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APPENDIX

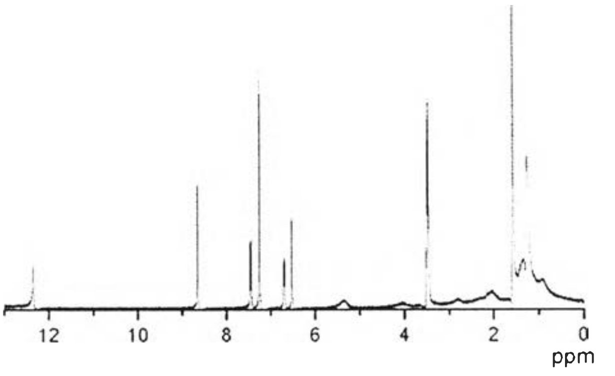

Figure A.1 The ^{1}H-NMR spectrum of **1** in DMSO-d_6 at 400 MHz.

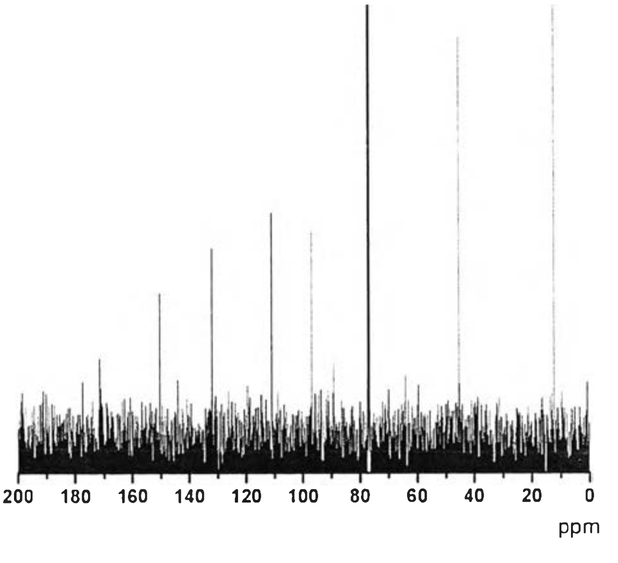

Figure A.2 The ^{13}C-NMR spectrum of **1** in $CDCl_3$ at 400 MHz.

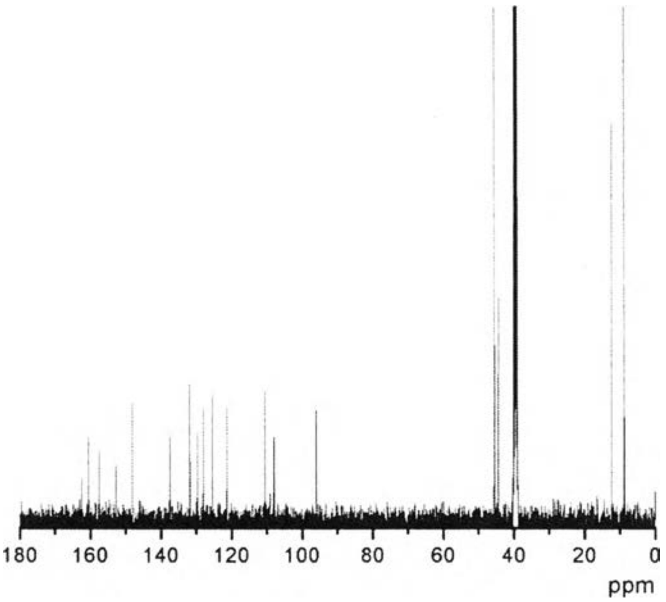

Figure A.3 The ^{13}C-NMR spectrum of **Cum_B** in $CDCl_3$ at 400 MHz.

