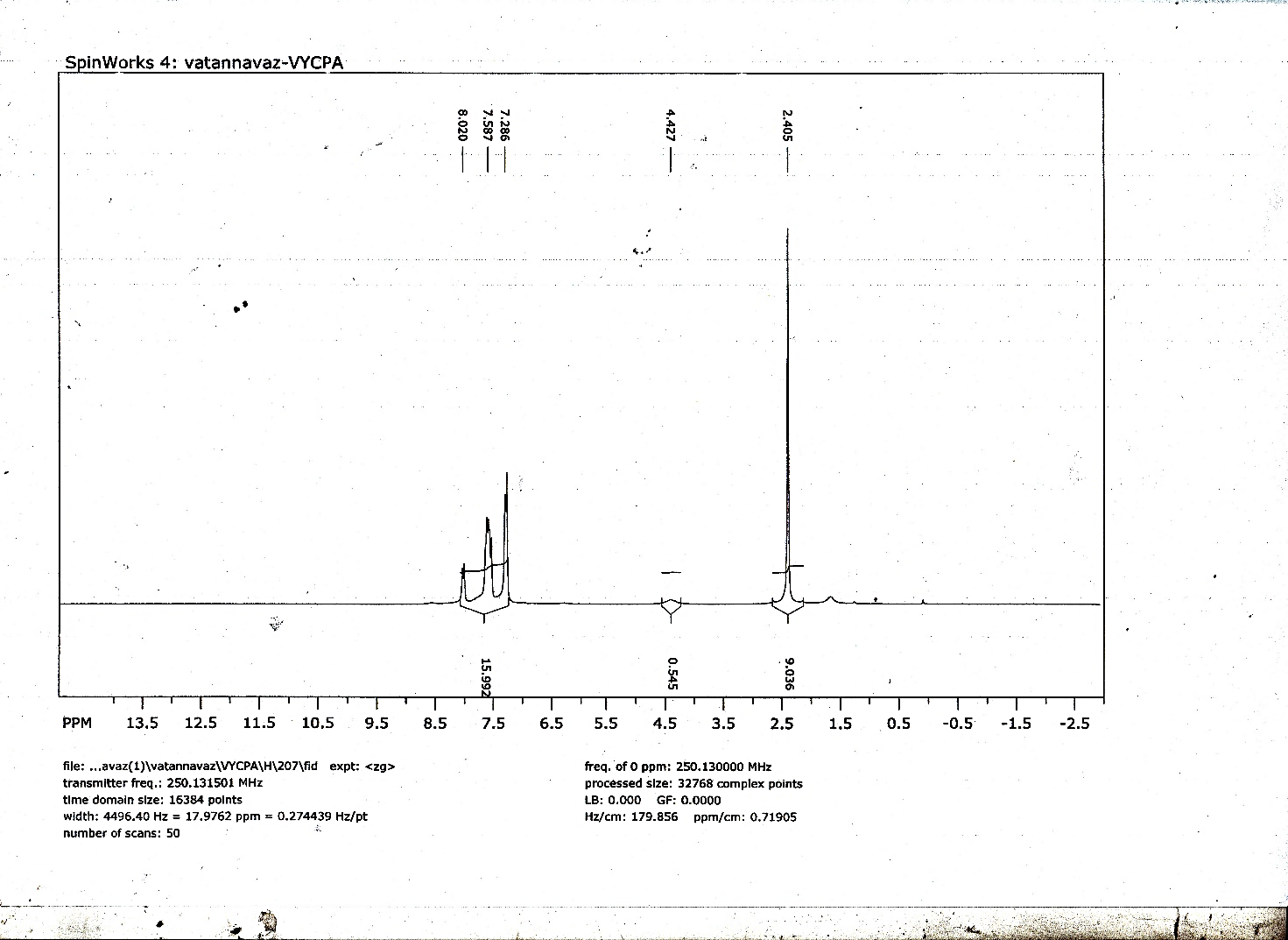
The 31P NMR spectrum synthesis of phosphorus ylide (p-tolyl)3P=CHCOC6H4(p-CN)(Y)(**2**)



