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## SUPPORTING INFORMATION

# α-Dialkylamino *N,N*-diisobutylacetamides: A new class of anion exchanger with intramolecular buffering properties

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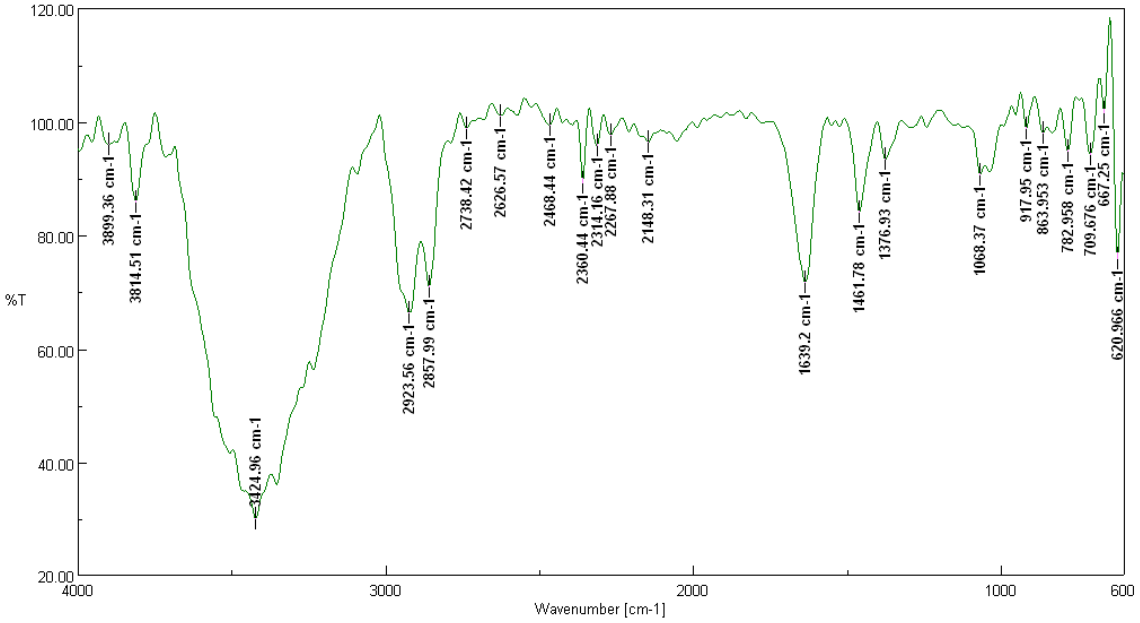