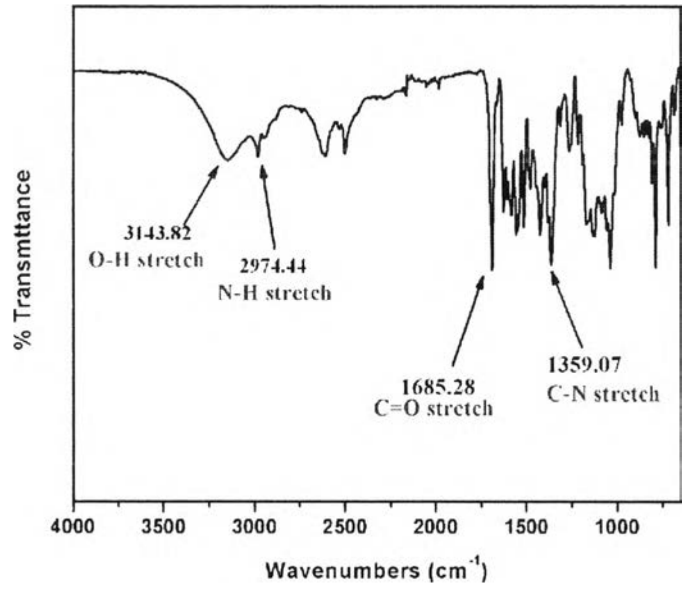

Figure A.4 IR spectrum of sensor **Cum_B**.

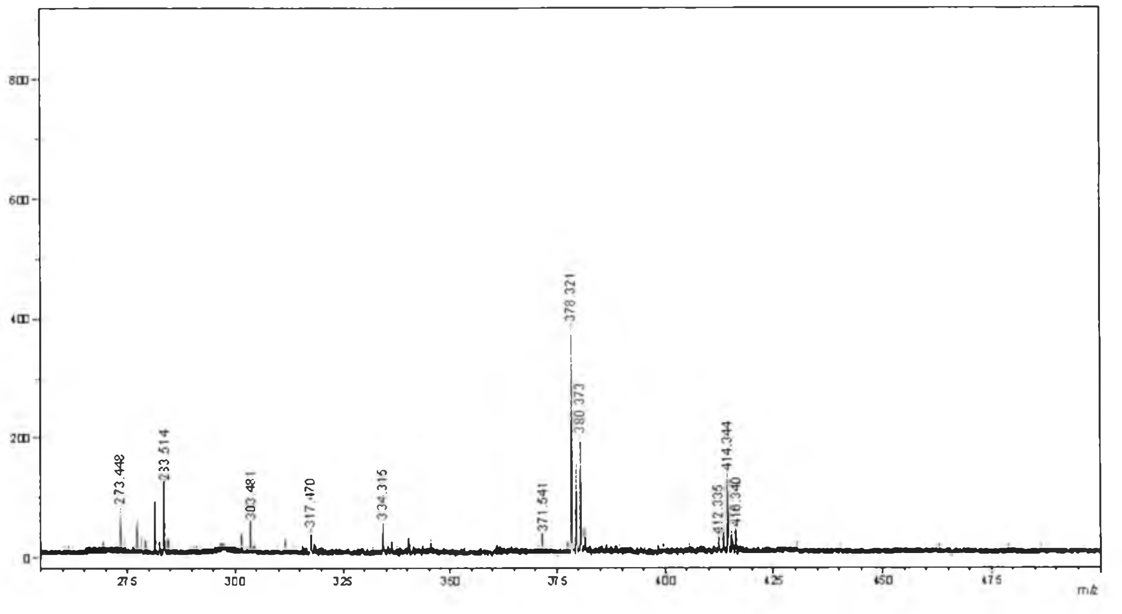

Figure A.5 MALDI-TOF mass spectrum of sensor **Cum_B** shown at 380.373 m/z.

