Supporting Information

for

Solvent-free synthesis of novel *para*-menthane-3,8-diol ester derivatives from citronellal using a polymer-supported scandium triflate catalyst

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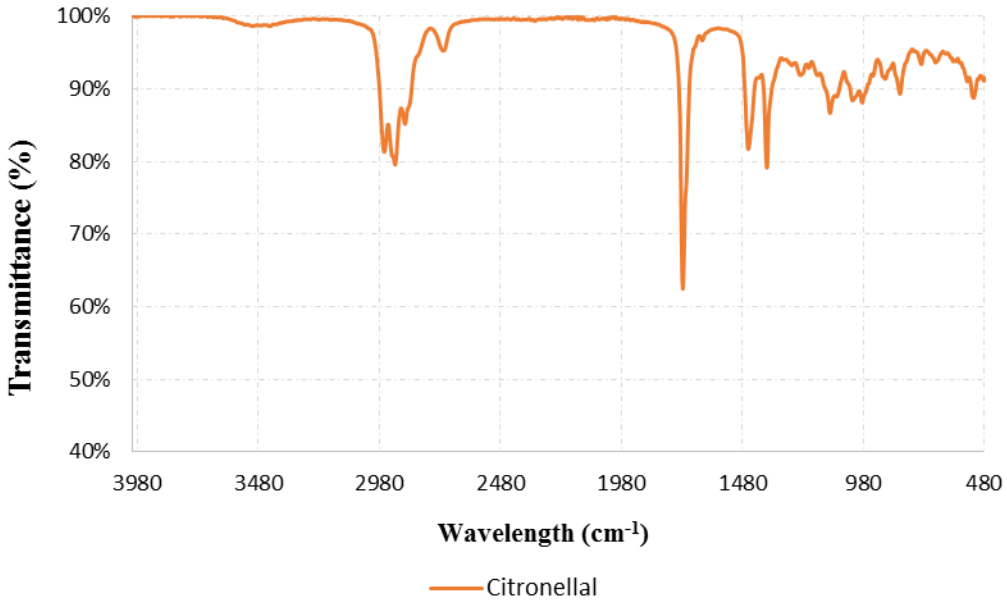
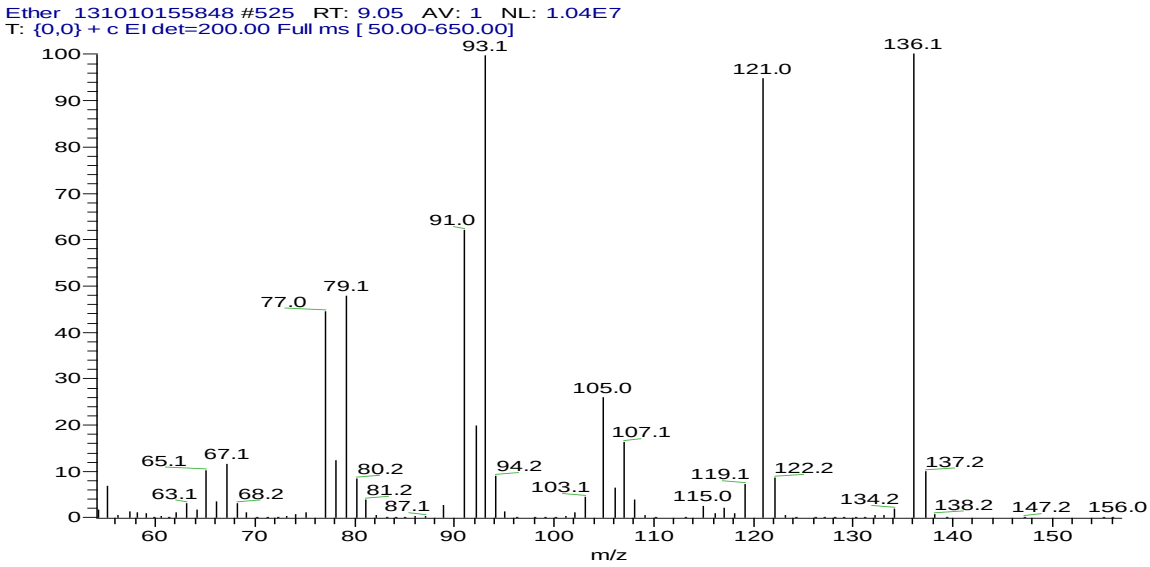
1. Starting material and oil components