**Fig. 8** (a) IR spectra of organic phase containing **1** before contact.

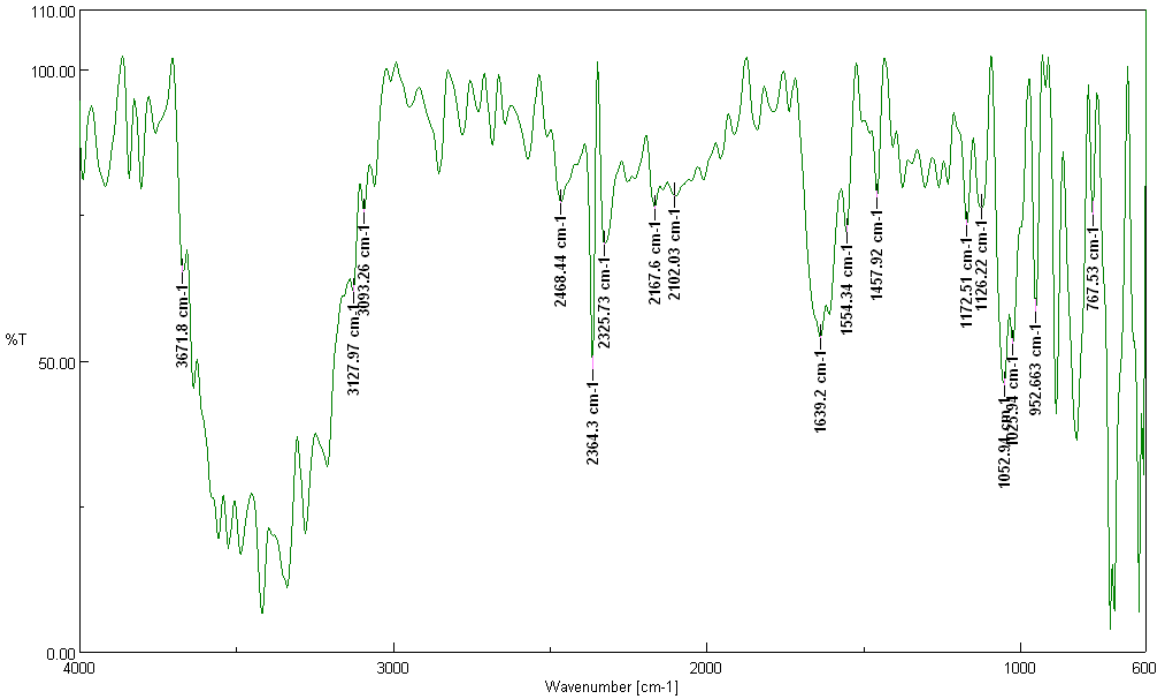