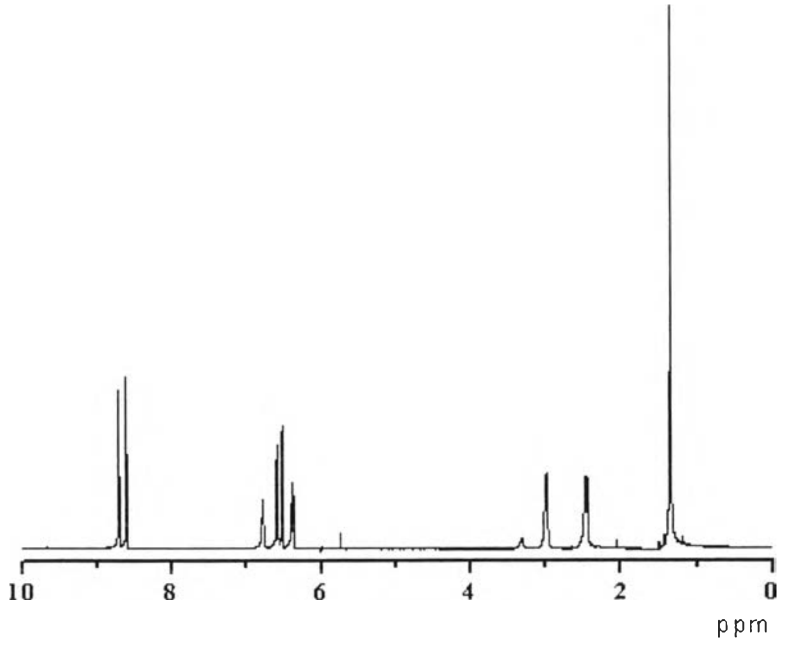

Figure A.6 The ^{1}H-NMR spectrum of **3** in DMSO-d_6 at 400 MHz.

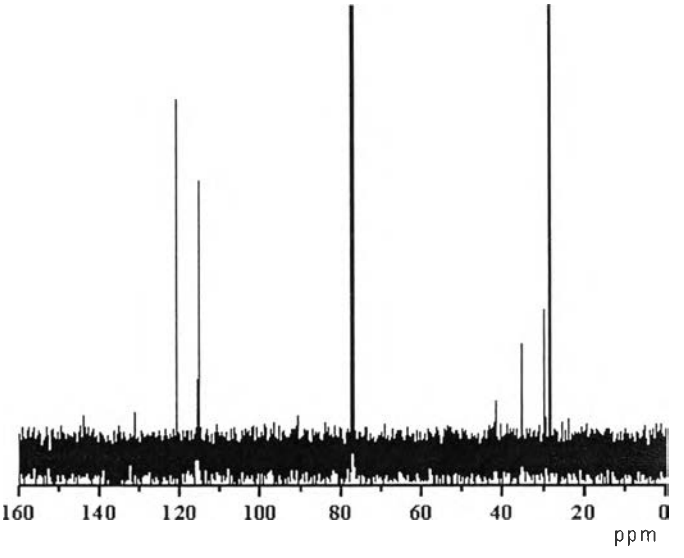

Figure A.7 The ^{13}C-NMR spectrum of **3** in $CDCl_3$ at 400 MHz.

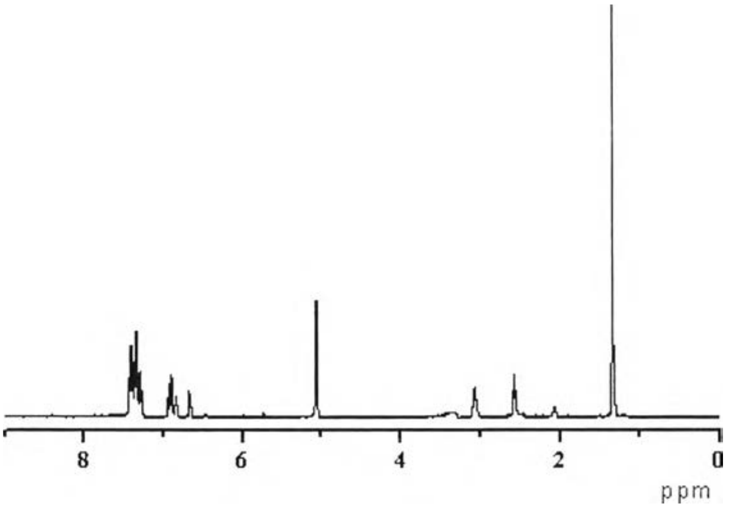

Figure A.8 The ^{1}H-NMR spectrum of **4** in DMSO-d_6 at 400 MHz.