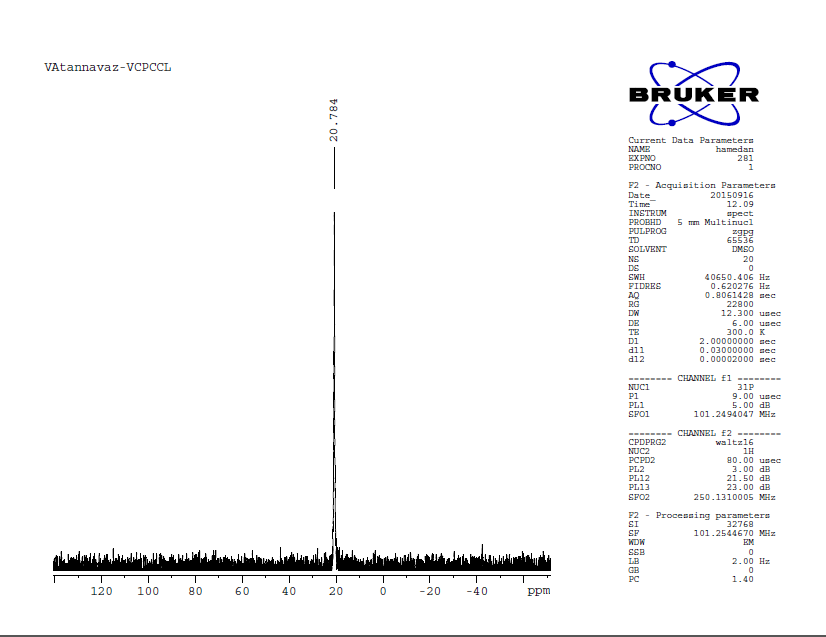
The 13C NMR spectrum synthesis of phosphorus ylide (p-tolyl)3P=CHCOC6H4(p-CN) (Y)(**2**)



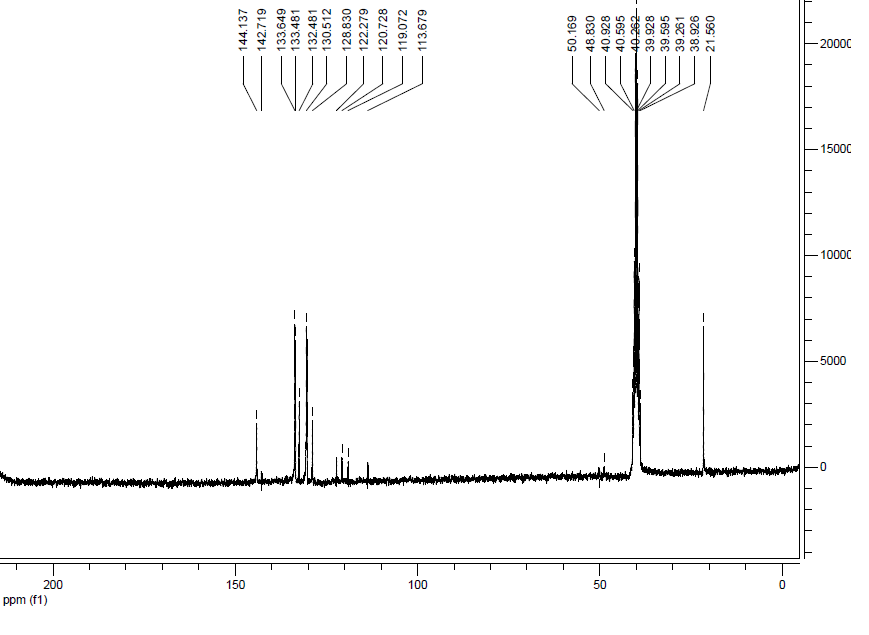
The 1H NMR spectrum synthesis of phosphorus ylide (p-tolyl)3P=CHCOC6H4(p-CN)(Y)(**2**)



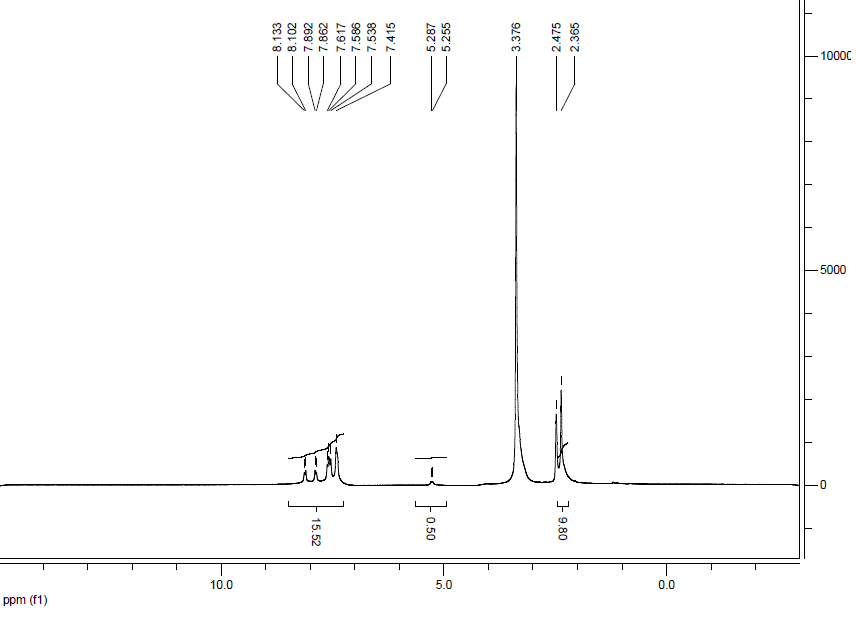
The 31P NMR spectrum synthesis of phosphorus [Y→HgCl2]2 (**3**)