**Fig. 8** (b) IR spectra of loaded organic phase (**1** and molybdate).

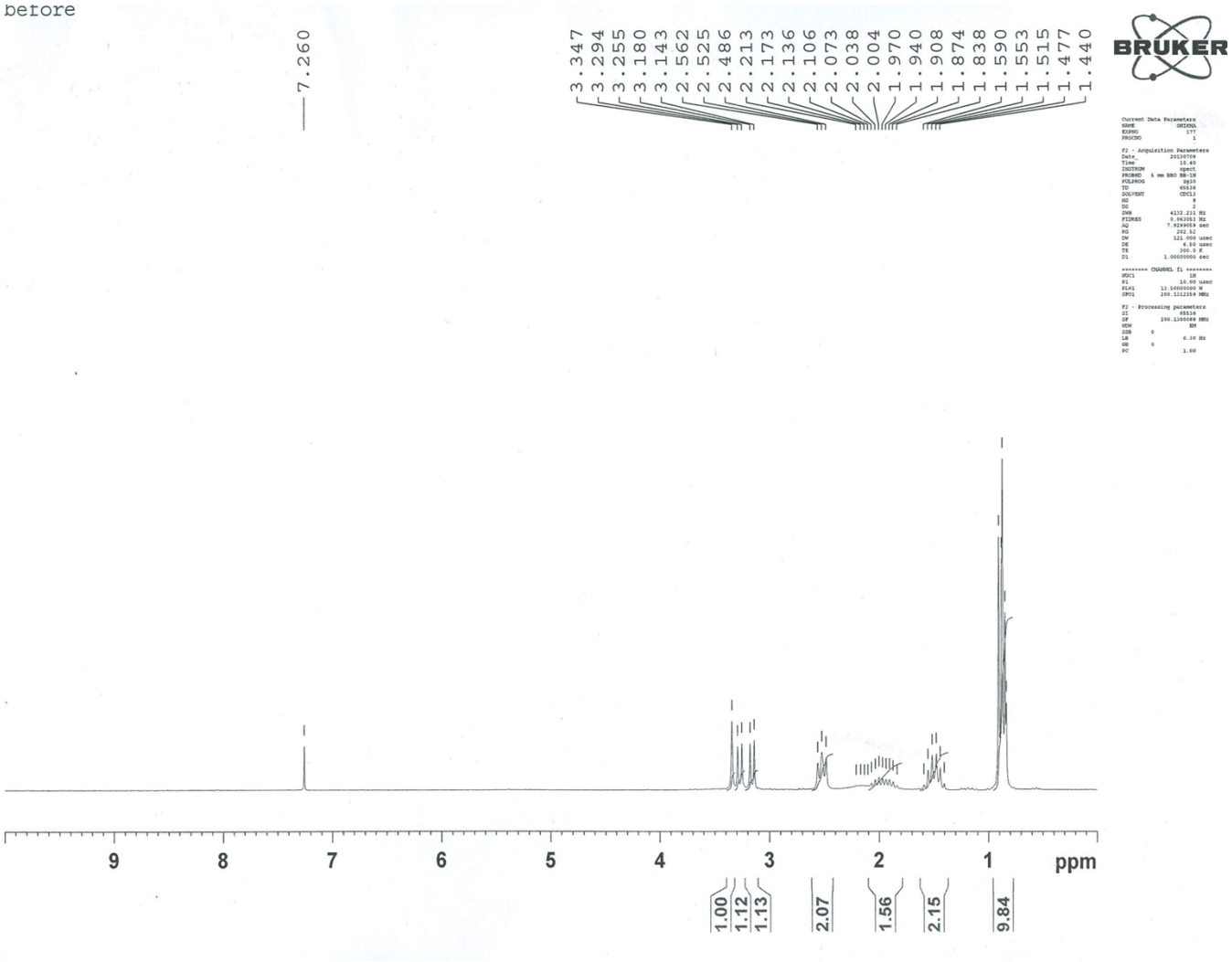



