

# Curriculum Vitae

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## EDUCATION

- 2016 – 2017 Postgraduate Certificate in Academic Practice, University of Hull
- 2008 – 2010 Postdoctoral Fellow  
Massachusetts Institute of Technology, Department of Chemistry, United States of America  
Supervisor: **Nobel Prize Laureate** Professor Richard R. Schrock
- 2006 – 2008 PhD in Chemistry  
University of Vienna  
Thesis: Development of Novel Anticancer Platinum(IV) Complexes: Synthesis, Characterization and Cytotoxic Properties  
Supervisor: Professor Dr. Dr. Bernhard K. Keppler
- 2000-2005 Chemistry studies, University of Vienna.

## CURRENT POSITION(S)

- 2018 – Present Associate Professor at the Institute of Inorganic Chemistry, University of Vienna

## PREVIOUS POSITIONS

- 2017 – 2018 Assistant Professor at the Institute of Inorganic Chemistry, University of Vienna
- 2014 – 2017 Lecturer in Organic Chemistry with tenure, School of Mathematics and Physical Sciences, University of Hull, United Kingdom.
- 2010 – 2014 Research Scientist, Institute of Bioengineering and Nanotechnology, A-STAR, Singapore.
- 2006 – 2008 Teaching Assistant (Assistent in Ausbildung), Institute of Inorganic Chemistry, University of Vienna.

## FELLOWSHIPS

- 2008 – 2010 Erwin-Schrödinger Postdoctoral Fellowship: "Catalytic Reduction of Dinitrogen to Ammonia at a Single Molybdenum Center; New Strategies for Ligand Synthesis and their Application", Austrian Science Foundation.
- 2007 Research-Fellowship (Förderstipendium), University of Vienna.

## GRANTS, AWARDS AND PRIZES

1. 2017 The Leverhulme Trust ““Hierarchical and Emergent Assembly through the Marriage of DNA and Peptides”, Co-Investigator

2. 2012 Team Winner of the Agency for Science Technology and Research Young Researcher Collaborative Grant competition
3. 2012 Peoples' Choice Award Winner Agency for Science Technology and Research Young Researcher Collaborative Grant competition
4. 2009 Grant for Academic Excellence (Leistungsstipendium), University of Vienna.
5. 2008 Award of Excellence for outstanding Ph.D. research, Austrian Federal Ministry of Science and Research.
6. 2008 Erwin-Schrödinger Postdoctoral Fellowship: "Catalytic Reduction of Dinitrogen to Ammonia at a Single Molybdenum Center; New Strategies for Ligand Synthesis and their Application", Austrian Science Foundation.
7. 2007 Research-Fellowship (Förderstipendium), University of Vienna.
8. 2007 Award for Academic Excellence (Leistungsstipendium), University of Vienna.
9. 2006 Award for Academic Excellence (Leistungsstipendium), University of Vienna.
10. 2005 Award for Academic Excellence (Leistungsstipendium), University of Vienna.
11. 2005 Award for Academic Excellence (Leistungsstipendium aus Stiftung und Sondervermögen), University of Vienna.
12. 2004 Award for Academic Excellence (Leistungsstipendium), University of Vienna.

## List of Publications

25. Young, A. J.; Serpell, C. J.; Chin, J. M.; **Reithofer, M. R.\*** "Optically active histidin-2-ylidene stabilised gold nanoparticles" *Chem. Commun.* **2017**, 53, 12426-12429. (\*corresponding author), (Citations: 0, Impact Factor: 6.319)