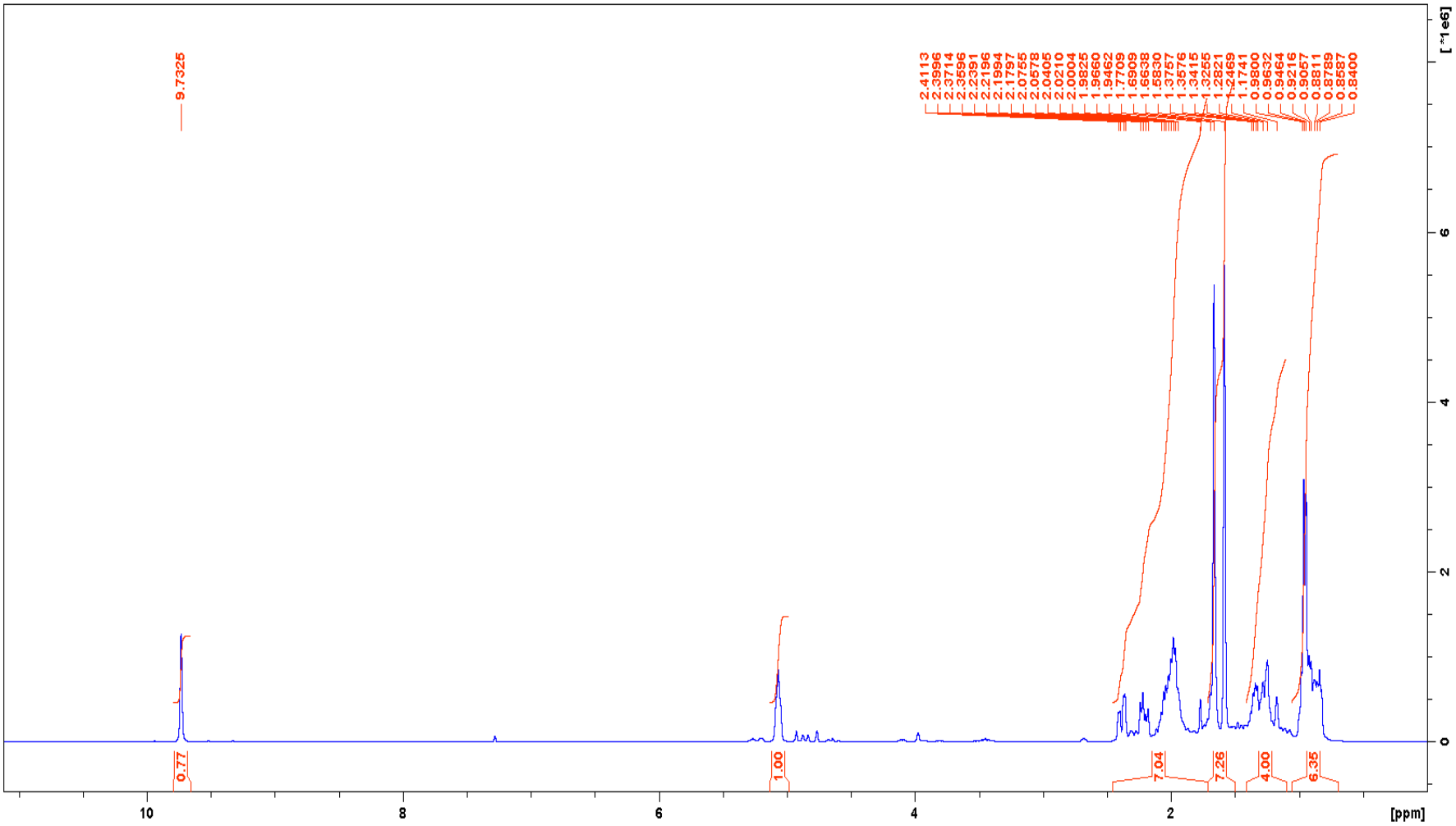
1.1. Citronellal



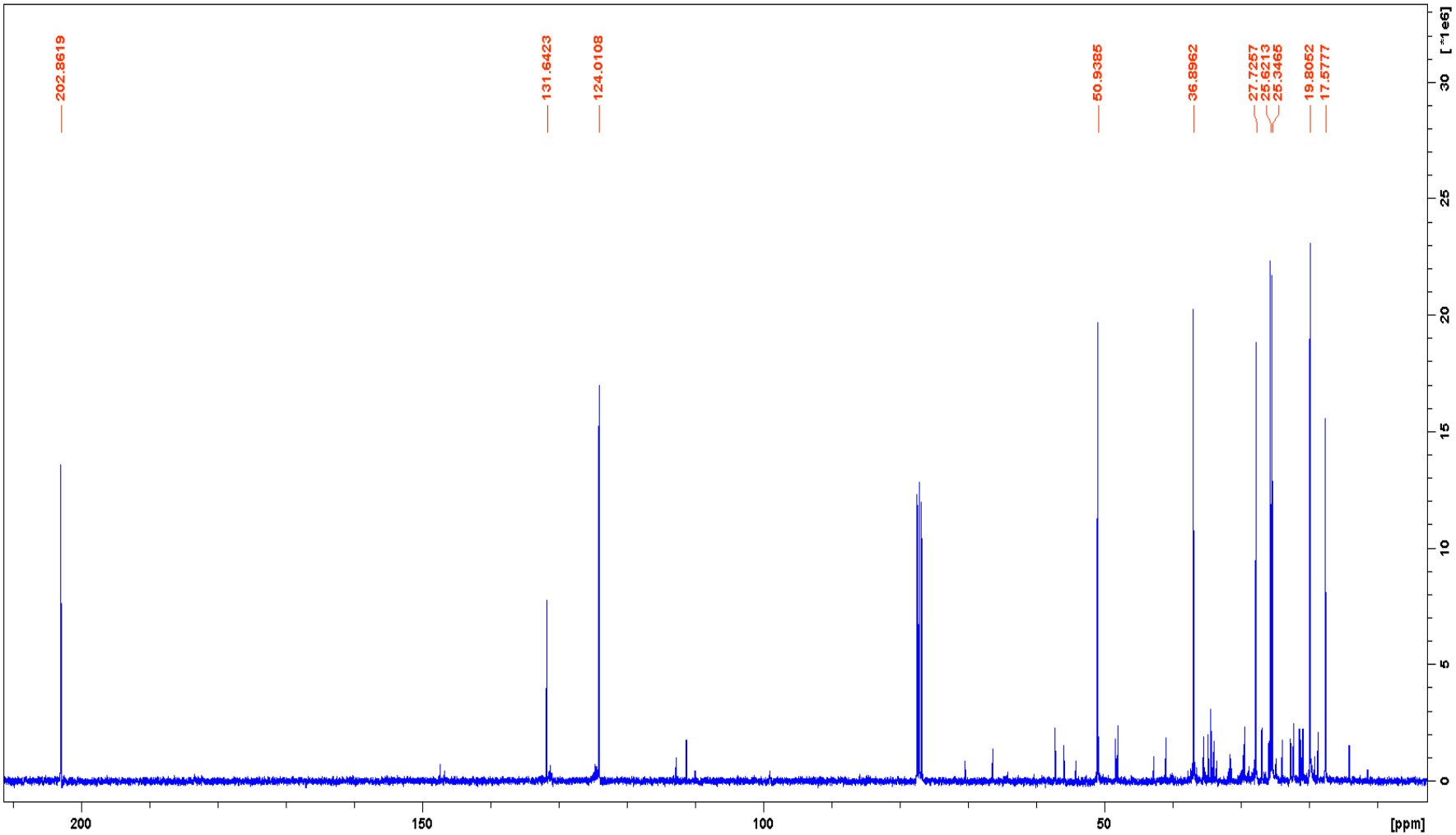
FTIR- spectrum



GC–MS spectrum

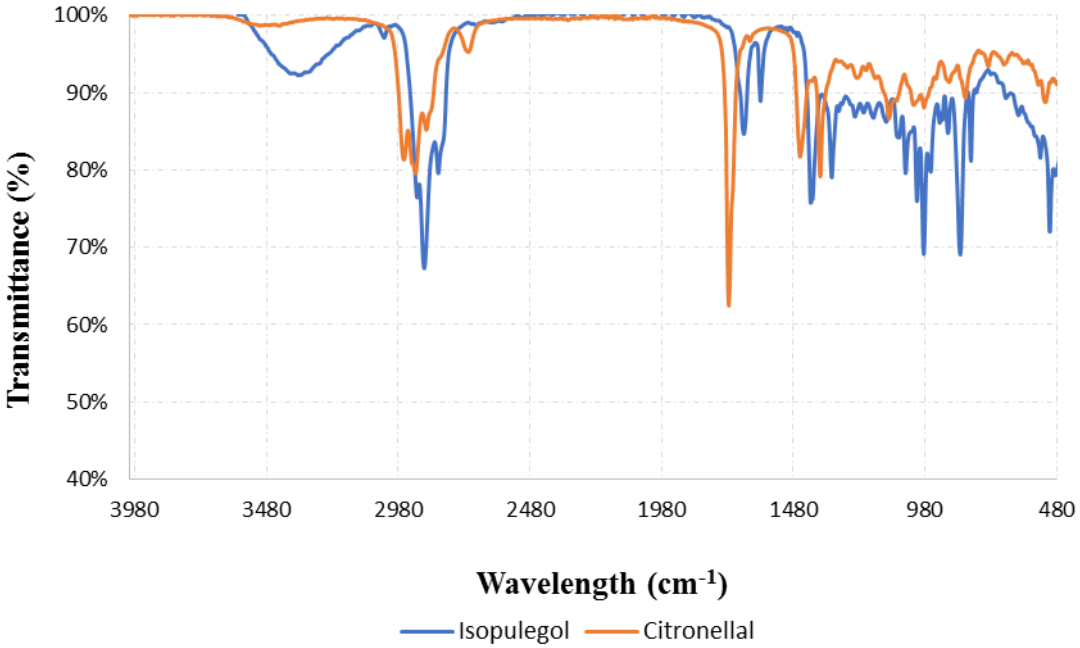


^{1}H NMR spectrum

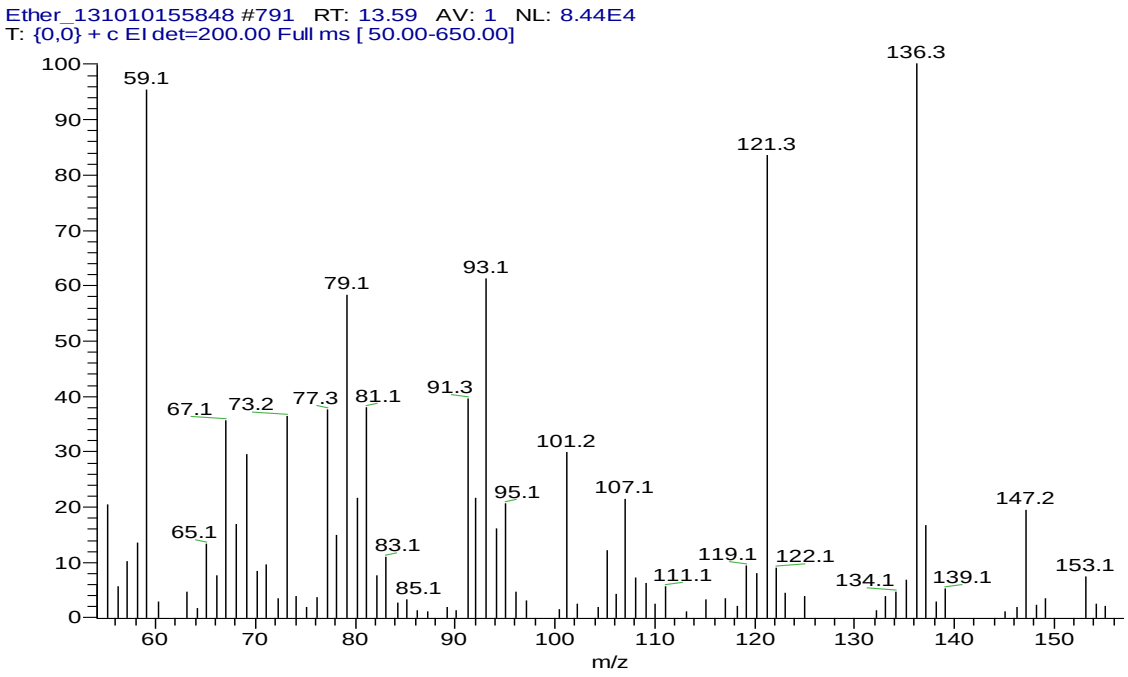


^{13}C NMR spectrum

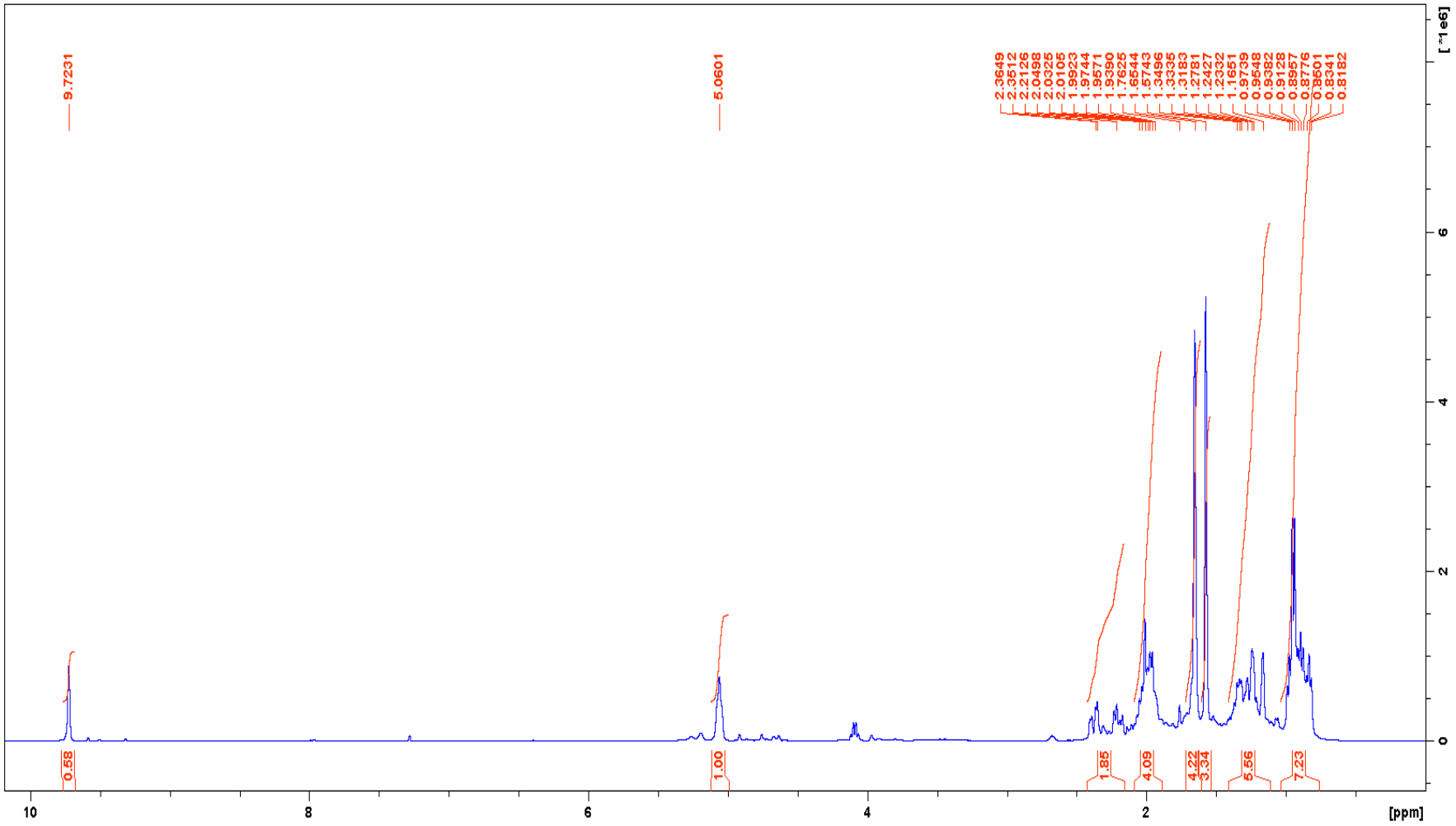
1.2. Isopulegol



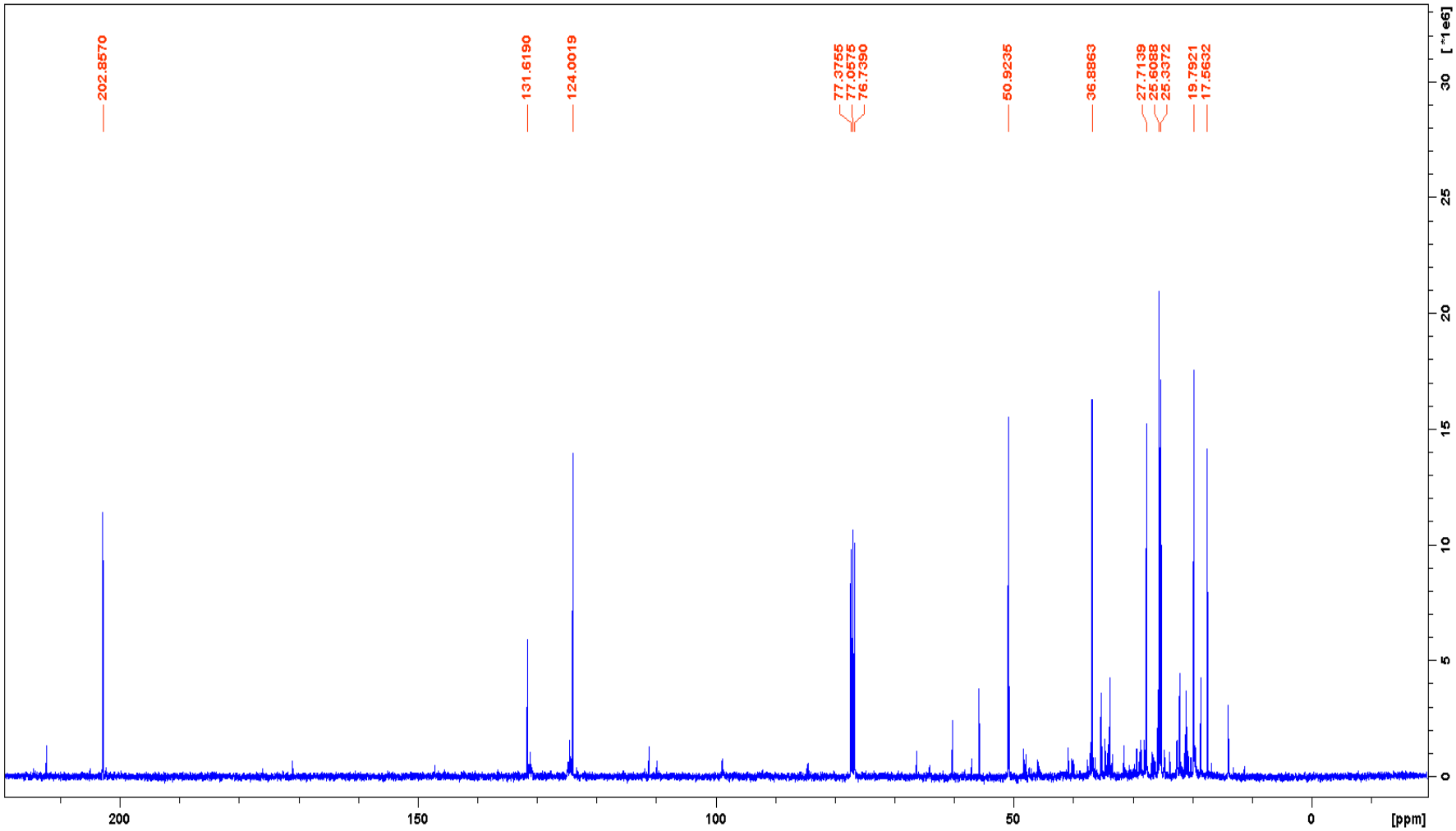
FTIR spectrum



GC–MS spectrum