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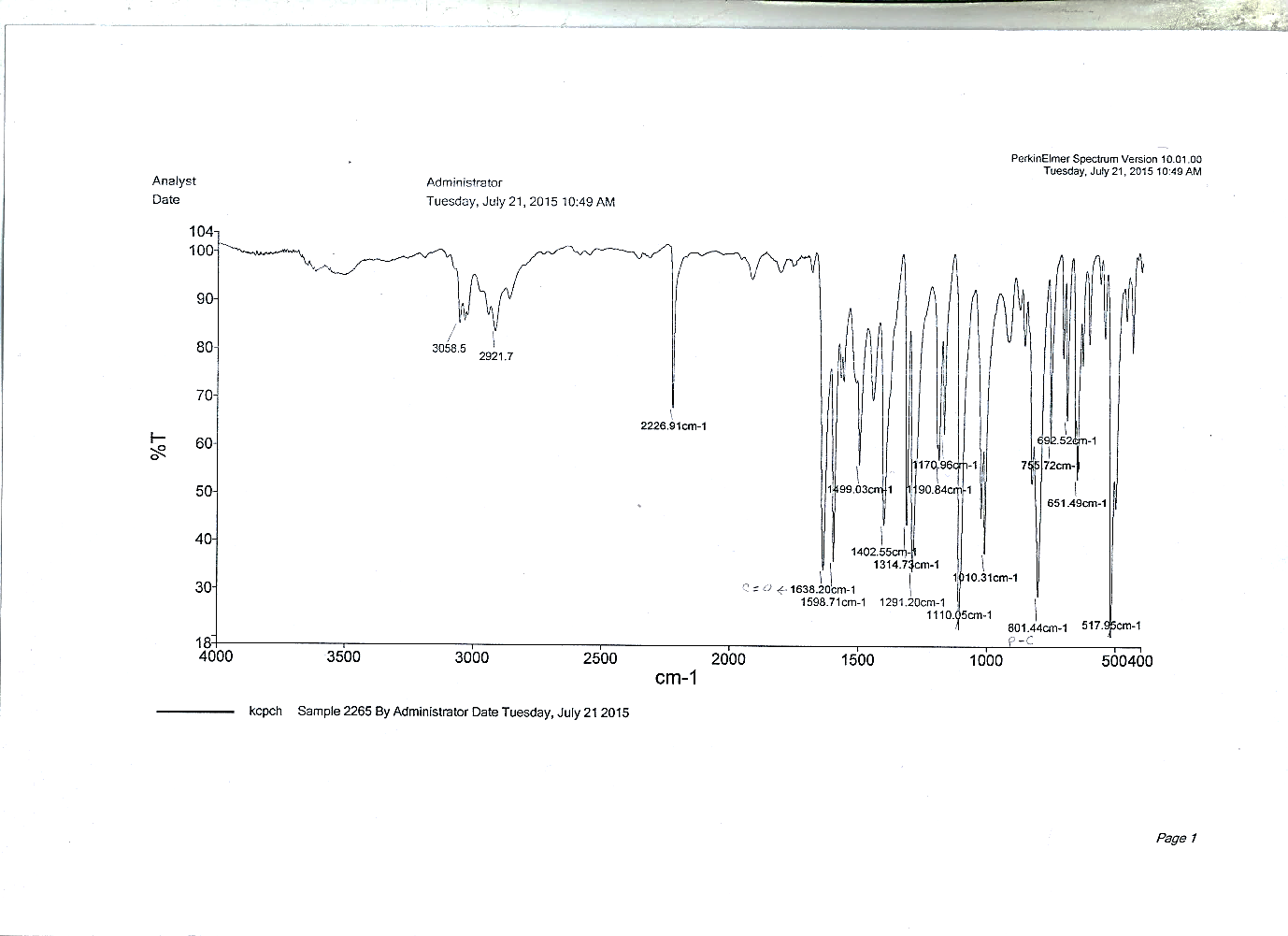
The 13C NMR spectrum synthesis of phosphorus [Y→HgCl2]2 (**3**)