The above paper was highlighted by ChemistryViews

24. Cheng, F.; Marshall, E. S.; Young, A. J.; Robinson, P. J.; Bouillard, J-S. G.; Adawi, A. M.; Vermeulen, N. A.; Farha, O. K.; **Reithofer M. R.\***; Chin, J. M. "Magnetic Control of MOF Crystal Orientation and Alignment", *Chem. Eur.* **2017**, 23, 15578-15582. (\*corresponding author), (Citations: 0, Impact Factor: 5.317)
23. Sharma, A.; Roemelt, M.; **Reithofer, M.**; Schrock, R.R.; Hoffman, B.M.; Neese, F. "EPR/ENDOR and Theoretical Study of the Jahn-Teller-Active [HIPTN3N]MoVL Complexes (L = N-, NH)", *Inorg. Chem.*, 2017, 12, 6906-6919. (Citations: 1, Impact Factor: 4.857)
22. Fan Lee, F.; Lim, J.; **Reithofer, M. R.**; Lee, S. S.; Chung, J. E.; Hauser, C. A. E.; Kurisawa, M. "Synthesis and bioactivity of a conjugate composed of green tea catechins and hyaluronic acid", *Polym. Chem.*, **2015**, 6, 4462-4472. (Citations: 8, Impact Factor: 5.375)
21. Aw, J. E.; Goh, G. T. W.; Huang, S.; **Reithofer, M. R.**; Thong, A. Z.; Chin, J. M.\* "Non- Close-Packed Breath Figures via Ion-Partitioning-Mediated Self-Assembly", *Langmuir*, **2015**, 31, 6688-6694. (Citations: 3, Impact Factor: 3.833)
20. Tan, T.T.Y.; Cham, J.T.M.; **Reithofer, M.R.**; Andy Hor, T.S., Chin, J.M. "Motorized Janus metal organic framework crystals", *Chem. Commun.*, **2014**, 50, 15175-15178. (Citations: 7, Impact Factor: 6.319)
19. **Reithofer, M. R.**; Lakshmanan, A.; Tay, K. P. A.; Chin, J. M.; Hauser, C. A. E. "In situ Synthesis of Size-controlled, Stable Silver Nanoparticles within Ultrashort Peptide Hydrogels for Effective Anti-bacterial Therapy", *Biomaterials*, **2014**, 35, 7537-7542. (Citations: 51, Impact Factor: 8.402)
18. Tan, T.T. Y.; Ahsan, A.; **Reithofer, M. R.**; Chew, B. K. J.; Tay, S. W.; Tan, S. Y.; Wang, X. B.; Xu, J.; Hor, T. S. A.; Chin, J. M. "Photoresponsive Liquid Marbles and Dry Liquids", *Langmuir*, **2014**, 30, 3448-3454. (Citations: 24, Impact Factor: 3.833)
17. **Reithofer, M. R.\***; Chan, K.-H.; Lakshmanan, A.; Lam, D. H.; Mishra, A.; Gopalan, B.; Joshi, M.; Wang, S.; Hauser, C. A. E.\* "Ligation of anti-cancer drugs to self-assembling ultrashort peptides by click chemistry for localized therapy", *Chem. Sci.*, **2014**, 5, 625-630. (\*corresponding author), #Featured as HOT paper by Chemical Science. (Citations: 20, Impact Factor: 8.668)

**The above paper was highlighted on Nanowerk and A\*STAR Research**

<http://www.nanowerk.com/nanotechnology-news/newsid=35880.php>

<http://www.research.a-star.edu.sg/research/6977>

16. Tan, T. T. Y; **Reithofer, M. R.**; Chen, E.; Menon, A.; Hor, T. S. A.; Xu, J.; Chin, J. M. "Tuning Omniphobicity via Morphological Control of Metal-Organic Framework Functionalized Surfaces", *J. Am. Chem. Soc.*, **2013**, 135, 16272-16275. (Citations: 13, Impact Factor: 13.858)

**The above paper was highlighted on Nanowerk, USA News and A\*STAR Research**

[http://www.nanowerk.com/nanotechnology\\_news/newsid=35135.php](http://www.nanowerk.com/nanotechnology_news/newsid=35135.php)

<https://www.research.a-star.edu.sg/research/6955>

<http://www.dailynewsen.com/science/chemical-transformation-yields-surface-bound-microstructures-that-repel-oil-and-water-based-contaminants-h2468799.html>

