

## PUBLICATION LIST

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### PATENTS:

- A. Abulrob, D. Stanimirovic; U. Iqbal, **M.-P. Nieh**, J. Katsaras “Single Domain Antibody-Targeted Carrier for Contrast Agents and Drug Delivery Agents” **2008** (12078-1). – to be extended to a full patent in 2010
- X. Qi, **M.-P. Nieh**, J. Katsaras “Spontaneously formed ellipsoidal phospholipid unilamellar vesicles” **2007** (US2007081880) – in the process of being extended to a full patent.

### BOOK CHAPTERS

- N. Kučerka, **M.-P., Nieh** and J. Katsaras. **2010**. “*Small-Angle Scattering from Homogenous and Heterogeneous Lipid Bilayers*” in “**Advances in Planar Lipid Bilayers And Liposomes**” Vol. 12, Ed. A. Iglic and H. T. Tien, pp. 201 – 236. Academic Press (Elsevier Inc.)
- **M.-P., Nieh**, N. Kučerka and J. Katsaras. **2009**. “*Spontaneously Formed Unilamellar Vesicles*” in “**Methods in Enzymology**” Vol. 465, Ed. Nejat Düzgüneş, pp. 3 – 20. Academic Press (Elsevier Inc.)
- J. Katsaras, J. Pencer, **M.-P., Nieh**, T. Abraham, N. Kučerka and T. A. Harroun. **2008**. “*Neutron and X-Ray Scattering from Isotropic And Aligned Membranes.*” in “**Structure And Dynamics of Membranous Interfaces**” Ed. K. Nag, pp. 107 – 134. Wiley.
- Pencer, J., T. T. Mills, N. Kučerka, **M.-P., Nieh** and J. Katsaras. **2007**. “*Small-Angle Neutron Scattering to Detect Rafts and Lipid Domains.*” in “**Lipid Rafts**” Ed. T. J. McIntosh, pp. 231 - 244. The Humana Press Inc. (ISBN 13: 978-1-58829-729-7).
- J. Katsaras, V. A. Raghunathan, T. A. Harroun, **M.-P. Nieh**, M. Chakrapani, M. J. Watson. **2005**. “*Neutron Scattering from Biomaterials in Complex Sample Environments.*” in “**Neutron Scattering in Biology - Techniques and Applications**”. Ed. J. fitter, T. Gutberlet, J. Katsaras, pp.107 – 126. Springer.

### PEER-REVIEWED PUBLICATIONS

1. **(Review Article)** G. Pabst, N. Kučerka, **M.-P. Nieh**, M. C. Rheinstädter, J. Katsaras “Applications of Neutron And X-ray Scattering to the Study of Biologically Relevant Model Membranes” **Chem. Phys. Lipid.** **163**, 460 – 479 (2010).
2. **(Review Article)** T. A. Harroun, N. Kučerka, **M.-P. Nieh** and J. Katsaras “Neutron and X-ray scattering for biophysics and biotechnology: examples of self-assembled lipid systems” **Soft Matter** **5**, 2694-2703 (2009)
3. **(Review Article)** J. Katsaras, N. Kučerka and **M.-P. Nieh** “Structure from substrate supported lipid bilayers” **Biointerphases** **3**, FB55-63 (2008).
4. **(Review Article)** N. Kučerka, **M.-P. Nieh**, J. Pencer, T. A. Harroun, J. Katsaras “The study of liposomes, lamellae and membranes using neutrons and X-rays” **Curr. Opin. Colloid & Interf. Sci.**, **12**, 17-22 (2007).
5. **(Review Article)** J. Katsaras, T. A. Harroun, J. Pencer, **M.-P. Nieh** “Bicellar” lipid mixtures as used in biochemical and biophysical studies” **Naturwissenschaften**, **92**, 355-366 (2005).
6. **M.-P. Nieh**, V. A. Raghunathan, G. Pabst, T. A. Harroun, K. Nagashima, H. Morales, J. Katsaras, and P. M. Macdonald “Temperature Driven Annealing of Perforations in Bicellar Model Membranes” **Langmuir**, **27**, 4838-4847 (2011)
7. U. Iqbal, H. Albaghdadi, **M.-P. Nieh**, U. I. Tuor, Z. Mester, D. Stanimirovic, J. Katsaras, A. Abulrob “Small unilamellar vesicles: a platform technology for molecular imaging of brain tumors” **Nanotechnology**, **22**, 195102 (2011)
8. Y. Guo, C. Mulligan, **M.-P. Nieh** “An Unusual Morphological Transformation of Rhamnolipid Aggregates Induced by Concentration And Addition of Styrene: A Small Angle Neutron Scattering (SANS) Study” **Colloids Surf. A.**, **373**, 42-50 (2011).
9. **M.-P. Nieh**, N. Kučerka, J. Katsaras “Formation Mechanism of Self-Assembled Unilamellar Vesicles” **Can. J. Phys.**, **88**, 735-740 (2010).