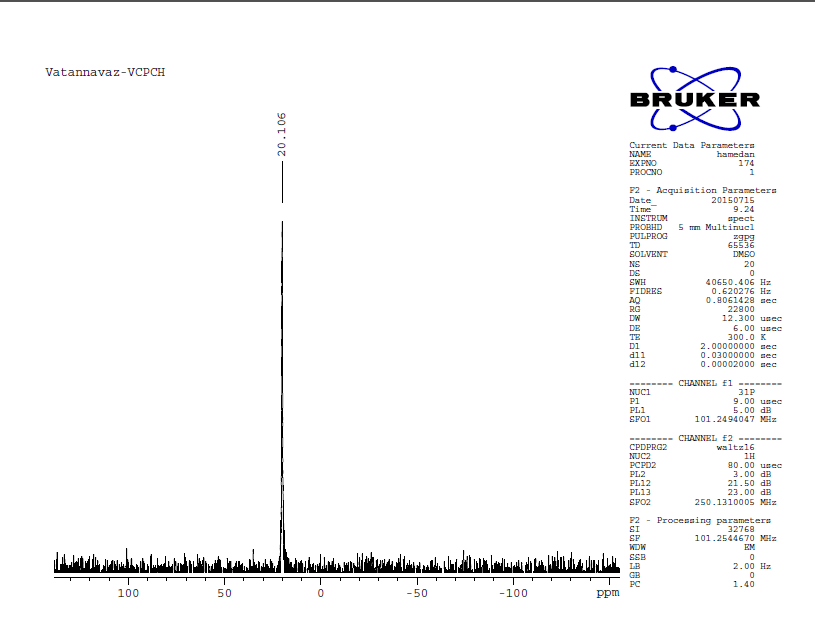
The 1H NMR spectrum synthesis of phosphorus [Y→HgCl2]2 (**3**)



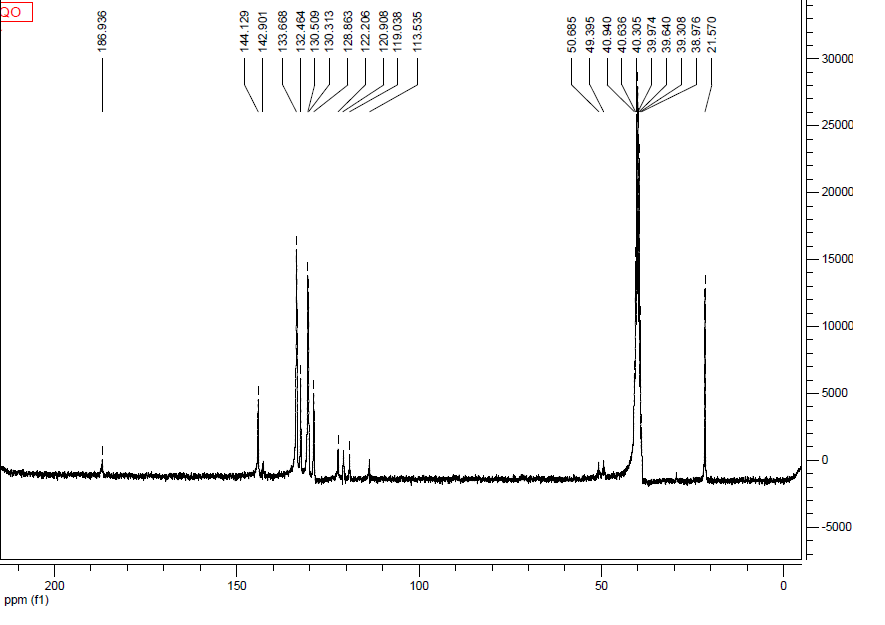
TheIR spectrum synthesis of phosphorus [Y→HgBr2]2 (**4**)



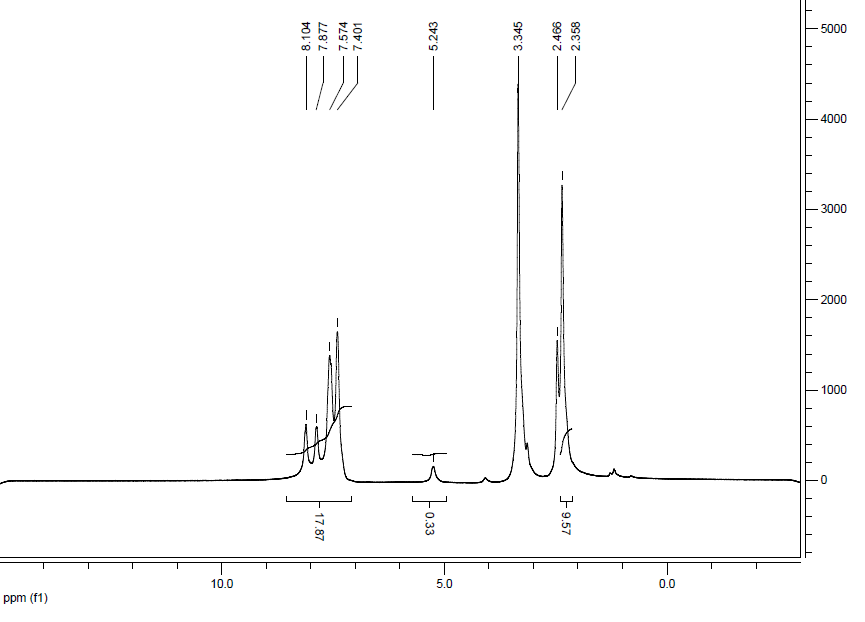
The 31P NMR spectrum synthesis **of phosphorus [Y→**HgBr2]2 (**4**)