**Fig. 9** (a) $^{1}$H NMR of α-dipropylamino *N,N'*-diisobutylacetamide **1.**

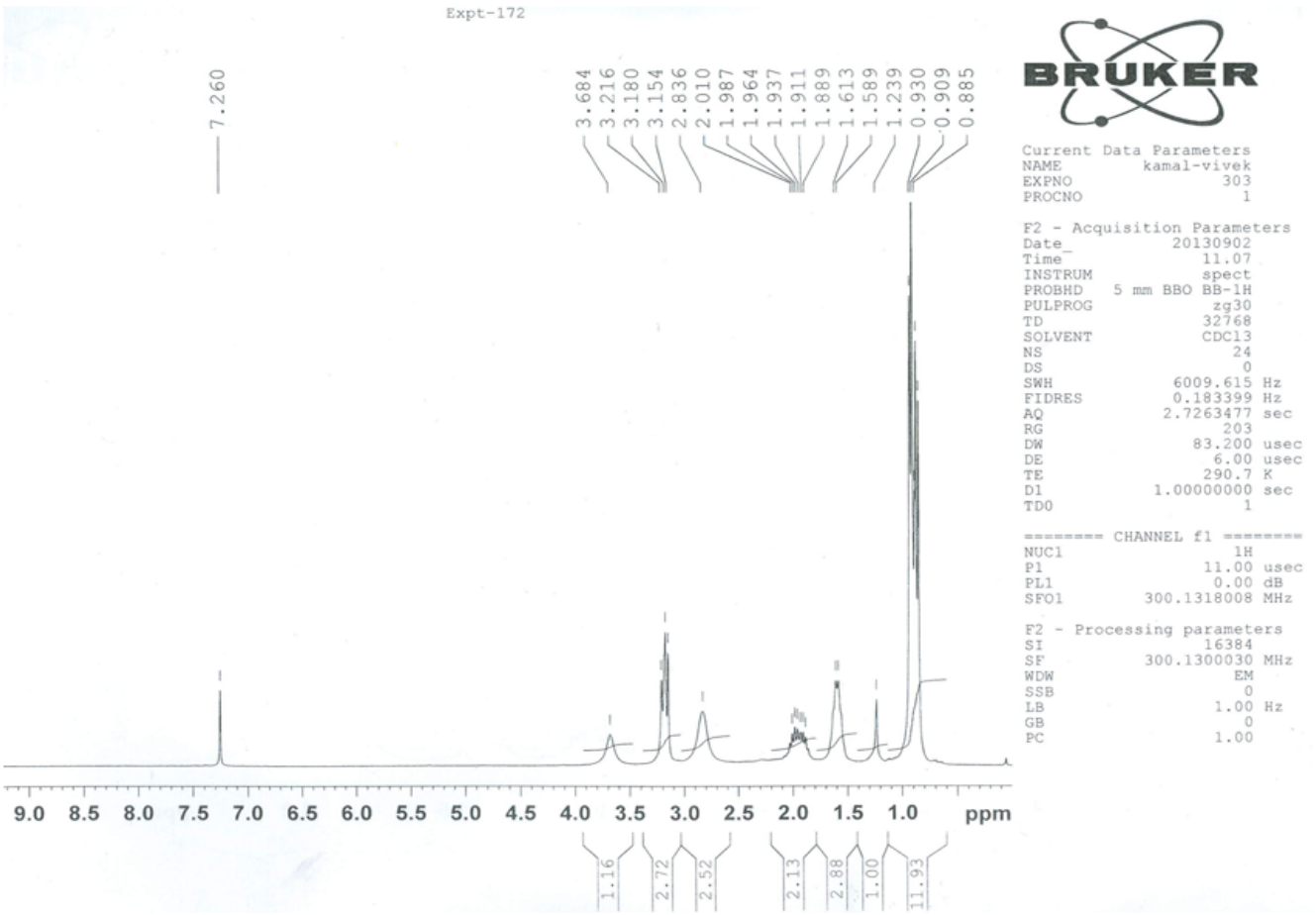
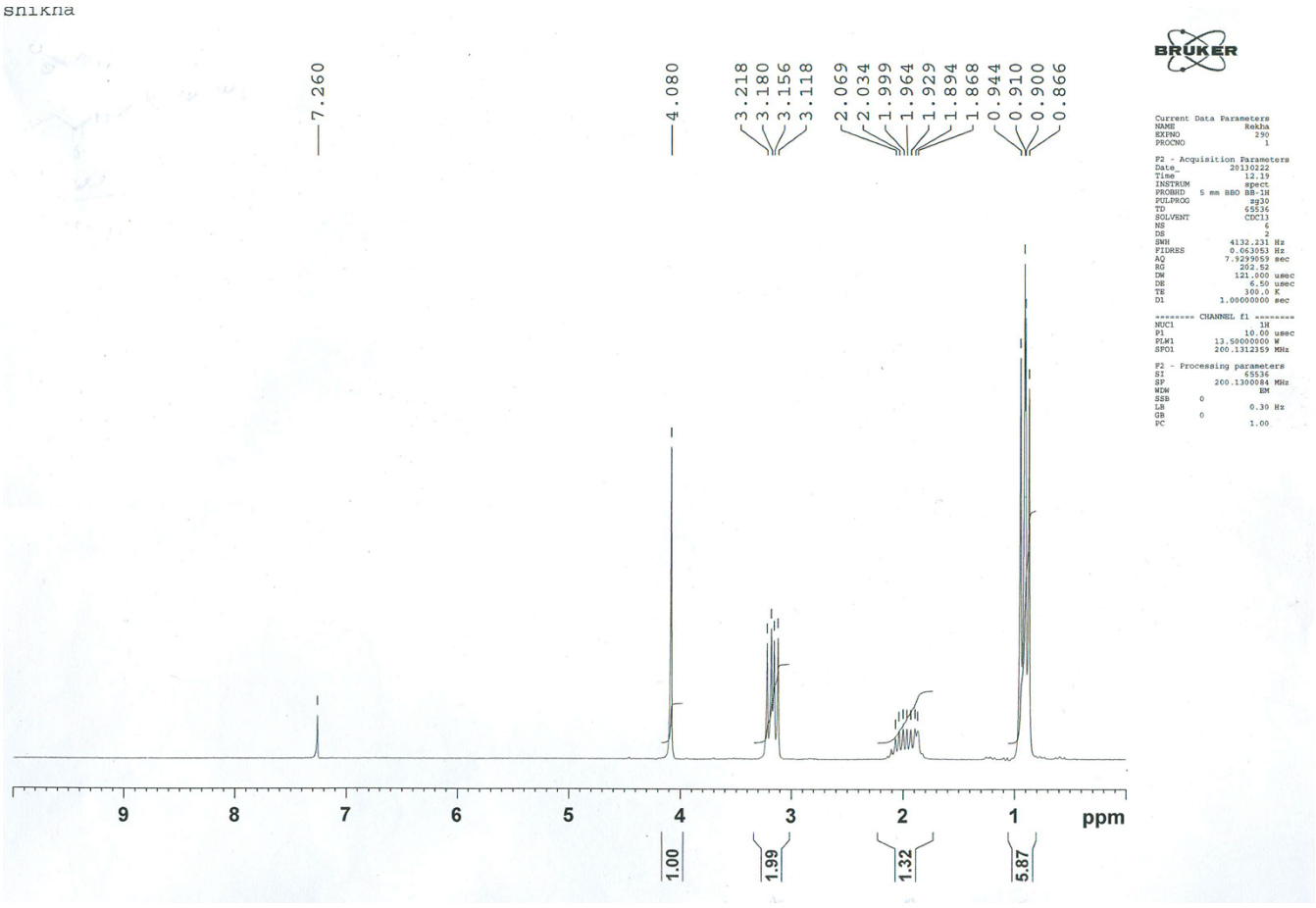
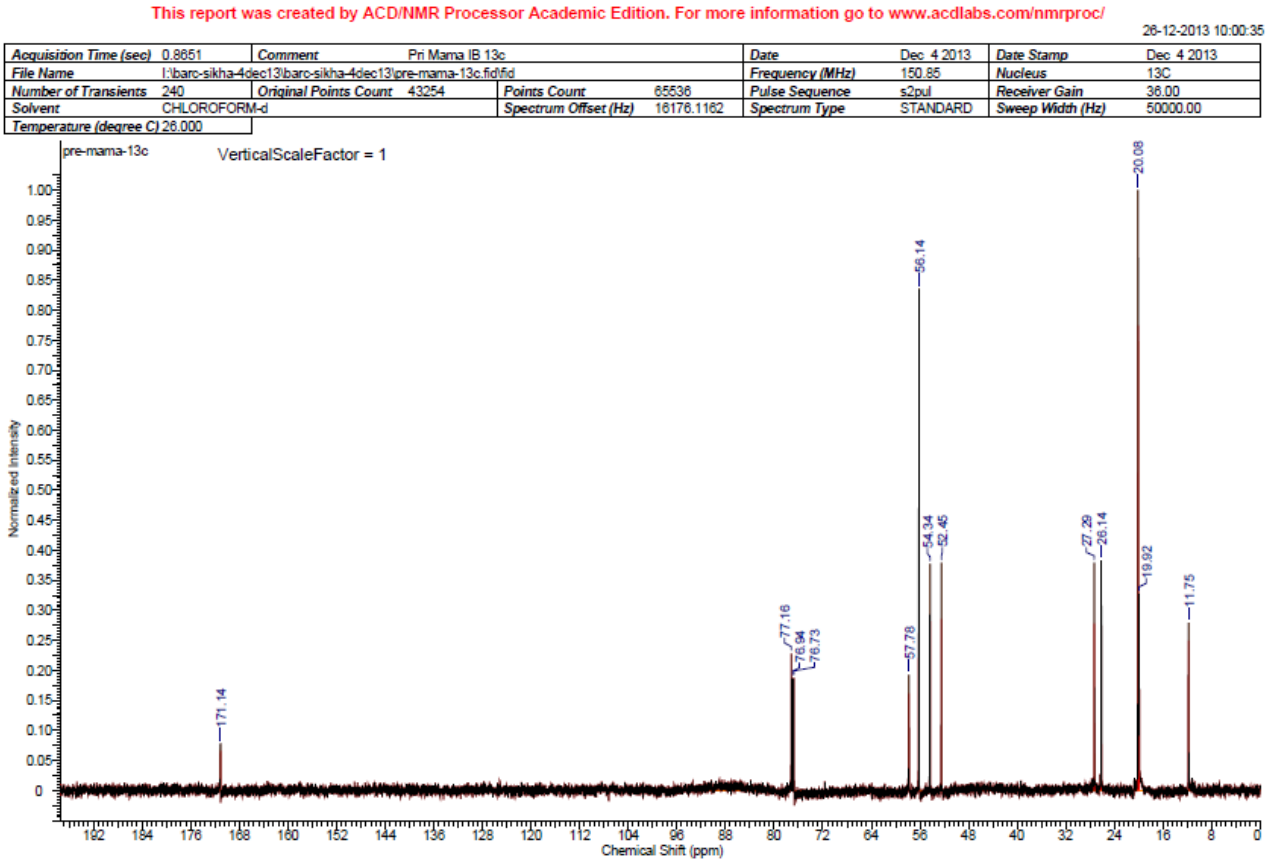


