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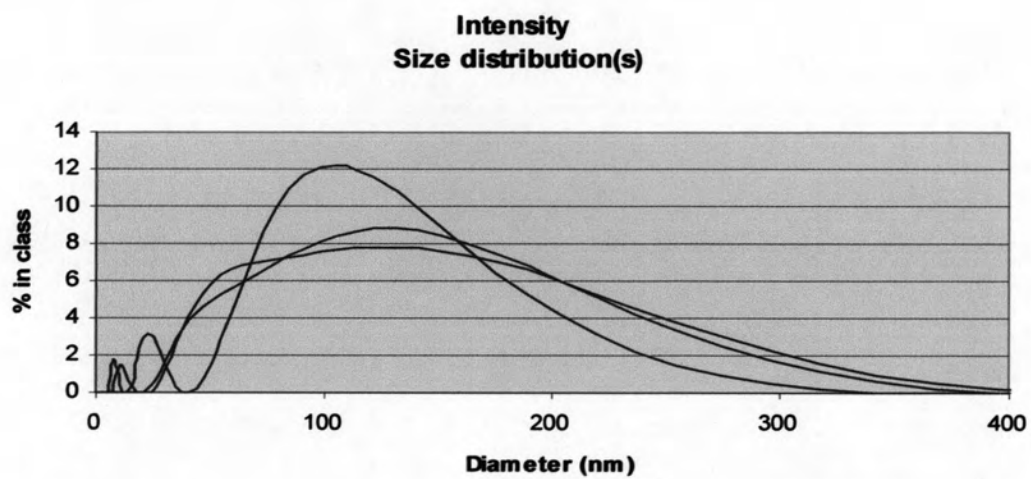
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## **APPENDICES**



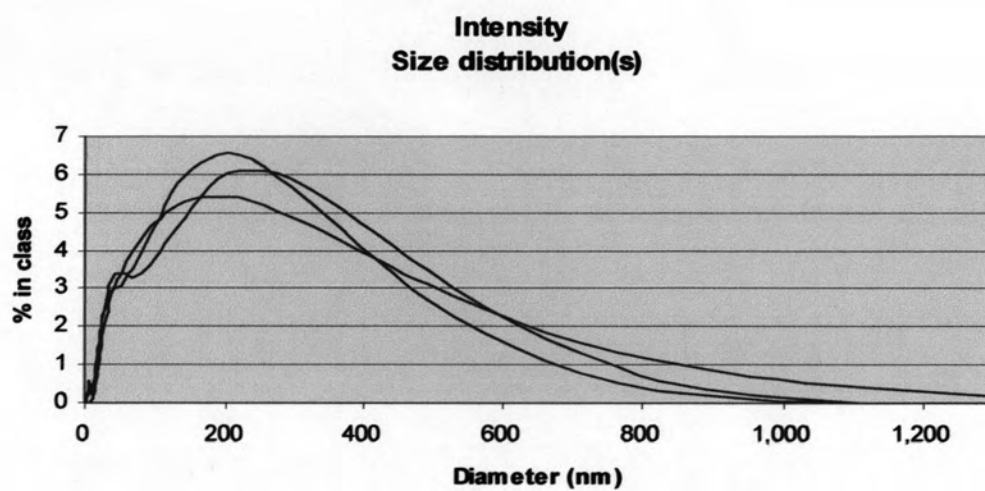
**Appendix A: Particle size distribution of polydiacetylene vesicles****Figure A1: Particle size distribution of poly(PCDA) vesicles**

	Particle size (nm)
1 <sup>st</sup>	73.4
2 <sup>nd</sup>	73.2
3 <sup>rd</sup>	73.1
Mean	73.2



