**Invited (and Keynote/Plenary) Presentations at Conferences**
(Green – undergraduates; Red = graduate students; Blue = PDFs)

76. Michael A. Brook, Robert Bui, Kyle Faiczak, Cody B. Gale, Andrea Heugenhauser, Angela Li, Ana Pricu, Kaitlyn Silverthorne, Khaled Tamin, and Jianfeng Zhang, *Could natural materials improve the sustainability of silicone polymers?*, 8th Asian Silicon Symposium (ASiS-8), Oct. 28-31, 2022, Taipei Taiwan, (Plenary).
75. Michael A. Brook and Yang Chen, *Interfaces and Sustainability: Where the Rubber Hits the Road (*Subtitle*: Devulcanizing Rubber)*, Organic Rubber Group, Technical Meeting, Mississauga ON, June 1, 2022 (Invited).
74. Michael A. Brook, Sijia Zheng, Yang Chen, and Saleh Ibrahim, *Enabling Silicones for Sustainability and Enabling Sustainability with Silicones: Old Tires and New Elastomers*, Macro 2022 49th World Polymer Congress, Winnipeg, Canada, July 17-21, 2022 (Invited).
73. Michael A. Brook, Cody B. Gale, Yang Chen, Sijia Zheng and Mengchen Liao, *Redox Chemistry with Silicones: Trying to Improve Sustainability*, 51st Silicon Symposium San Diego, CA Mar. 18-20, 2022 (Plenary).
72. Michael A. Brook, *Curing silicones: organic approaches that don't need metal catalysts*, Silicon containing Polymers and Composites, San Diego, CA Dec. 1-4, 2021 (Invited).
71. Michael A. Brook, Yang Chen, Sijia Zhang, Miguel Melendez-Zamudio, Kevina Chavda, Daniel Hrabowyj, Andrea Feinle, Mimi Han and Amanda Fawcett, *Strategies for Silicone Elastomer Sustainability: Fewer Covalent Bonds*, Silicon containing Polymers and Composites, San Diego, CA Dec. 1-4, 2021 (Invited).
70. Michael A. Brook,* *Sulfur Chemistry Can Make Silicones More Sustainable, and vice versa*, *Future Directions of Soft Materials, a workshop*, McMaster University, Hamilton Canada June 2021 (Invited).
69. Michael A. Brook,* Sijia Zheng, Mengchen Liao, Adrien Lusterio, Miguel Melendez-Zamudio, Kevina Chavda, Guanhua Lu, Jianfeng Zhang and Yang Chen, *Making Silicones More Sustainable – Sulfur Helps*, The 19th International Symposium on Silicon Chemistry (ISOS-2020/ESD-10), July 2-7, 2021 (Invited) – postponed from 2020.
68. Michael A. Brook,* Mengchen Liao, Sijia Zheng, Griffin Lachapelle, Saleh Ibrahim, Miguel Melendez-Zamudio, Kevina Chavda, Jianfeng Zhang and Yang Chen, *Using Sulfur to Make Silicones More Sustainable*, SOUSSC, Hamilton Canada (McMaster University, virtual), March 20, 2021, keynote speaker.
- Michael A. Brook, *TBD Invited Speaker, 260th American Chemical Society Meeting, San Francisco, CA Aug. 16-20, 2020. – withdrew – live conference cancelled.
- Michael A. Brook,* Yang Chen, Andrea Feinle, Kyle Faiczak, Ayodele Fatona, Adrien Lusterio, Jose Moran-Mirabal, Adnan Murad, Andrew Osamudiamen, David Valentini, and Sijia Zhang, *Combining Saccharides with Silicone Polymers to Improve Sustainability*, Invited Speaker, 259th American Chemical Society Meeting, Philadelphia, PA, March 22-26, 2020 (Invited) – live conference cancelled.
