

Department of Chemistry, Boston College
Merkert Chemistry Center; 2609 Beacon Street
Chestnut Hill, MA 02467-3860
617-552-1483 (phone); 617-552-0833 (fax)
peter.zhang@bc.edu
<https://sites.bc.edu/peter-zhang/>

- §1999-2001 Postdoc; Massachusetts Institute of Technology (Advisor: Stephen L. Buchwald)
- §1996-1999 Postdoc; Massachusetts Institute of Technology (Advisor: Stephen J. Lippard)
- §1991-1996 Ph.D.; University of Pennsylvania (Advisor: Bradford B. Wayland)
- §1985-1988 M.S.;

Membered Cyclic Sulfonamides by Metalloradical C–H Amination”

, , 18160–18169. [\[Link\]](#)

- Ø Lang, K.; Torker, S.; Wojtas, L.; Zhang, X. P. “Asymmetric Induction and Enantiodivergence in Catalytic Radical C–H Amination via Enantiodifferentiative H-Atom Abstraction and Stereoretentive Radical Substitution” , , 12388–12396. [\[Link\]](#)
- Ø Hu, Y.; Lang, K.; Tao, J.-R.; Marshall, M. K.; Cheng, Q.-G.; Cui, X.; Wojtas, L.; Zhang, X. P. “Next-Generation C_2 -Symmetric Chiral Porphyrins for Cobalt(II)-Based Metalloradical Catalysis: Catalyst Engineering by Distal Bridging” , , 2670–2674. [\[Link\]](#)
- Ø Li, C.-Q.; Lang, K.; Lu, H.-J.; Hu, Y.; Cui, X.; Wojtas, L.; Zhang, X. P. “Catalytic Radical Process for Enantios

- ☉ Chen, Y.; Ruppel, J. V.; Zhang, X. P. "Cobalt-Catalyzed Asymmetric Cyclopropanation of Electron-Deficient Olefins" *Chem. Commun.*, 2014, 12074–12075. [\[Link\]](#)
- ☉ Baskaran, D.; Mays, J. W.; Zhang, X. P.; Bratcher, M. S. "Carbon Nanotubes with Covalently Linked Porphyrin Antennae: Photoinduced Electron Transfer" *J. Am. Chem. Soc.*, 2013, 6916–6917. [\[Link\]](#)
- ☉ Chen, Y.; Fields, K. B.; Zhang, X. P. "Bromoporphyrins as Versatile Synthons for Modular Construction of Chiral Porphyrins: Cobalt-Catalyzed Highly Enantioselective and Diastereoselective Cyclopropanation" *J. Am. Chem. Soc.*, 2014, 14718–14719 [\[Link\]](#)

1. Xu, P.; Xie, J.-J.; Wang, D.-S.; Zhang, X. P. "Metalloradical Approach for Concurrent Control of Multiple Convergences and Selectivities in Intermolecular Radical Allylic C–H Amination" *Chem. Commun.*, Accepted for Publication. [\[Link\]](#)
2. Lang, K.; Yang, H.; Lee, W.-C. C.; Zhang, X. P. "Combined Radical and Ionic Approach for The Enantioselective Synthesis of β -Functionalized Amines from Alcohols" *J. Am. Chem. Soc.*, 2014, 548–557. [\[Link\]](#)[\[Text\]](#)[\[Highlight\]](#)
3. Lee, W.-C. C.; Zhang, X. P. "Asymmetric Radical Cyclopropanation of Alkenes" *J. Am. Chem. Soc.*, 2014, 850–851. [\[Link\]](#)
4. Ke, J.; Lee, W.-C. C.; Wang, X.-X.; Wang, Y.; Wen, X.; Zhang, X. P. "Metalloradical Activation of In Situ-Generated α -Alkynyldiazomethanes for Asymmetric Radical Cyclopropanation of Alkenes" *J. Am. Chem. Soc.*, 2014, 2368–2378. [\[Link\]](#)
5. Wang, X.-X.; Zhang, X. P. "Catalytic Radical Approach for Selective Carbene Transfers via Cobalt(II)-Based Metalloradical Catalysis" In *Radical Catalysis*; eds. Wang, J.-B.; Che, C.-M.; Doyle, M. P. John Wiley & Sons, 2014, Chapter 2, 25–66. [\[Link\]](#)
6. Wang, J.-Y.; Xie, J.-J.; Lee, W.-C. C.; Wang, D.-S.; Zhang, X. P. "Radical Differentiation of Two Ester Groups in Unsymmetrical Diazomalones for Highly Asymmetric Olefin Cyclopropanation" *J. Am. Chem. Soc.*, 2014, 330–344. [\[Link\]](#)[\[Highlight\]](#)[\[SynForm\]](#)
7. Zhang, W.-J.; Nafady, A.; Shan, C.; Wojtas, L.; Chen, Y.-S.; Cheng, Q.-G.; Zhang, X. P.; Ma, S.-Q. "Functional Porphyrinic Metal-organic Frameworks for Asymmetric Radical Cyclopropanation" *J. Am. Chem. Soc.*, 2014, 13618–13624. [\[Link\]](#)

