# CURRICULUM VITAE

**GUOQI ZHANG, Ph.D.**
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## Education & Professional Appointments

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|---|---|
| 2018 - present | Associate Professor, John Jay College and The Graduate Center, the City University of New York, New York |
| 2014 - 2018 | Assistant Professor, The Graduate Center, the City University of New York, New York |
| 2013 - 2018 | Assistant Professor, John Jay College, the City University of New York, New York |
| 2011 - 2013 | Director's Postdoc Fellow, Los Alamos National Laboratory, New Mexico, US |
| 2010 - 2011 | Novartis Foundation Fellow, Novartis Pharma & University of Basel, Switzerland |
| 2006 - 2010 | Postdoctoral Research Associate, University of Basel, Switzerland |
| 2001 - 2006 | Ph.D., Chemistry, Institute of Chemistry, Chinese Academy of Sciences, China |
| 1997 - 2001 | B.S., Chemistry, Wuhan University, China |

## Awards and Honors

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|---|---|
| 2022 | Faculty Covid Recovery Award at CUNY John Jay College |
| 2021 | Faculty Recognition Award for Scholarly Excellence at CUNY John Jay College |
| 2015 | Faculty Recognition Award for Scholarly Excellence at CUNY John Jay College |
| 2014 | CUNY "Salute to Scholars" Reception |
| 2014 | CUNY Collaborative Research Award |
| 2014 | American Chemical Society-Petroleum Research Fund New Investigator Award |
| 2011 | Director's Postdoc Fellowship Award, Los Alamos National Laboratory, Los Alamos, NM |
| 2010 | Novartis Foundation Fellowship Award, Novartis Pharma AG, Switzerland |
| 2009 | 'Reisefund' (travel award), University of Basel, Switzerland |
| 2006 | President Award in Research, Chinese Academy of Sciences, China |

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|---|---|
| 2005 | CAIA Technology Award, the 11th Academic Report Meeting of Analysis and Measurement in Beijing (BCEIA 2005), China |
| 2004-2006 | Outstanding Research Scholarship, Institute of Chemistry, Chinese Academy of Sciences, China |
| 2004 | Best Paper Award at the 24th Annual Meeting of the Chinese Chemical Society, China |
| 1998-2000 | Outstanding Student Scholarship, Wuhan University, China |

## Publications (Peer-Reviewed Journal Articles)

(* Denotes corresponding author; Undergraduate co-authors are underlined)

***@ CUNY John Jay College***

**2022**

124. **Guoqi Zhang**,* Haisu Zeng, Shengping Zheng, Michelle C. Neary, Pavel A. Dub,* "Markovnikov Alcohols via Epoxide Hydroboration by Molecular Alkali Metal Catalysts", *iScience.* **2022**, *under review.*

123. **Guoqi Zhang**,* Alex Wang, Haisu Zeng, Shengping Zheng, Michelle C. Neary, "Assembly of a 3D Supramolecular Framework and its Applications in Hydrofunctionalization of Ketones and Aldehydes", *Chemistry,* **2022**, *4*, 393-404.

122. **Guoqi Zhang**,* Haisu Zeng, Shengping Zheng, Michelle C. Neary, Pavel A. Dub,* "Vanadium-Catalyzed Stereo- and Regioselective Hydroboration of Alkynes to Vinyl Boronate", *ACS Catal.* **2022**, *12*, 5425-5429.

**2021**

121. **Guoqi Zhang**,* "4-Vinylpyridine derivative: protonation, methylation and silver(I) coordination chemistry", *J. Chem. Res*. **2021**, *45*, 687-693.

**2020**

120. **Guoqi Zhang**,* Jing Wu, Shengping Zheng, Michelle C. Neary, Jincheng Mao,* Marco Flores, Ryan Trovitch, Pavel A. Dub,* "Correction to "Redox-Noninnocent Ligand-Supported Vanadium Catalysts for the Chemoselective Reduction of C=X (X = O, N) Functionalities"", *J. Am. Chem. Soc*. **2020**, *142*, 16507-16509.