67. Michael A. Brook,* Shuai Liang, Michael Yin Wong, Jennifer Morgan, Alyssa Schneider, and Emily Lu, *Kawakami's Insight: The Benefits of Structured Silicones*, Invited Speaker, International Workshop on Silicon-Based Polymers (ISPO), Kiryu Japan, July 2019 (Invited).

66. Michael A. Brook,* *Using Natural Materials to Improve Silicone Properties*, Materials/ Polymer, 34th Philippine Chemistry Congress (34th PCC), Cebu, The Philippines, May 2019 (Keynote).
65. Michael A. Brook,* Ayodele Fatona, Sijia Zheng, Jianfeng Zhang and Yang Chen, *New Opportunities with Silicone Elastomers Using Sulfur Chemistry: Cure, Organofunctionalization and Recycling*, The 13th International Conference on "Advanced Polymers via Macromolecular Engineering" (APME 2019) Stellenbosch, South Africa from 15 - 18 April 2019.
64. Michael A. Brook,* Scott E. Laengert, Ben Macphail, Robert Bui, Sijia Zheng, Alyssa F. Schneider, Mengchen Liao, Yang Chen and Jianfeng Zhang, *The Greening of Silicones: Exploiting Natural Materials*, 18th International Symposium on Silicon Chemistry (ISOS-18), Shandong, China, Aug. 6-11, 2017 (Plenary).
63. Michael A. Brook, *Finding the cure: alternative strategies to crosslink silicone elastomers*, ISPO 11th International Workshop on Silicon-Based Polymers, Snekkersten, Denmark, July 2017 (Plenary).
62. Michael A. Brook, Mengchen Liao, Scott E. Laengert, Alyssa F, Schneider, Jennifer Morgan, John B. Grande and Jianfeng Zhang, *A strategy for controlled silicone polymer synthesis: Just add water (or a few other things)*, 100th Canadian Chemistry Conference and Exhibition, Toronto, Canada, May 2017, Invited, Macromolecular Science and Engineering Award lecture.
61. Michael A. Brook,* Jennifer Morgan,^ Tong Chen,^ John Grande^. (2017). Hyperbranched Silicone Gels and Elastomers. 14th UNESCO/IUPAC Conference on Macromolecules & Materials, Stellenbosch, South Africa, April 2017 (Invited).
60. Michael A. Brook,* Jennifer Morgan, Alyssa Schneider and Scott Laengert, *Tailored Silicone Structures Lead to Tailored Silicone Properties*, 253rd American Chemical Society National Meeting, San Francisco, March, 2017, (Invited).
59. Michael A. Brook. (2016). *New Fillers and New Curing Mechanisms for Silicone Elastomers*. Smithers Rapra Silicone Elastomers World Summit, Cologne, Germany, Nov. 2016 (Invited)
58. Michael A. Brook,* *What Corriu Knew: Mechanism and Structure Matter.* A Scientific Tribute to Professor R.J.P. Corriu, Montpellier, France, Nov. 2016 (Invited).
57. Michael A. Brook, John Grande,^ Alyssa Schneider,^ Jennifer Morgan,^ Tong Chen,^ Mengchen Liao^. *Controlling silicone structures using the Piers-Rubinsztajn Reaction*, 47th Silicon Symposium, Portland OR June 19-23, 2016 (Keynote, Kipping Award Address).
56. Michael A. Brook, Yang Chen, Benjamin Macphail, Laura Zepeda-Velasquez, John B. Grande, Ayodele Fatona, Jose Moran-Mirabal, Marlena Whinton, Madiha F. Khan, *Designing Silicones to Control Interfaces*, 251st American Chemical Society Meeting, Mar. 13-17, 2016, San Diego, California (Invited, Kipping Award Address).
55. Brook, Michael A., Zepeda-Velasquez, Laura, DeWolf, Christine, Mansuri, Erum, Whinton, Marlena, *Reprocessable Silicone Boronate Gels*, Symposium on Polymer Gels as Advanced Soft Materials, Francoise Winnik, Ryo Yoshida. Takahashi Miyata and Joanna Aizenberg, co-organizers, Pacifichem 2015, Hawaii, December 2015 (Invited).