26. Wang, Y.; Zhang, X. P. “[Co(3,5-Di-*t*-Bu-lbuPhyrin)]” -EROS, John Wiley & Sons, ;
DOI: 10.1002/047084289X.rn02201. [\[Link\]](#)
27. Wang, Y.; Zhang, X. P. “[Co(3,5-DiMeO-ZhuPhyrin)]” -EROS, John Wiley & Sons, ;
DOI: 10.1002/047084289X.rn02200. [\[Link\]](#)
28. Jiang, H.-L.; Lang, K.; Lu, H.-J.; Wojtas, L.; Zhang, X. P. “Asymmetric Radical Bicyclization
of Allyl Azidoformates via Cobalt(II)-” “E 10 BDC BT/CS0 [00B3>56.30030(201004800579.3(m

- , , 19981–19984. [\[Link\]](#) [Highlighted in [SynForm](#)] [Highlighted in [Organic Chemistry Portal](#)]
53. Lu, H.-J.; Jiang, H.-L.; Hu, Y.; Wojtas, L.; Zhang, X. P. “Stereoselective Radical Amination of Electron-Deficient C(sp³)–H Bonds by Co(II)-Based Metalloradical Catalysis: Synthesis of alpha-Amino Acid Derivatives via alpha-C–H Amination of Esters and Amides.” *J. Am. Chem. Soc.* 2013, 135, 10230–10234. doi:10.1021/ja128484g

78. Lu, H.-J.; Tao, J.-R.; Jones, J. E.; Wojtas, L.; Zhang, X. P. "Co(II)-Catalyzed Intramolecular C–H Amination of Phosphoryl Azides: Formation of 6- and 7-Membered Cyclophosphoramidates" , 1248–1251. [\[Link\]](#) [Highlighted in [Synfacts](#)]
79. Lu, H.-J.; Subbarayan, V.; Tao, J.; Zhang, X. P. "Cobalt-Catalyzed Intermolecular Benzylic C–H Amination with 2,2,2-Trichloroethoxycarbonyl Az

106. Huang, L.; Chen, Y.; Gao, G.-Y.; Zhang, X. P. "Diastereoselective and Enantioselective Cyclopropanation of Alkenes Catalyzed by Cobalt Porphyrins" *J. Am. Chem. Soc.* **2010**, *132*, 8179–8184 [\[Link\]](#)
107. Gao, G.-Y.; Colvin, A. J.; Chen, Y.; Zhang, X. P. "Versatile Synthesis of *o*-Aryloxy- and Alkoxy-Substituted Porphyrins via Palladium-Catalyzed C–O Cross-Coupling Reactions" *J. Am. Chem. Soc.* **2010**, *132*, 3261–3264 [\[Link\]](#)
108. Gao, G.-Y.; Chen, Y.; Zhang, X. P. "General and Efficient Synthesis of Arylamino- and Alkylamino-Substituted Diphenylporphyrins and Tetraphenylporphyrins via Palladium-Catalyzed Multiple Amination Reactions" *J. Am. Chem. Soc.* **2010**, *132*, 6215–6221 [\[Link\]](#)
109. Chen, Y.; Huang, L.; Zhang, X. P. "Acid-Promoted Olefination of Ketones by Iron(III) Porphyrin Complex" *J. Am. Chem. Soc.* **2010**, *132*, 2493–2496 [\[Link\]](#)
110. Chen, Y.; Huang, L.; Zhang, X. P. "Efficient and Stereoselective Synthesis of beta-Trifluoromethyl-alpha, beta-Unsaturated Esters via Iron(III) Porphyrin-Catalyzed Olefination of Ketones" *J. Am. Chem. Soc.* **2010**, *132*, 5925–5929 [\[Link\]](#)
111. Cheng, B.; Zhang, X. P. "Facile and Efficient Synthesis of *o*-Arylamino- and Alkylamino-Substituted Porphyrins via Palladium-Catalyzed Amination" *J. Am. Chem. Soc.* **2010**, *132*, 4432–4438 [\[Link\]](#)
112. Chen, Y.; Huang, L.; Ranade, M. A.; Zhang, X. P. "Iron(III) and Ruthenium(II) Porphyrin Complexes-Catalyzed Selective Olefination of Aldehydes with Ethyl Diazoacetate" *J. Am. Chem. Soc.* **2010**, *132*, 3714–3717 [\[Link\]](#)

122. Zhang, X.-X.; Parks, F. P.; Wayland, B. B. "One-Electron Activation of CO by a Rhodium(II) Porphyrin Bimetallo-radical Complex: Concerted Reactions of Two Metalloformyl Radicals ((MCO)·)"

7.