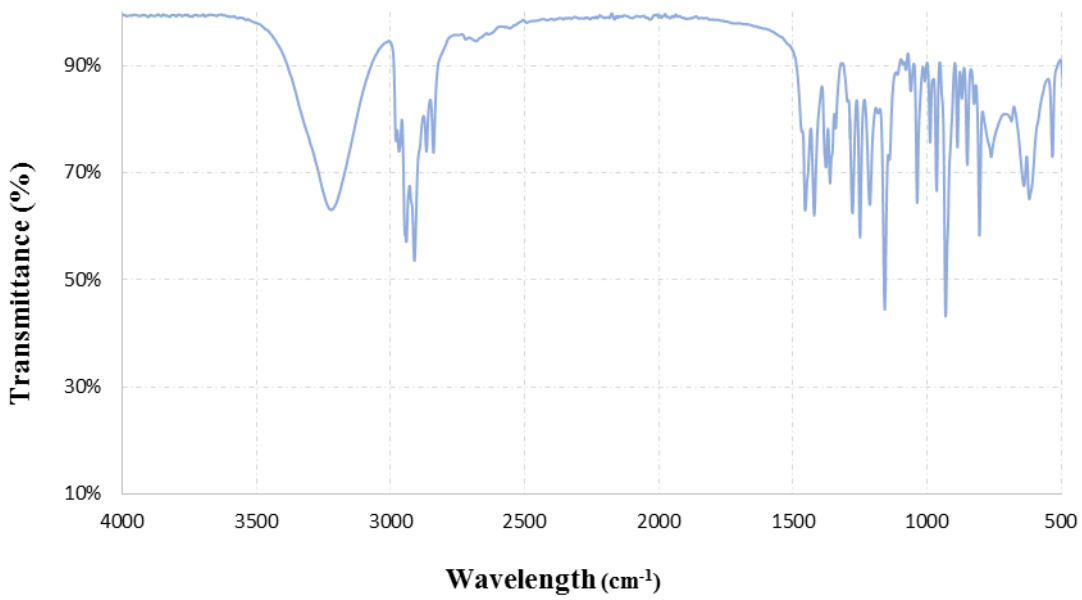


^{1}H NMR spectrum

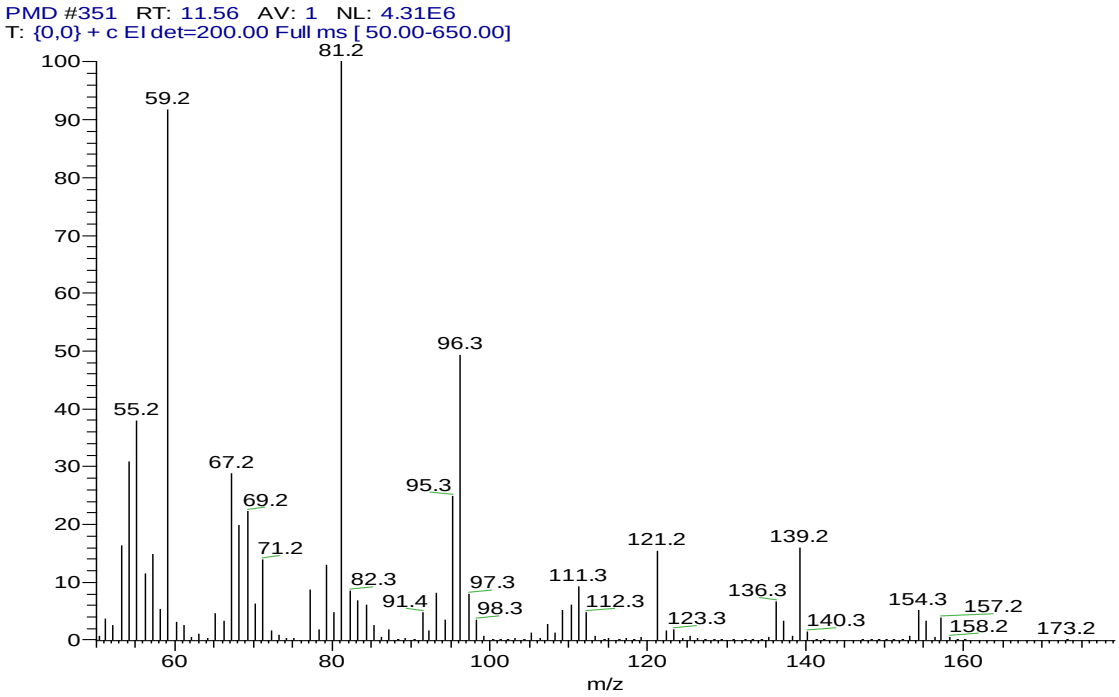


^{13}C NMR spectrum

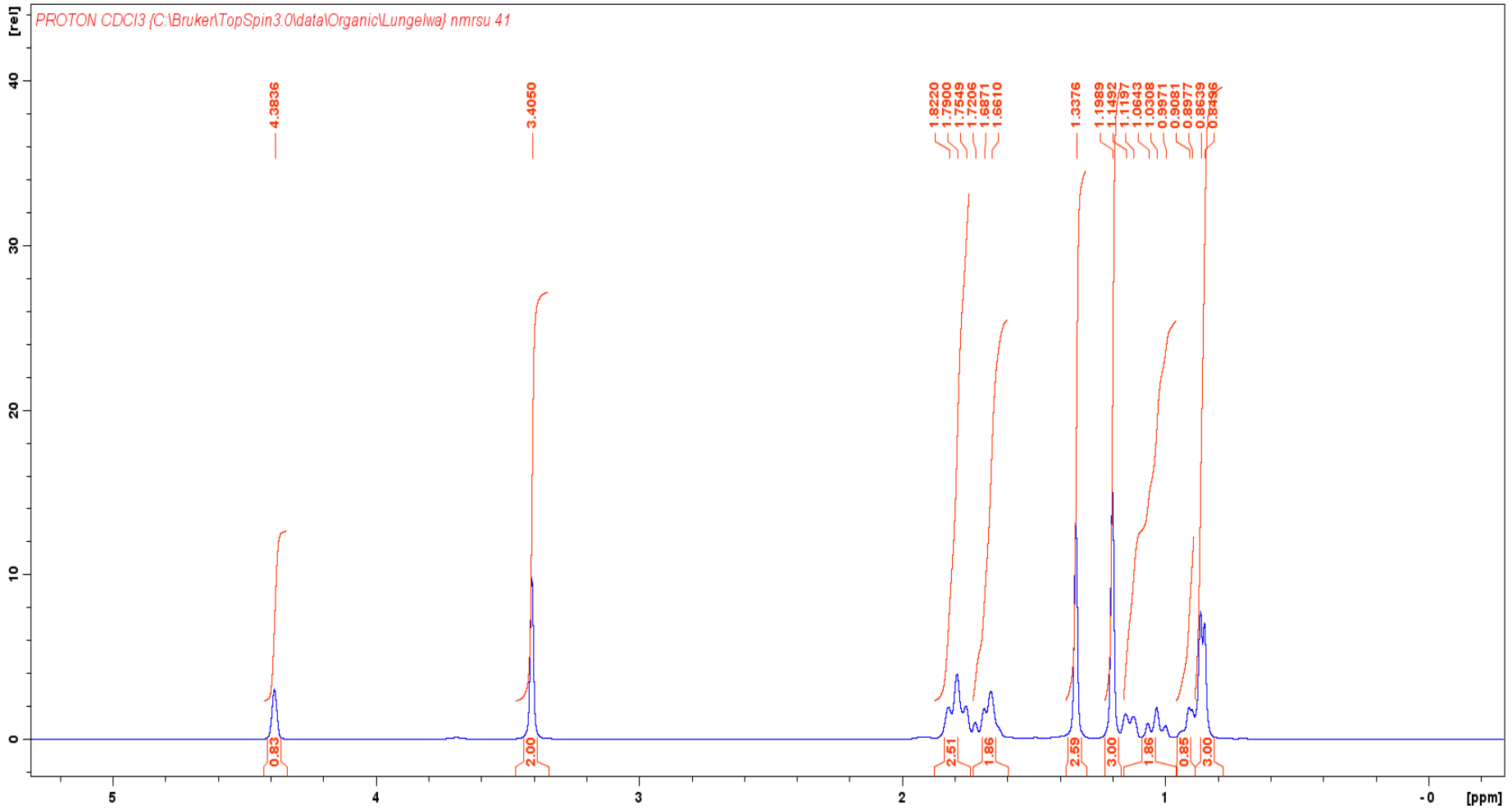
1.3. *para*-menthane-3,8-diol



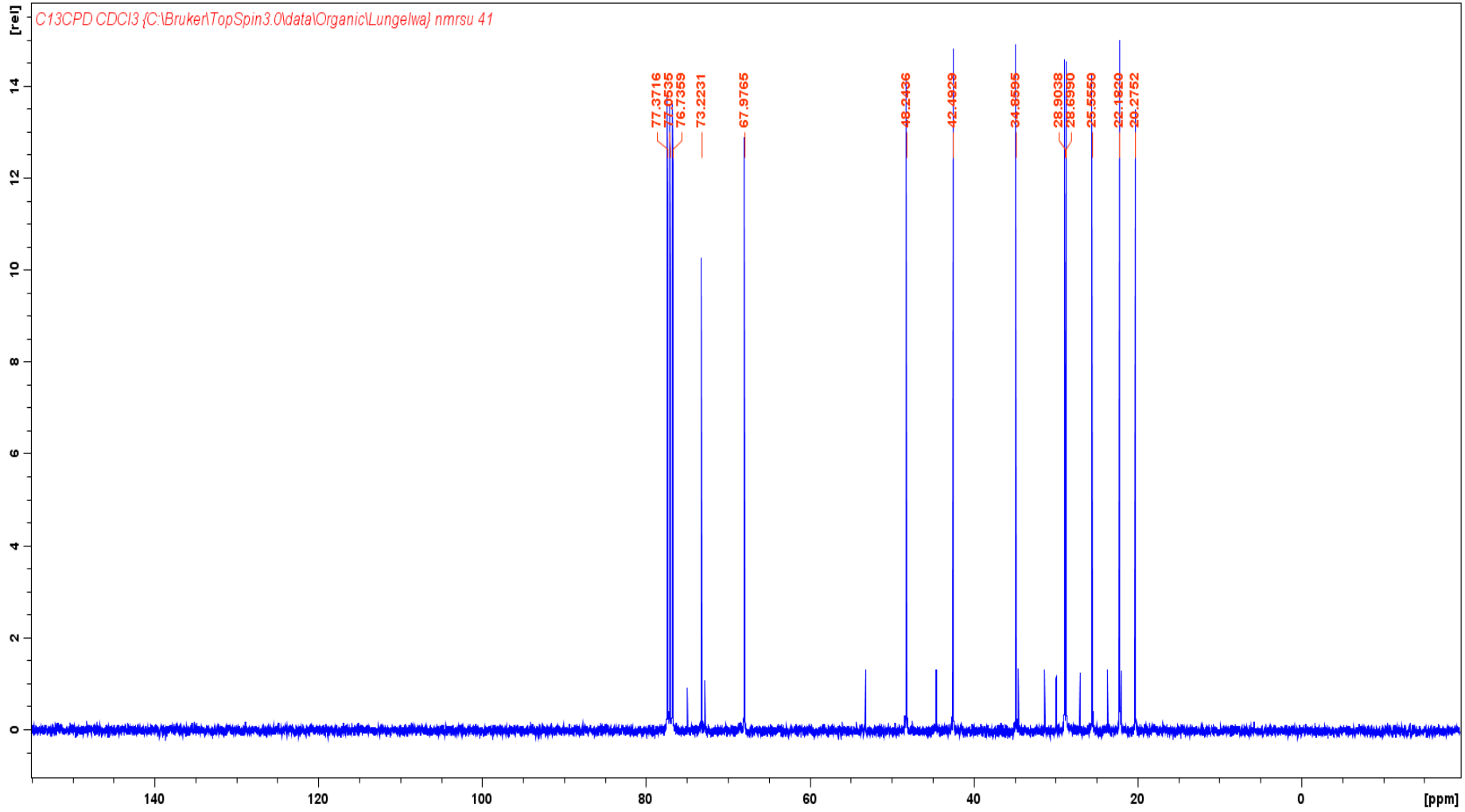
FTIR spectrum



GC–MS spectrum



^{1}H NMR spectrum

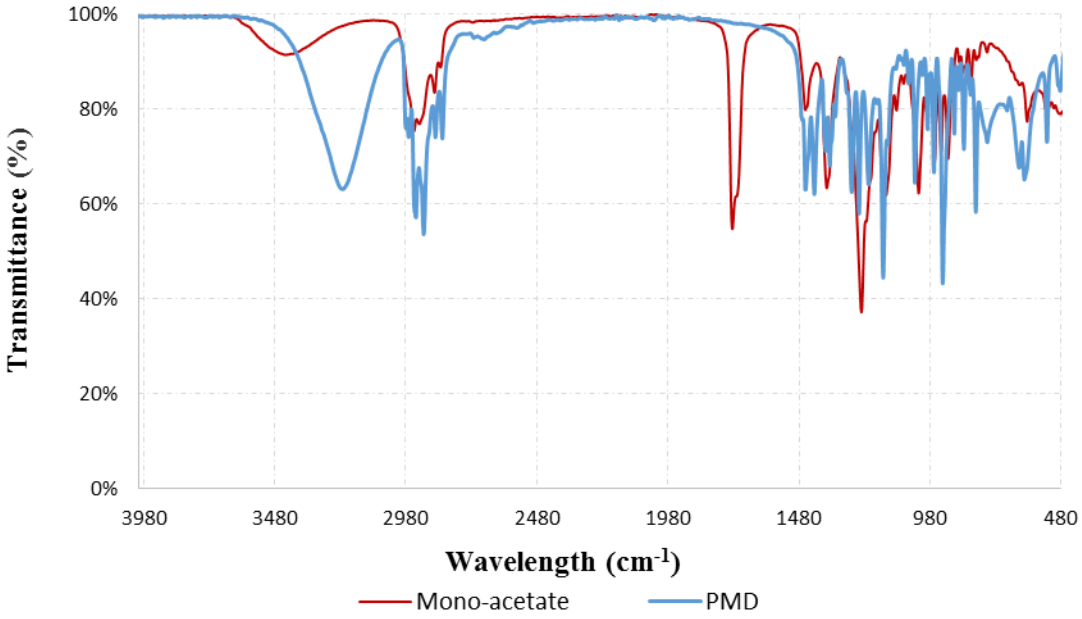


^{13}C NMR spectrum

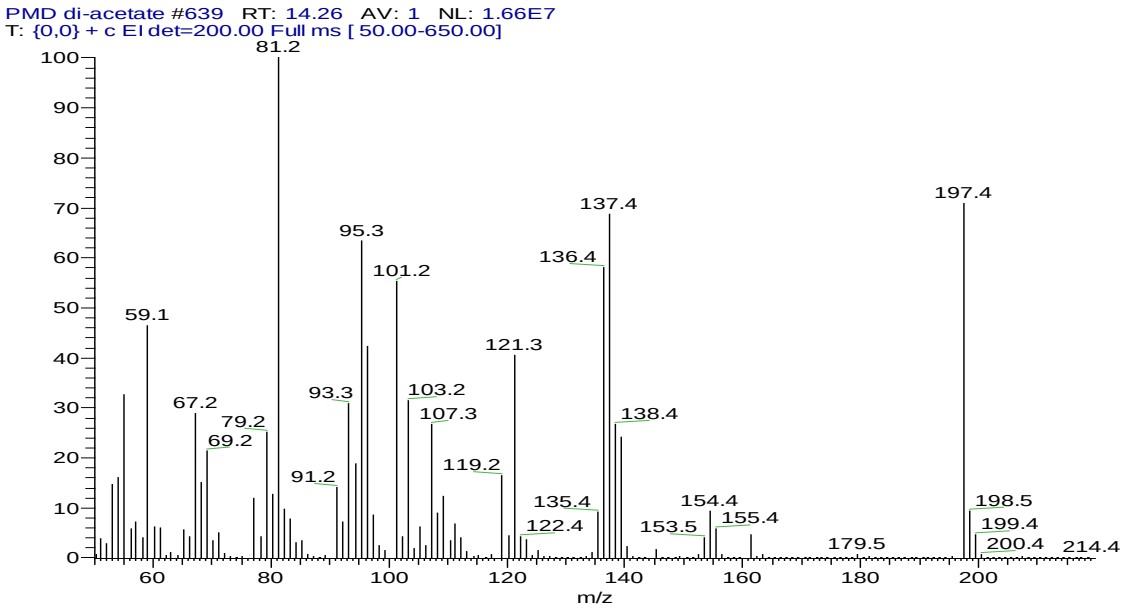
Appendix B:

2. *para*-Menthane-3,8-diester derivatives

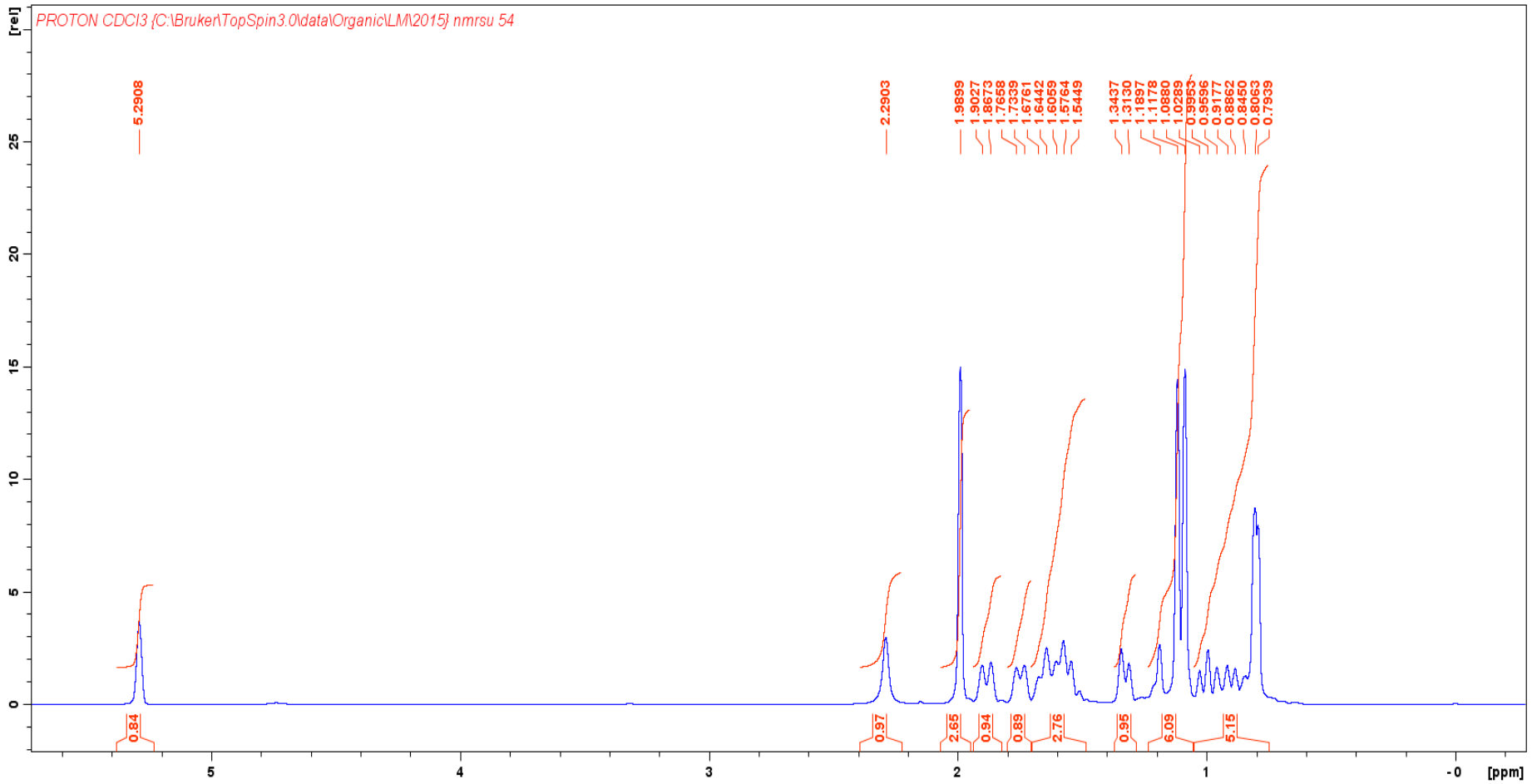
2.1. Mono-acetate



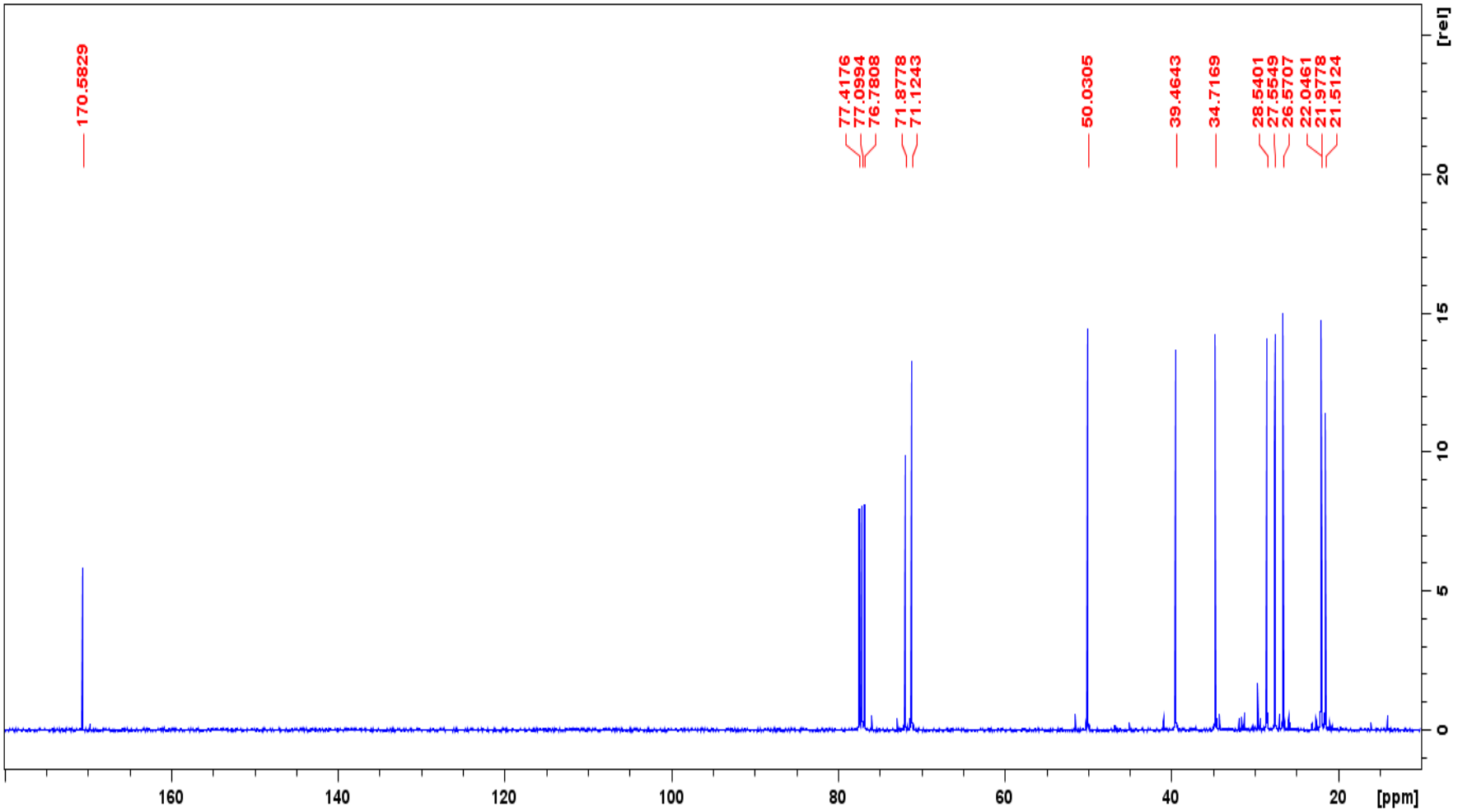
FTIR spectrum



GC–MS spectrum

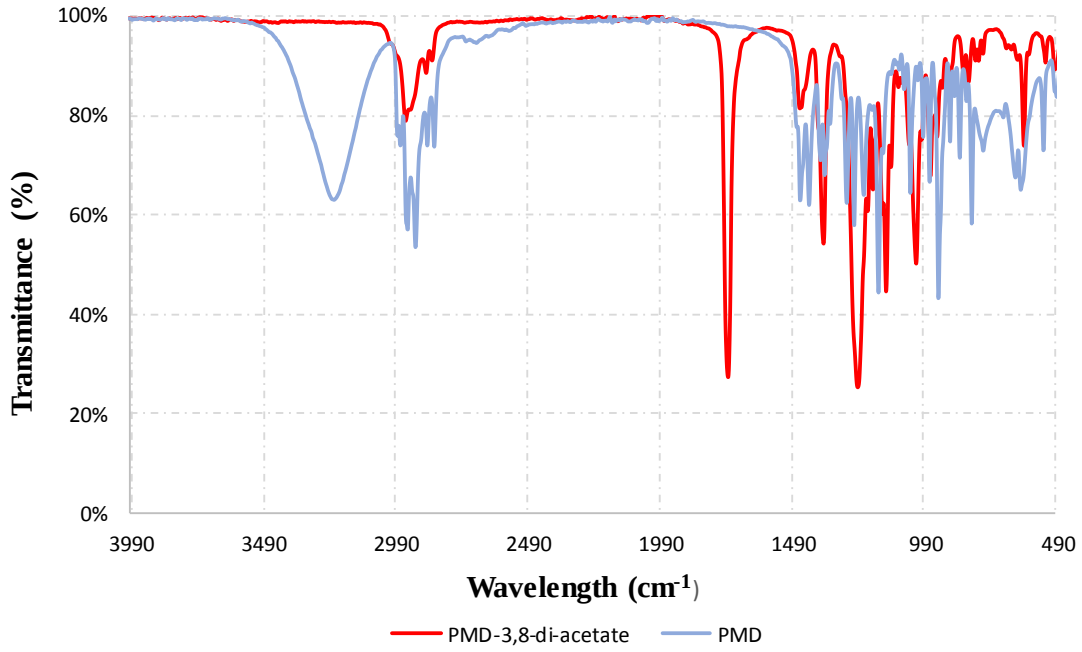


^{1}H NMR spectrum

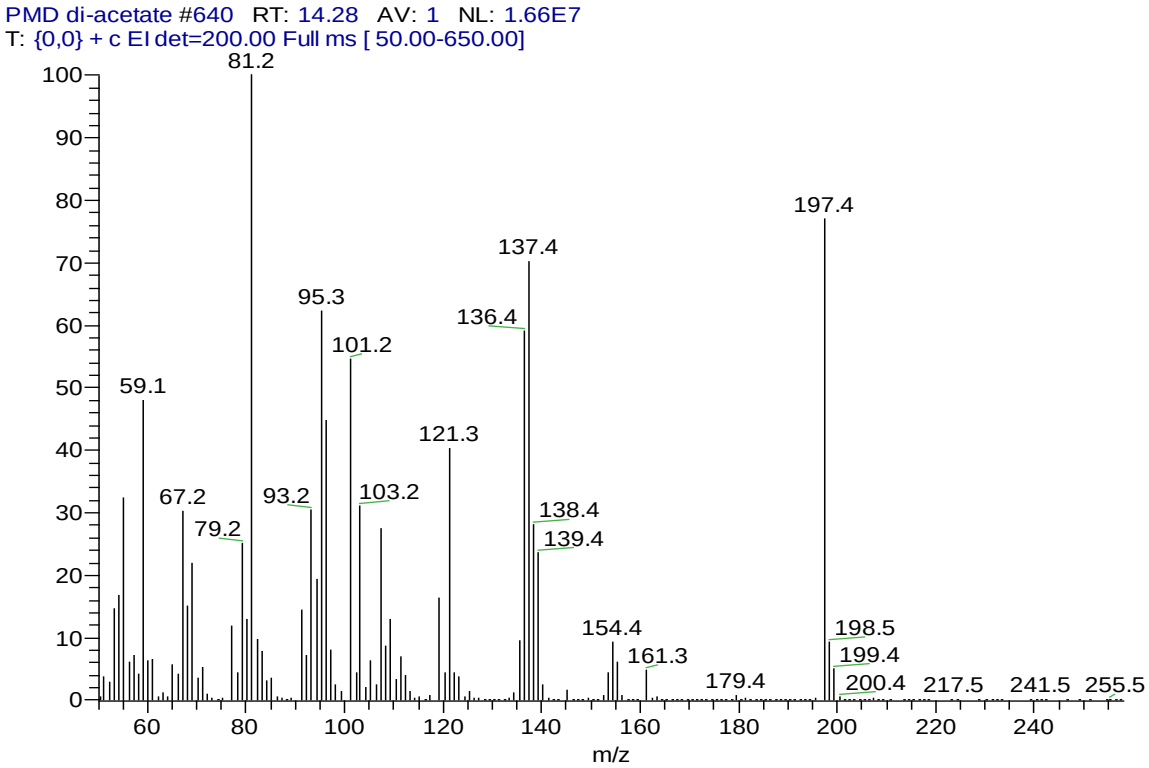


^{13}C NMR spectrum

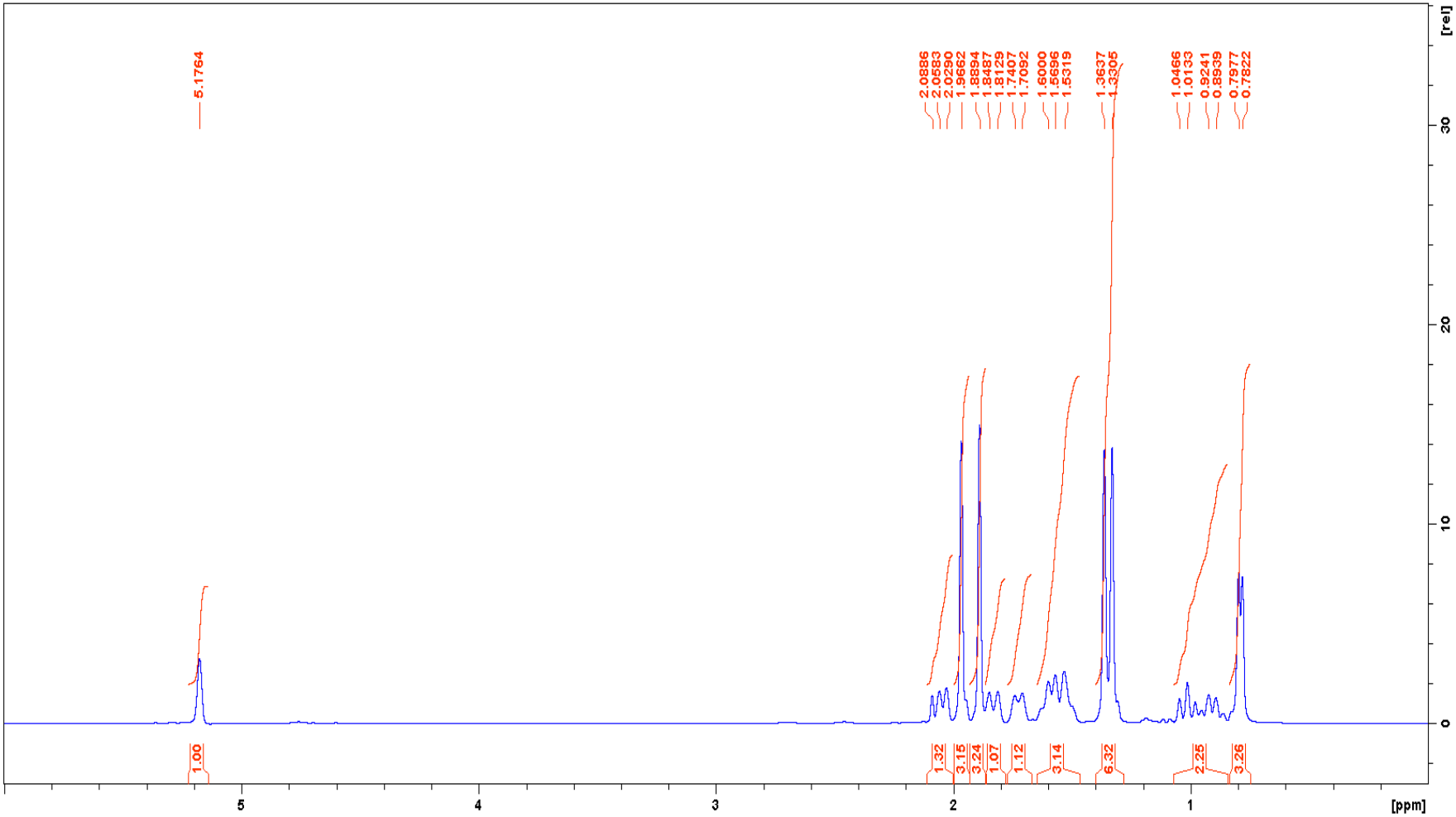
2.2. Di-acetate



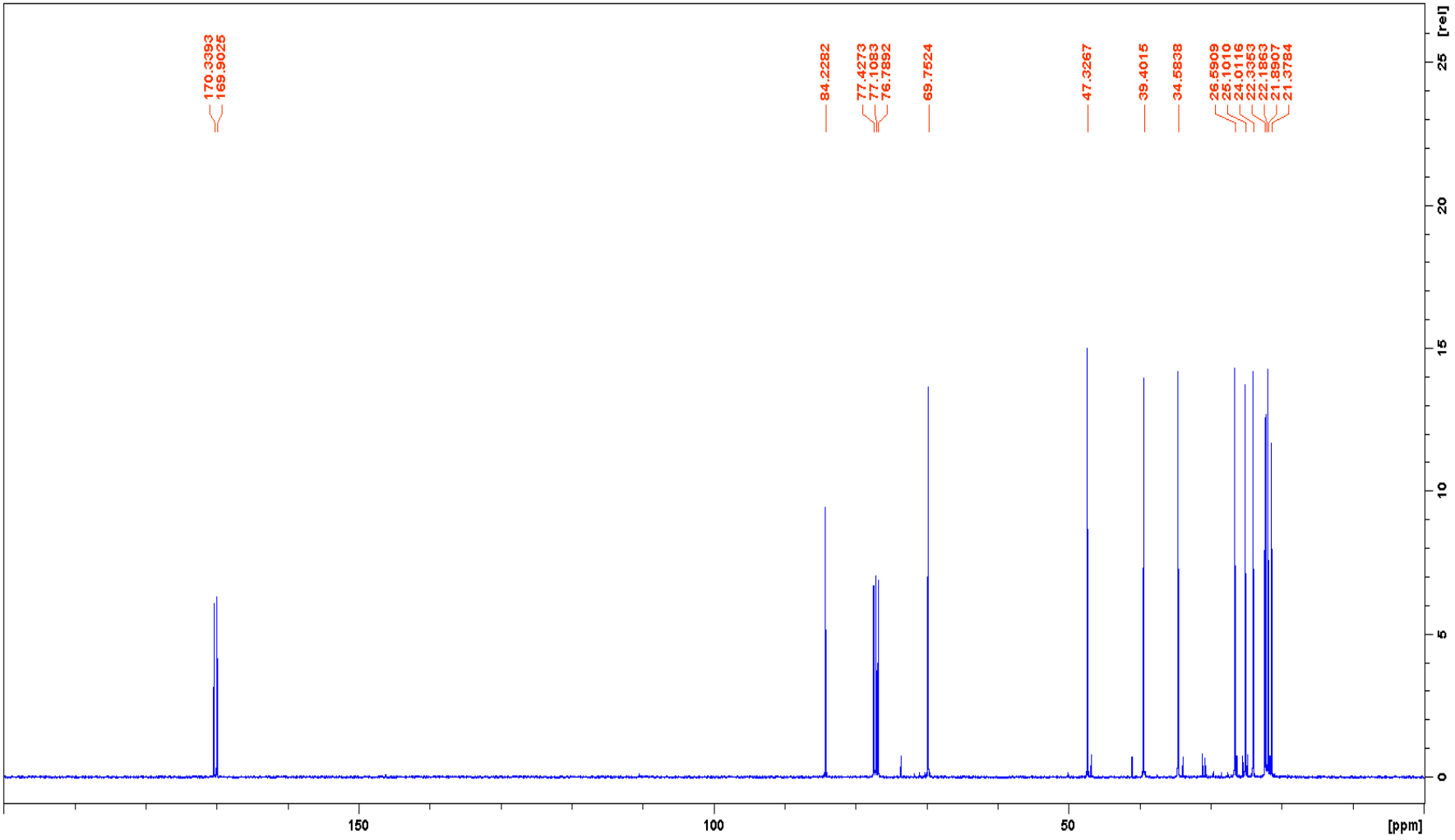