53. Brook, Michael A., Zepeda-Velasquez, Laura; Whinton, Marlena; Chen, Yang; Grande, John B. Khan, Madiha F.; Rambarran, Talena; Fatona Ayodele and Jose Moran-Mirabal, *Water responsive silicone polymers*, Symposium on Fluorine & Silicon Containing Polymers, Joseph Mabry, and Scott Iacono, co-organizers, 14th Pacific Polymer Conference 2015, Hawaii, December 2015 (Invited).
52. Brook, Michael A., Zepeda-Velazquez, Laura C., Chen, Yunqing, Grande, Amanda S., *Thermoplastic silicone elastomers*, UNESCO/IUPAC Workshop & Conference on Macromolecules & Materials, 7-10 September 2015, Port Elizabeth, South Africa (Invited).
51. Michael A. Brook*, Nora Labbancz, Yang Chen, Yunqing Chen, Virginie Delhorbe, Nicholas Luong, Madiha Khan and Adam Kowalczyk. *Hydrosilanes + $B(C_6F_5)_3$ initiate the group transfer polymerization of methyl methacrylate*, 46th Silicon Symposium, Davis, CA June 21-24, 2015 (Invited).
50. J.B. Grande, J. Zhang, A. Schneider and Michael A. Brook, *Boron-catalyzed Siloxane Formation: New Routes to Precise 3D Silicones and Green Composites,* Symposium on Catalytic Transformations of Main Group Substrates, 98th Canadian Chemistry Conference, Ottawa, Canada, June 13-17, 2015 (Invited).
49. Brook, Michael A.; Zhang, Jianfeng, Fleury, Etienne, Schneider, Alyssa. *Green Silicones: Lignin Reinforced Foams*, ISPO 10th International Workshop on Silicon-Based Polymers, Aussois, France, April 2015 (Invited).
48. Michael A. Brook,* Yang Chen, Yunqing Chen, Nora Labbancz, Laura Dodge, Alyssa Schneider, Marlena Whinton, and Talena Rambarran, *Strategies for the High Throughput Synthesis of Silicones*, International Symposium on Silicon Chemistry (ISIS XVII), Berlin, Germany, Aug. 2014 (Invited).
47. Michael A. Brook, *Should Professors Bother to Patent Their Technologies?* 97th Canadian Chemical Society Conference, Vancouver, June 2014 (Invited).
46. M.A. Brook, Y. Chen, Y. Chen, L. Dodge, J.B. Grande, N. Labbancz, A.F. Schneider and A. Szelag, T.P. Bender, *Using Boron Chemistry to Create Silicone Polymers*, 97th CSC Conference, Vancouver BC, June 1-5, 2014 (Invited).
45. Michael A. Brook, *Manipulating Polysiloxane Surfaces Using Nature's Polymers*, POLYCHAR 22, University of Stellenbosch, South Africa, April 7-11, 2014 (**Keynote Lecture**).
44. Brook, M. A. *Breast Implant Lawsuits – A Tempest in a C-Cup?* Rotary Lunchtime Lectures, Feb. 4, 2014, Niagara on the Lake (**Keynote Lecture**).
43. Brook, Michael A.; Grande, John B.; Dodge, Laura; Fawcett, Amanda S. *Structured Silicones: Assembly Through Physical and Click Linkages*, International Workshop on Organosilicon Polymers ISPO, Moscow, Russia, Sept. 2013 (Invited).
42. Michael A. Brook, John B. Grande, Laura Dodge, Ferdinand Gonzaga, *Precise silicone surfactants: Old and new hydrophiles.* 45th Silicon Symposium, Lubbock Texas, May 21-24, 2013 (Invited).
41. Michael A. Brook, John B. Grande, Amanda S. Fawcett, Ferdinand Gonzaga, Talena Rambarran, Marlena Whinton, and Yang Chen, *Why Can't Silicones Follow the New Polymer Paradigm? Making Precise Structures,* Silicon Containing Polymers and Composites, San Diego, USA Dec. 10, 2012 (Invited).