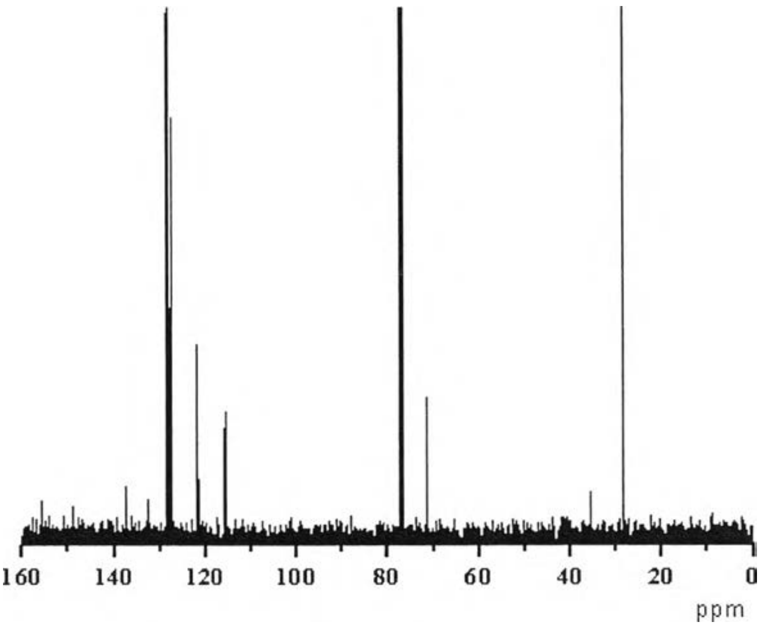

Figure A.9 The ^{13}C-NMR spectrum of **4** in $CDCl_3$ at 400 MHz.

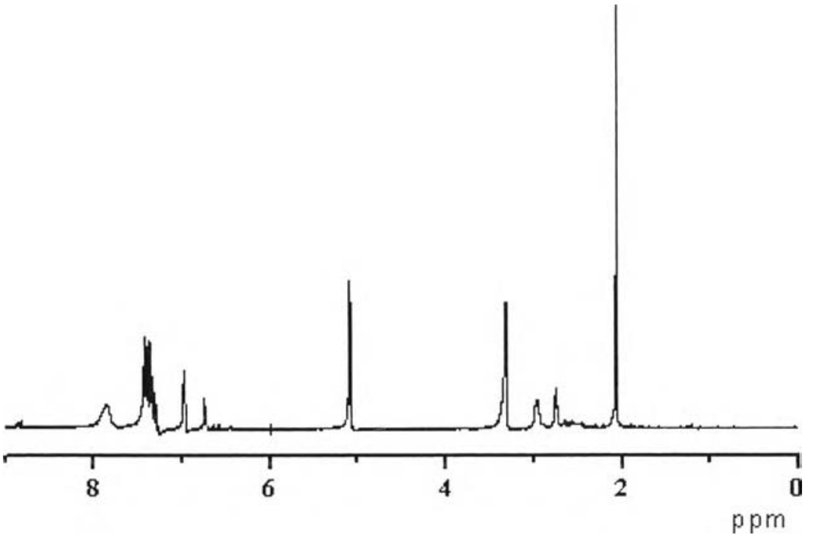

Figure A.10 The ^{1}H-NMR spectrum of **5** in DMSO-d_6 at 400 MHz.