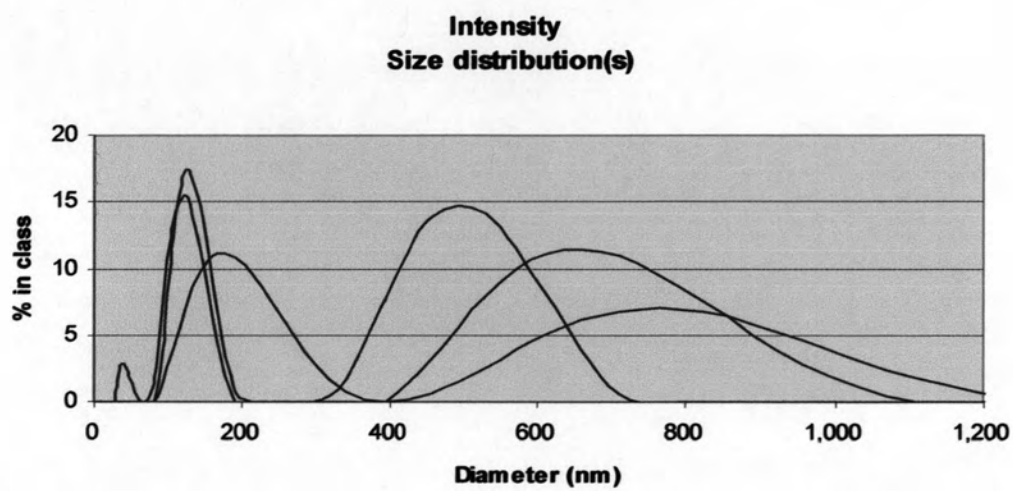
**Figure A2:** Particle size distribution of poly(AEPCDA) vesicles

	Particle size (nm)
1 <sup>st</sup>	89.1
2 <sup>nd</sup>	88.0
3 <sup>rd</sup>	88.6
Mean	88.6



**Figure A3:** Particle size distribution of poly(EBPCDA) vesicles

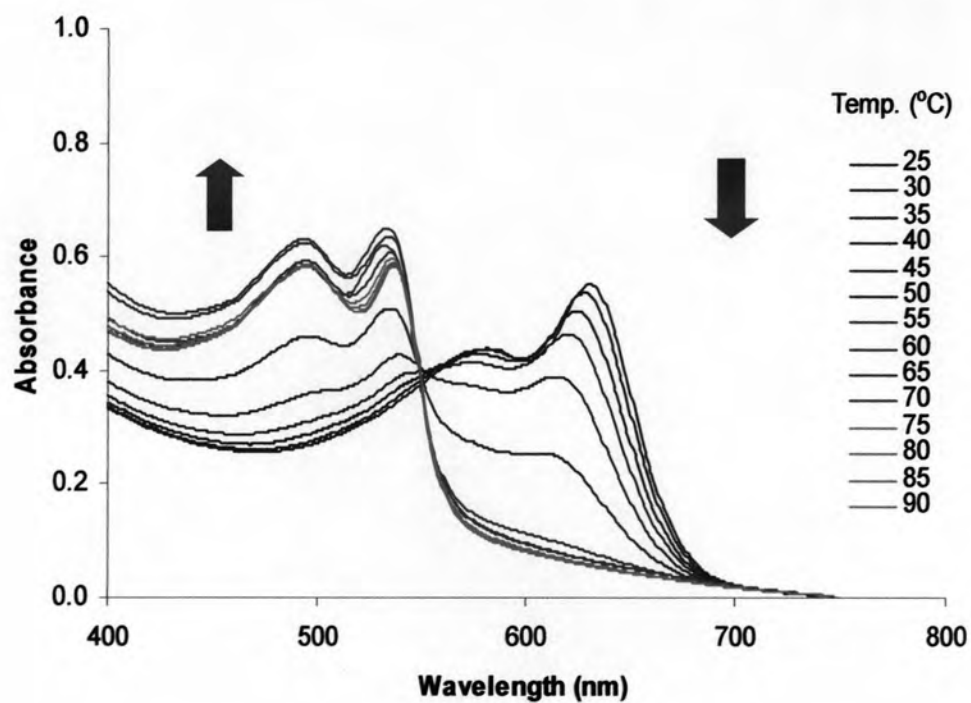
	Particle size (nm)
1 <sup>st</sup>	228.3
2 <sup>nd</sup>	273.2
3 <sup>rd</sup>	235.4
Mean	245.6