FTIR spectrum



GC–MS spectrum

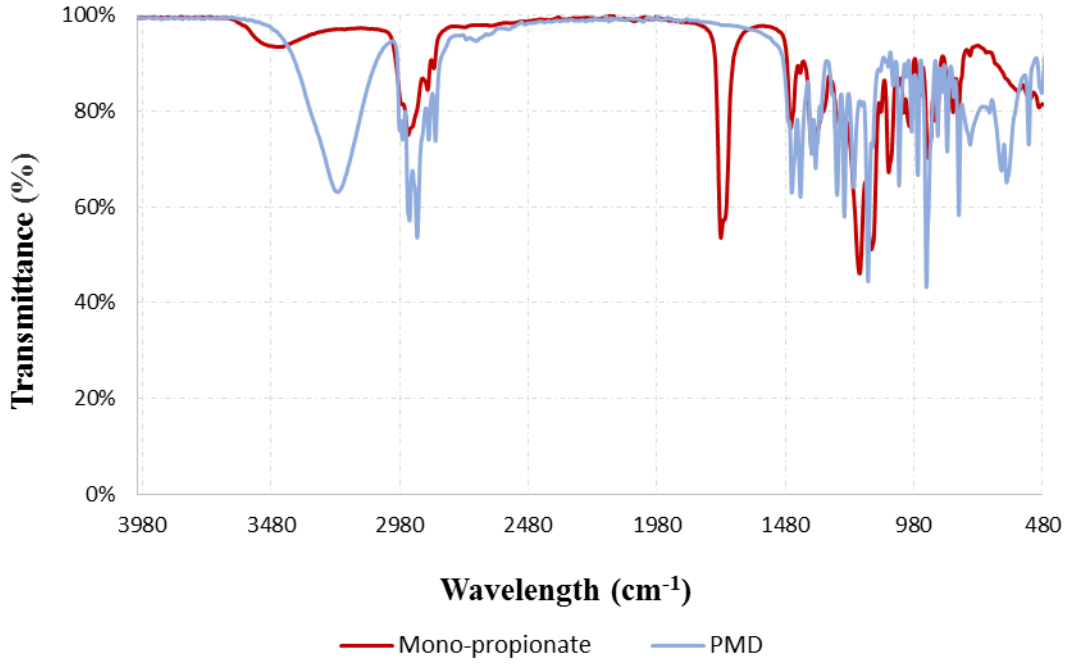


^{1}H NMR spectrum

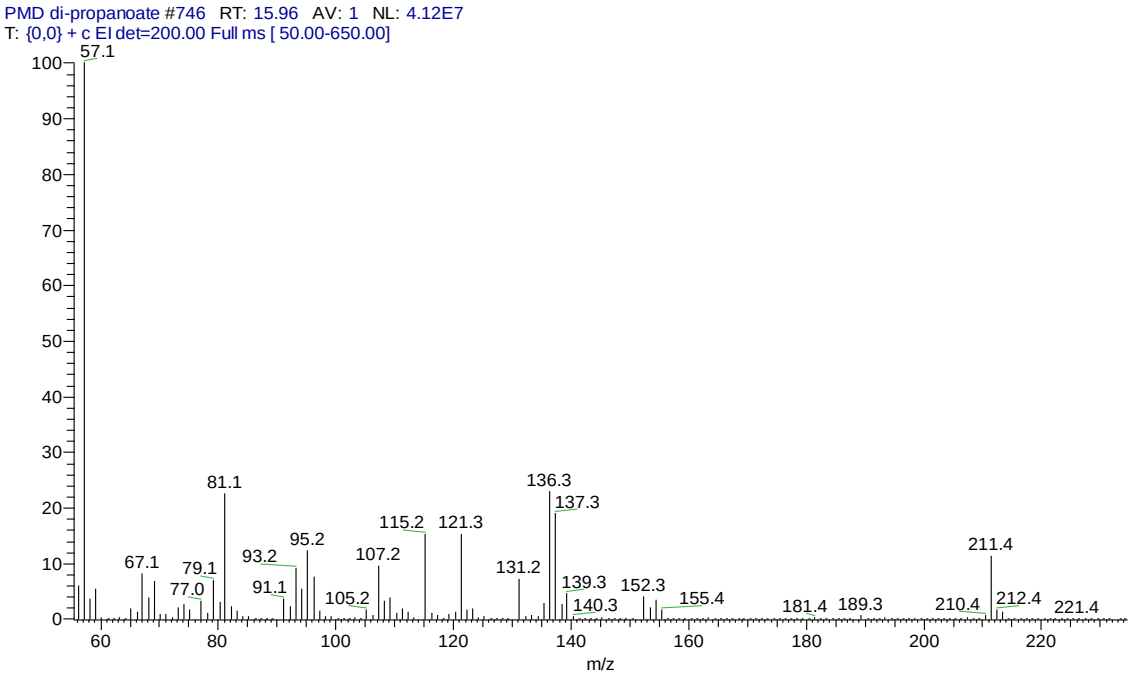


^{13}C NMR spectrum

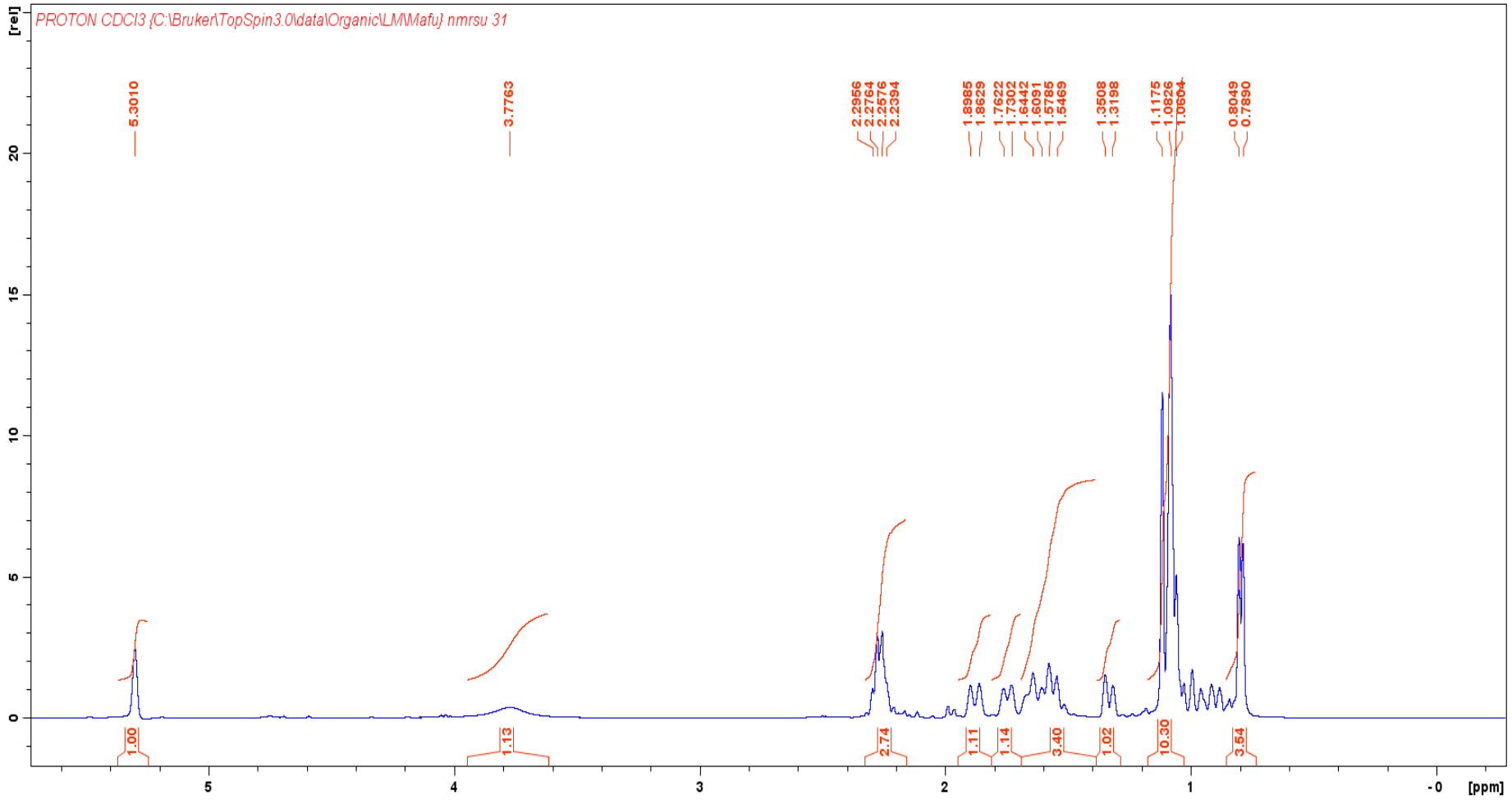
2.3. Mono-propionate



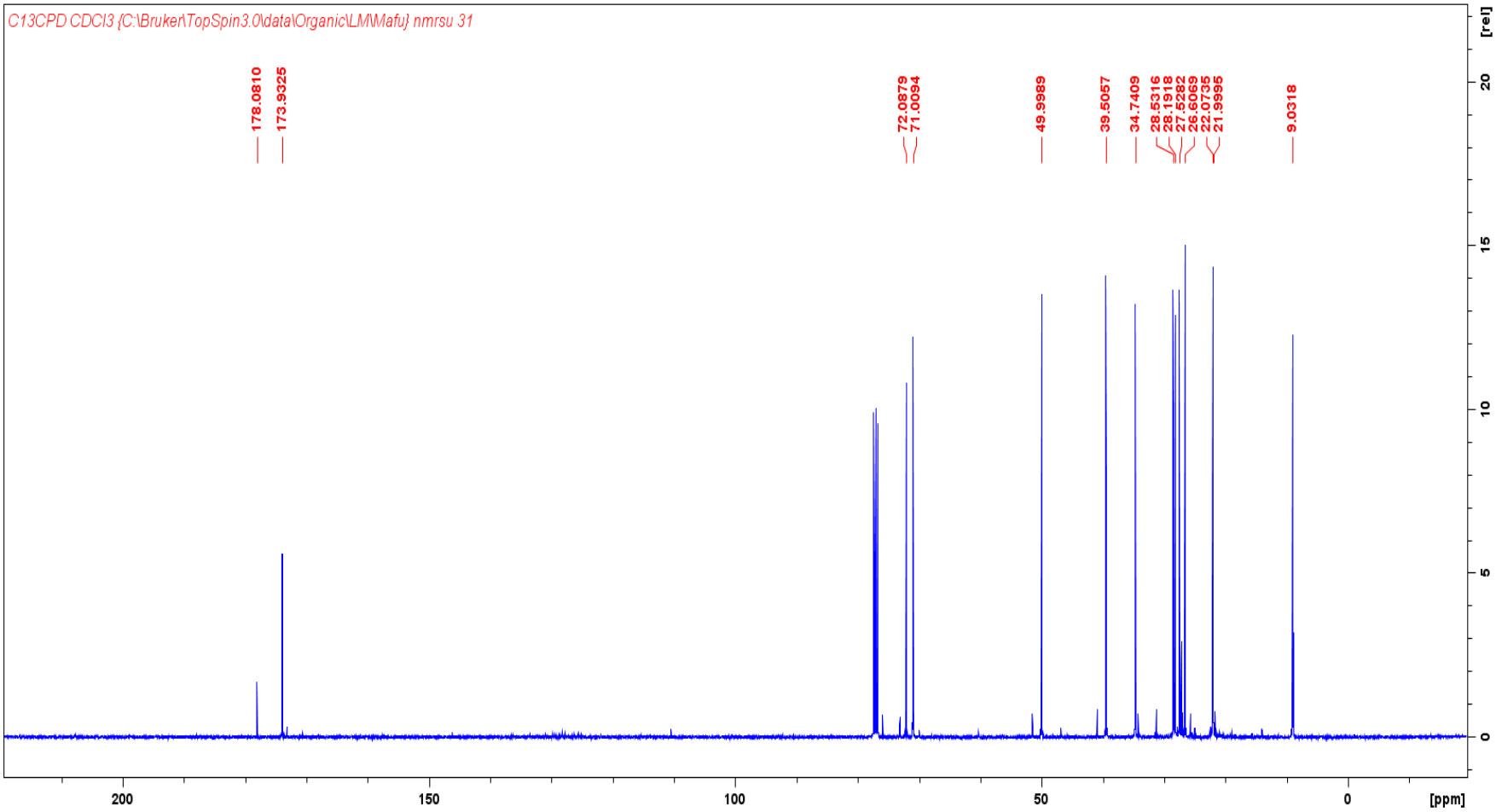
FTIR spectrum



GC–MS spectrum

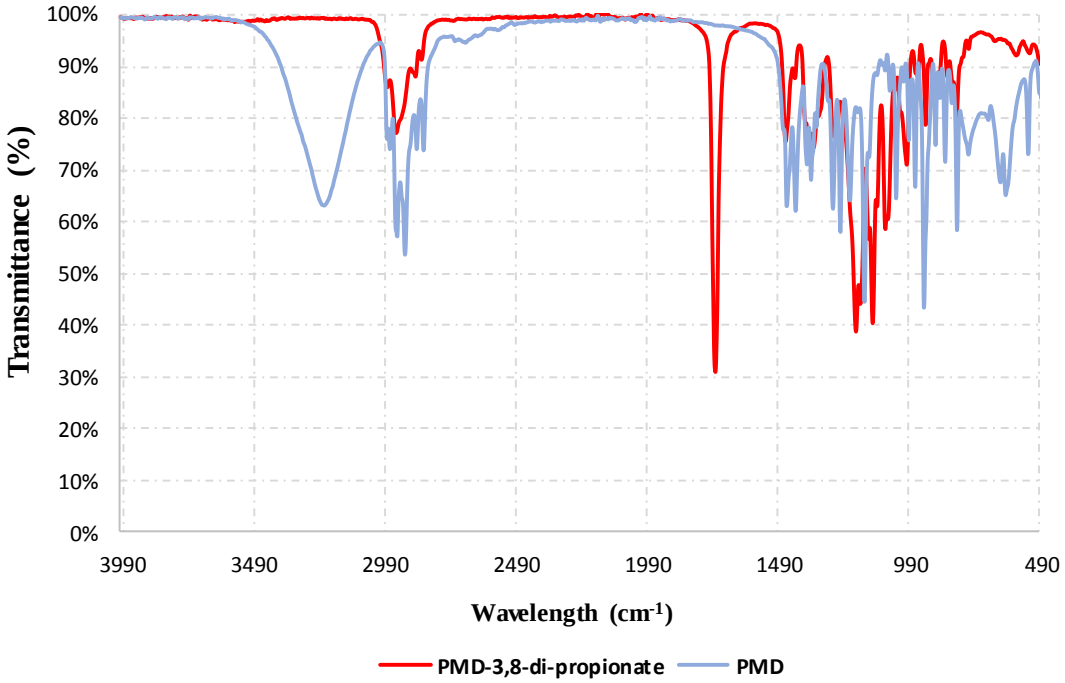


^{1}H NMR spectrum

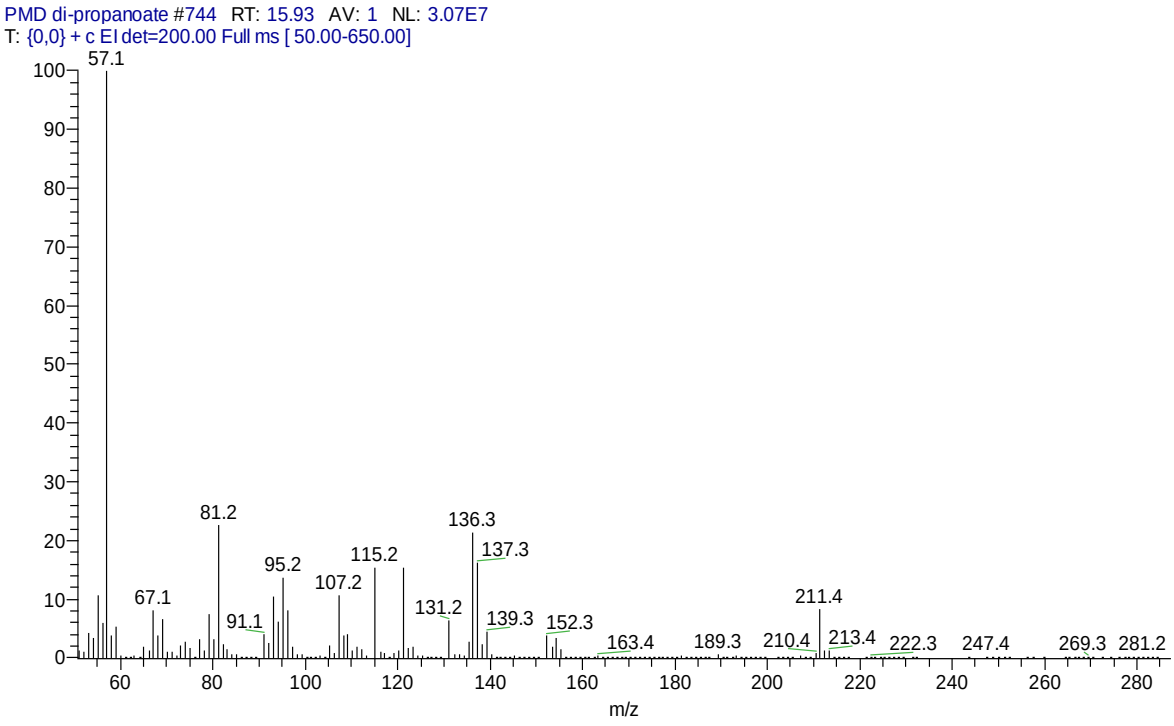


^{13}C NMR spectrum