119. Jing Wu, Jinzhu Zhang, Ruben Soto-Acosta, Lili Mao, Jiahui Lian, Kenny Chen, Guy Pillon, **Guoqi Zhang**, Robert J. Geraghty, Shengping Zheng, "One-Pot Synthesis of 1-Hydroxyacridones from *para*-Quinol and *ortho*-Methoxycarbonylaryl Isocyanates", *J. Org. Chem.* **2020**, *85*, 4515-4524.

118. **Guoqi Zhang**,* Haisu Zeng, Sihan Li, Jahvon Johnson, Zixuan Mo, Shengping Zheng, "1-D Manganese(II)-Terpyridine Coordination Polymers as Precatalysts for Hydrofunctionalization of Carbonyl Compounds", *Dalton Trans.* **2020**, *49*, 2610-2615.

**2019**

117. **Guoqi Zhang**,* Jing Wu, Shengping Zheng, Michelle C. Neary, Jincheng Mao,* Marco Flores, Ryan Trovitch, Pavel A. Dub,* "Redox Non-Innocent Ligand Supported Vanadium Catalysts for Chemoselective Reduction of C=X (X = O, N) Functionalities", *J. Am. Chem. Soc*. **2019**, *141*, 15230-15239.

116. **Guoqi Zhang**,* Sihan Li, Jing Wu, Haisu Zeng, Zixuan Mo, Keziah Davis, Shengping Zheng, "High Efficient and Selective Hydroboration of Terminal and Internal Alkynes Catalysed by a Cobalt(II) Coordination Polymer", *Org. Chem. Front.* **2019**, *6,* 3228-3233.

115. Weiwei Fan, Li Li, **Guoqi Zhang**,* "Branched-Selective Alkene Hydroboration with Earth-Abundant Metals", *J. Org. Chem.* **2019**, 84, 5987-5996. (Invited Review Article)

114. **Guoqi Zhang**,* Jessica Cheng, Kezia Davis, Mary Grace Bonifacio and Cynthia Zajaczkowski, "Practical and Selective Hydroboration of Aldehydes and Ketones in Air Catalysed by an Iron(II) Coordination Polymer", *Green Chem*. **2019**, *21*, 1114-1121.

113. Haisu Zeng, Jing Wu, Sihan Li, Christina Hui, Anita Ta, Shu-Yuan Cheng,* Shengping Zheng,* **Guoqi Zhang**,* "Copper(II)-Catalyzed Selective Hydroboration of Ketones and Aldehydes", *Org. Lett.* **2019**, *21*, 401-406.

112. **Guoqi Zhang**,* Jing Wu, Haisu Zeng, Michelle C. Neary, Matthew Devany, Shengping Zheng, Pavel A. Dub,* "Dearomatization and Functionalization of Terpyridine Ligands Leading to Unprecedented Zwitterionic Meisenheimer Aluminum Complexes and Their Use in Catalytic Hydroboration", *ACS Catal.* **2019**, *9*, 874-884.

111. E Liu, Li Li, Jessica Cheng, **Guoqi Zhang**,* "Synthesis and Structural Characterization of Dinuclear Zinc(II) and Europium(III) Complexes Based on a Bis-hydrazone Ligand", *J. Mol. Struct*. **2019**, *1188*, 1-6.

**2018**

110. **Guoqi Zhang**,* Jing Wu, Sihan Li, Sean Cass, Shengping Zheng, "Markovnikov-Selective Hydroboration of Vinylarenes by a Cobalt(II) Coordination Polymer ", *Org. Lett.* **2018**, 20, 7893-7897.

109. Jing Wu, Haisu Zeng, Jessica Cheng, Shengping Zheng, James A. Golen, David R. Manke, **Guoqi Zhang**,* "Cobalt(II) Coordination Polymer as a Precatalyst for Selective Hydroboration of Aldehydes, Ketones, and Imines", *J. Org. Chem.* **2018**, *83*, 9442-9448.

108. Li Li, E Liu, Jessica Cheng, **Guoqi Zhang**,* "Iron(II) coordination polymer catalyzed hydroboration of ketones", *Dalton Trans*. **2018**, *47*, 9579-9584.