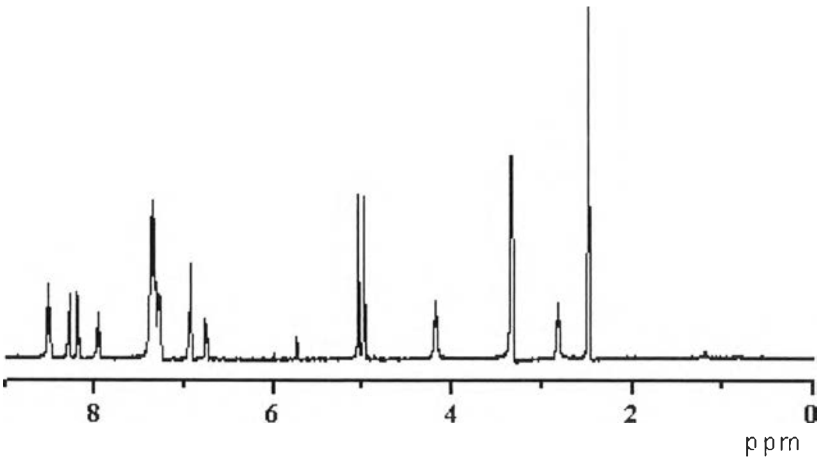

Figure A.11 The ^{1}H-NMR spectrum of **6** in DMSO-d_6 at 400 MHz.

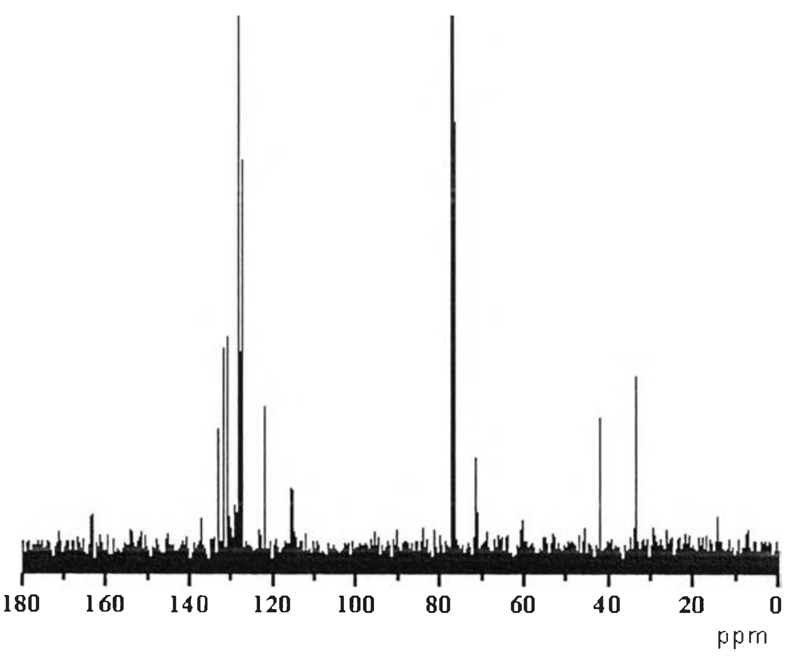

Figure A.12 The ^{13}C-NMR spectrum of **6** in $CDCl_3$ at 400 MHz.