10. N. Kučerka, D. Marquardt, T. A. Harroun, **M.-P. Nieh**, S. R. Wassall, D. H. De Jong, L. V. Schäfer, S. J. Marrink, J. Katsaras "Cholesterol in bilayers with PUFA chains: Doping with DMPC or POPC results in sterol reorientation and membrane-domain formation" *Biochemistry*, **49**, 7485–7493 (2010).
11. S. Mahabir, W. K. Wan, J. Katsaras, **M.-P. Nieh** "The Effects of Charge Density And Thermal History on the Morphologies of Spontaneously Formed Unilamellar Vesicles" *J. Phys. Chem. – B*, **114**, 5729-5735 (2010).
12. R. Soong, **M.-P. Nieh**, E. Nicholson, J. Katsaras, P. M. Macdonald "Pluronic F68 in Bicelles: Phase Structure and Lateral Diffusion from Combined SANS and PFG NMR Studies" *Langmuir* **26**, 2630-2638 (2010).
13. D. C. Bay, R. A. Budiman, **M.-P. Nieh** and R. J. Turner "Multimeric Forms of the Small Multidrug Resistance Protein EmrE in Anionic Detergent" *Biochim. Biophys. Acta- Biomembranes* **1798**, 526-535 (2010).
14. N. Kučerka, **M.-P. Nieh**, J. Katsaras "Asymmetric Distribution of Cholesterol in Unilamellar Vesicles of Monounsaturated Phospholipids" *Langmuir*, **25**, 13522-13527 (2009).
15. N. Kučerka, D. Marquardt, T. A. Harroun, **M.-P. Nieh**, S. R. Wassall, J. Katsaras "The Functional Significance of Lipid Diversity: Orientation of Cholesterol in Bilayers is Determined by Lipid Species." *J. Am. Chem. Soc.*, **131**, 16358-16359 (2009).
16. X. Gao, N. Kučerka, **M.-P. Nieh**, J. Katsaras, S. Zhu, J. L. Brash and H. Sheardown "Chain conformation of a new class of PEG-based thermoresponsive polymer brushes grafted on silicon as determined by neutron reflectometry" *Langmuir*, **25**, 10271-10278 (2009).
17. N. Kučerka, **M.-P. Nieh**, J. Pencer, J. N. Sachs, J. Katsaras "What determines the thickness of a biological membrane" *General Physiol. & Biophys.*, **28**, 117-125 (2009).
18. S. Hudson, J. Hutter, **M.-P. Nieh**, J. Pencer, L. Millon, W. K. Wan "Characterization of anisotropic poly(vinyl alcohol) hydrogel by small- and ultra small-angle neutron scattering" *J. Chem. Phys.*, **130**, 034903 (2009).
19. **M.-P. Nieh**, Z. Yamani, N. Kučerka, J. Katsaras, D. Burgess, H. Breton "Adapting a Triple-axis Spectrometer for Small Angle Neutron Scattering Measurement" *Rev. Sci. Instrum.*, **79**, 095102 (2008).
20. **M.-P. Nieh**, M. D. Guiver, D. S. Kim, J. Ding, T. Norsten "Morphology of Comb-Shaped Proton Exchange Membrane (PEM) Copolymers Based on a Neutron Scattering Study" *Macromolecules*, **41**, 6176-6182 (2008).
21. N. Kučerka, E. Papp-Szabo, **M.-P. Nieh**, T. A. Harroun, S. R. Schooling, J. Pencer, E. A. Nicholson, T. J. Beveridge, J. Katsaras "Effect of Cations on the Structure of Bilayers Formed by Lipopolysaccharides Isolated from *Pseudomonas aeruginosa* PAO1" *J. Phys. Chem. B* **112**, 8057-8062 (2008).
22. **M.-P. Nieh**, J. Katsaras, X. Qi "Controlled release mechanisms of spontaneously forming unilamellar vesicles", *Biochim. Biophys. Acta - Biomembranes* **1778**, 1467-1471 (2008).
23. B. Dahrazma, C. N. Mulligan, **M.-P. Nieh** "Effects of additives on the structure of rhamnolipid (biosurfactant): a small-angle neutron scattering (SANS) study" *J. Colloid & Interface Sci.* **319**, 590-593 (2008).
24. J. Pencer, A. Jackson, N. Kučerka, **M.-P. Nieh**, J. Katsaras "The influence of curvature on membrane domains", *Eur. Biophys. J.* **37**, 665-671 (2008).
25. N. Kučerka, J. Pencer, **M.-P. Nieh**, and J. Katsaras "Influence of cholesterol on the bilayer properties of monounsaturated phosphatidylcholine unilamellar vesicles" *Eur. Phys. J. E.* **23**, 247-254 (2007).
26. W. Feng, **M.-P. Nieh**, S. Zhu, T. A. Harroun, J. Katsaras, J. L. Brash "Characterization of protein resistant grafted methacrylate polymer layers bearing oligo(ethylene glycol) and phosphorylcholine side chains by neutron reflectometry" *Biointerphases*, **2**, 34-43 (2007).
27. L. E. Millon, **M.-P. Nieh**, J. Hutter, W.-K. Wan "SANS characterization of an anisotropic polyvinyl alcohol hydrogel with vascular applications" *Macromolecules*, **40**, 3655-3662 (2007)
28. T. Abraham, S. R. Schooling, **M.-P. Nieh**, N. Kucerka, T. J. Beveridge, J. Katsaras "Neutron diffraction study of pseudomonas aeruginosa lipopolysaccharide bilayers" *J. Phys. Chem. B.*, **111**, 2477-2483 (2007).