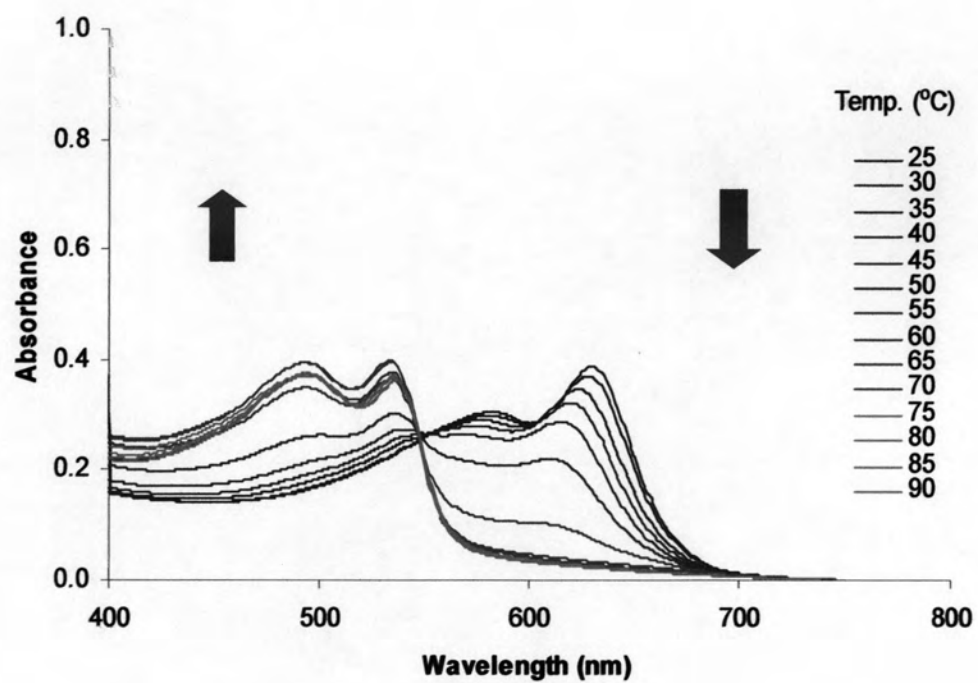


**Appendix B: Visible absorption spectra of polydiacetylene vesicle solution prepared from mixed lipid vesicle solution between PCDA and C<sub>18</sub> at various ratios upon heating process.**

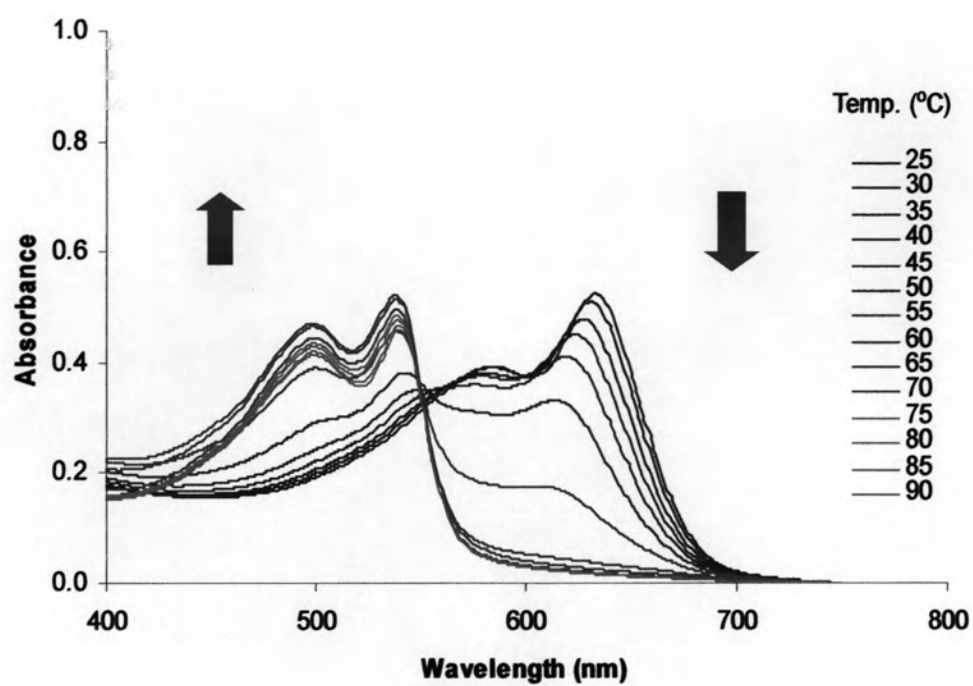
**Figure B1:** Visible absorption spectra of polydiacetylene vesicle solution prepared from mixed lipid vesicle solution between PCDA and C<sub>18</sub> at ratio 10:90