107. Xianbo Shen, Qi Zhang, **Guoqi Zhang**, Jianli Wang, "Significant and Synergistic Intensification of Aerobic Oxidation of Activated Alcohols in Water at Ambient Condition by Adding Perfluoro-Surfactant", *ChemistrySelect* **2018**, *3*, 7856-7861.

**2017**

106. **Guoqi Zhang**,* Jing Wu, Haisu Zeng, Jessica Cheng, Michelle C. Neary, Shengping Zheng, "Cobalt-catalyzed regioselective hydroboration of terminal alkenes", *Eur. J. Org. Chem.* **2017**, 5814-5818.

105. E Liu, Li Li, Hangxing Xiong, Corinna Chan, Jessica Cheng, **Guoqi Zhang**,* "Anchoring pyrazolines on a 2,2':6',2"-terpyridine backbone", *J. Mol. Struct.* **2017**, *132,* 64-69.

104. Li Li, E Liu, Hangxing Xiong, Corinna Chan, David R. Manke, James A. Golen, **Guoqi Zhang**,* "Mononuclear, dinuclear and polymeric cobalt(II) complexes built on 4-aryl-2,6-bis(2'-pyrazinyl)pyridines", *Polyhedron* **2017**, *132,* 64-69.

103. Hangxing Xiong, Li Li, E Liu, Jessica Cheng, **Guoqi Zhang**,* "A chiral multidentate salan-supported heterobimetallic catalyst for asymmetric Friedel-Crafts reaction", *Inorg. Chem. Commun*. **2017**, *84*, 24-27.

102. E Liu, Hangxing Xiong, Li Li, Chengxiong Yang, Zhiwei Yin, Anthony Chang, David R. Manke, James A. Golen, **Guoqi Zhang**,* "Facile synthesis of new divergent imidazole-containing ligands for a 1-D cobalt(II) coordination polymer", *Polyhedron* **2017**, *127*, 355-360.

101. **Guoqi Zhang**,* Jing Wu, Haisu Zeng, Shu Zhang, Zhiwei Yin, Shengping Zheng, "Cobalt-catalyzed α-alkylation of ketones with primary alcohols", *Org. Lett.* **2017**, *19*, 1080-1083.

100. Hangxing Xiong, Li Li, E Liu, Chengxiong Yang, Yuan Zhuo Zhang, James C. Fettinger, **Guoqi Zhang**,* "Silver(I) coordination polymers with thioether ligands: the influence of fluoro-substitution", *Polyhedron* **2017**, *126*, 268-275.

99. Hangxing Xiong, Li Li, E Liu, Chengxiong Yang, Yuan Zhuo Zhang, James C. Fettinger, **Guoqi Zhang**,* "Anion-dependent assembly of diverse 1D-3D silver(I) coordination networks with a thioether ligand", *Polyhedron* **2017**, *123*, 226-233.

**2016**

98. **Guoqi Zhang**,* Haisu Zeng, Jing Wu, Zhiwei Yin, Shengping Zheng,* James C. Fettinger, "Highly selective hydroboration of alkenes, ketones and aldehydes catalyzed by a well-defined manganese complex", *Angew. Chem. Int. Ed.* **2016**, 55, 14369-14372.

97. Zhiwei Yin, Haisu Zeng, Jing Wu, Shengping Zheng,* **Guoqi Zhang**,* "Cobalt-catalyzed synthesis of aromatic, aliphatic, and cyclic secondary amines via a 'hydrogen-borrowing' strategy", *ACS Catal.* **2016**, *6,* 6546-6550.

96. Yue He, Jincheng Mao,* Guangwei Rong, Hong Yan, **Guoqi Zhang**,* "Ligand-free, Cu-and Fe-catalyzed selective ring-opening arylations of benzoxazoles with aryl iodides", *Chem. Asia. J.* **2016**, *11*, 1672-1676.