40. Michael A. Brook, *Explicit silicone structures: Are they worth the effort?* 4th Asian Silicon Symposium (ASiS-4), Oct. 2012, Tsukuba, Japan (**Plenary Lecture**).
39. Michael A. Brook, Yongxin Wang, Yang Chen, John Grande, Ferdinand Gonzaga, Na Li, Marlena Whinton, Nicholas Luong, Madiha Khan, Jianfeng Zhang and Talena Rambarran, *Structuring Silicone Interfaces*, 6th European Silicon Days, Sept. 2012, Lyon, France (Invited).
38. Michael A. Brook, John B. Grande, Amanda S. Fawcett, Anna Szeląg, Elizabeth Laidley, and Timothy P. Bender, *Flexible and Functional Silicone Polymer Assembly Using Main Group Strategies*, Main Group Chemistry Meets Polymer and Materials Science Symposium, 244th American Chemical Society National Meeting, Aug. 2012 Philadelphia, USA (Invited).
37. Michael A. Brook, *Where Do Organosilicon Compounds and Polymers Come From?* Organosilicones in the Environment Workshop, Burlington ON, May 8,9 2012 (**Keynote Lecture**).
36. Michael A. Brook, Ferdinand Gonzaga, John Grande, Mark Pascoal, Amanda Fawcett, Marlena Whinton and Talena Rambarran, *Structuring Interfaces with Explicit Silicone Surfactants*, 243rd ACS National Meeting, San Diego CA March 26, 2012. This lecture does not have an ACS abstract. I was invited by Prof Kira, to give a lecture at his symposium when Prof. Yitzak Apeloig was unable to give his lecture.
35. M.A. Brook and F. Gonzaga, *High Surface Area Metal Structures by Citrate Surfactant Reduction* 94th Canadian Chemical Conference, June 6-10, 2011, Abs. 993, Symposium in Honour of John Harrod (Invited).
34. Michael A. Brook, John B. Grande, Johan Alauzun, Yang Chen, Tim Dargaville, Daniel Keddie, Helen Y. So, Amanda S. Fawcett, Yongxin Wang, Vinodh Rajendra, and David B. Thompson, *Structured Silicone Elastomers for Improved Biocompatibility*, 32nd Australasian Polymer Symposium, Feb. 14-17, 2011, Coffs Harbor, Australia (Invited).
33. Michael A. Brook, Ferdinand Gonzaga, Tim Dargaville, Daniel Keddie, John Grande and Mark Pascoal, *New Strategies for Functionalizing and Crosslinking Silicones*, ISASC The 1st International Symposium on Applied Silicon Chemistry, October 22-23, 2010, Yonsei Univ., Wonju, KOREA (Invited).
32. Michael A. Brook, Ferdinand Gonzaga, John Grande, Amanda Fawcett, Laura Dodge, Meera Mehta and Tim Rogers, *Synthesis of Explicit Silicone Polymers*, 3rd Asian Symposium on Silicon Chemistry (ASiS), Oct. 2010, Hangzhou China (Invited).
31. Michael A. Brook, *Surface Activity of 3D Structured Silicones*, 7th International Workshop on Organosilicon Polymers (ISPO), 27-30 June 2010, Łódź, Poland (Plenary Lecture).
30. M. A. Brook, *Structuring Siloxanes: New Routes to Silica and Silicone Composites*, 2nd Sino-Canadian Conference of Advanced Materials, May 2010, Suzhou, China (Invited).
29. Michael A. Brook, Heather D. Sheardown, Alison Holloway, Renita D'souza, Yunping Shao, Ken Ng, Vinodh Rajendra, Amanda Fawcett, Helen So and Johan Alauzun, *Strategies to Improve Silicone Elastomer Biocompatibility*, 11th Pacific Polymer Conference, Dec. 2009, Cairns, Australia (Keynote address).