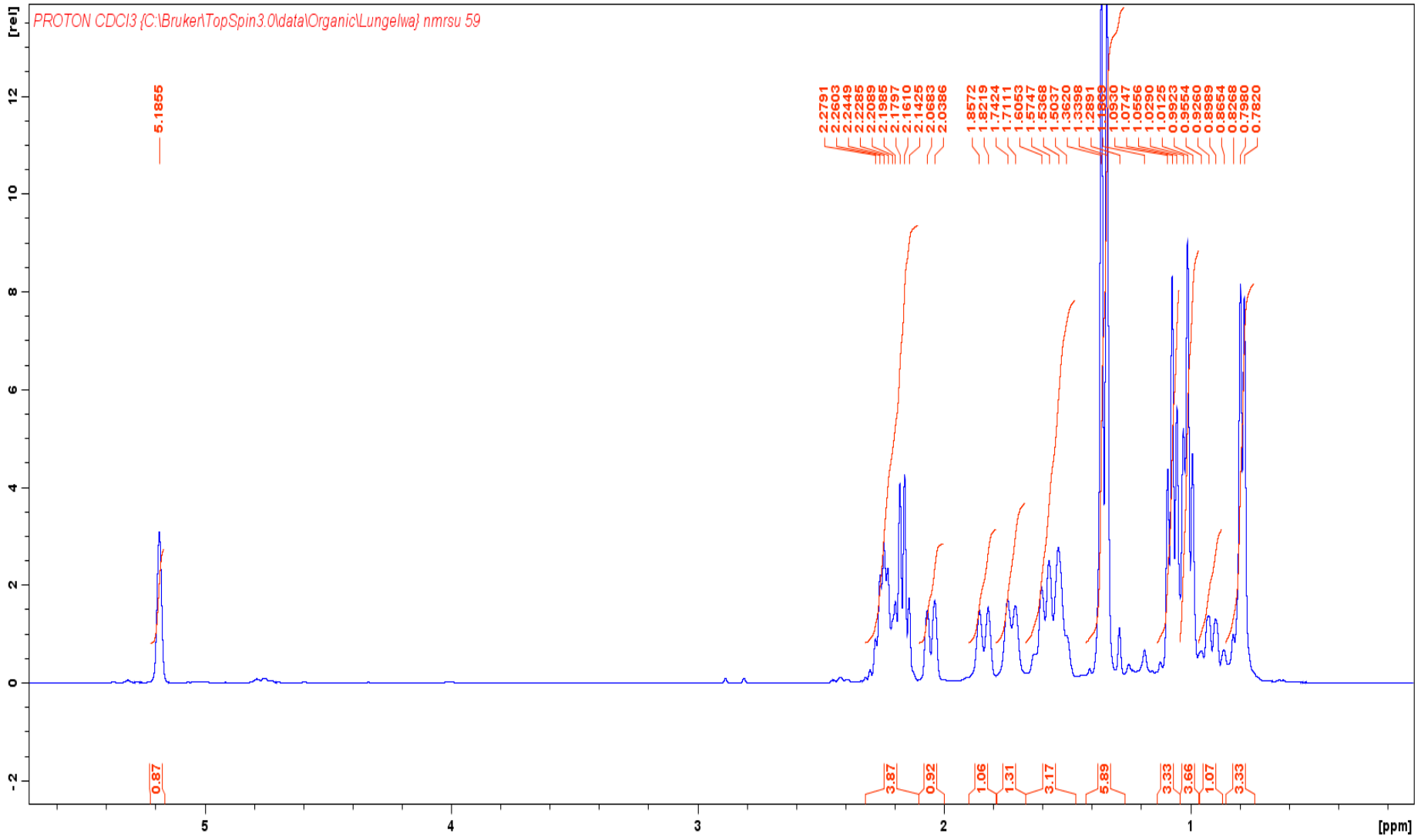
2.4. Di-propionate



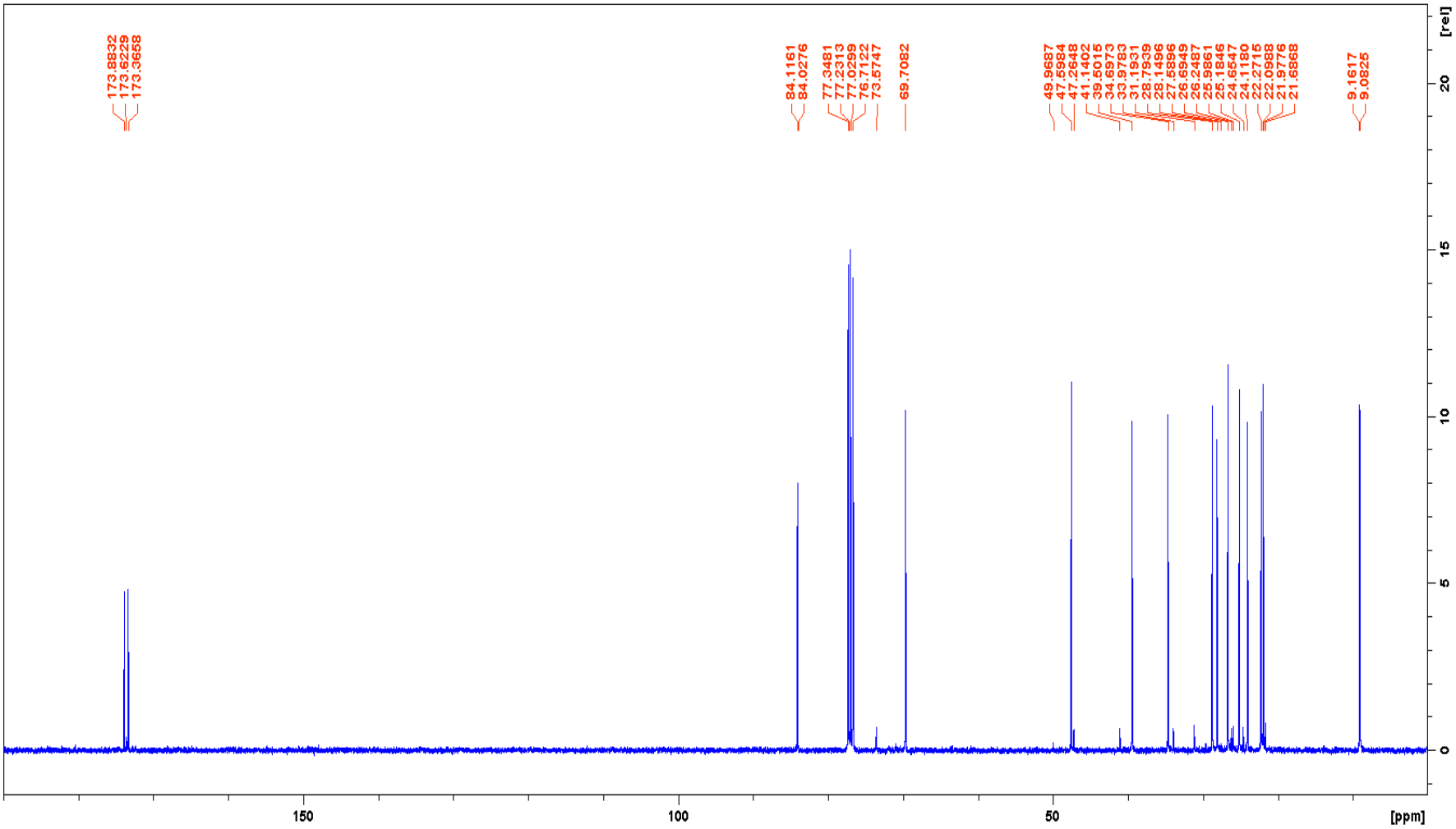
FTIR spectrum



GC–MS spectrum

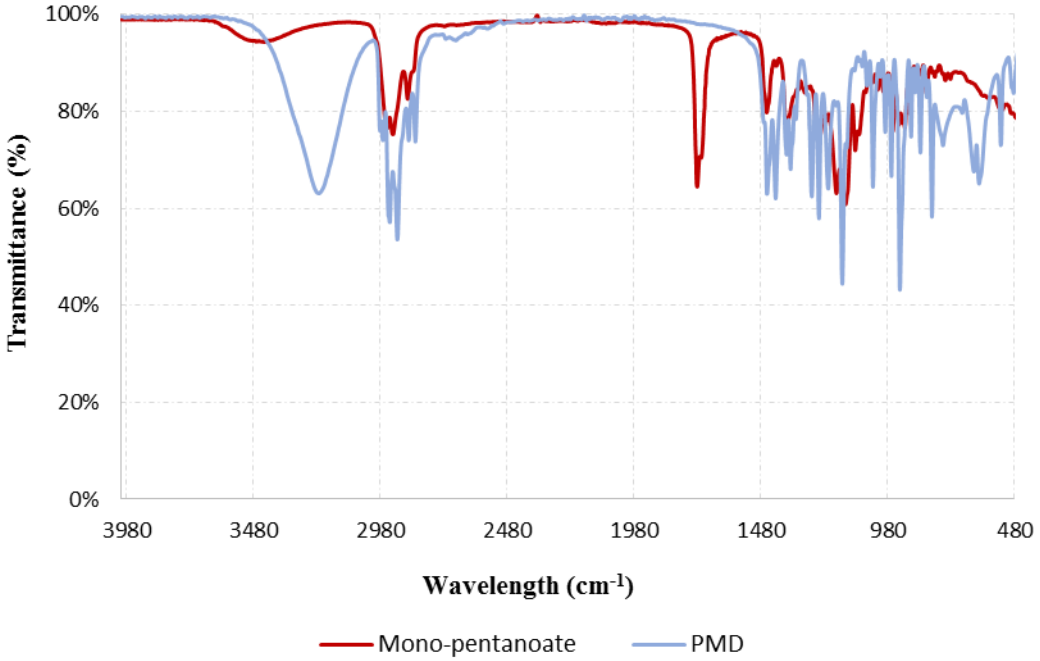


^{1}H NMR spectrum

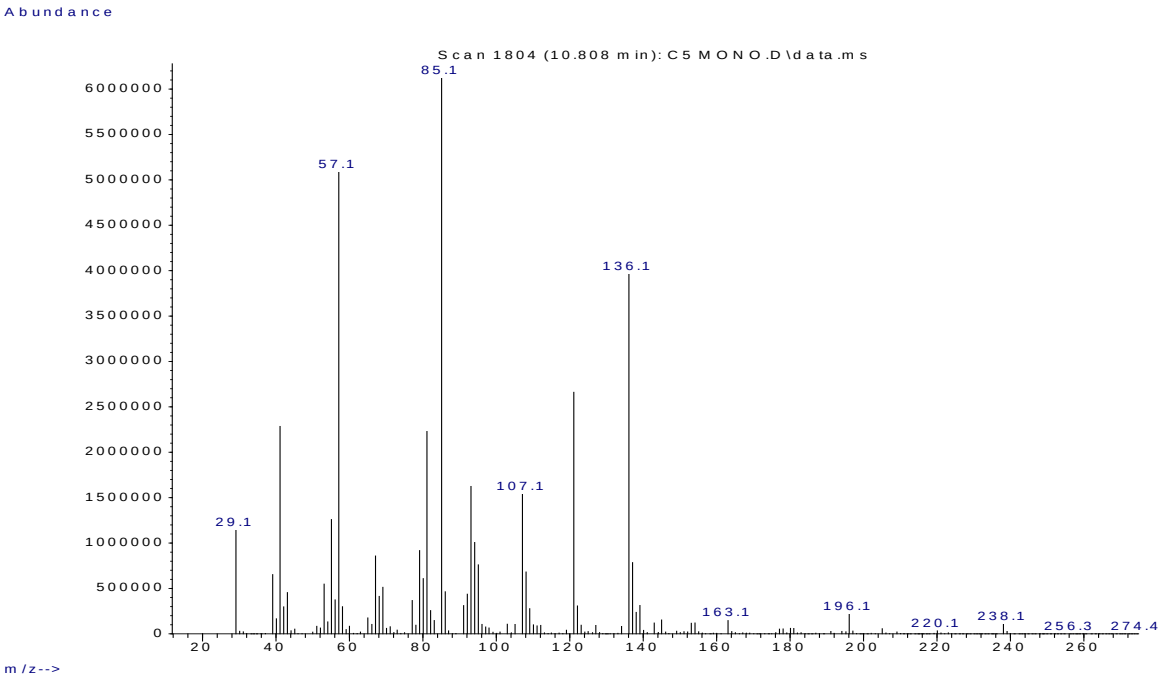


^{13}C NMR spectrum

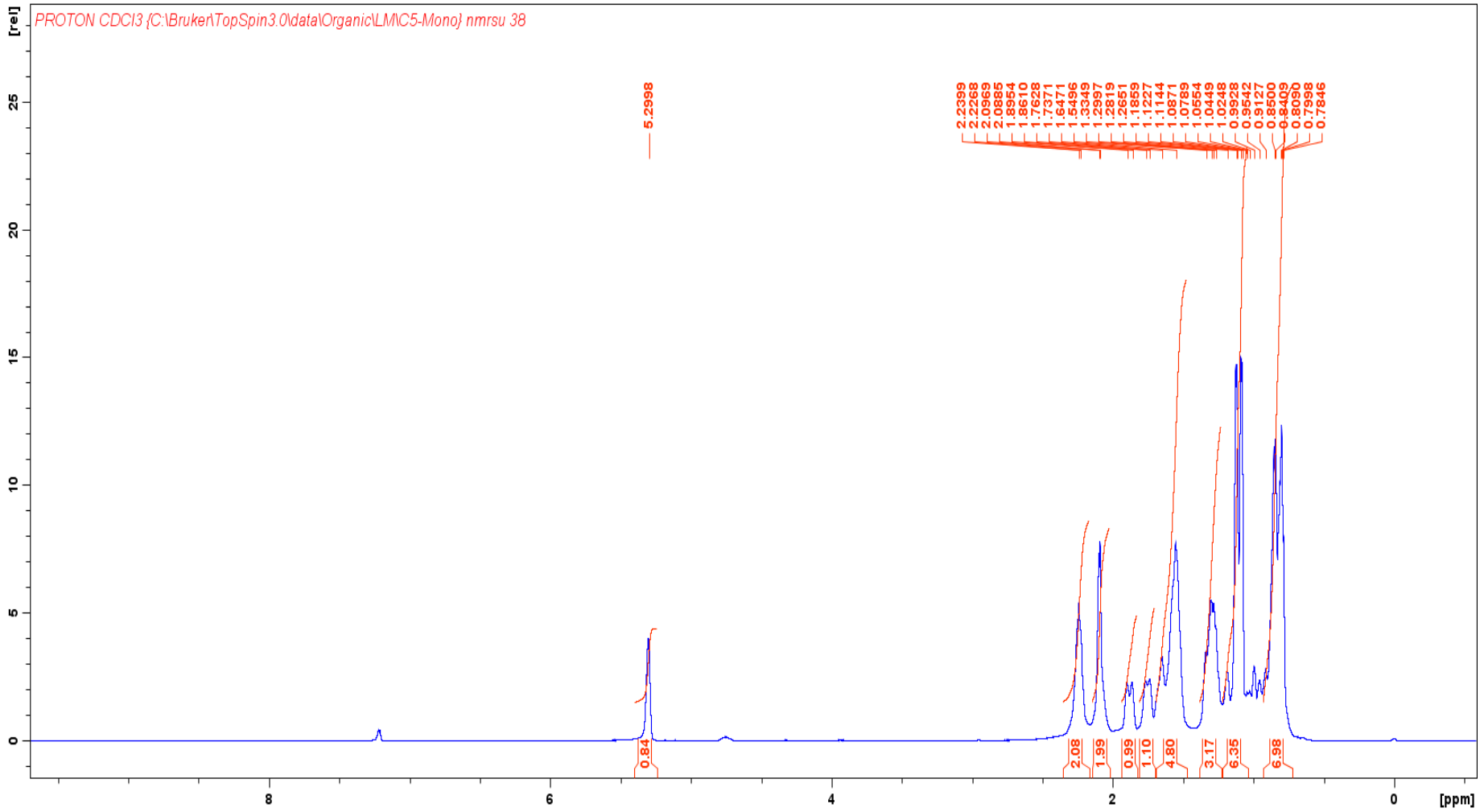
2.5. Mono-pentanoate



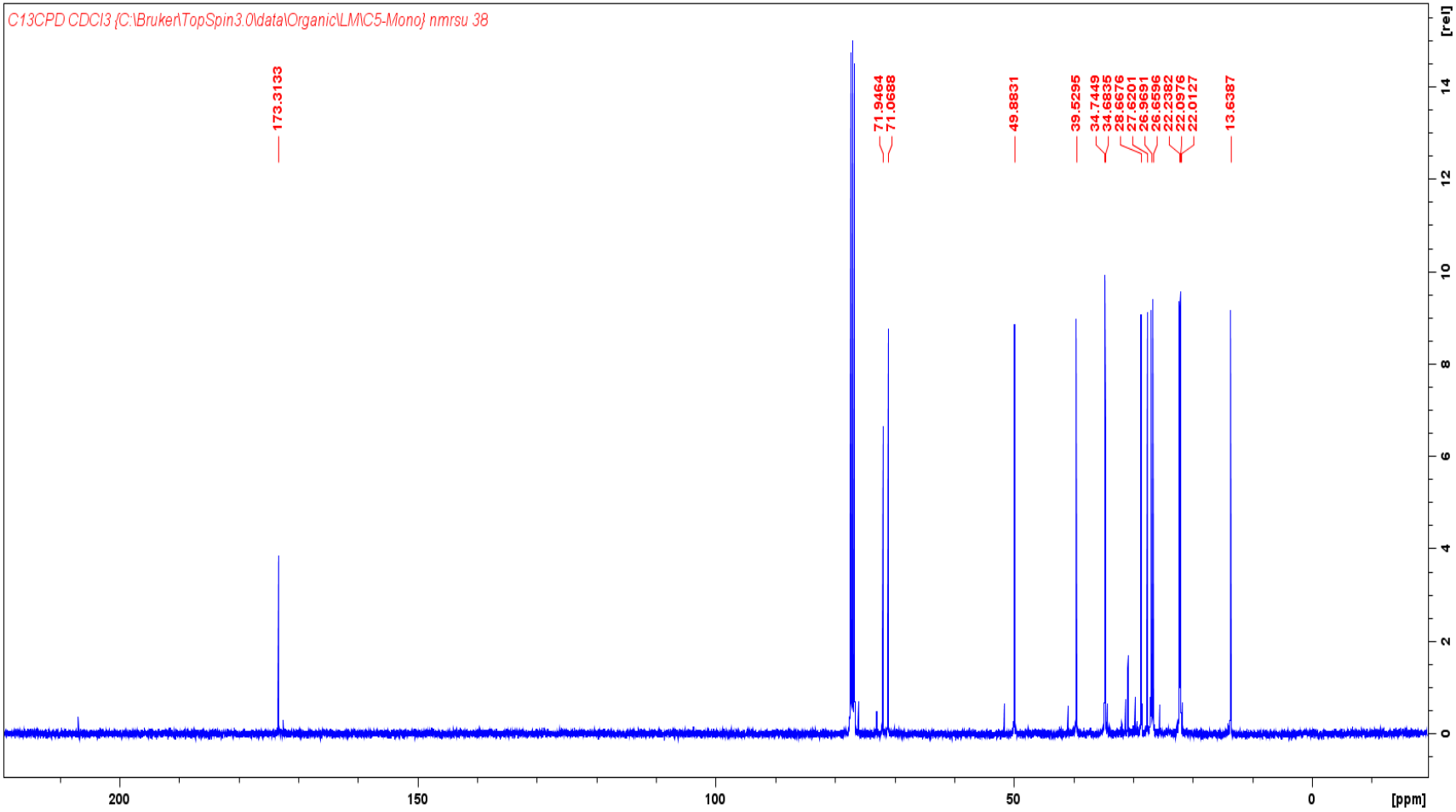
FTIR spectrum



GC–MS spectrum