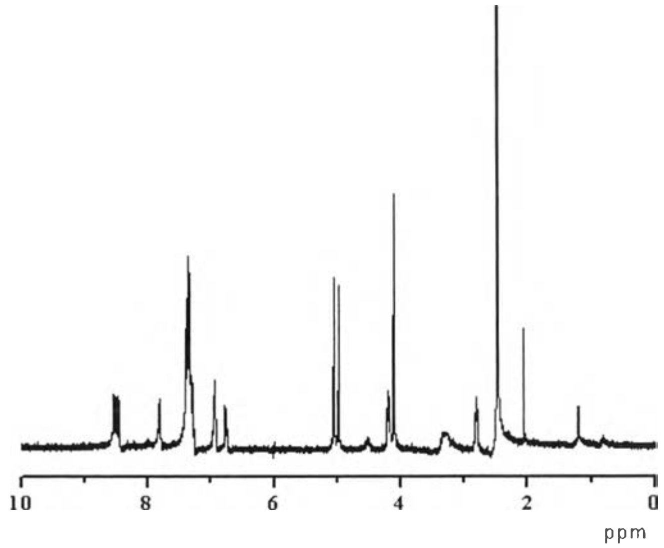

Figure A.13 The ^{1}H-NMR spectrum of **7** in DMSO-d_6 at 400 MHz.

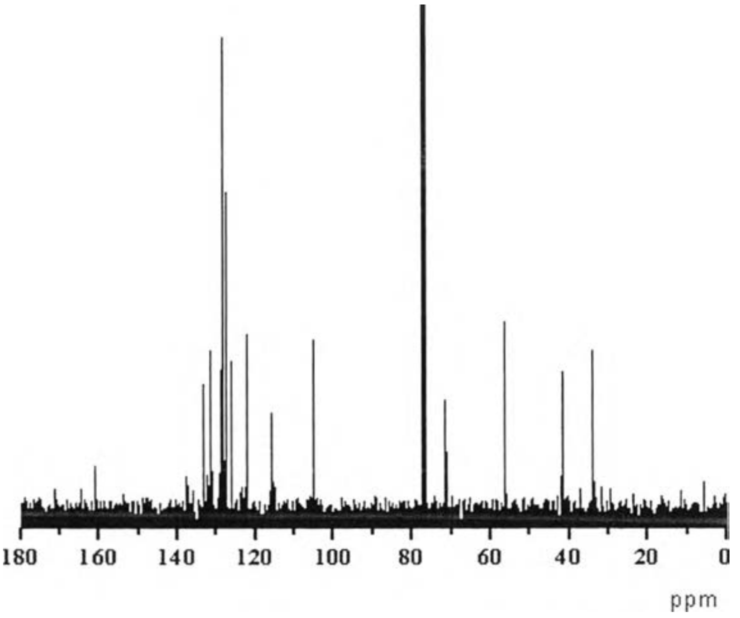

Figure A.14 The ^{13}C-NMR spectrum of **7** in $CDCl_3$ at 400 MHz.