95. **Guoqi Zhang**,* Zhiwei Yin, Jiawen Tan, "Cobalt-catalysed transfer hydrogenation of olefins", *RSC Adv.* **2016**, *6*, 22419-22423. (Cited: 30 times; *Editor's Collection Article* in 2019)

94. **Guoqi Zhang**,* Zhiwei Yin, Shengping Zheng, "Cobalt-catalyzed N-alkylation of amines with alcohols", *Org. Lett.* **2016**, *18*, 300-303. (Cited: 123 times)

93. Jincheng Mao,* Hong Yan, Guangwei Rong, Yue He, **Guoqi Zhang**,* "The application of copper/iron co-catalysis in cross coupling reactions", *The Chem. Rec.* **2016**, *16*, 1096-1605.

92. Li Li, Yuan Zhuo Zhang, Chengxiong Yang, E Liu, James A. Golen, Arnold L. Rheingold, **Guoqi Zhang**,* "Synthesis and structural characterization of zinc(II) and cobalt(II) complexes based on multidentate hydrazone ligands", *J. Mol. Struct.* **2016**, *1110*, 180-184.

91. **Guoqi Zhang**,* Jiawen Tan, Tonya Phoenix, David R. Manke, James A. Golen, Arnold L. Rheingold, "Amalgamating 4'-substituted 4,2':6',4"-terpyridine ligands with double-helical chains or ladder-like networks", *RSC Adv.* **2016**, *6*, 9270-9277.

90. Li Li, Yuan Zhuo Zhang, Chengxiong Yang, E Liu, James C. Fettinger, **Guoqi Zhang**,* "Two polymorphs of 4-(4-hexyloxyphenyl)-2,6-di(pyrazin-2-yl)pyridine and the crystal structure of its copper(II) complex", *J. Mol. Struct.* **2016**, *1110*, 19-23.

89. Qingliang He, Ting-Ting Yuan, Yiran Wang, Abhishant Guleria, Suying Wei,* **Guoqi Zhang**,* Luyi Sun, Jingjing Liu, Jingfang Yu, David P. Young, Hongfei Lin, Airat Khasanov, Zhanhu Guo,* "Manipulating dimensional assembly pattern and crystalline structure of iron oxide nanostructures with functional polyolefin", *Nanoscale,* **2016**, *8*, 1915-1920.

88. Li Li, Yuan Zhuo Zhang, E Liu, Chengxiong Yang, James A. Golen, **Guoqi Zhang**,* "One-dimensional copper(II) coordination polymers built on 4'-substituted 4,2':6',4''- and 3,2':6',3''-terpyridines: syntheses, structures and catalytic properties", *Polyhedron* **2016**, *105*, 115-122.

87. **Guoqi Zhang**,* Yuan Zhuo Zhang, Wenfeng Lo, Jianfeng Jiang, James A. Golen, Arnold L. Rheingold, "Diverse copper(II) complexes with simple nitrogen ligands: Structural characterization and applications in aerobic alcohol oxidations in water", *Polyhedron* **2016**, *103*, 227-234. (*Cover Picture*; Special issue dedicated to Prof. Catherine E. Housecroft)

**2015**

86. Jie Chen, Jincheng Mao,* Yue He, Daqing Shi, **Guoqi Zhang**,* "$AlCl_3$-promoted thiolation of acyl C–H bonds with arylsulfonyl hydrazides", *Tetrahedron* **2015**, *71*, 9496-9500.

85. Ren-Rong Liu, Dan-Jie Wang, Liang Wu, Bin Xiang, **Guoqi Zhang**, Jian-Rong Gao, Yi-Xia Jia, "Nickel-catalyzed enantioselective addition of styrenes to cyclic N-sulfonyl α-ketiminoesters", *ACS Catal*. **2015**, *5*, 6524-6528.

84. Jincheng Mao,* Defu Liu, Yongming Li, Jinzhou Zhao, Guangwei Rong, Hong Yan, **Guoqi Zhang**,* "A practical, chemoselective approach to O-methylation of carboxylic acids with dimethyl malonate", *Tetrahedron* **2015**, *71*, 9067-9072.

83. Zhiwei Yin, Shengguo Zhang, Shengping Zheng, James A. Golen, Arnold L. Rheingold, **Guoqi Zhang**,* "Cobalt(II) coordination polymers versus discrete complex with 4,2':6',4''-terpyridine ligands: the role of a pyrenyl substituent", *Polyhedron* **2015**, *101*, 139-145.