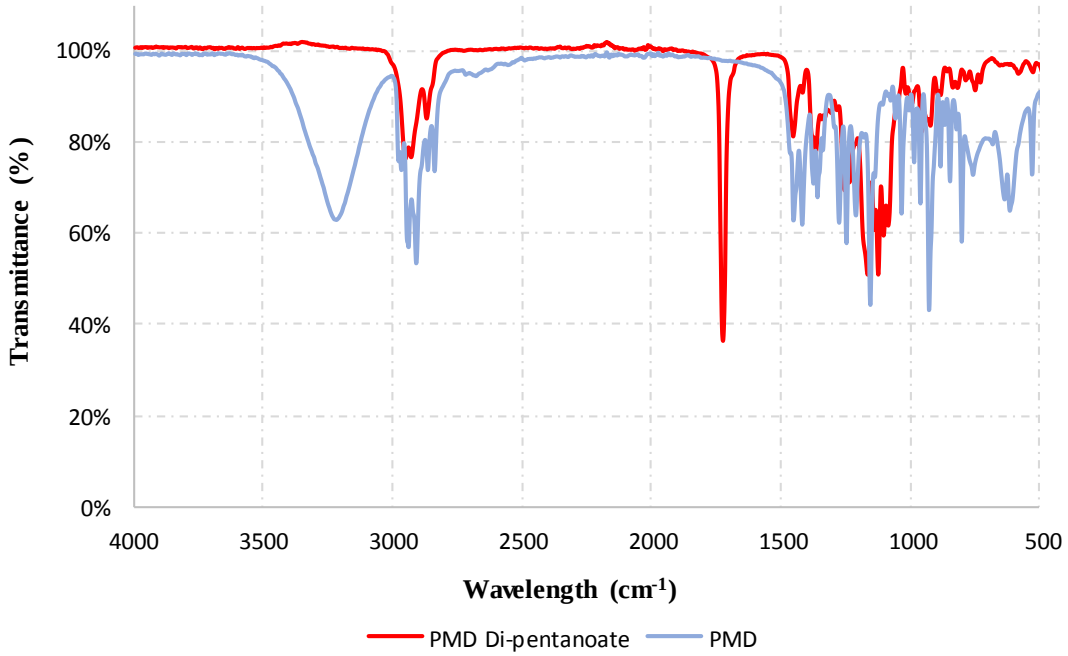


^{1}H NMR spectrum

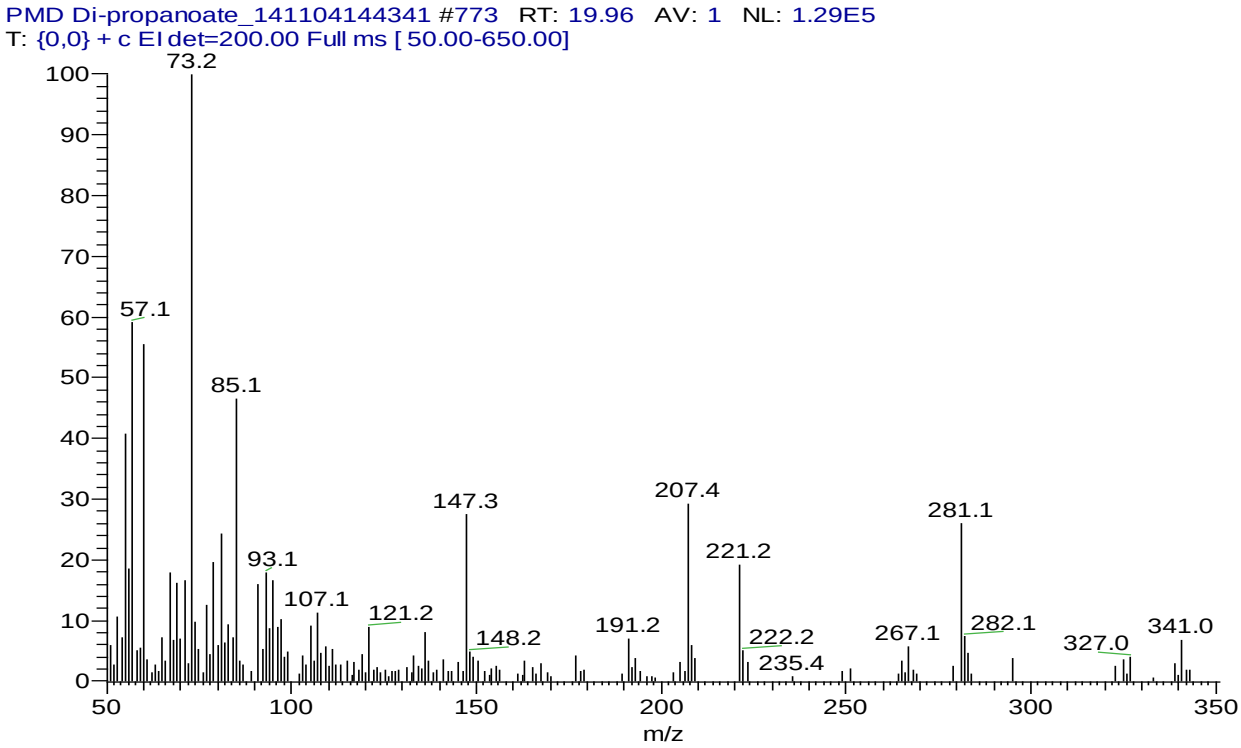


^{13}C NMR spectrum

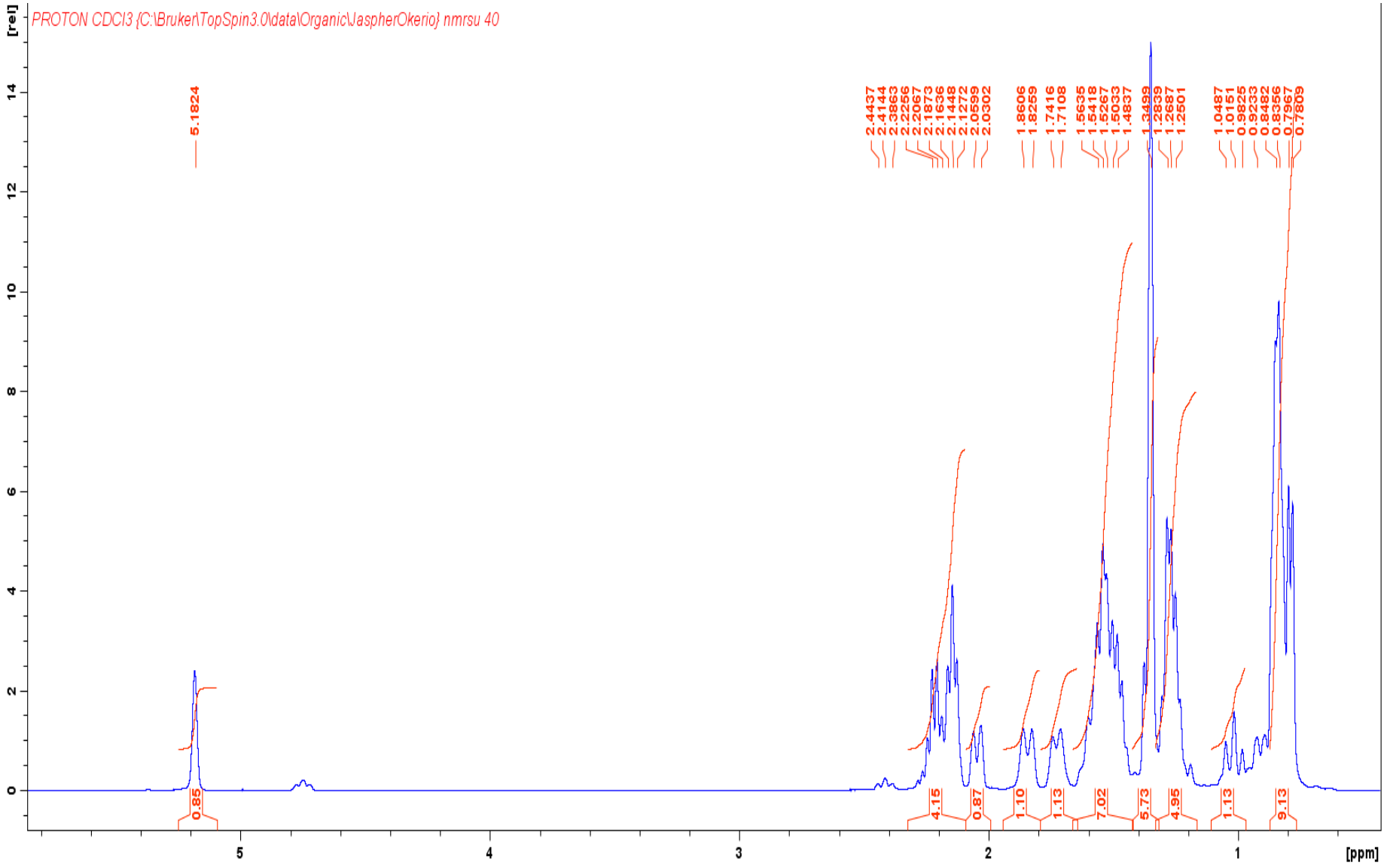
2.6. Di-pentanoate



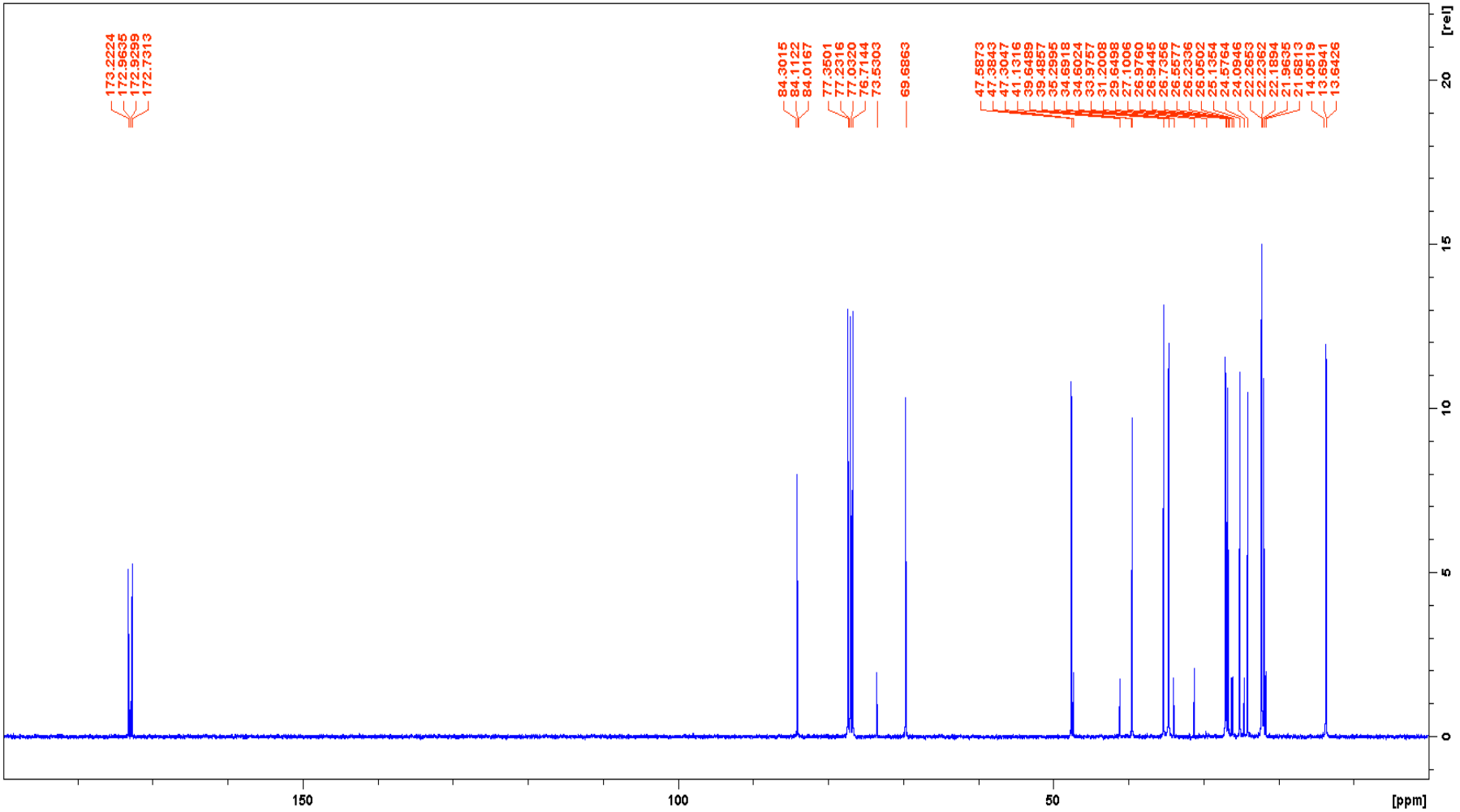
FTIR spectrum



GC–MS spectrum

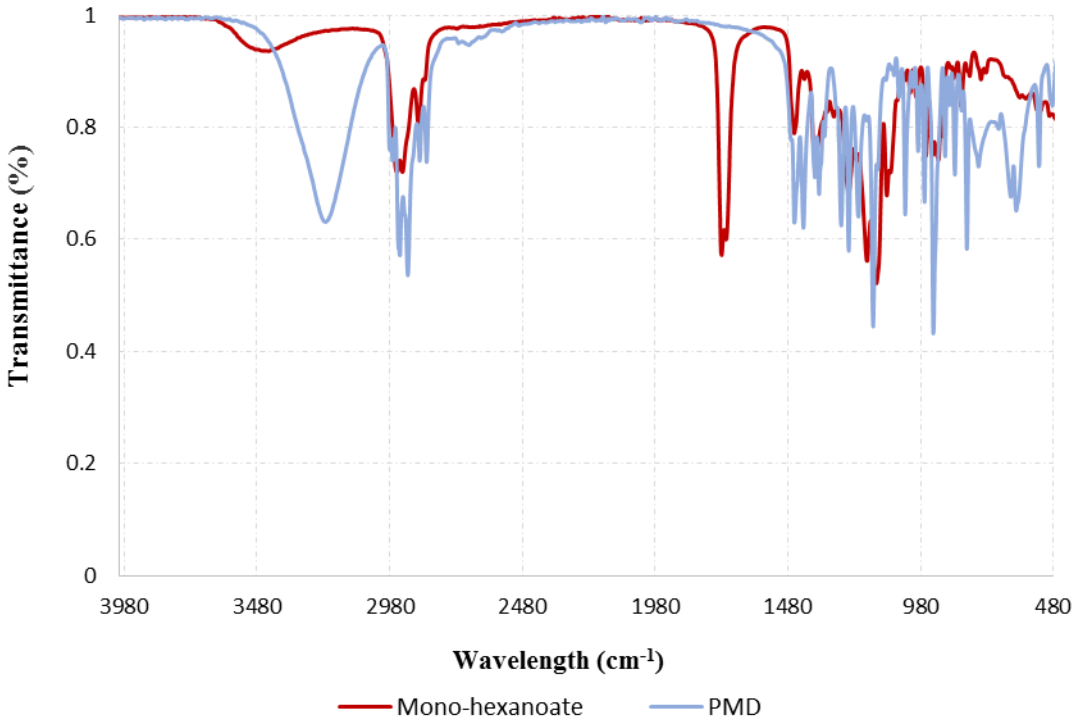


^{1}H NMR spectrum

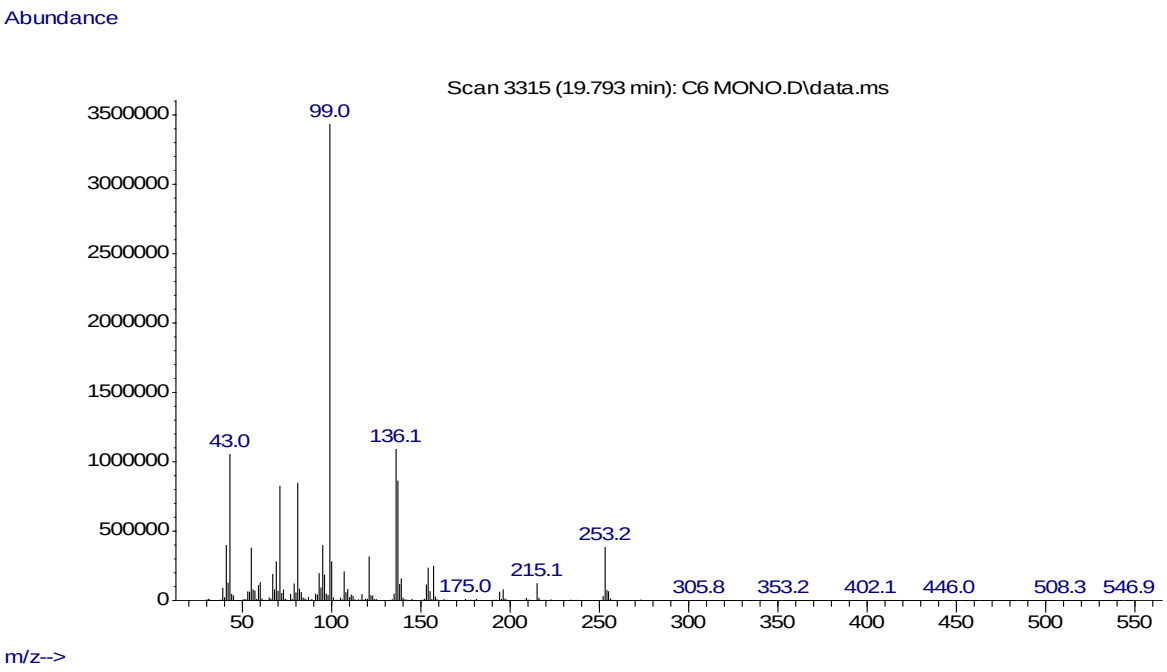


^{13}C NMR spectrum

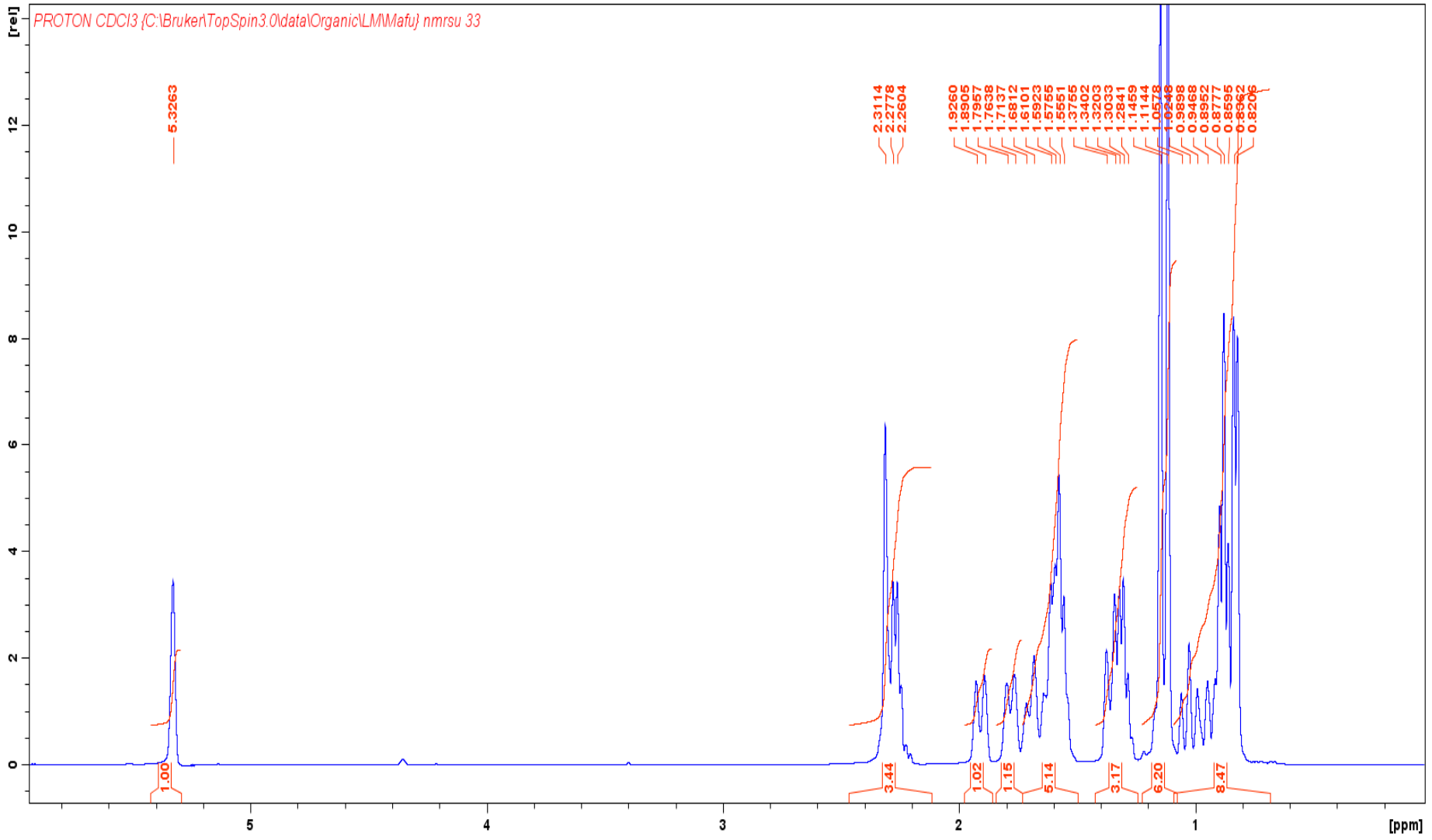
