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APPENDIX

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

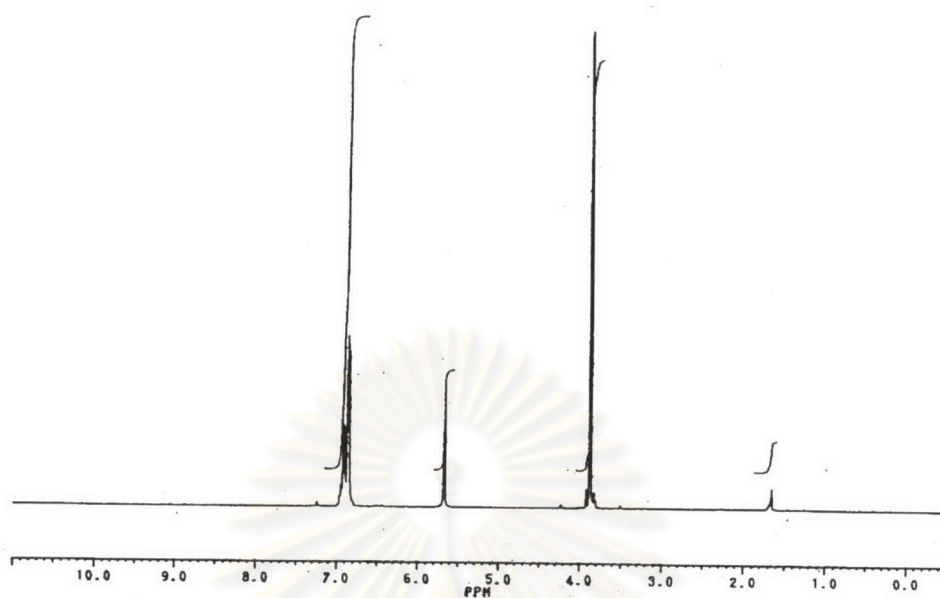


Figure A.1 The <sup>1</sup>H-NMR spectrum of *o*-methoxy phenol, **1a**, in CDCl<sub>3</sub> with 200 MHz