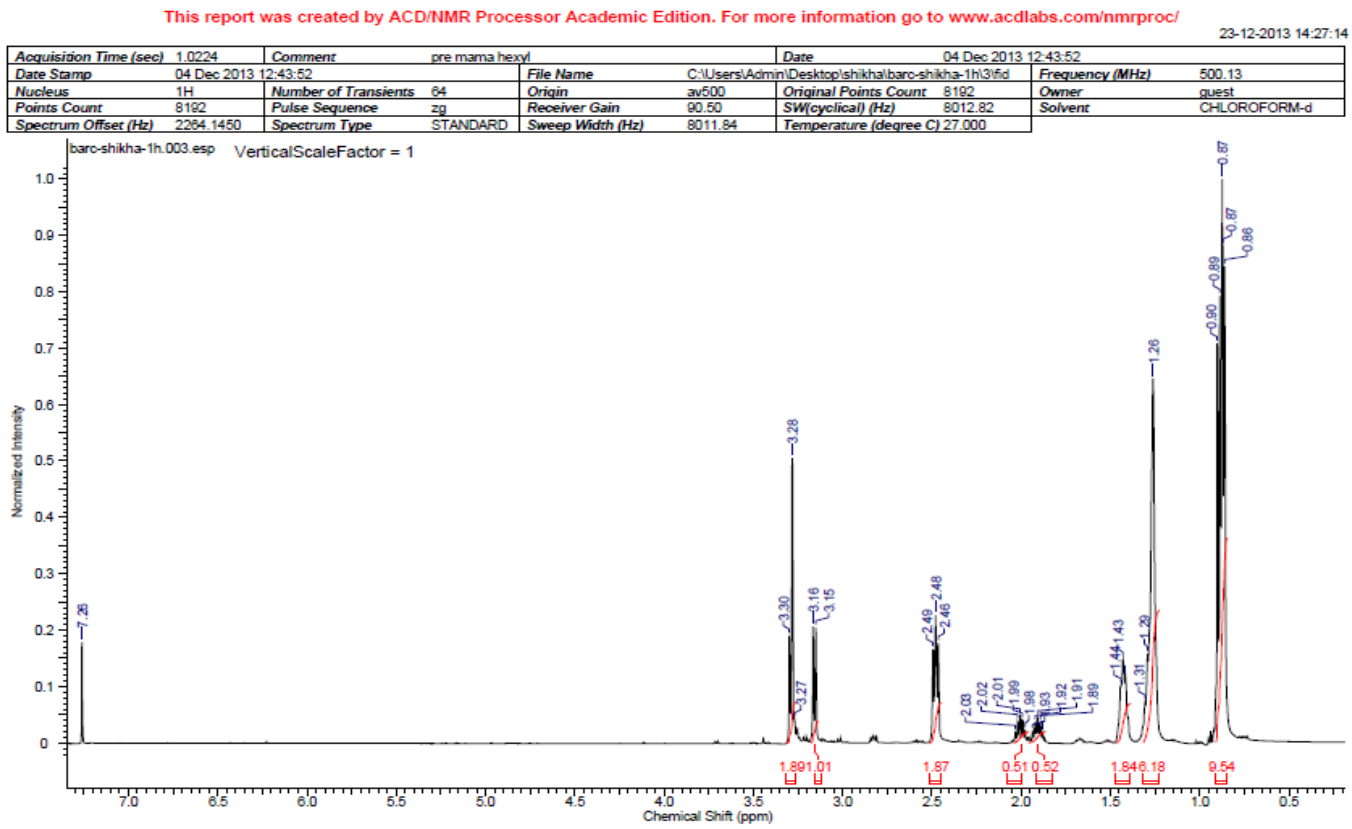

**Fig. 9** (b) $^{1}$H NMR of complex of $MoO_4^{2-}$ with α-dipropylamino *N,N'*-diisobutylacetamide **1.**



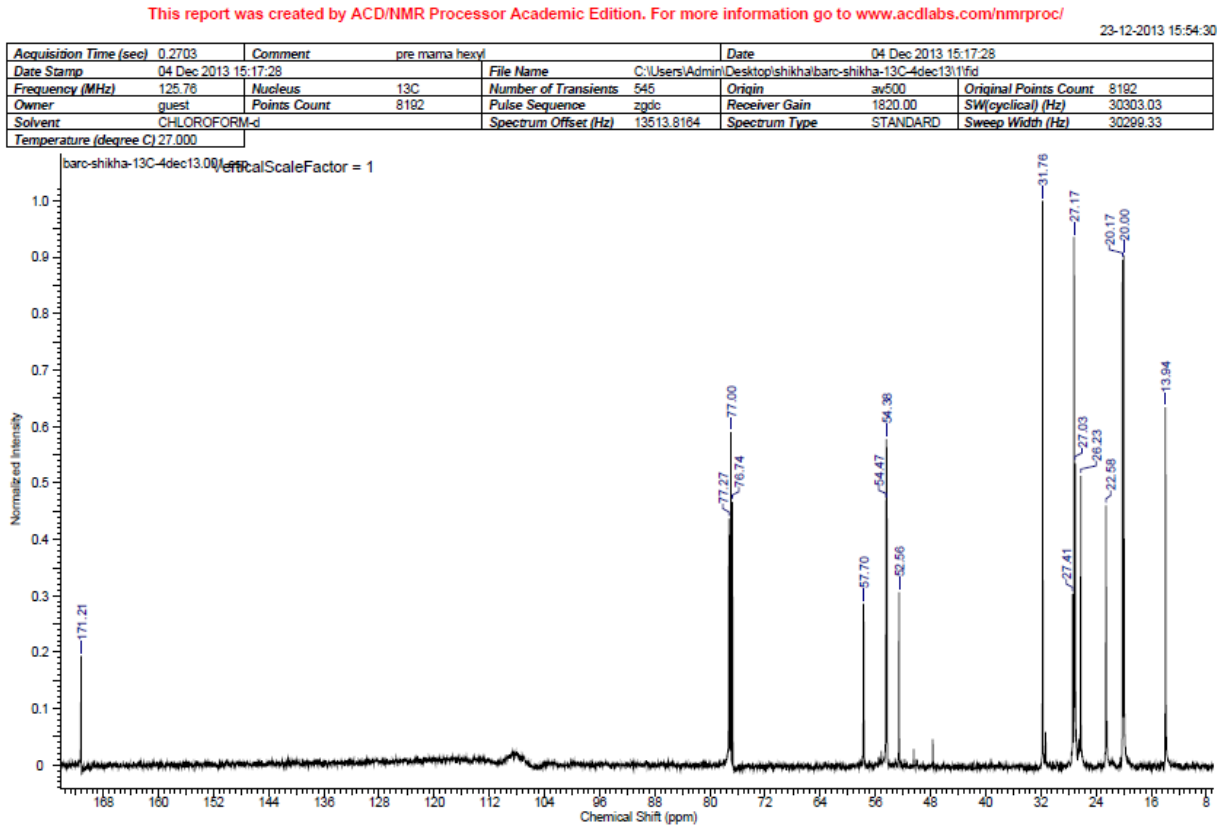

$^{1}$H NMR of *N,N'*-diisobutylchloroacetamide **7.**