29. **M.-P. Nieh**, J. Pencer, J. Katsaras, X. Qi “Spontaneously formed bimodal phospholipid unilamellar ellipsoidal vesicles and their interactions with helical domains of saposin C”, *Langmuir*, **22**, 11028-11033 (2006).
30. D. Dee, J. Pencer, **M.-P. Nieh**, S. Krueger, J. Katsaras, R. Yada “Comparison of solution structures and stabilities of native, partially unfolded and partially refolded pepsin”, *Biochemistry*, **45**, 13982-13992 (2006)
31. **M.-P. Nieh**, V. A. Raghunathan, C.-Y. Huang, J. Pencer, T. A. Harroun, J. Katsaras “Spontaneously forming unilamellar nano-sized vesicles – polydispersity, size, shape and stability” *NSTI-Nanotech*, **2**, 709-712 (2006).
32. T. A. Harroun, C. M. Desrochers, **M.-P. Nieh**, M. J. Watson, J. Katsaras “0.9 T static magnetic field and temperature-controlled specimen environment for use with general-purpose optical microscopes”, *Rev. Sci. Instrum.*, **77**, 014102 (2006).
33. J. Pencer, **M.-P. Nieh**, T. A. Harroun, S. Krueger, C. Adams and J. Katsaras “Bilayer thickness and thermal response Of DMPC unilamellar vesicles containing cholesterol, ergosterol and lanosterol: a SANS study”, *Biochim. Biophys. Acta - Biomembranes*, **1720**, 84-91 (2005).
34. **M.-P. Nieh**, V. A. Raghunathan, S. R. Kline, T. A. Harroun, C.-Y. Huang, J. Pencer, J. Katsaras “Spontaneously formed unilamellar vesicles with path-dependent size distribution” *Langmuir*, **21**, 6656-6661 (2005).
35. T. A. Harroun, M. Koslowsky, **M.-P. Nieh**, C-F de Lannoy, V. A. Raghunathan, J. Katsaras “A comprehensive examination of mesophases formed by DMPC and DHPC mixtures” *Langmuir*, **21**, 5356-5361 (2005).
36. **M.-P. Nieh**, V. A. Raghunathan, C. J. Glinka, T. A. Harroun, J. Katsaras “Structural phase behavior of high-concentration alignable biomimetic “bicelle” mixtures” *Macromol. Symp.*, **219**, 135-145 (2005).
37. B. Yue, C.-Y. Huang, **M.-P. Nieh**, C. J. Glinka, J. Katsaras “Spontaneously forming unilamellar phospholipid vesicles” *Macromol. Symp.*, **219**, 123-133 (2005).
38. B. Yue, C.-Y. Huang, **M.-P. Nieh**, C. J. Glinka, J. Katsaras “Highly stable phospholipid unilamellar vesicles from spontaneous vesiculation: a DLS and SANS study” *J. Phys. Chem. B*, **109**, 609-616 (2005).
39. T. A. Harroun, V. A. Raghunathan, **M.-P. Nieh**, J. Katsaras “Finite-size effects in biomimetic smectic films” *Phys. Rev. E.*, **70**, 062902 (2004)
40. **M.-P. Nieh**, S. Kumar, R. Colby, R. H. Fernando, J. Katsaras “Effect of the hydrophilic size on structural phases of aqueous non-ionic Gemini surfactant solutions” *Langmuir*, **20**, 9061-9068 (2004).
41. **M.-P. Nieh**, V. A. Raghunathan, C. J. Glinka, T. A. Harroun, G. Pabst, J. Katsaras “The magnetically alignable phase of phospholipid “bicelle” mixtures in a chiral nematic made up of worm-like micelles” *Langmuir*, **20**, 7893-7897 (2004).
42. T. A. Harroun, M. Koslowsky, **M.-P. Nieh**, V. A. Raghunathan, J. Katsaras “Finite-size effects do not reduce the repeat spacing of phospholipid multibilayer stacks on a rigid substrate” *Euro. Phys. J. E*, **13**, 359-362, (2004).
43. **M.-P. Nieh**, T. A. Harroun, V. A. Raghunathan, C. J. Glinka, J. Katsaras “Spontaneously formed monodispersed biomimetic unilamellar vesicles: the effect of charge, dilution and time” *Biophys. J.*, **86**, 2615-2629, (2004).
44. T. A. Harroun, **M.-P. Nieh**, M. J. Watson, V. A. Raghunathan, G. Pabst, M. R. Morrow, J. Katsaras “Relationship between the unbinding and main transition temperature of phospholipid bilayers under pressure”, *Phys. Rev. E.*, **69**, 031906 (2004).
45. **M.-P. Nieh**, T. A. Harroun, V. A. Raghunathan, C. J. Glinka, J. Katsaras “Concentration independent spontaneously forming biomimetic vesicles” *Phys. Rev. Lett.*, **91**, 158105 (2003).
46. **M.-P. Nieh**, V. A. Raghunathan, H. Wang, J. Katsaras “Highly aligned lamellar lipid domains induced by macroscopic confinement” *Langmuir*, **19**, 6936-6941, (2003).
47. H. Wang, **M.-P. Nieh**, E. K. Hobbie, C. J. Glinka, J. Katsaras “Kinetic pathway of the bilayered-micelle to perforated lamellae transition” *Phys. Rev. E*, **67**, 060902(R), (2003).