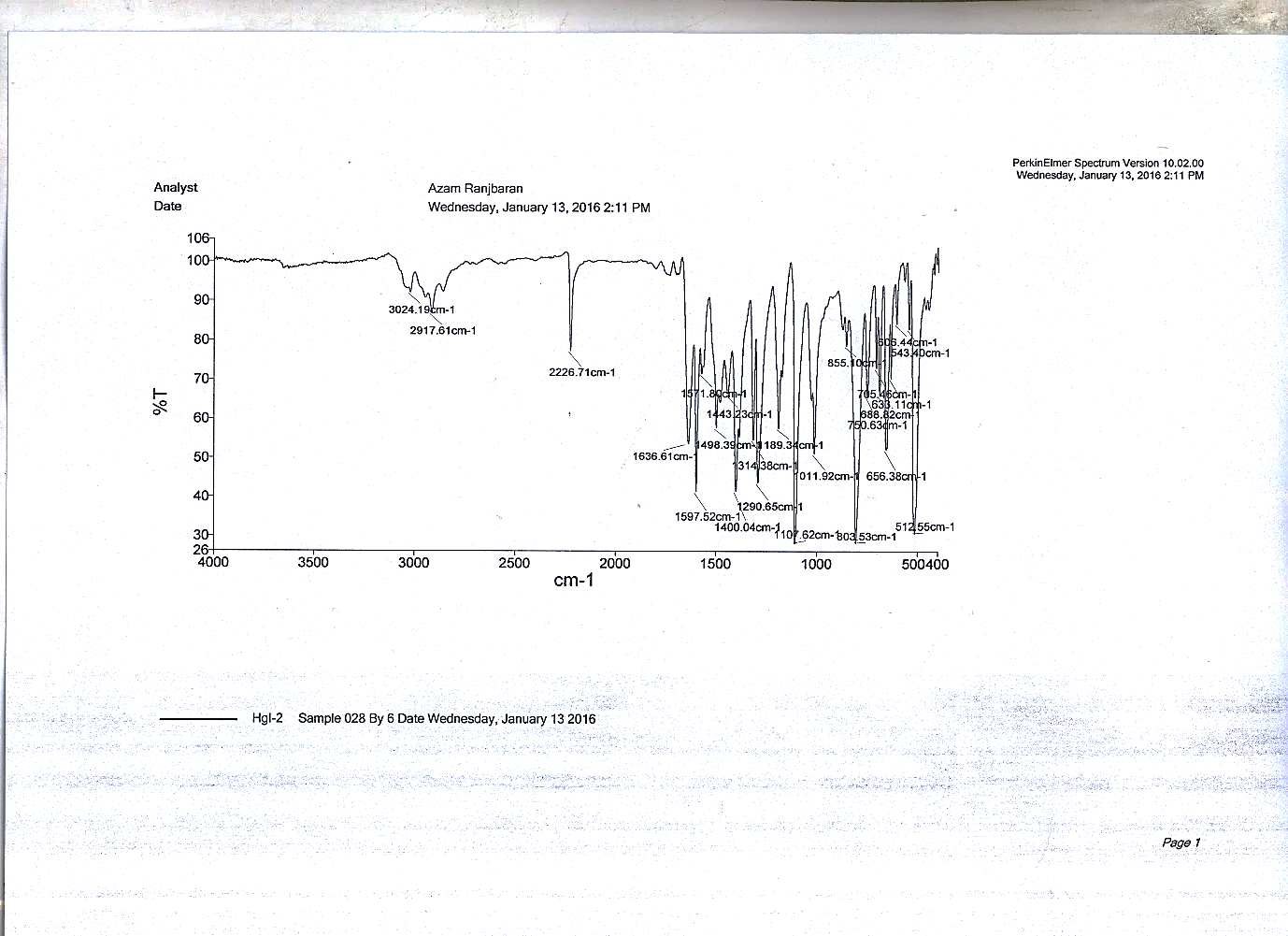
The 13C NMR spectrum synthesis of phosphorus [Y→HgBr2]2 (**4**)