28. Brook, M. A., *Why are people so sceptical about silicones as biomaterials? Strategies for improved biocompatibility*, European Silicon Days, Sept. 9-11, 2007, Bath England (Plenary Lecture).

27. Michael A. Brook, David Thompson, Ryan Longenecker, Amanda Fawcett, *Controlling the Internal Morphology of Silicone Elastomers: Using Self-Assembly of Surfactants Inside Silicones.* ISPO, June 2007, Montpellier, France (Plenary lecture).
26. Yang Chen, David Valentini and Michael A. Brook, *Starch Meets Silicone and Silica: Using Polysaccharides to Structure Silicon-Based Materials* ISPO, June 2008, Busan, Korea (Invited).
25. Michael A. Brook, Ferdinand Gonzaga, and David B. Thompson, *Structuring Silicones, and Structuring Metal Crystals with Silicones*, 15th ISOS, May 2008, Jeju Island, Korea (Invited).
24. Michael A. Brook, Heather D. Sheardown, Shigui Zhao, Yunping Shao, Yang Chen, Neven Awad and Renita D'souza, *Strategies to Improve Biocompatibility at Silicone Interfaces*, Biomaterials Symposium, Chemical Society of Canada National Conference, May 2008, Edmonton, Canada, ABS 38 (Invited).
23. David B. Thompson and Michael A. Brook, *Complex, explicit 3D silicone structures from dehydrocarbonative coupling*, Materials Symposium, Chemical Society of Canada National Conference, May 2008, Edmonton Canada, ABS 1098 (Invited).
22. Michael A. Brook,* H. D. Sheardown,* A. Fawcett, R. D'souza, S. Zhao, Y. Chen, Y. Shao and N. Awad, *Internal and External Structuring of Silicones for Improved Biocompatibility*, 41st Organosilicon Symposium, April 2008, San Francisco, USA (Invited).
21. Brook, M. A., *Exploiting Protein Silicone Interactions in Drug Delivery*, 2007 ACS ProSpectives Conference: Successful Biologics: Formulation to Manufacturing, Nov. 2007, Philadelphia USA.
20. Brook, M. A., *Structuring Inorganic Interfaces: What Minerals Can Teach Us About Metals*, Tercer Encuentro de Química Inorgánica (3rd Mexican national meeting in inorganic chemistry), Aug. 2007, Guanajuato, Mexico (Invited).
19. Michael A. Brook, Lihua Liu, Heather Sheardown, Hong Chen, Yang Chen, and Diana Morarescu, *Building biological layers on silicone elastomers using redistributive erosion/growth mechanisms*, Silicones and Silicone-Modified Materials, 232rd American Chemical Society Meeting, Sept. 2006, San Francisco, Abstract POLY 337.
18. Michael A. Brook, J. Guo, H. D. Sheardown, H. Chen, D. Chen, *Carbohydrate Modified Silicone Elastomers*, ISOS XIV International Symposium on Organosilicon Chemistry, August 2005, Würzburg Germany (Invited).
17. Michael A. Brook, *Protein and oligonucleotide compatible sol-gel preparation and controlled aggregation of primary silica particles*, IUPAC World Polymer Congress, July 2004, Paris France (Invited).
16. Michael A. Brook, Hong Chen, and Heather Sheardown, *Protein Rejecting Silicone Elastomers for Scar Reduction in the Eye*, Emerging New Materials Research Day, June 2003, Toronto Canada (Invited).
15. Michael A. Brook, Stefanie Mortimer, Cindy Liu and Paul Zelisko, *Formulating Emulsions Using Silicone-Protein Copolymers*, International Workshop on Silicon Containing Polymers ISPO 3, August 2003, Troy, NY (Invited).
14. M. A. Brook, J. D. Brennan, D. Chen, H. Chen, Z. Zheng, P. Zelisko, S. Mortimer and A. Ragheb, *Harnessing Protein Activity at Silica and Silicone Interfaces,* 36th Organosilicon Symposium, Akron, May 2003 (Invited).