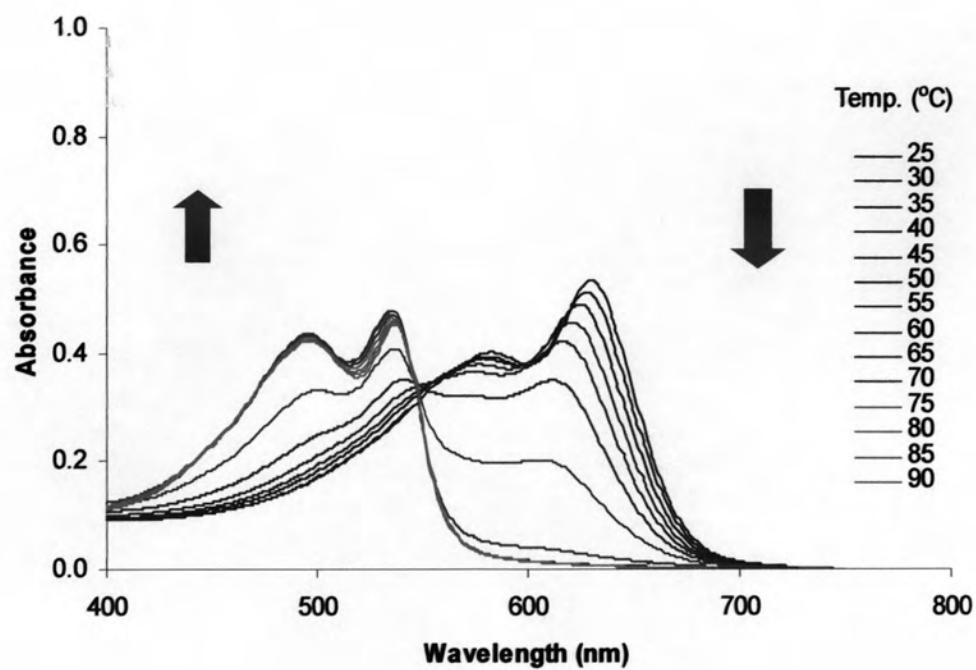
**Figure B2:** Visible absorption spectra of polydiacetylene vesicle solution prepared from mixed lipid vesicle solution between PCDA and C<sub>18</sub> at ratio 20:80



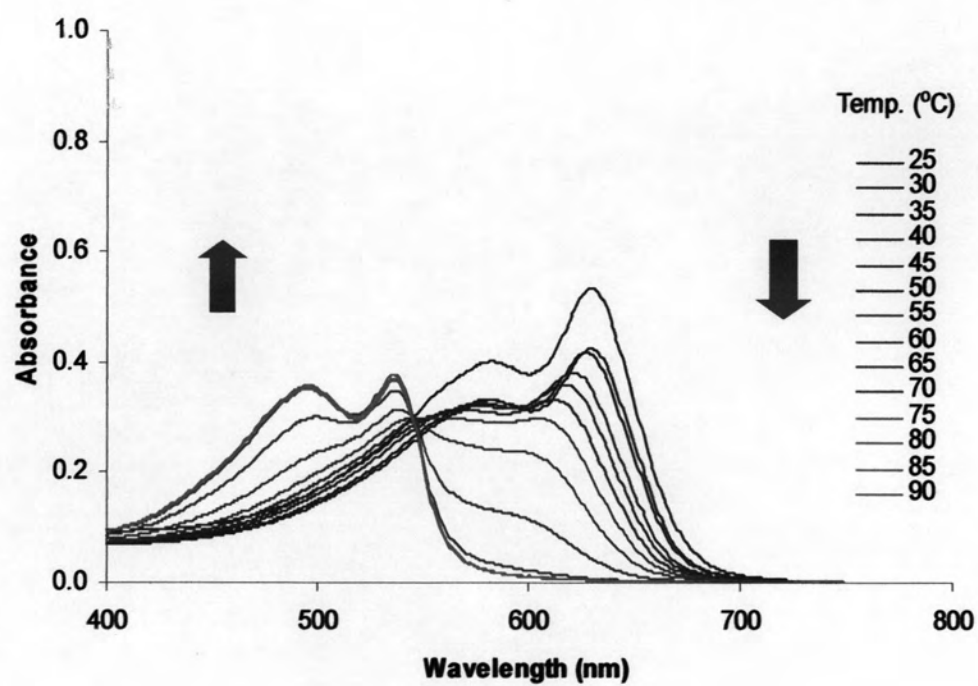
**Figure B3:** Visible absorption spectra of polydiacetylene vesicle solution prepared from mixed lipid vesicle solution between PCDA and C<sub>18</sub> at ratio 30:70