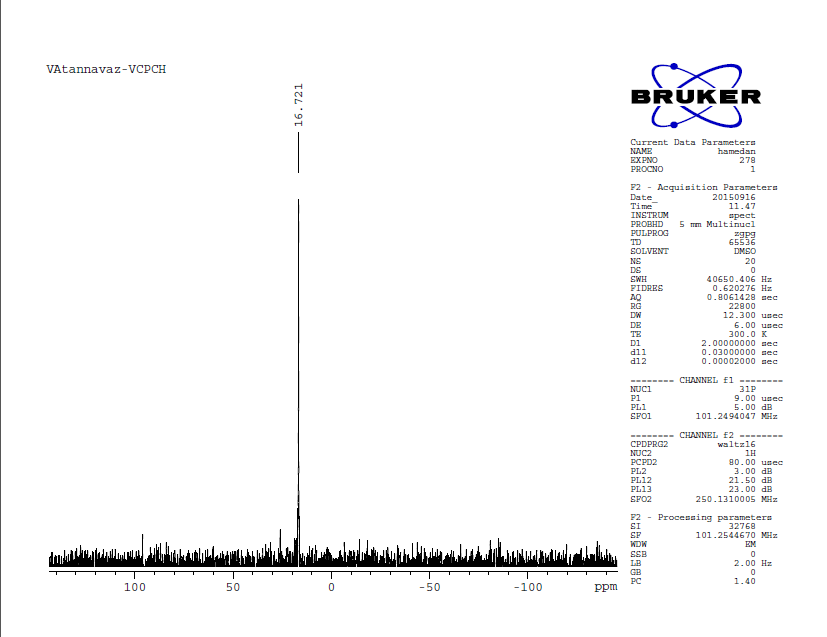
The 1H NMR spectrum synthesis of phosphorus [Y→HgBr2]2 (**4**)



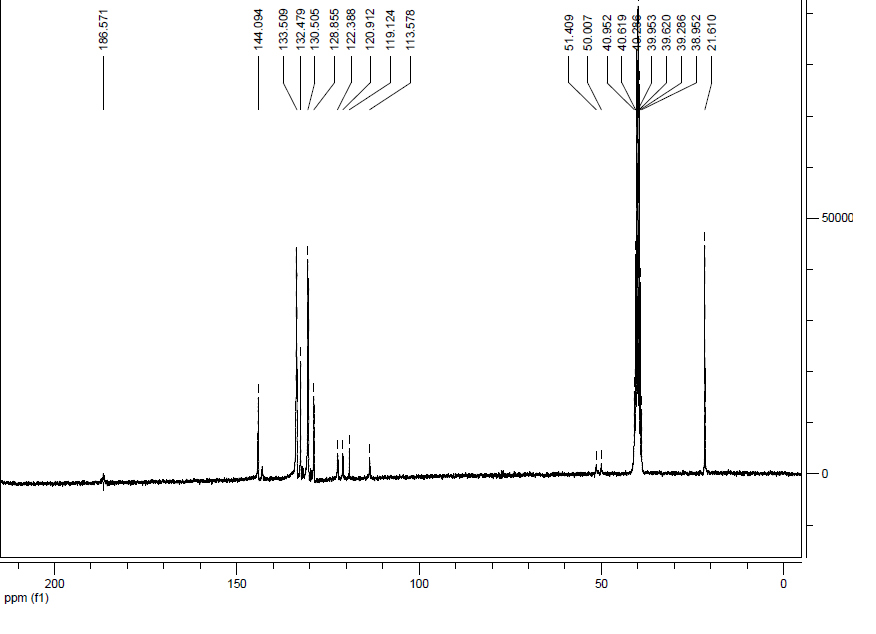
TheIR spectrum synthesis of phosphorus [Y→HgI2]2 (**5**)



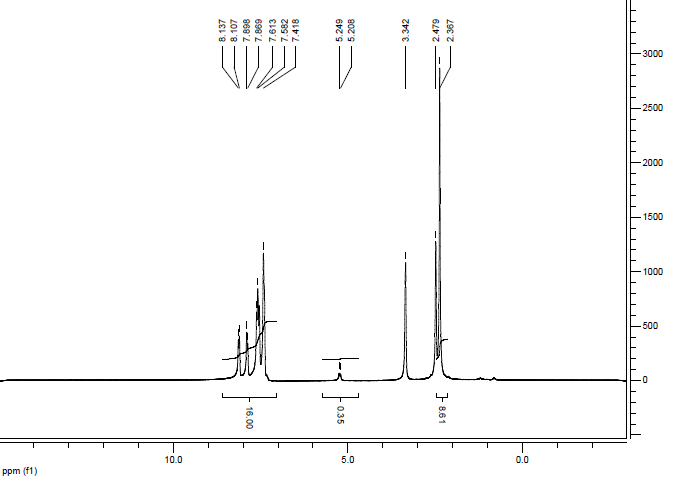
The 31P NMR spectrum synthesis of phosphorus [Y→HgI2]2 (**5**)