48. M. J. Watson, **M.-P. Nieh**, T. A. Harroun, J. Katsaras “Neutron sample cell suitable for the diffraction of aligned biomaterials and capable of exerting up to 370 MPa of hydrostatic pressure” *Rev. Sci. Instrum.*, **74**, 2778-2781, (2003).
  49. **M.-P. Nieh**, C. Glinka, S. Krueger, S. Prosser, J. Katsaras “SANS study on the effect of lanthanide ions and charged lipids on the morphology of phospholipid mixtures:” *Biophys. J.*, **82**, 2487-2498, (2002).
  50. **M.-P. Nieh**, S. Kumar, D. Ho, R. Briber “Neutron scattering study of chain conformations in the energetically neutral pores of Vycor glass”, *Macromolecules*, **35**, 6384, (2002).
  51. P. Luchette, T. Vetman, S. Prosser, R. Hancock, **M.-P. Nieh**, C. Glinka, S. Krueger, J. Katsaras “Morphology of fast-tumbling bicelles: a small angle neutron scattering and NMR study”, *Biochim. Biophys. Acta.*, **1513**, 83-94, (2001).
  52. **M.-P. Nieh**, C. Glinka, S. Krueger, S. Prosser, J. Katsaras “SANS study of the structural phase of magnetically alignable phospholipid mixtures” *Langmuir*, **17**, 2629-2638, (2001).
  53. **M.-P. Nieh**, David A. Hoagland, Bruce M. Novak “Chain stiffness of a high molecular weight polyguanidine prepared by living polymerization” *Macromolecules*, **31**, 3151, (1998).
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### **INVITED TALKS**