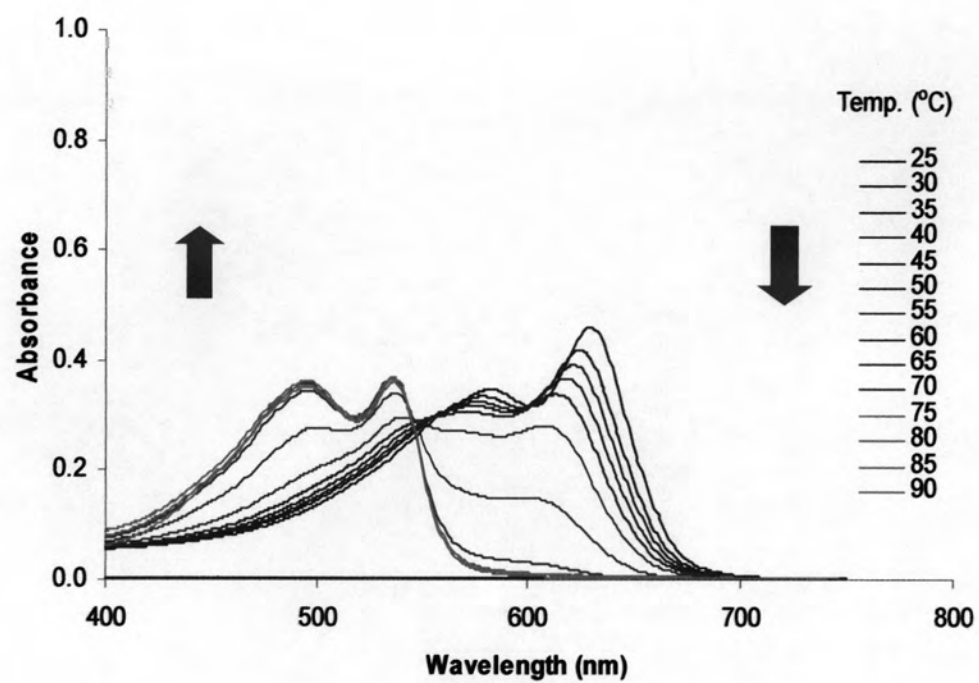
**Figure B4:** Visible absorption spectra of polydiacetylene vesicle solution prepared from mixed lipid vesicle solution between PCDA and C<sub>18</sub> at ratio 50:50



**Figure B5:** Visible absorption spectra of polydiacetylene vesicle solution prepared from mixed lipid vesicle solution between PCDA and C<sub>18</sub> at ratio 70:30