82. E. Liu, Yuan Zhuo Zhang, Chengxiong Yang, Li Li, James C. Fettinger, **Guoqi Zhang**,* "New copper(II) species from copper/2,2′-bypyridine and copper/4-dimethylaminopyridine catalyzed aerobic alcohol oxidations", *Polyhedron* **2015**, *95*, 223-229.

81. **Guoqi Zhang**,* Jiawen Tan, Yuan Zhuo Zhang, Christine Ta, Stephanie Sanchez, Shu-Yuan Cheng,* James A. Golen, Arnold L. Rheingold, "Syntheses, structures and cytotoxicity of cobalt(II) complexes with 4'-chloro-2,2':6',2''-terpyridine", *Inorg. Chim. Acta* **2015**, *435*, 147-152.

80. Jincheng Mao,* Defu Liu, Yongming Li, Jinzhou Zhao, Guangwei Rong, Hong Yan, **Guoqi Zhang**,* "Temperature-controlled NaI-mediated α-oxybenzoylation or oxyacylation-decarboxylation reactions of dimethyl malonate with carboxylic acids", *Catal. Commun*. **2015**, *70*, 62-65.

79. E. Liu, Yuan Zhuo Zhang, Jia-Wen Tan, Chengxiong Yang, Li Li, James A. Golen, Arnold L. Rheingold, **Guoqi Zhang**,* "Zn(II) and Co(III) metallosupramolecular assemblies derived from a rigid bis-Schiff base ligand", *Polyhedron* **2015**, *102*, 41-47.

78. Guangwei Rong, Jincheng Mao,* Hong Yan, Yang Zheng, and **Guoqi Zhang**,* "Phosphoric acid-mediated synthesis of vinyl sulfones through decarboxylative coupling reactions of sodium sulfinates with phenylpropiolic acids", *J. Org. Chem.* **2015**, *80,* 7652-7657. (Cited: 43 times)

77. Yue He, Jincheng Mao,* Guangwei Rong, Hong Yan, **Guoqi Zhang**,* "Iron-catalyzed esterification of benzyl C-H to form α-keto benzyl esters", *Adv. Synth. Catal.* **2015**, *357*, 2125-2131.

76. Guangwei Rong, Jincheng Mao,* Hong Yan, Yang Zheng, **Guoqi Zhang**,* "Iron/copper co-catalyzed synthesis of vinyl sulfones from sulfonyl hydrazides and alkyne derivatives"*, J. Org. Chem.* **2015**, *80*, 4697-4703.

75. Zhiwei Yin, **Guoqi Zhang,*** Shengping Zheng, Tonya Phoenix, James C. Fettinger, "Assembling mono-, di- and tri-nuclear coordination complexes with a ditopic analogue of 2,2':6',2"-terpyridine: syntheses, structures and catalytic studies", *RSC Advances,* **2015**, *5*, 36156-36166.

74. Liang Wu, Ren-Rong Liu, **Guoqi Zhang**, Dan-Jie Wang, Hao Wu, Jianrong Gao, Yi-Xia Jia, "Enantioselective Construction of Cyclic Indolyl a-Amino Esters *via* a Friedel–Crafts Alkylation Reaction", *Adv. Synth. Catal.* **2015**, *357*, 709-713.

73. **Guoqi Zhang**,* Yi-Xia Jia, Wenbo Chen,* Wenfeng Lo, Nyeisha Brathwaite, James A. Golen, Arnold L. Rheingold, "Diverse zinc(II) coordination assembles built on divergent 4,2':6',4"-terpyridine derivatives: syntheses, structures and catalytic properties", *RSC Advances.* **2015**, *5*, 15870-15879.

72. Kegang Liu, **Guoqi Zhang**,* "Direct asymmetric aldol reactions in aqueous media catalyzed by a β-cyclodextrin–proline conjugate with a urea linker" *Tetrahed. Lett.* **2015**, *56*, 243-246.

71. **Guoqi Zhang**,* E Liu, Chengxiong Yang, Li Li, James A. Golen, Arnold L. Rheingold, "Copper(II) complexes of 2,2':6',2"-terpyridine derivatives for catalytic aerobic alcohol oxidations: observation of mixed-valence $Cu^{I}Cu^{II}$ assembles", *Eur. J. Inorg. Chem.* **2015**, 939-947.