- Feb. 28, 2011 **Pfizer Inc.**, Pharmaceutical Development group “Self-Assembled Nano-Liposomes for Targeting Delivery” Groton, Connecticut, USA.
- Feb. 7, 2011 **Rensselaer Polytechnic Institute**, Center for Biotechnology & Interdisciplinary Studies “Bicelle-to-Vesicle Transition – Probed by Small Angle Neutron Scattering” Troy, New York, USA.
- Jul. 16, 2010 **University of Western Ontario**, Department of Physics, “Small Angle Neutron Scattering – Its Application on Soft Material Research And Recent Development at CNBC” London, Ontario, Canada.
- Jun. 9, 2010 **National Research Council**, Canadian Neutron Beam Centre, “Self-Assembled Unilamellar Vesicles: Formation Mechanism, Characterization and Applications” Chalk River, Ontario, Canada.
- Apr. 22, 2010 **University of Rhode Island**, Department of Chemical Engineering, “Self-Assembled Nano-Liposomes as Diagnostic/Therapeutic Carriers” Kingston, Rhode Island, USA.
- Mar. 12, 2010 **Oak Ridge National Laboratories**, Neutron Scattering Science Division, “Small Angle Neutron Scattering – A Powerful Tool for Fundamental Material Research” Oak Ridge, Tennessee, USA.
- Feb. 26, 2010 **University of Connecticut**, Institute of Materials Science, “From Basic Research to Technology: Applications of Soft Materials” Storrs, Connecticut, USA.
- Dec. 7, 2009 **Oak Ridge National Laboratories**, Neutron Scattering Science Division, “Self-Assembled Liposomes – from Basic Understanding to Applications” Oak Ridge, Tennessee, USA.
- Nov. 21, 2008 **National Taiwan University**, Institute of Biomedical Engineering, Taipei, Taiwan
- Nov. 17, 2008 **National Chung-Hsing University**, Department of Chemistry, Taichung,
- Nov. 14, 2008 **National Taiwan University**, Department of Chemical Engineering, Taipei, Taiwan
- Nov. 13, 2008 **Institute of Nuclear Energy Research**, Taoyuan, Taiwan
- Nov. 11, 2008 **Industrial & Technology Research Institute**, Hsinchu, Taiwan
- Nov. 7, 2008 **Tung-Hai University**, Department of Physics, Taichung, Taiwan
- Nov. 6, 2008 **Chung-Yuan Christian University**, Department of Chemical Engineering, Chungli, Taiwan
- Aug. 14, 2008 **Wyeth Pharmaceuticals Inc.**, Pearl River, New York, USA
- Nov. 30, 2007 **University of Western Ontario**, Centre for Chemical Physics, London, Ontario, Canada