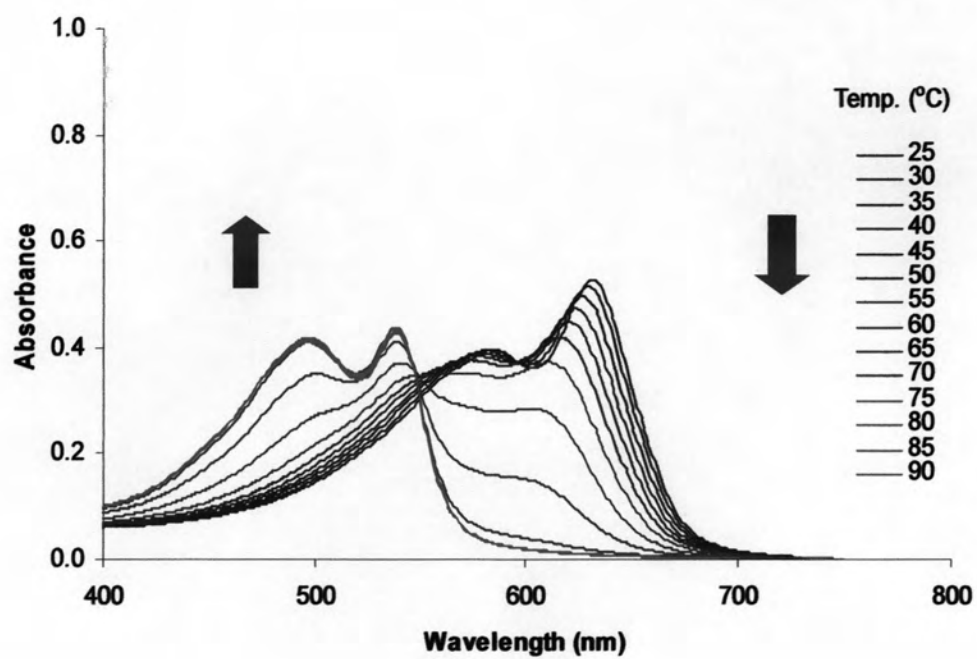


**Figure B6:** Visible absorption spectra of polydiacetylene vesicle solution prepared from mixed lipid vesicle solution between PCDA and C<sub>18</sub> at ratio 80:20

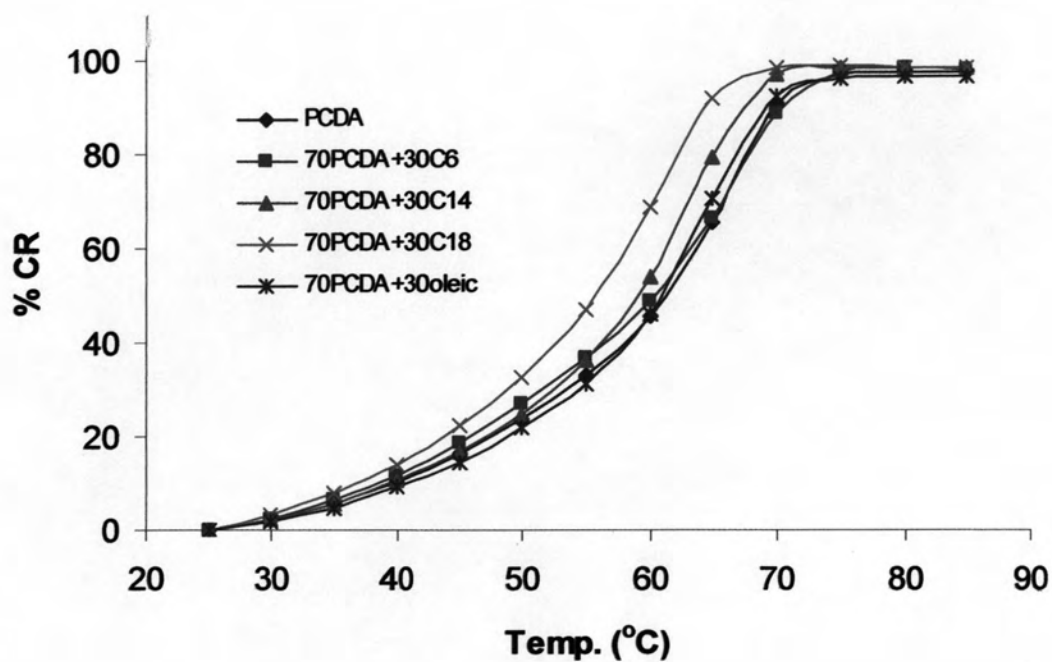




**Figure B7:** Visible absorption spectra of polydiacetylene vesicle solution prepared from mixed lipid vesicle solution between PCDA and C<sub>18</sub> at ratio 90:10



**Appendix C: Effect of fatty acid type to transition temperature of mixed vesicle solution**



## VITA

Miss Jasuma Boonyiseng was born on October 9<sup>th</sup>, 1981 in Chumphon, Thailand. She received a Bachelor's Degree of Science, majoring in Chemistry from Faculty of Science, Prince of Songkhla University in 2003. Since 2004, she has been a graduate student studying Petrochemistry and Polymer Science as her major course at Chulalongkorn University and completed the program in 2006.

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