70. **Guoqi Zhang**,* Li Li, Chengxiong Yang, E Liu,* James A. Golen, Arnold L. Rheingold, "Copper(II) complexes derived from bidentate N,O-ligands for catalytic aerobic oxidation", *Inorg. Chem. Commun.,* **2015**, *51*, 13-16.

69. Qing Li, Hengyu Pan, Drew Higgins, Ruiguo Cao, **Guoqi Zhang**, Haifeng Lv, Kangbing Wu, Jaephil Cho, Gang Wu, "Oxygen-reduction active large-diameter nitrogen-doped graphene tubes to support Pt nanoparticles for a hybrid cathode catalyst", *Small* **2015**, *11*, 1443-1452.

68. Guangwei Rong, Defu Liu, Hong Yan, Jie Chen, Yang Zheng, **Guoqi Zhang**,* Jincheng Mao,* A Practical way to prepare isobutyronitrile amides through reactions between carboxylic acids and AIBN", *Adv. Synth. Catal.* **2015**, *357*, 71-76.

**2014**

67. **Guoqi Zhang**,* Chengxiong Yang, Li Li,* E Liu,* James A. Golen, Arnold L. Rheingold, "Mild, green copper/4-dimethylaminopyridine catalysed aerobic oxidation of alcohols mediated by nitroxyl radicals in water", *RSC Advances* **2014**, *4*, 61907-61911.

66. **Guoqi Zhang**,* Christine Ta, Shu-Yuan Cheng, James A. Golen, Arnold L. Rheingold , "Clicking thiourea into a salen scaffold: structures and cytotoxicity of cobalt(II) and nickel(II) complexes", *Inorg. Chem. Commun.,* **2014**, *48*, 127-130.

65. **Guoqi Zhang**,* Gloria Proni, Sherry Zhao, Edwin C. Constable, Catherine E. Housecroft, Jennifer A. Zampese, Markus Neuburger, "Chiral tetranuclear and dinuclear copper(II) complexes for TEMPO-mediated aerobic oxidation of alcohols: are four metal centres better than two?", *Dalton Trans.* **2014**, *43*, 12313-12320.

64. **Guoqi Zhang**,* Qing Li, "Hydrogen bonding or deprotonation: on fluoride ion fluorescence sensing with 1, 1'-bi-2-naphthol derivatives", *Supramol. Chem.* **2014**, 26, 817-824.

63. **Guoqi Zhang**,* Edwin C. Constable, Catherine E. Housecroft, Jennifer A. Zampese, "Assembling chiral salan-copper(II) complexes into a 2D-network with carboxylic acid functionalization", *Inorg. Chem. Commun.,* **2014**, *43*, 51-55.

62. Qing Li, Ping Xu,* Wei Gao, Shuguo Ma, **Guoqi Zhang**,* Ruiguo Cao, Jaephil Cho, Hsing-Lin Wang, Gang Wu,* "Carbon-nanotubes/graphene nanocomposite derived from cage-containing metal-organic framework for oxygen reduction in nonaqueous Li-$O_2$ battery cathodes", *Adv. Mater.* **2014**, *26*, 1378-1386.

61. **Guoqi Zhang**,* "A trinuclear $Cu_2Eu$ complex catalyzed asymmetric Friedel-Crafts alkylations of indoles with nitroalkenes", *Inorg. Chem. Commun.,* **2014**, *40*, 1-4.

60. **Guoqi Zhang**,* Qing Li, Gloria Proni, "One-pot diastereoselective assembly of helicates based on a chiral salen scaffold", *Inorg. Chem. Commun.,* **2014**, *40*, 47-50.

59. **Guoqi Zhang**,* "Polymorphism in unusual one-dimensional coordination polymers based on cadmium(II) and 2-mercaptopyridine-*N*-oxide", *CrystEngComm* **2013**, *15*, 6453-6456.