Mar. 29, 2007 **McMaster University**, Department of Chemical Engineering, Hamilton, Ontario, Canada  
Jun. 21, 2006 **American Conference on Neutron Scattering**, St. Charles, Illinois, USA  
Nov. 18, 2004 **National Tsing Hua University**, Department of Chemical Engineering, Hsinchu, Taiwan, ROC  
Sep. 28, 2004 **University of Western Ontario**, Department of Chemical Engineering, London, Ontario, Canada  
May 25, 2004 **University of Ottawa**, Department of Chemical Engineering, Ottawa, Ontario, Canada  
May 7, 2004 **Ryerson University**, Department of Chemical Engineering, Toronto, Ontario, Canada  
Oct. 20, 2003 **NIST Center for Neutron Scattering**, Gaithersburg, MD, USA  
Sept. 9, 2002 **NRC, SIMS**, Ottawa, Ontario, Canada

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## CONFERENCE CONTRIBUTIONS

1. **M.-P. Nieh**, S. Mahabir, J. Katsaras, W. K. Wan "Time-Resolved Study on Nanodisc-to-Vesicle Transformation" 2011 American Physical Society, Dallas, TX (Mar. 22, 2011).
2. **M.-P. Nieh**, N. Kučerka, J. Katsaras "Can Multilamellar Vesicles Be Transformed into Unilamellar Vesicles?", 2010 American Conference on Neutron Scattering, Ottawa, Ontario, Canada (Jun. 29, 2010).
3. N. Kučerka, **M.-P. Nieh**, J. Katsaras "Lipid Areas Obtained from the Simultaneous Analysis of Neutron and X-ray Scattering", 2010 American Conference on Neutron Scattering, Ottawa, Ontario, Canada (Jun. 29, 2010).
4. N. Kučerka, D. Marquardt, T. A. Harroun, **M.-P. Nieh**, D. de Jong, L. Schafer, S.-J. Marrink, J. Katsaras "Cholesterol in PUFA Bilayers Studied by Small-Angle Neutron Diffraction", 2010 American Conference on Neutron Scattering, Ottawa, Ontario, Canada (Jun. 27, 2010).
5. N. Kučerka, D. Marquardt, T. A. Harroun, **M.-P. Nieh**, S. R. Wassall, D. de Jong, L. Schafer, S.-J. Marrink, J. Katsaras "Cholesterol's Location in Bilayers is Determined by Lipid Composition", 2010 American Conference on Neutron Scattering, Ottawa, Ontario, Canada (Jun. 27, 2010).
6. S. Mahabir, W. K. Wan, N. Kučerka, J. Katsaras, K. Littrell, L. Debeer-Schmitt, **M.-P. Nieh** "Mechanism for the Growth of 'Bicelles' ", 2010 American Conference on Neutron Scattering, Ottawa, Ontario, Canada (Jun. 27, 2010) – *the Best Poster Award*.
7. **M.-P. Nieh**, S. Mahabir, W. Wan, J. Katsaras "Direct Evidence of Formation Mechanism of Self-Assembled Monodisperse Unilamellar Vesicles for Potential Delivery Carriers", 93<sup>th</sup> Canadian Chemistry Conference and Exhibition, Toronto, Ontario, Canada (May 30, 2010).
8. S. Mahabir, W. Wan, J. Katsaras, **M.-P. Nieh** "Investigation of Charge And Heating Rate on Spontaneously Assembled Unilamellar Vesicles Using Small-Angle Neutron Scattering", American Association of Pharmaceutical Sciences National Biotechnology Conference, San Francisco, CA, USA (May 16-19, 2010).
9. **M.-P. Nieh** "What Can Neutron And X-Ray Scattering Do for Silk Characterization?", AFMNet transgenic Spider Silk Workshop, Montreal, Quebec, Canada (Dec 9, 2009).
10. S. Mahabir, W. Wan, J. Katsaras, **M.-P. Nieh** "Using SANS to Study Unilamellar Vesicles", Canadian Institute of Neutron Scattering, Toronto, Canada (Oct 30, 2009).
11. **M.-P. Nieh**, J. Katsaras, E. Nicholson, R. Soong, P. MacDonald "Detailed Structure of A Magnetically Alignable Mixture – "Bicelles"", Canadian Association of Physicists, Moncton, New Brunswick, Canada (June 9, 2009).
12. **M.-P. Nieh**, Z. Yamani, N. Kučerka, J. Katsaras "New Development of Small Angle Neutron Scattering (SANS) Capability & Application at Canadian Neutron Beam Centre", Canadian Association of Physicists, Moncton, New Brunswick, Canada (June 8, 2009).
13. **M.-P. Nieh**, J. Katsaras, E. Nicholson, R. Soong, P. MacDonald "Detailed Structure of A Magnetically Alignable Mixture – "Bicelles"", 92<sup>th</sup> Canadian Chemistry Conference and Exhibition, Hamilton, Ontario, Canada (June 3, 2009).