15. **Reithofer, M. R.**; Sum, Y. N.; Zhang, Y. "Synthesis of Cyclic Carbonates with Carbon Dioxide and Cesium Carbonate", *Green Chem.*, **2013**, *15*, 2086-2090. (Citations: 35, Impact Factor: 9.125)
14. **Reithofer, M. R.**; Dobereiner, G. E.; Schrock, R. R.; Müller, P. "Monoaryloxy Pyrrrolide (MAP) Imido Alkylidene Complexes of Molybdenum and Tungsten That Contain 2,6-Bis(2,5-R<sub>2</sub>-pyrrolyl)phenoxide (R = *i*-Pr, Ph) Ligands and an Unsubstituted Metallacyclobutane on Its Way to Losing Ethylene", *Organometallics*, **2013**, *32*, 2489-2492. (Citations: 21, Impact Factor: 3.862)
13. Mishra, A.; Chan, K.-H.; **Reithofer, M. R.**; Hauser, C. A. E. "Influence of metal salts on the hydrogelation properties of ultrashort aliphatic peptides", *RSC Advances*, **2013**, *3*, 9985-9993. (Citations: 10, Impact Factor: 3.108)
12. Chin, J. M.; **Reithofer, M. R.**; Tan, T. T. Y.; Menon, A. G.; Chen, E. Y.; Chow, C. A.; Hor, A. T. S.; Xu, J. "Supergluing MOF liquid marbles", *Chem. Commun.*, **2013**, *49*, 493-495. (Citations: 17, Impact Factor: 6.319)

**The above paper was highlighted on ScienceDaily, Phys.org and Nanowerk**

<http://www.nanowerk.com/news2/newsid=31613.php>

<http://www.sciencedaily.com/releases/2013/07/130731152017.htm>

<http://phys.org/news/2013-07-smart-materials-fused-liquid-marbles.html>

11. Buss, I.; Kalayda, G. V.; Lindauer, A.; **Reithofer, M. R.**; Galanski, M.; Keppler, B. K.; Jaehde, U. "Effect of reactivity on cellular accumulation and cytotoxicity of oxaliplatin analogues", *J. Biol. Inorg. Chem.*, **2012**, *17*, 699-708. (Citations: 8, Impact Factor: 2.894)
10. Ginzinger, W.; Muehlgassner, G.; Arion, V. B.; Jakupec, M. A.; Roller, A.; Galanski, M.; **Reithofer, M.**; Berger, W.; Keppler, B. K. "A SAR study of novel antiproliferative ruthenium and osmium complexes with quinoxalinone ligands in human cancer cell lines", *J. Med. Chem.*, **2012**, *55*, 3398-3413. (Citations: 55, Impact Factor: 6.259)
9. **Reithofer, M. R.**; Bytzek, A. K.; Valiahd, S. M.; Kowol, C. R.; Groessl, M.; Hartinger, C. G.; Jakupec, M. A.; Galanski, M.; Keppler, B. K. "Tuning of Lipophilicity and Cytotoxic Potency by Structural Variation of Anticancer Platinum(IV) Complexes", *J. Inorg. Biochem*, **2011**, *105*, 46-51. (Citations: 66, Impact Factor: 3.348)
8. **Reithofer, M. R.**; Schrock, R. R.; Müller, P. "Synthesis of [(DPPNCH<sub>2</sub>CH<sub>2</sub>N)<sub>3</sub>N]<sub>3</sub><sup>-</sup> Molybdenum Complexes (DPP = 3,5-(2,5-diisopropylpyrrolyl)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>) and Studies Relevant to Catalytic Reduction of Dinitrogen", *J. Am. Chem. Soc.*, **2010**, *132*, 8349-8358. (Citations: 26, Impact Factor: 13.858)
7. Bytzek, A. K.; **Reithofer, M. R.**; Galanski, M.; Groessl, M.; Keppler, B. K.; Hartinger, C. G. "The first example of MEEKC-ICP-MS coupling and its application for the analysis of anticancer platinum complexes", *Electrophoresis*, **2009**, *31*, 1144-1150. (Citations: 37, Impact Factor: 2.744)
6. **Reithofer, M. R.\***; Schwarzing, A.; Valiahd, S. M.; Galanski, M.; Jakupec, M. A.; Keppler, B. K. "Novel dicarboxylatodichlorido(ethan-1,2-diamine)platinum(IV) complexes with exceptionally high cytotoxicity", *J. Inorg. Biochem*, **2008**, *102*, 2072-2077, (\*corresponding author). (Citations: 32, Impact Factor: 3.348)