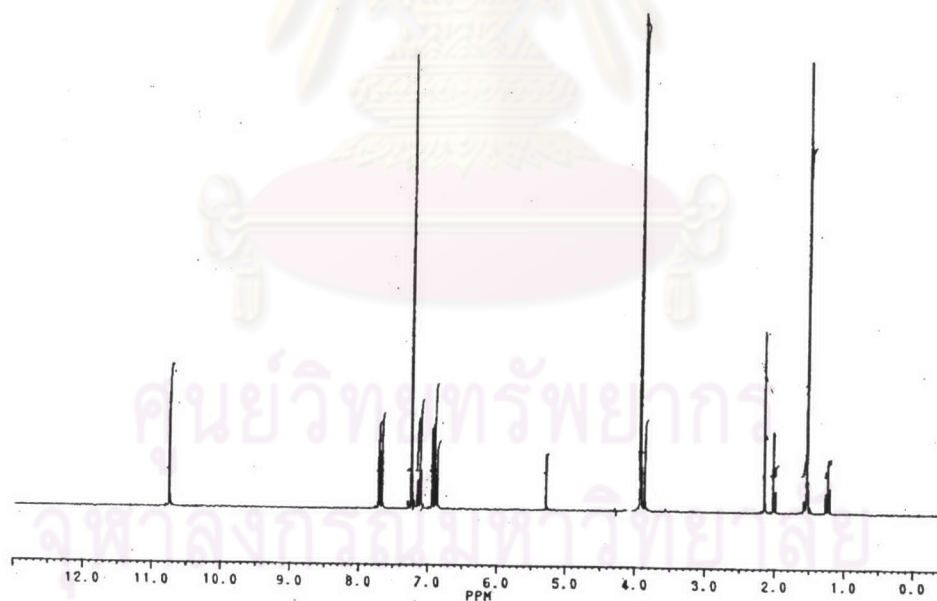
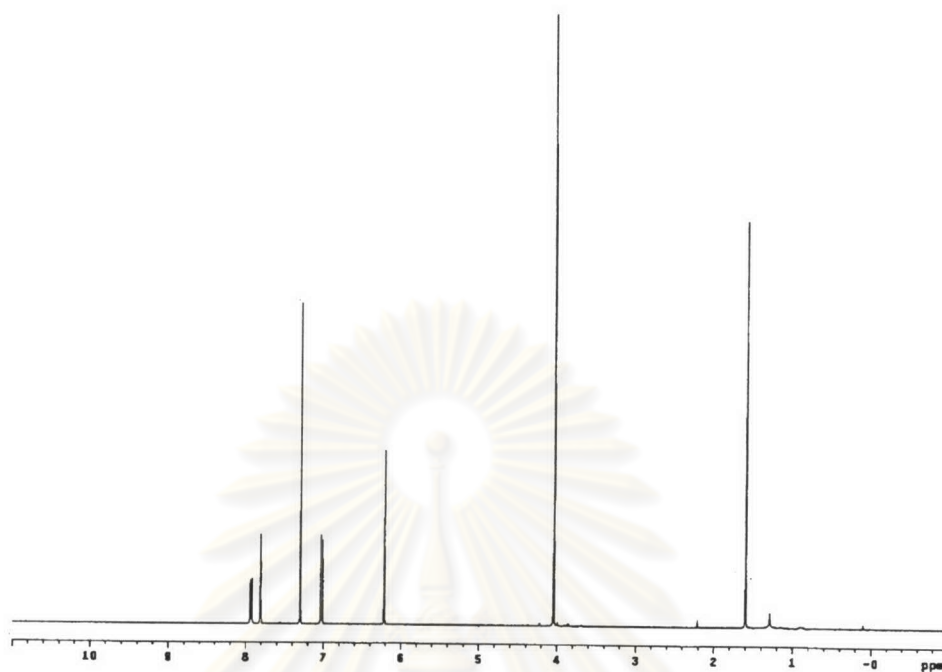
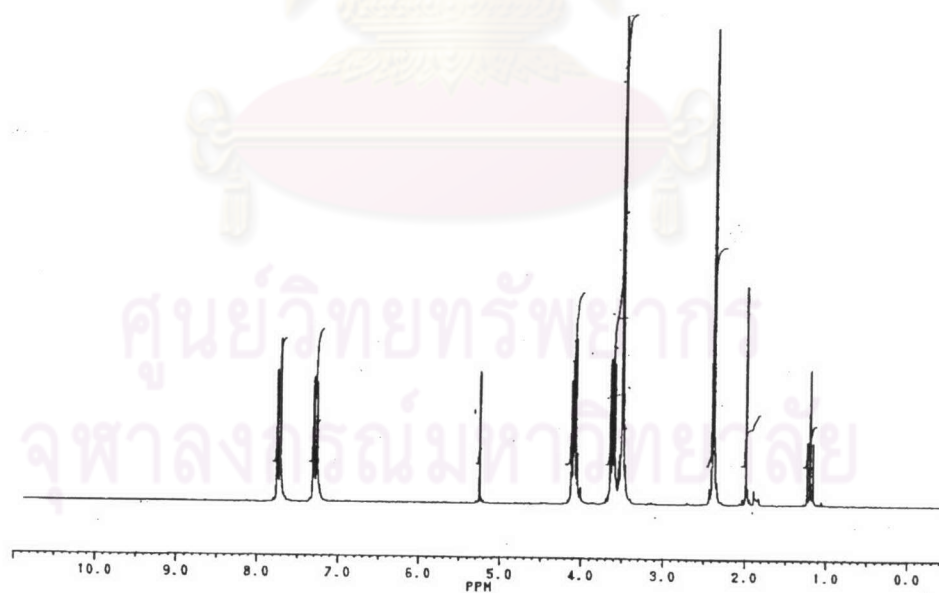


Figure A.2 The <sup>1</sup>H-NMR spectrum of 2-methoxy-6-nitrophenol, **2a**, in CDCl<sub>3</sub> with 200 MHz