14. **M.-P. Nieh**, G. Yuan, C. N. Mulligan “Small Angle Neutron Scattering (SANS) Study on the Morphological Transformation of Rhamnolipid Aggregates Induced by Styrene”, 92<sup>th</sup> Canadian Chemistry Conference and Exhibition, Hamilton, Ontario, Canada (June 1, 2009).
15. S. Mahabir, **M.-P. Nieh**, J. Katsaras, W. K. Wan “SANS Characterization of Self-Assembled Unilamellar Vesicles for Controlled Release”. Canadian Biomaterials Society, Quebec City, Quebec, Canada (May 21 2009).
16. **M.-P. Nieh**, Z. Yamani, N. Kučerka, J. Katsaras “Adapting a Triple-Axis Spectrometer for Small Angle Neutron Scattering Measurements”, International Conference on Neutron Scattering, Knoxville, Tennessee, Canada (May 5, 2009).
17. S. D. Hudson, J. L. Hutter, L. E. Millon, W. Wan, **M.-P. Nieh** “Anisotropic Poly(Vinyl Alcohol) Hydrogel: Connection Between Structure and Bulk Mechanical Properties” American Physics Society, Pittsburgh, PA, USA (March 19, 2009)
18. **M.-P. Nieh**, M. D. Guiver, D. S. Kim, J. Ding, T. Norsten “Small Angle Neutron Scattering Study on Comb-Shaped Fluorocarbon Copolymer as a Proton Exchange Membrane (PEM)”, 58<sup>th</sup> Canadian Chemical Engineering Conference, Ottawa, Ontario, Canada (October, 2008).
19. **M.-P. Nieh**, Z. Yamani, N. Kučerka, J. Katsaras “Structural Characterization of Soft Materials with Small Angle Neutron Scattering - General Introduction and New Development at Chalk River Laboratories”, 58<sup>th</sup> Canadian Chemical Engineering Conference, Ottawa, Ontario, Canada (October, 2008).
20. **M.-P. Nieh**, J. Katsaras, U. Iqbal, A. Abulrob, D. Stanimirovic, U. Tuor “A Recent Development of Spontaneously Forming Liposomes for Potential Diagnostic and Therapeutic Carriers”, 58<sup>th</sup> Canadian Chemical Engineering Conference, Ottawa, Ontario, Canada (October, 2008).
21. S. D. Hudson, J. L. Hutter, **M.-P. Nieh**, J. Pencer, L. E. Millon, W. Wan “SANS and USANS of Anisotropic PVA Hydrogel”, Canadian Association of Physicists, Quebec City, Quebec, Canada (June, 2008).
22. **M.-P. Nieh**, M. D. Guiver, D. S. Kim, T. Norsten “Morphology of Comb-Shaped Proton Exchange Membrane (PEM) Copolymers Using Small Angle Neutron Scattering”, Canadian Association of Physicists, Quebec City, Quebec, Canada (June, 2008).