13. Muxin Liu, Elodie Pacard, Amro Ragheb, Paul Zelisko et Michael A. Brook, *Emulsion de silicone eau dans huile : stabilisation par des protéines*, Journées de formulation: Formulation des composés silicones et fluorés: Concurrence ou complémentarité Lyon, France 9, 10 décembre 2002 (Invited).
12. Michael A. Brook, Dan Chen, Kui Guo, Zhang Zheng, John Brennan, Hong Chen and Paul Zelisko, *Using silicon chemistry to stabilize proteins in silica*, XIII$^{th}$ International Symposium on Organosilicon Chemistry, August 2002, Guanajuato, Mexico, Abstract A-28 (Invited).
11. Michael. A. Brook, Vasiliki Bartzoka, Gladys Chan and Paul Zelisko, *Are Silicones Deleterious to Protein Structure and Function?* 33$^{rd}$ Organosilicon Symposium, April 2000, Saginaw MI, USA, Abstract B-15 (Invited).
10. M. A. Brook, R. Z. Stan, B. Davies, V. Bartzoka. *Combining Silicones with Biopolymers*. XII$^{th}$ International Symposium on Organosilicon Chemistry, May 1999, Sendai, Japan (Invited).
9. M. A. Brook and Frank J. LaRonde, *Chiral Extracoordinate Silanes: Catalytic, Enantioselective Reduction of Carbonyl Groups*, 32$^{nd}$ Organosilicon Symposium, March 1999, Milwaukee, USA (Invited).
8. M. A. Brook, R. Z. Stan and A. Tseitlin, Progress in the Chemistry of Surface Compability, 5$^{th}$ International Conference on Woodfiber-Plastic Composites, May 1998, Toronto, ON (Invited).
7. M. A. Brook, T. Kuhnen, M. J. McGlinchey, R. Ruffolo, M. Stradiotto and J. Urschey, *(Metal) Complex Solutions To Some Synthetic (Silicon) Problems*, ACS Meeting, Apr. 1998, Dallas, USA, Kipping Symposium (J. Lambert, Awardee), Abstract 279 (Invited).
6. Brook, M. A.; Balduzza, S.; Bartzoka, V.; Hu, G.; LaRonde, F.; Sebe, G.; Stan, R., *Modifying biopolymers with silanes and silicone*, 4th International Conference on Woodfiber-Plastic Composites, May 1997, Lansing, MI; p 293-293 (Invited).
5. Sebe, G.; Brook, M. A., *Hydrophobization of pine wood surfaces by grafting polysiloxanes*, 4$^{th}$ International Conference on Woodfiber-Plastic Composites, May 1997, Lansing, MI, p 301-301 (Invited).
4. M. A. Brook, Sonya Balduzzi, Vasiliki Bartzoka, Gang Hu, Frank LaRonde, Gilles Sèbe and Rodica Stan, *Modifying Biopolymers with Silanes and Silicones*, ACS Northeast Regional Meeting, May 1997, Midland MI, Abstract 143 (Invited).
3. Michael A. Brook, David A. Valentini, Rodica Stan, Vasiliki Bartzoka and Gilles Sèbe, *Approaches to the Dimensional Stabilization of Wood: Hydrophobization*, Design Industriel, Architecture et Rhéologie du Bois, March 1997, Bordeaux, France (Invited).
2. M. A. Brook, H. A. M. Ketelson, C. Gottardo and R. H. Pelton, *Particles in a Box: Hydrosilation Catalyzed by Platinum Nanoparticles Enmeshed in a Silsesquioxane Gel*, 9th International Organosilicon Conference, Sept. 1996, Montpellier, France, Abstract LD8 (Invited).
1. M.A. Brook, H. Ketelson and R.H. Pelton, (Polymer Colloids Symposium), *Controlled Modification of Silica Surfaces: Polyolefin and Silicone Sterically Stabilized Colloids*, 78th Canadian Society for Chemistry Conference, Guelph, June 1995, Abstract 253 (Invited).