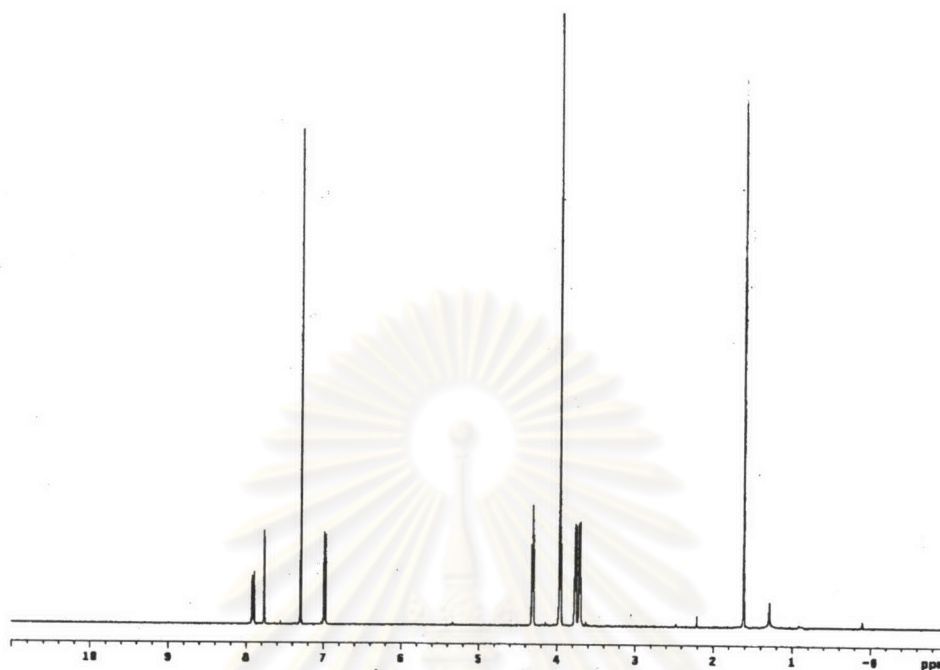




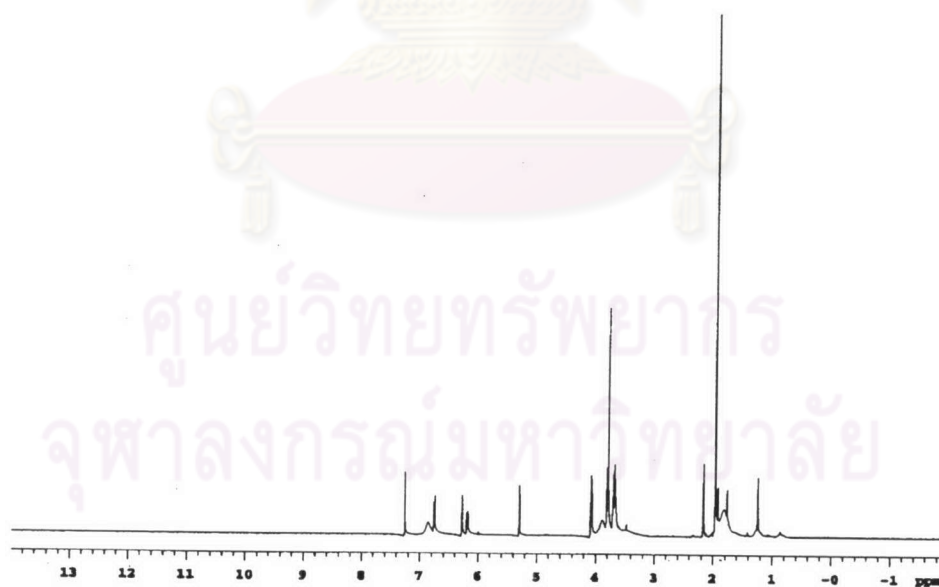
**Figure A.3** The  $^1\text{H-NMR}$  spectrum of 2-methoxy-4-nitrophenol, **2b**, in  $\text{CDCl}_3$  with 400 MHz