2.7. Mono-hexanoate



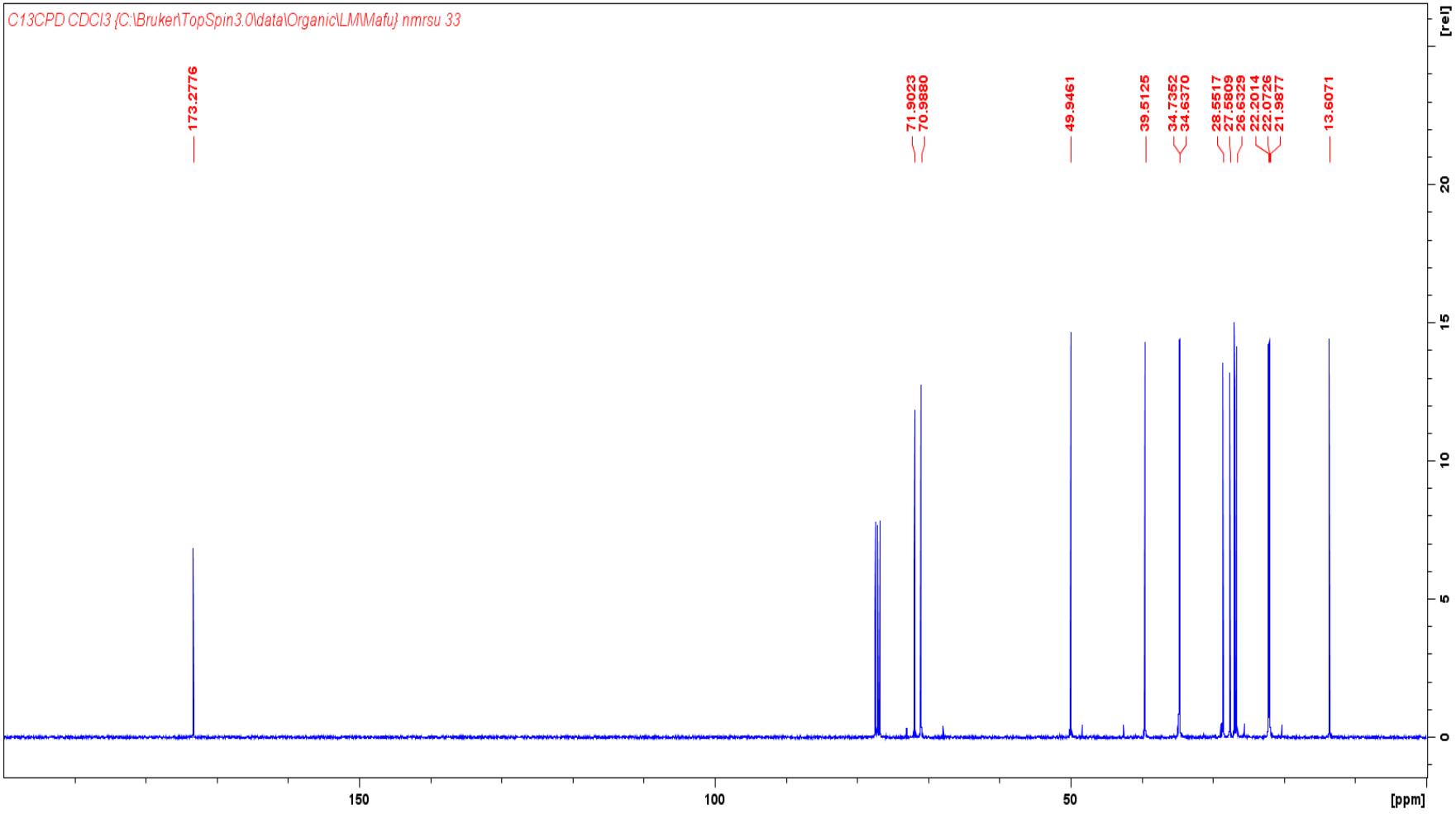
FTIR spectrum



GC–MS spectrum

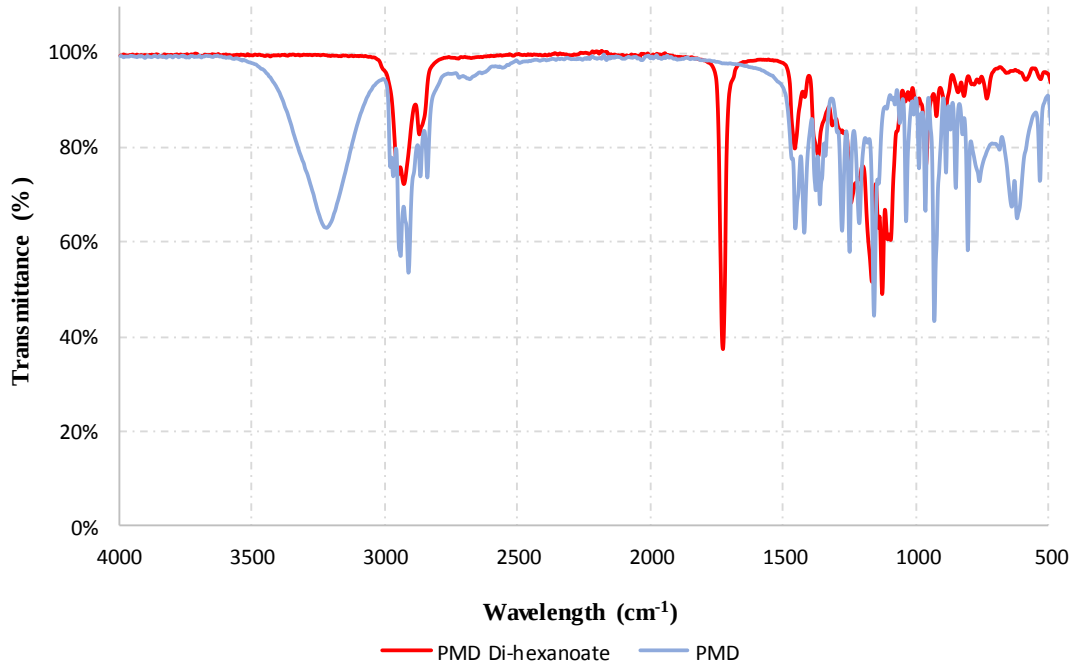


^{1}H NMR spectrum

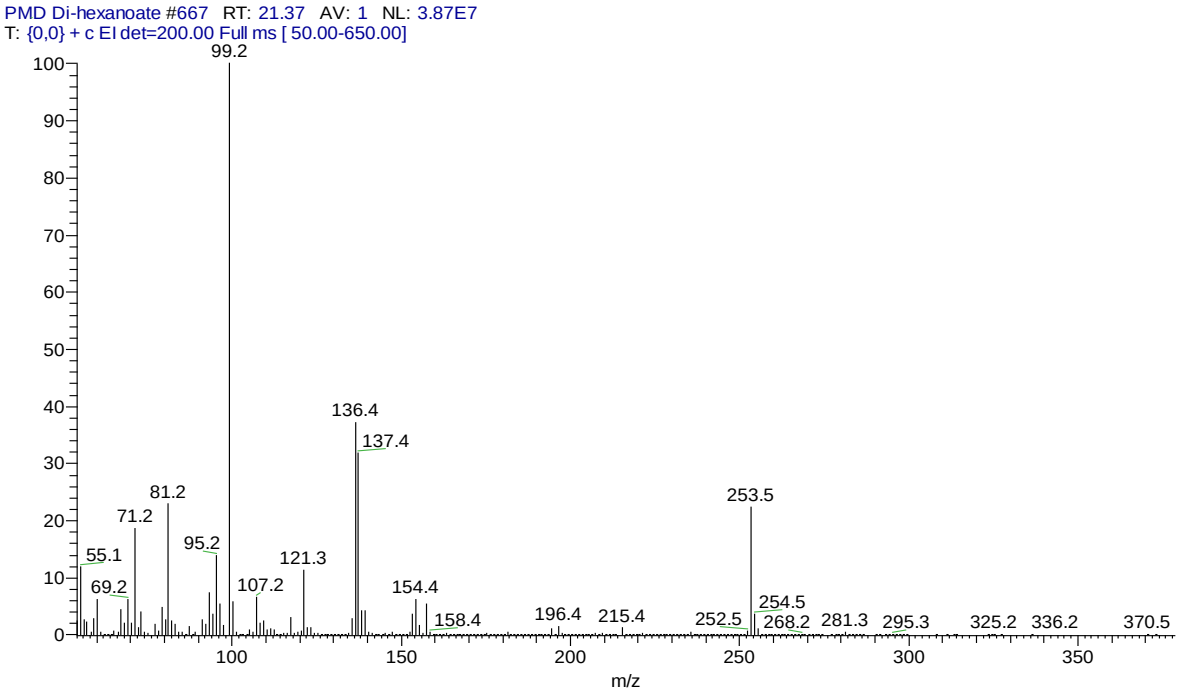


^{13}C NMR spectrum

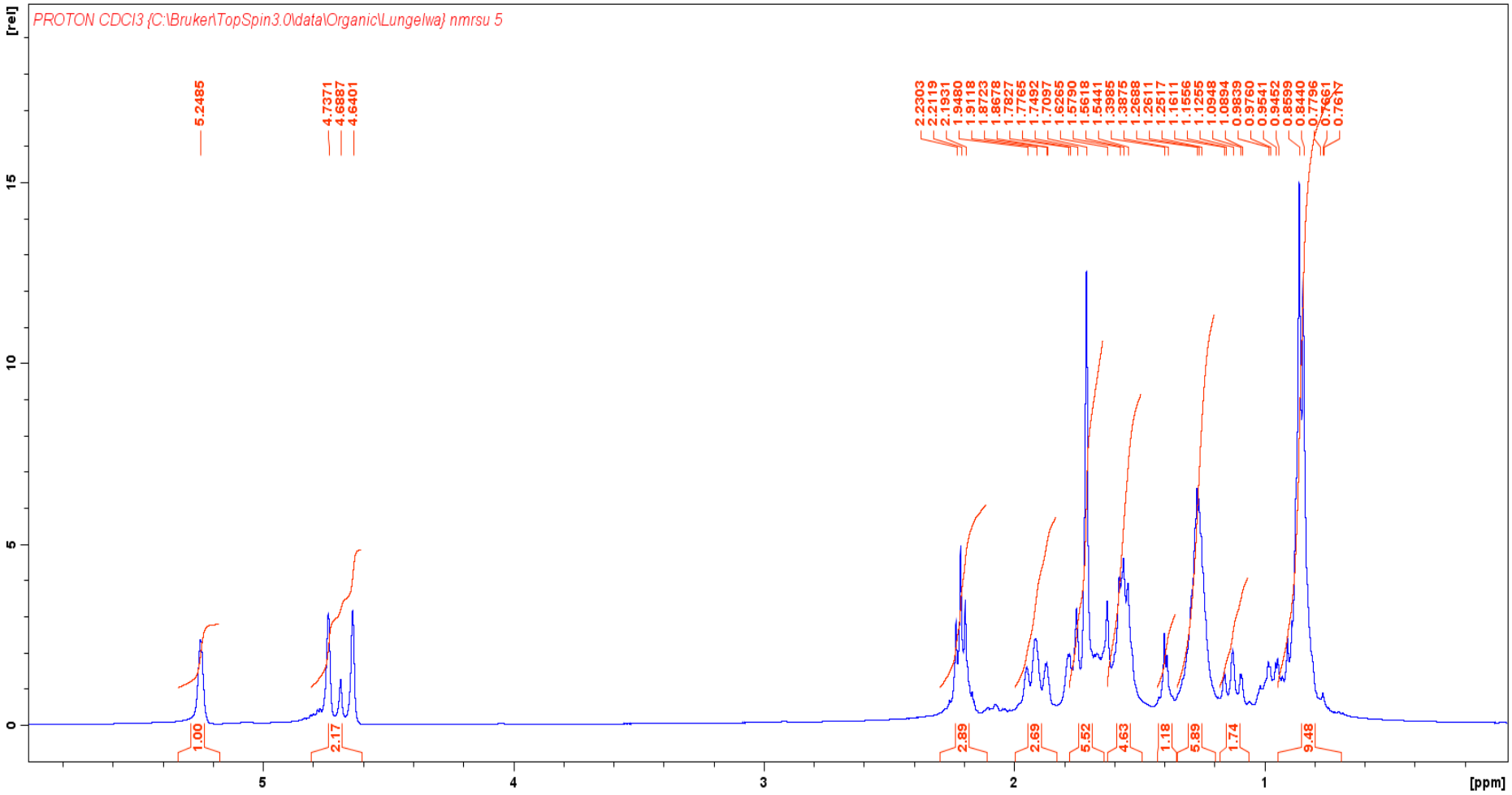
Di-hexanoate



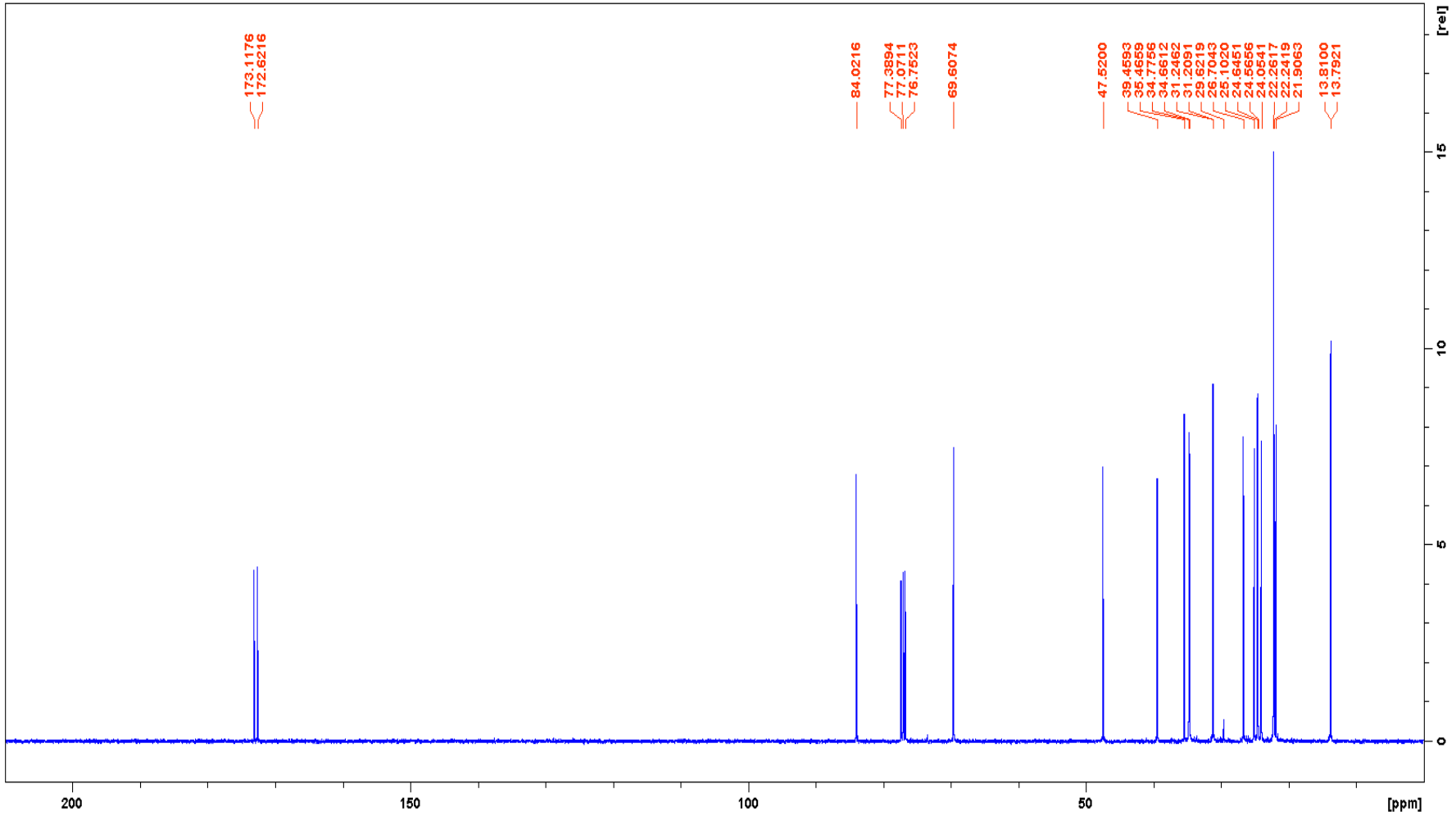
FTIR spectrum



GC–MS spectrum



^{1}H NMR spectrum



^{13}C NMR spectrum