23. N. Kučerka, J. Pencer, V. Anghel, **M.-P. Nieh**, J. Katsaras “Detection of Lipid Rafts by Neutron Scattering”, Canadian Association of Physicists, Quebec City, Quebec, Canada (June, 2008).
24. J. Katsaras, N. Kučerka, **M.-P. Nieh**, T. Harroun, S. Schooling, E. Papp-Szabo, J. Pencer, E. Nicholson, T. Beveridge “Effect of Cations on the Structure of Lipopolysaccharide Bilayers Isolated from *P. aeruginosa* PAO1”, Quebec City, Quebec, Canada (June, 2008).
25. **M.-P. Nieh**, M. D. Guiver, D. S. Kim, T. Norsten “Small Angle Neutron Scattering Study of Comb-Shaped Copolymers as Proton Exchange Membrane (PEMs)”, American Conference on Neutron Scattering, Santa Fe, New Mexico, USA (May, 2008).
26. **M.-P. Nieh**, Z. Yamani, J. Katsaras, N. Kučerka “Small Angle Neutron Scattering Development at Canadian Neutron Beam Centre (CNBC) – Chalk River Laboratories” American Conference on Neutron Scattering, Santa Fe, New Mexico, USA (May, 2008).
27. **M.-P. Nieh**, W. Feng, S. Zhu, J. Katsaras, T. Harroun, J. Brash “Characterization of biocompatible polymer thin films, grafted poly-(methacrylate) with oligo(ethylene glycol) and phosphorylcholine side chains, by neutron reflectometry”, Canadian Association of Physicists, Saskatoon, Saskatchewan, Canada (June, 2007).
28. **M.-P. Nieh**, J. Pencer, J. Katsaras, X. Qi “Controlled-release and controlled-size spontaneous unilamellar vesicles with low polydispersities”, Canadian Association of Physicists, Saskatoon, Saskatchewan, Canada (June, 2007).
29. **M.-P. Nieh**, N. Kučerka, J. Pencer, J. Katsaras “The morphologies of magnetically alignable bicelle mixtures”, 90<sup>th</sup> Canadian Chemistry Conference and Exhibition, Winnipeg, Manitoba, Canada (May, 2007).
30. **M.-P. Nieh** “Important parameters controlling size, polydispersity and shape of self-assembled unilamellar vesicles”, (*invited*) American Conference on Neutron Scattering, St. Charles, IL, USA (June, 2006).

31. **M.-P. Nieh**, J. Kastaras, J. Pencer, X. Qi “Properties of spontaneously formed unilamellar vesicles and their interactions with Saposin C”, Canadian Association of Physicists, St. Catharines, Ontario, Canada (June, 2006).
32. **M.-P. Nieh** “Neutron scattering for characterizing the structure of soft materials”, Canadian Chemistry Conference and Exhibition, Halifax, Nova Scotia, Canada (May, 2006).
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