25.

82. Department of Chemistry, Chemical Biology, & Biomedical Engineering, Stevens Institute of Technology, Hoboken, NJ; October 23, .
 83. New Directions in Chemistry of Heterocyclic Compounds, (NDCHC-2013); Pyatigorsk, Russia; September 17-21, . (Keynote Speaker)
 84. Pharmaron, Beijing, China; August 2, .
 85. College of Chemistry and Molecular Engineering, Peking University, Beijing, China; August 1, .
 86. College of Chemistry and Biological Engineering, University of Science and Technology Beijing, Beijing, China; July 30, .
 87. Frontier Institute of Science and Technology, Xi'an Jiaotong University, Xi'an, China; July 23, .
 88. Department of Chemistry, Nanjing University, Nanjing, China; December 14, .
 89. Department of Chemistry, University of Minnesota, Minneapolis, MN; September 20, .
 90. Symposium on Metalloporphyrin-Based Catalytic Processes, (ICPP-7); Jeju, Korea; July 1-6, .
 91. Department of Chemistry and Biochemistry, University of Maryland, College Park, MD; March 1, .
 92. Department of Chemistry, Temple University, Philadelphia, PA; February 15, .
 93. Department of Chemistry, University of Pennsylvania, Philadelphia, PA; February 14, .
 94. Department of Chemistry, Drexel University, DexKofional Conferenc rn.Tc 0 Tw (-2 0.079 Tw .023 Tw T(
- 93.

107. Department of Homogeneous and Supramolecular Catalysis, Van 't Hoff Institute for Molecular Sciences (HIMS), University of Amsterdam; Amsterdam, The Netherlands; January 9–12, .
108. Department of Chemistry and Chemical Biology, University of New Mexico; Albuquerque, NM; November 5, .
109. Department of Chemistry and Biochemistry,

132. Department of Chemistry, Tongji University, Shanghai, China; December 26, .
133. Department of Chemistry, Fudan University, Shanghai, China; December 26, .
134. Department of Chemistry, East-China University of Science and Technology, Shanghai, China; December 25, . Dhemis, China; DecembershtCf0 Tcasf0 Tcu4(f0 Tc.6(-y)23.4(y)10./TT27

162. Department of Chemistry, Duke University, Durham, NC; October 18,
163. Department of Chemistry, University of Tennessee at Chattanooga, Chattanooga, TN; October 14,
164. Department of Chemistry, University of Alabama, Tuscaloosa, AL; October 6,
165. Department of Chemistry, Georgia State University, Atlanta, GA; September 30,
166. Department of Chemistry and Biochemistry, University of Delaware, Newark, DE; September 22,
167. Department of Chemistry, University of Pennsylvania, Philadelphia, PA; September 20,
168. Chemical Science Division, Oak Ridge National Laboratory, Oak Ridge, TN; September 15,
169. Department of Chemistry, State University of New York at Buffalo, Buffalo, NY; September 7,
170. Department of Chemistry, Virginia Polytechnic Institute and State University, Blacksburg, VA; August 26,
171. Department of Chemistry, Fudan University, Shanghai, China; August 4,
172. Department of Chemistry, Shanghai Jiaotong University, Shanghai, China; August 3,
173. Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, China; August 2,
174. Department of Chemistry, Peking University, Beijing, China; July 27,
175. Institute of Chemistry, Chinese Academy of Sciences, Beijing, China; July 26,
176. Department of Chemistry, Beijing Normal University, Beijing, China; July 25,
177. , New Port, RI, July 10-15,
178. Department of Chemistry, University of Chicago, Chicago, IL; May 27,
179. Department of Chemistry and Biochemistry, University of Mississippi, Oxford, MS; March 24,
180. Department of Chemical Engineering, University of Tennessee, Knoxville, TN; October 26,
181. Symposium on Organometallic and Materials Chemistry in the Southeast, , Atlanta, GA; November 16-19,
182. Department of Chemistry, West Kentucky University, Bowling Green, KY; November 1,
183. Department of Chemistry, University of West Florida, Pensacola, FL; February 8,
184. Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, China; July 20,
185. Department of Chemistry, Anhui Normal University, Wuhu, China; July 16,
186. Department of Chemistry, Michigan State University, East Lansing, MI; January 18,
187. Department of Chemistry, North Carolina State University, Raleigh, NC; January 16,
188. Department of Chemistry, University of Tennessee, Knoxville, TN; January 12,
189. Department of Chemistry and Biochemistry, Ohio University, Athens, OH, January 8,