***Prior to CUNY***

58. **Guoqi Zhang**, Kalyan V. Vasudevan, Brian L. Scott, Susan K. Hanson, "Understanding the mechanisms of cobalt-catalyzed hydrogenation and dehydrogenation reactions", *J. Am. Chem. Soc.* **2013**, *135*, 8668-8681.

57. **Guoqi Zhang**, Susan K. Hanson, "Cobalt-catalyzed transfer hydrogenation of C=O and C=N bonds", *Chem. Commun.* **2013**, *49*, 10151-10153.

56. **Guoqi Zhang**, Susan K. Hanson, "Cobalt-catalyzed acceptorless dehydrogenation: synthesis of imines from alcohols and amines", *Org. Lett.* **2013**, 15, 650-653.

55. **Guoqi Zhang**, Brian L. Scott, Susan K. Hanson, "Mild and homogeneous cobalt-catalyzed hydrogenation of C=C, C=O, and C=N bonds", *Angew. Chem. Int. Ed.* **2012**, *51*, 12102-12106. (VIP paper & Front Cover)

54. **Guoqi Zhang**, Brian L. Scott, Ruilian Wu, Louis A. 'Pete' Silks, Susan K. Hanson, "Catalytic aerobic oxidation of lignin models by vanadium(V) complexes of bis(phenolate) ligands", *Inorg. Chem.* **2012**, *51*, 7354-7361.

53. Edwin C. Constable, Catherine E. Housecroft, Jennifer A. Zampese, **Guoqi Zhang**, "Multinuclear zinc(II) complexes with $\{Zn_6(\mu\text{-}O)_6(\mu_3\text{-}O)_2\}$- and $\{Zn_5(\mu\text{-}O)_3(\mu_3\text{-}O)_3\}$-cluster cores", *Polyhedron* **2012**, *44*, 150-155.

52. Edwin C. Constable, Catherine E. Housecroft, Markus Neuburger, Jennifer A. Zampese, **Guoqi Zhang**, "Cobalt(II) coordination polymers with 4'-substituted 4,2':6',4"- and 3,2':6',3"-terpyridines: engineering a switch from planar to undulating chains and sheets", *CrystEngComm.* **2012**, *14*, 3554-3563.

51. **Guoqi Zhang***, "Asymmetric Friedel-Crafts reactions of pyrroles and nitroalkenes catalyzed by a heterotrinuclear Pd/Sm/Pd complex", *Org. & Biomol. Chem.* **2012**, *10*, 2534-2536.

50. Edwin C. Constable, **Guoqi Zhang**, Catherine E. Housecroft, Jennifer A. Zampese, "Bucky block: templating a coordination network with $C_{60}$", *CrystEngComm.* **2012**, *14*, 1770-1774.

49. Edwin C. Constable, **Guoqi Zhang**, Catherine E. Housecroft, Jennifer A. Zampese, "A matter of greasy tails: interdigitation of alkyl chains in free and coordinated 4'-(4-dodecyloxyphen yl)-4,2':6',4"-terpyridines", *Inorg. Chem. Comm.* **2012**, 15, 113-116.

48. Edwin C. Constable, Catherine E. Housecroft, Peter Kopecky, Markus Neuburger, Jennifer A. Zampese, **Guoqi Zhang**, "Coordination polymers with divergent 4'-*tert*-butyl-4,2':6',4"-terpyridine linkers: from aryl-aryl to ball-and-socket packing", *CrystEngComm.* **2012**, 14, 446-452.

47. **Guoqi Zhang***, Shuangqing Wang, Jinshi Ma, Guoqiang Yang*, "Syntheses, characterization and third-order nonlinear optical properties of a class of thiazolylazo-based metal chelates", *Inorg. Chim. Acta* **2012**, 384, 97-104.

46. Edwin C. Constable, **Guoqi Zhang**, Daniel Häussinger, Catherine E. Housecroft, Jennifer A. Zampese, "Metallohosts with a heart of carbon", *J. Am. Chem. Soc.* **2011**, *133*, 10776-10779.