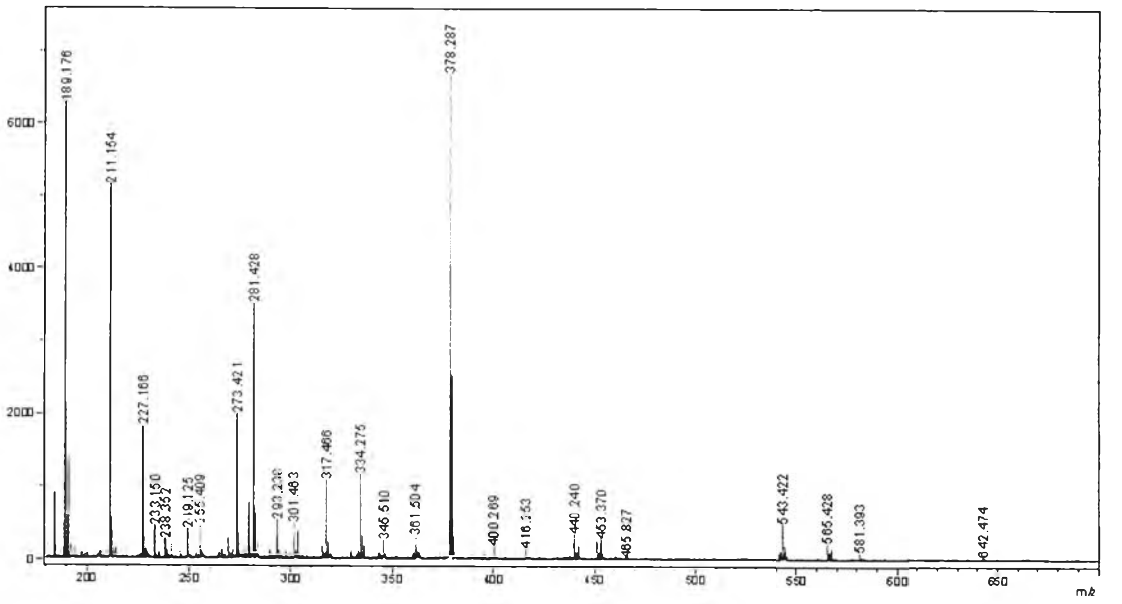

Figure A.15 MALDI-TOF mass spectrum of **7** shown at 543.422 m/z.

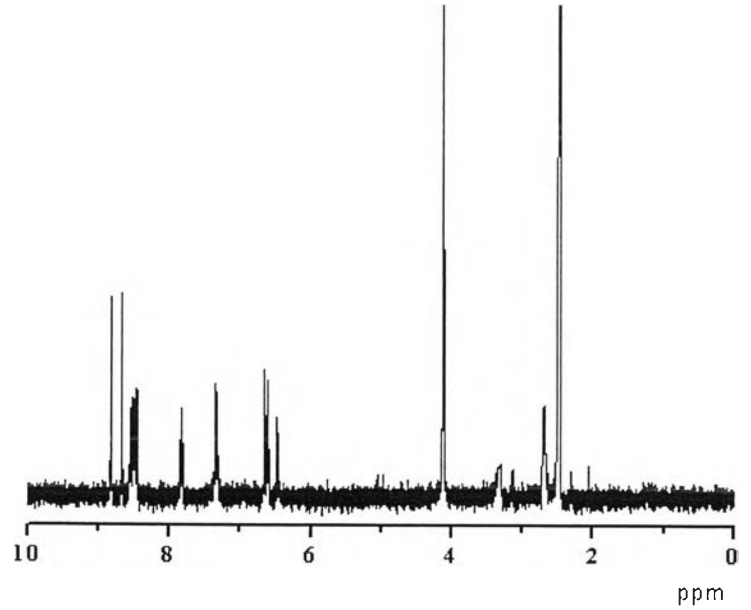

Figure A.16 The ^{1}H-NMR spectrum of **NBD** in DMSO-d_6 at 400 MHz.

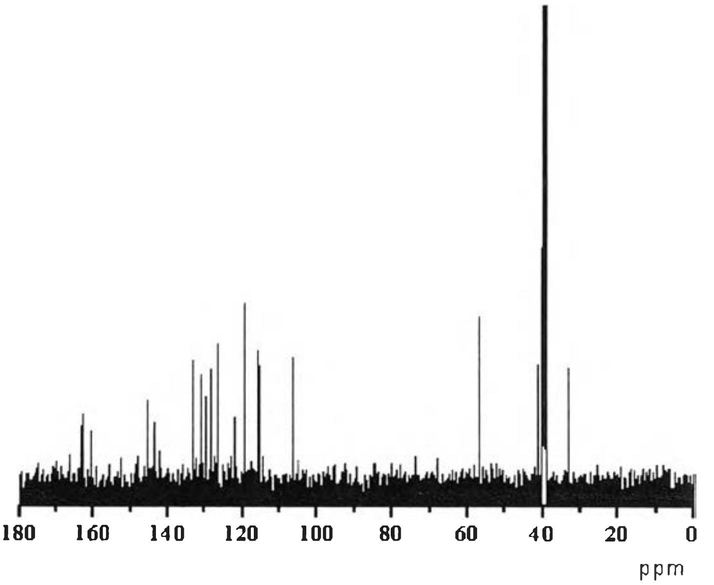

Figure A.17 The ^{13}C-NMR spectrum of **NBD** in DMSO-d_6 at 400 MHz.