5. **Reithofer, M. R.**; Valiahdi, S. M.; Galanski, M.; Jakupec, M. A.; Arion, V. B.; Keppler, B. K. "Novel endothal containing platinum(IV) complexes - synthesis, characterization, and cytotoxic activity", *Chem. Biodiv.*, **2008**, *5*, 2160-2170, (ICBIC 13 special issue). (Citations: 23, Impact Factor: 1.515)
4. **Reithofer, M. R.**; Galanski, M.; Arion, V. B.; Keppler, B. K. "Unprecedented twofold intramolecular hydroamination in diam(m)ine - dicarboxylatodichloridoplatinum(IV) complexes - ethane-1,2-diamine vs. ammine ligands", *Chem. Comm.*, **2008**, *9*, 1091-1093. (Citations: 5, Impact Factor: 6.319)
3. **Reithofer, M. R.**; Valiahdi, S. M.; Jakupec, M. A.; Arion, V. B.; Egger, A.; Galanski, M.; Keppler, B. K. "Novel di- and tetracarboxylatoplatinum(IV) complexes - synthesis, characterization, and cytotoxic activity", *J. Med. Chem.*, **2007**, *50*, 6692-6699. (Citations: 66, Impact Factor: 6.259)
2. **Reithofer, M.**; Galanski, M.; Roller, A.; Keppler, B. K. "An Entry to Novel Platinum Complexes. Carboxylation of Dihydroxoplatinum(IV) Complexes with Succinic Anhydride and Subsequent Derivatization", *Eur. J. Inorg. Chem.*, **2006**, *13*, 2612-2617. (Citations: 60, Impact Factor: 2.444)
1. Hartinger, Ch. G.; Nazarov, A. A.; Galanski, M.; **Reithofer, M.**; Keppler, B. K. "Glucose ferrocenyl-oxazolines: Coordination behavior toward [Pd(3-allyl)Cl]<sub>2</sub> studied by ESI-MS", *J. Organomet. Chem.*, **2005**, *690*, 3301-3308. (Citations: 16, Impact Factor: 2.18)

## Patents

"Self-Assembling Ultrashort Aliphatic Depsidedides for Biomedical Applications" PCT Int. Appl. 2016, WO 2016144259 A1 20160915; Hauser, C. A. E.; Reithofer, M. R.; Loo, Y.

"Self-Assembling Ultrashort Aliphatic Cyclic Peptides for Biomedical Applications" Singapore Patent Application No.: 10201502526S; Hauser, C. A. E.; Reithofer, M. R.

"Nanoparticle-containing Hydrogels" PCT Int. Appl. 2015, WO 2015057170 A1 20150423; Hauser, C. A. E.; Reithofer, M. R.; Chin, J. M. Licensed, 2016

"Metathesis catalysts and methods thereof", PCT Int. Appl. 2014, WO 2014172534 A1 20141023. Reithofer, M. R.; Schrock R. R.

"Hydrogels comprising self-assembling ultrashort peptides modified with bioactive agents for therapeutic and cosmetic use", PCT Int. Appl. 2014, WO 2014104974 A2 20140703; Hauser, C. A. E.; Reithofer, M. R.; Chan, K.-H.; Mishra, A.

"Synthesis of cyclic carbonates", PCT Int. Appl. 2014, WO 2014171894 A1 20141023; Zhang, Y.; Reithofer, M. R.; Sum, Y. N.

"Self-assembled composite ultrasmall peptide-polymer hydrogels", PCT Int. Appl. 2013, WO 2013066274 A1 20130510; Hauser, C.; Loo, Y.; Wan, A. C. A.; Reithofer, M