45. Antoinetto Chougnet, **Guoqi Zhang**, Kegang Liu, Daniel Häussinger, Andreas Kägi, Thomas Allmendinger, Wolf-D. Woggon, "Diastereoselective and highly enantioselective Henry reactions using $C_1$-symmetrical copper(II) complexes", *Adv. Synth. Catal.* **2011**, *353*, 1797-1806.

44. **Guoqi Zhang**,* Lanying Yang, Jinshi Ma, Guoqiang Yang*, "Synthesis and structural characterization of 1,2-bis((1*H*-pyrrol-2-yl)methylene)hydrazine and its Cu(II) complex", *J. Mol. Struct.* **2011**, *1006*, 542-546.

43. Edwin C. Constable, **Guoqi Zhang**, Catherine E. Housecroft, Jennifer A. Zampese, "Zinc(II) coordination polymer, metallohexacycles and metallocapsules -Do we understand self-assembly in metallosupramolecular chemistry: algorithms or serendipity?", *CrystEngComm.* **2011**, *13*, 6864-6870.

42. **Guoqi Zhang**,* Jinshi Ma, Guoqiang Yang,* "A luminescent dinuclear cadmium(II) supramolecular architecture constructed from a metal-organic synthon", *J. Mol. Struct.* **2011**, *1004*, 248-251.

41. Edwin C. Constable, **Guoqi Zhang**, Catherine E. Housecroft, Jennifer A. Zampese, "Disulfide struts: assembly motifs supporting cuprocapsules", *Inorg. Chem. Comm.* **2011**, *14*, 1703-1705.

40. Dehui Hu, Zhipei Yang, **Guoqi Zhang**,* Min Liu, Junfeng Xiang, Tongling, Liang, Jinshi Ma, Guoqiang Yang*, "Self-complementary hydrogen-bonded duplexes and helices based on bis(pyrrolyl) carbohydrazide derivatives", *CrystEngComm.* **2011**, *13*, 6021-6023. (Selected as a '*Hot Article'*)

39. Edwin C. Constable, **Guoqi Zhang**, Catherine E. Housecroft, Jennifer A. Zampese, "9-Anthracenyl substitued pyridyl enones revisited: photoisomerism in ligands and silver(I) complexes", *Dalton Trans.* **2011**, *40*, 12146-12152.

38. Edwin C. Constable, **Guoqi Zhang**, Catherine E. Housecroft, Markus Neuburger, Jennifer A. Zampese, "π-Stacking and hydrogen bonding direct diastereoselectivity in one-pot syntheses of octahedral iron(II) complexes", *Chem. Comm.* **2010**, *46*, 3077-3079.

37. Edwin C. Constable, **Guoqi Zhang**, Catherine E. Housecroft, Jennifer A. Zampese, "Sheet, ladder or chain? Small substituents in 4'-phenyl-4,2':6',4"-terpyridines make all the difference in cadmium(II) coordination polymers", *CrystEngComm.* **2010**, *12*, 3733-3739.

36. Edwin C. Constable, **Guoqi Zhang**, Catherine E. Housecroft, Jennifer A. Zampese, "Same head, different scaffold: a plethora of structural motifs assembled from silver(I) and ditopic 2,2'-bipyridine ligands", *CrystEngComm.* **2010**, *12*, 3724-3732.

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## **Presentations** (Undergraduate coauthors are underlined)

Guoqi Zhang, "*Base Metal Complexes of Pincer-Type Ligands for Reduction Catalysis*", Invited Seminar, Middle Tennessee State University. March, 2021.

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Guoqi Zhang, Jessica Cheng, Jake Aquilina, "*Earth-Abundant Metal Catalysts for Hydrogenation, Hydrofunctionalization and Dehydrogenative Coupling Reactions*", Oral presentation, 255th ACS National Meeting & Expo, New Orleans, LA. March, 2018.

Guoqi Zhang, "*Structurally Defined Non-precious Metal Materials as Catalysts for Synthesis of Fine Chemicals and Energy Conversion*", Oral presentation and Session Chair, 2017 Spring International Conference on Chemical Engineering, Chengdu, China. April, 2017.

Guoqi Zhang, "*Applications of Non-precious Metal Catalysts in Petroleum Process*", Invited Seminar, Southwest Petroleum University of China, Chengdu, China. April, 2017.

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