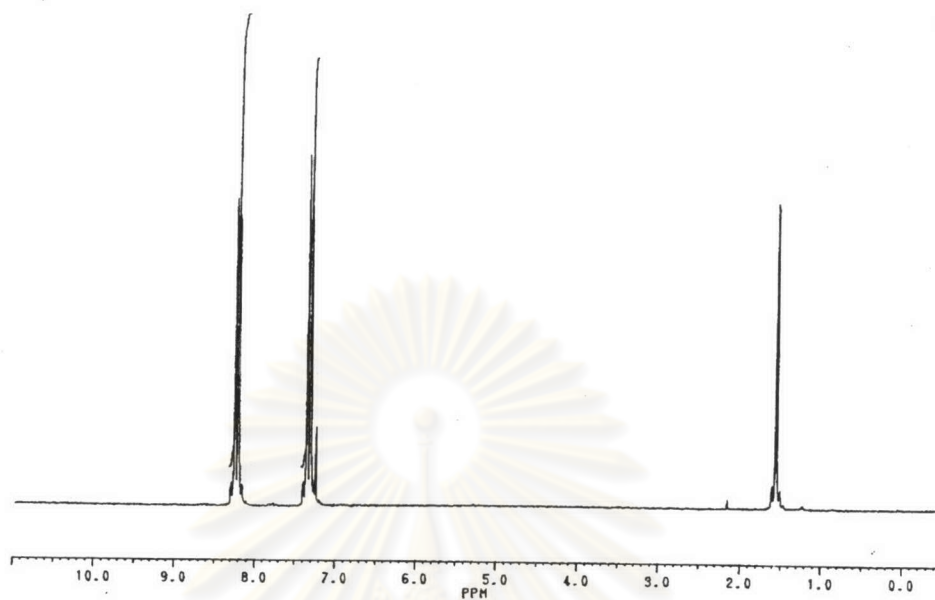
**Figure A.4** The  $^1\text{H-NMR}$  spectrum of tetraethylene glycol ditosylate in  $\text{CDCl}_3$  with 200 MHz



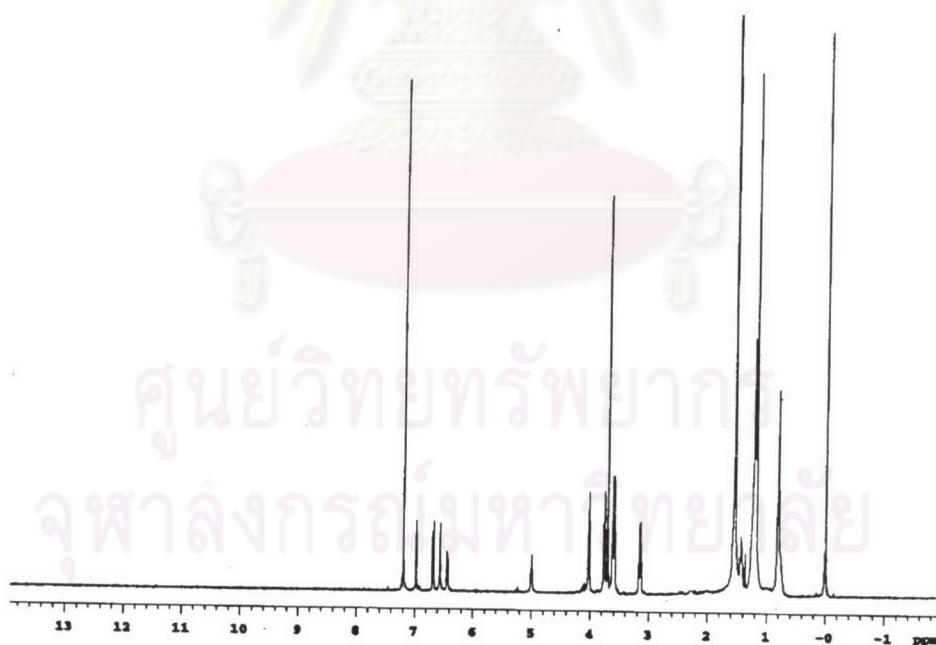
**Figure A.5** The <sup>1</sup>H-NMR spectrum of 2,2'-[oxabis(3-oxapentaethyleneoxy)]-bis(2-methoxy-4-nitrophenol), **3a**, in CDCl<sub>3</sub> with 400 MHz



**Figure A.6** The <sup>1</sup>H-NMR spectrum of 2,2'-[oxabis(3-oxapentaethyleneoxy)]-bis(2-methoxy-4-aminophenol), **4a**, in CDCl<sub>3</sub> with 400 MHz