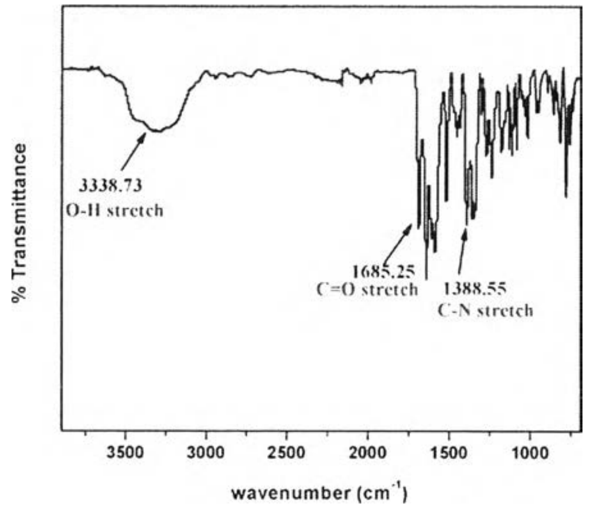

Figure A.18 IR spectrum of sensor **NBD**

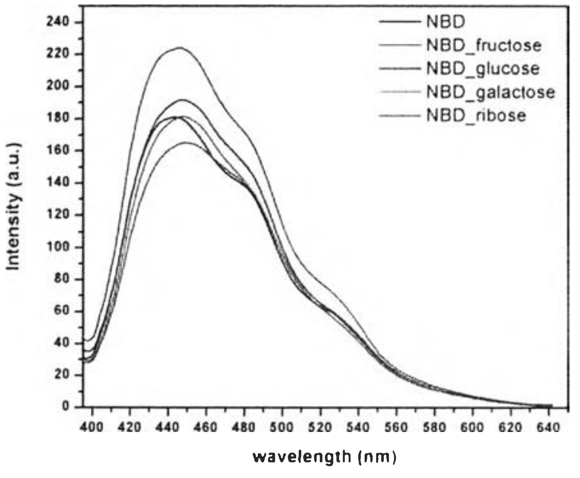

Figure A.19 Fluorescence spectral changes of **NBD** with various saccharides in 10 % DMSO with 0.1 M phosphate buffer at pH 7.4

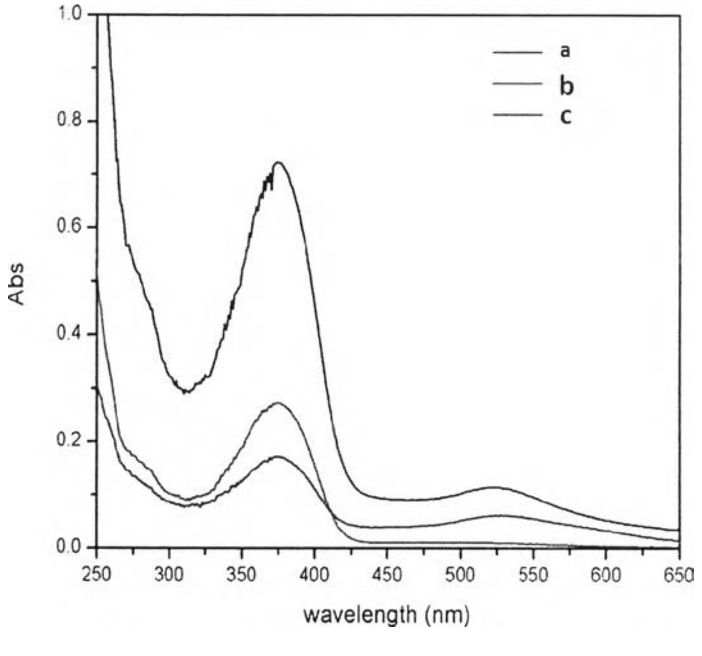

Figure A.20 UV-Visible spectrum of NBDB_ AuNPs a) before centrifuge, b) supernatant and C) after centrifuge

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