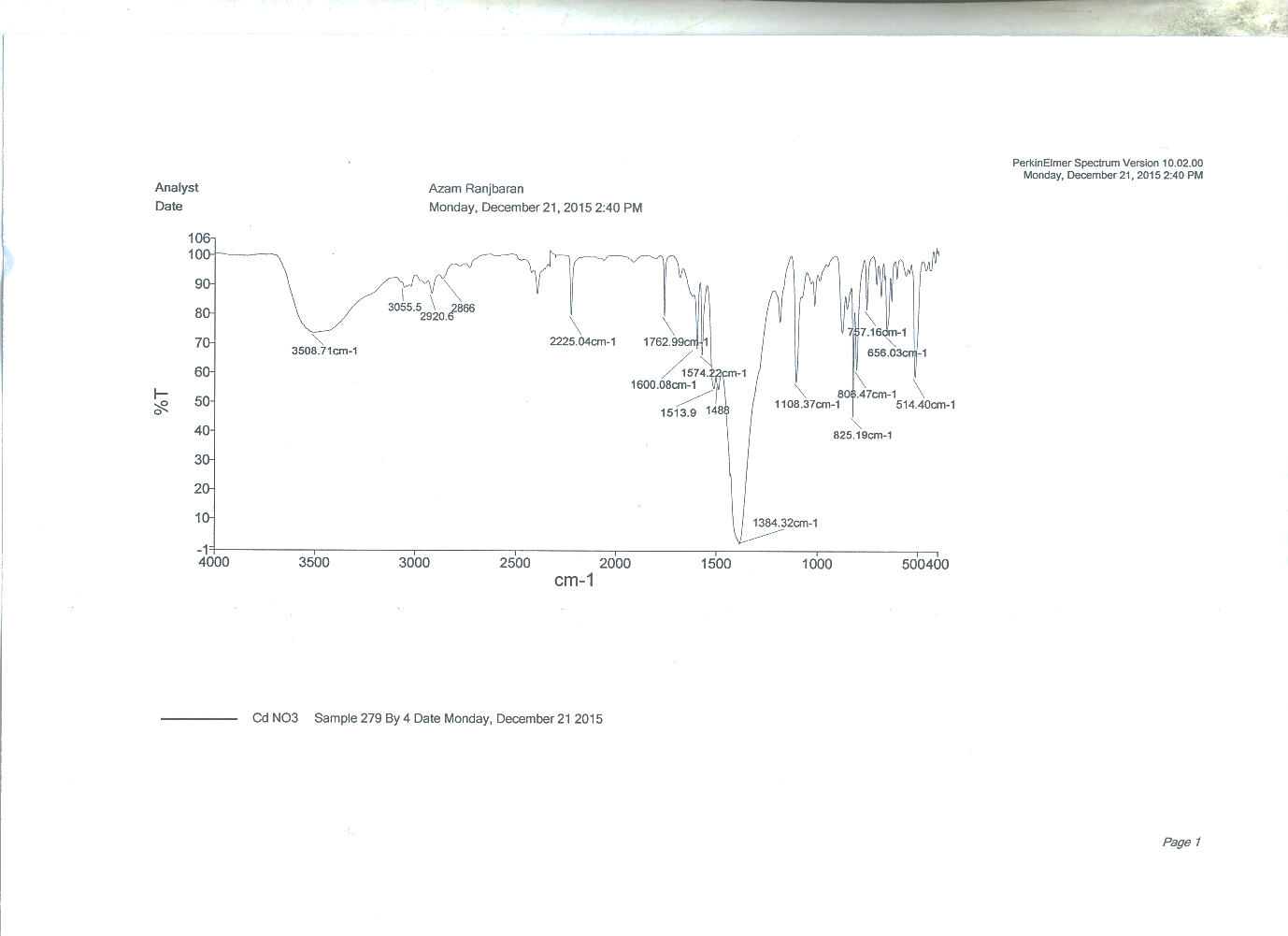
The 13C NMR spectrum synthesis of phosphorus [Y→HgI2]2 (**5**)