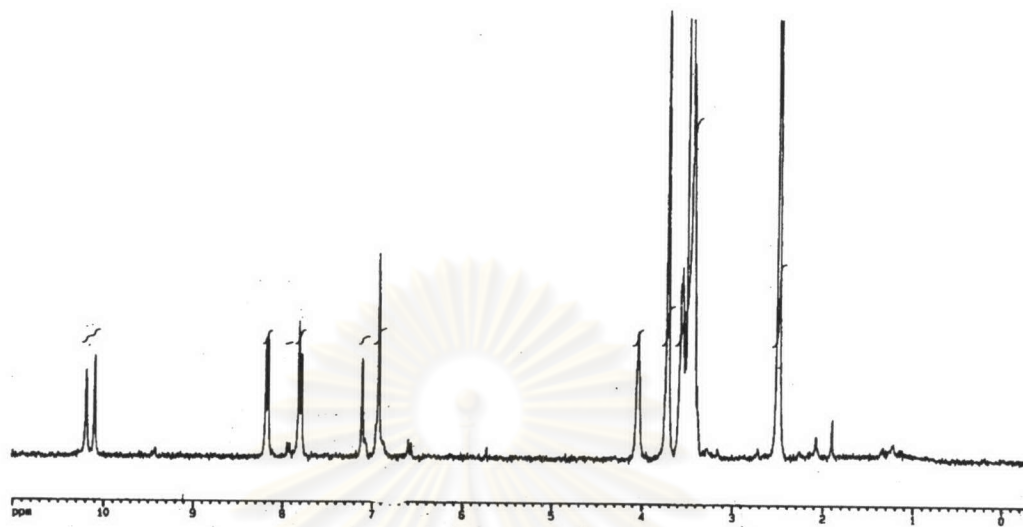


**Figure A.7** The  $^1\text{H}$ -NMR spectrum of *p*-nitrophenyl thiocyanate in  $\text{CDCl}_3$  with 200 MHz

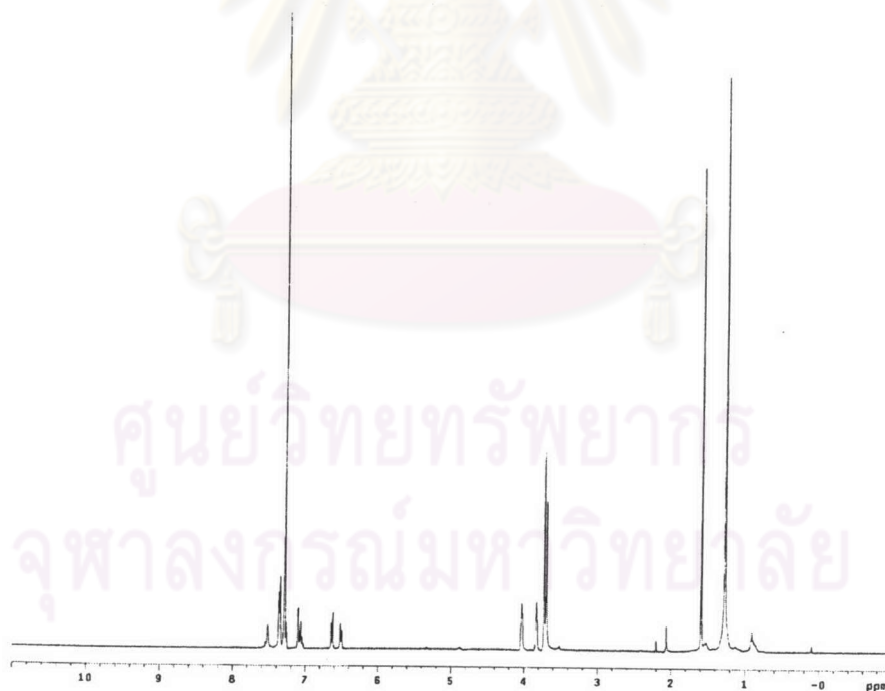


**Figure A.8** The  $^1\text{H}$ -NMR spectrum of acyclic crown ether containing hexyl urea moieties, **5a**, in  $\text{CDCl}_3$  with 400 MHz





**Figure A.9** The <sup>1</sup>H-NMR spectrum of acyclic crown ether containing nitrophenyl thiourea moieties, **5b**, in DMSO with 300 MHz



**Figure A.10** The <sup>1</sup>H-NMR spectrum of acyclic crown ether containing phenyl urea moieties, **5c**, in CDCl<sub>3</sub> with 400 MHz

**VITAE**

Mr. Supachai Rittikulsittichai was born on March 8, 1979 in Chonburi, Thailand. He received his Bachelor's degree of Science in Chemistry from Burapha University in 2000. Since 2001, he has been a graduate student at the Department of Chemistry, Chulalongkorn University and become a member of the Supramolecular Chemistry Research Unit under Supervision of Assistance Professor Dr. Thawatchai Tuntulani. He finished his Master's degree of Science in the academic year 2003.



ศูนย์วิจัยทรัพยากร  
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