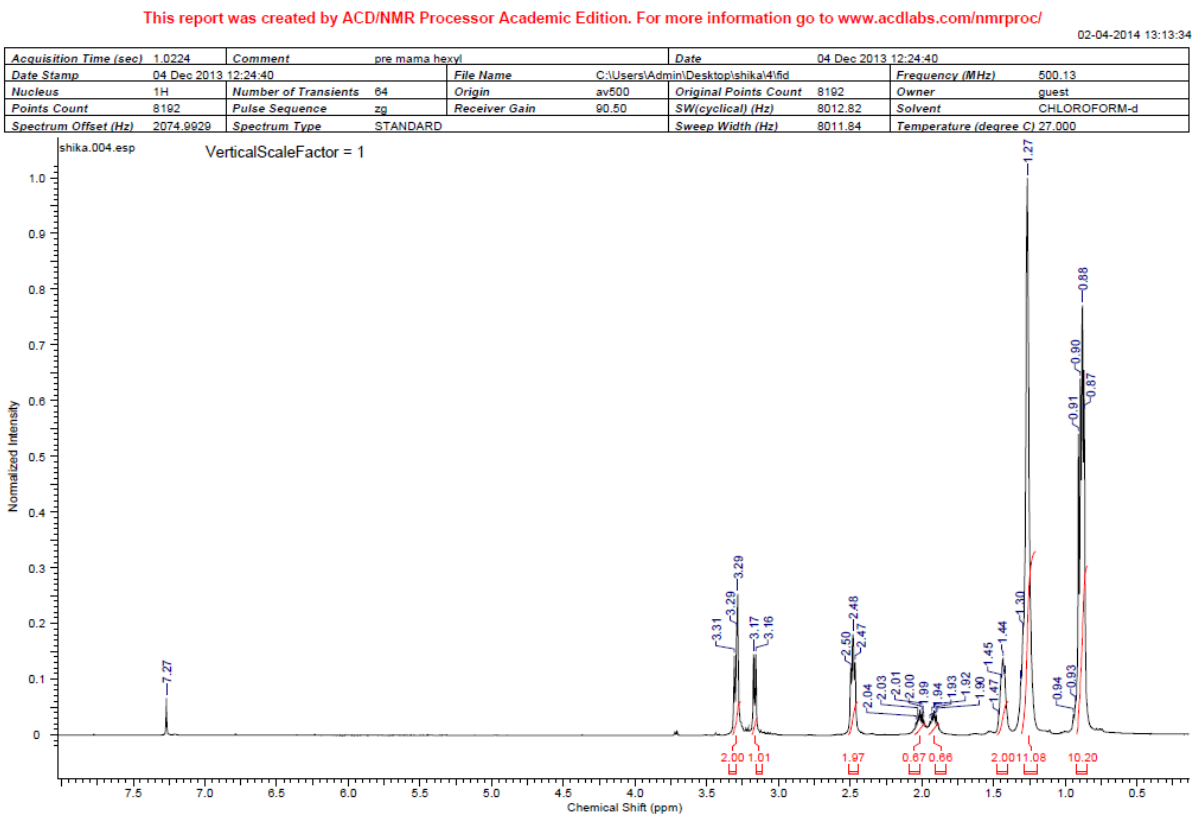

$^{13}$C NMR of α-dipropylamino *N,N'*-diisobutylacetamide **1.**



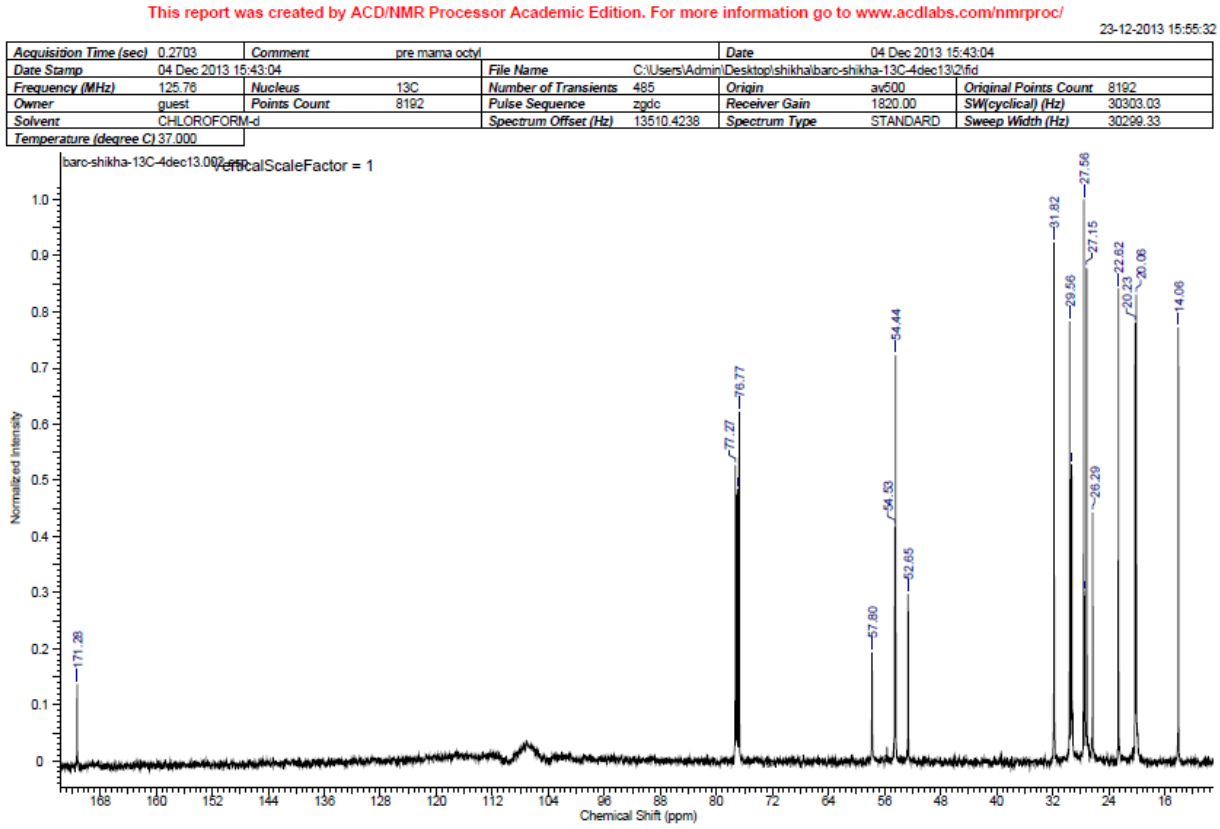

$^{1}$H NMR of α-dihexylamino *N,N'*-diisobutylacetamide **2.**




$^{13}$C NMR of α-dihexylamino *N,N'*-diisobutylacetamide **2.**




$^{1}$H NMR of α-dioctylamino *N,N'*-diisobutylacetamide **3.**




$^{13}$C NMR of α-dioctylamino *N,N'*-diisobutylacetamide **3.**