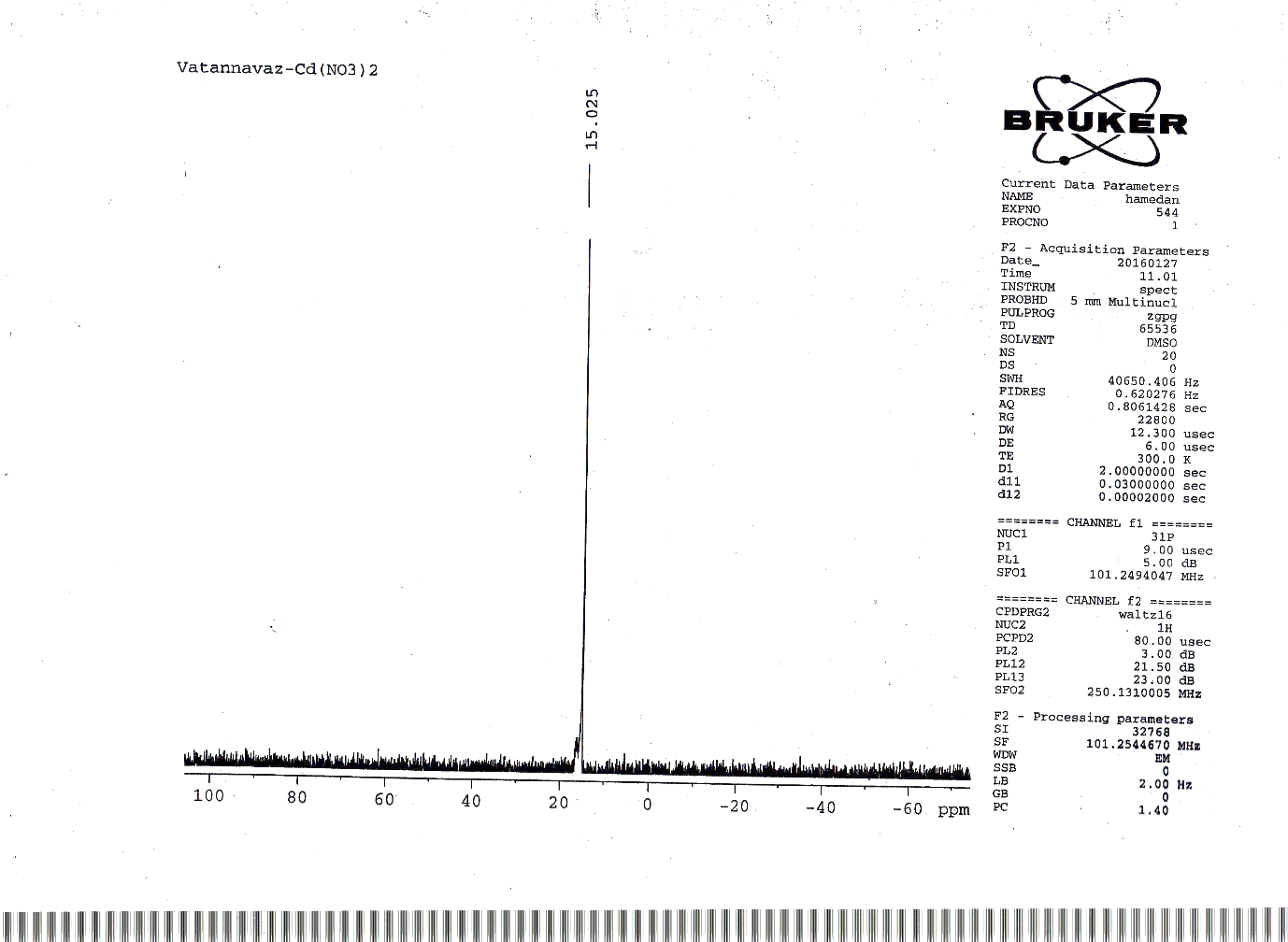
The 1H NMR spectrum synthesis of phosphorus [Y→HgI2]2 (**5**)



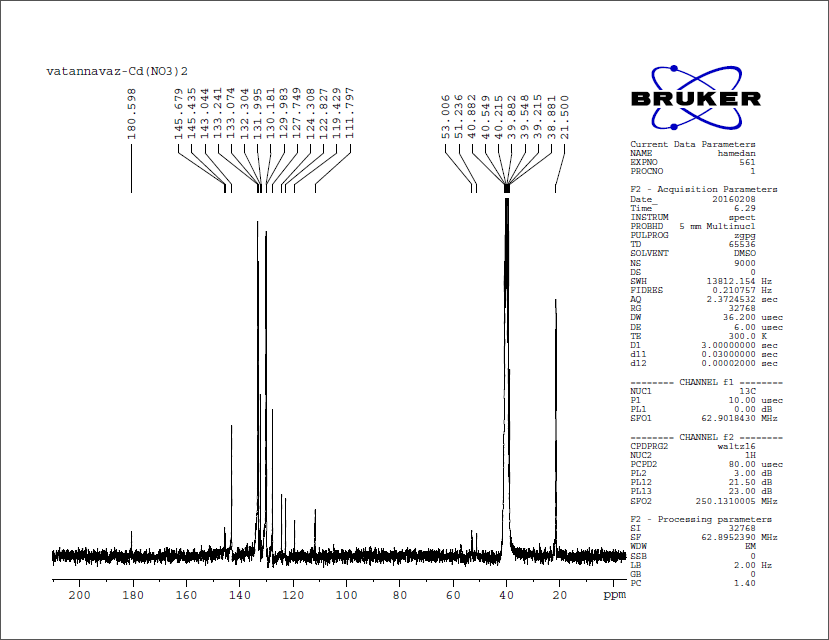
TheIR spectrum synthesis of phosphorus [Y→Cd(NO3)]2 (**6**)



The 31P NMR spectrum synthesis of phosphorus [Y→Cd(NO3)]2 (**6**)



The 13C NMR spectrum synthesis of phosphorus [Y→Cd(NO3)]2 (**6**)



The 1H NMR spectrum synthesis of phosphorus [Y→Cd(NO3)]2 (**6**)

