

# CURRICULUM VITAE

## Associate Professor Colette Boskovic

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### ACADEMIC QUALIFICATIONS AND EMPLOYMENT HISTORY

#### Qualifications:

- PhD, School of Chemistry, University of Melbourne, Australia, (supervisor: Prof. Tony Wedd), "Oxidised and Six Electron Reduced Metatungstate: Synthesis, Structure and Redox Chemistry", conferred 2000
- BSc(Hons) (1st Class Honours), University of Melbourne, Australia, (supervisor: Prof. Tony Wedd), "Redox Chemistry of the Metatungstate System", 1990-1993

#### Appointments:

- Associate Professor, School of Chemistry, University of Melbourne, Australia, 2016-present
- Senior Lecturer, School of Chemistry, University of Melbourne, Australia, 2009-2015 (maternity leave: August 2009-April 2010)
- Lecturer, School of Chemistry, University of Melbourne, Australia, 2004-2009 (maternity leave: June-December 2006)
- Postdoctoral Fellow, Department of Chemistry, University of Berne, Switzerland (with Prof. Hans Güdel), 2001-2004
- Assistant Professor (part-time), Department of Chemistry, Indiana University, USA, 2001
- Postdoctoral Fellow, Department of Chemistry, Indiana University, USA (with Prof. George Christou), 1999-2001

#### Awards & Honours:

- Visiting Professor, University of Barcelona, Spain, 2017
- Dean's Award for Excellence in Research (Teaching and Research), Faculty of Science, University of Melbourne, 2014
- Alan Sargeson Lectureship, Inorganic Chemistry Division, Royal Australian Chemical Institute (RACI), 2013
- Selby Research Award, University of Melbourne, 2004
- Bruce West Award for best oral presentation at the RACI Victorian Inorganic Division Postgraduate Symposium, 1995
- Australian Postgraduate Award, 1994-1998
- James Cuming (Major) Memorial Scholarship, University of Melbourne, 1992

#### Professional Affiliations:

- Member Chartered Chemist of the Royal Australian Chemical Institute (RACI), 2004-present
- Graduate (Associate) of the Royal Australian Chemical Institute (RACI), 1994-1998
- Member of the Royal Society of Chemistry (RSC), 2011-present
- Member of the American Chemical Society (ACS), 1999-2001 & 2011- present

## **RESEARCH & RESEARCH TRAINING**

### **National Competitive Grants – Australian Research Council (ARC) Discovery Projects Grants:**

- ARC Discovery Projects Grant DP190100854, "Harnessing redox-active ligands in functional metal complexes", Colette Boskovic, \$448,955, 2019-2021
- ARC Discovery Projects Grant DP170100034, "Enhancing Single-Molecule Magnets", Colette Boskovic, Alessandro Soncini, Keith Murray & Richard Mole, \$402,500, 2017-2019
- ARC Discovery Projects Grant DP150100353, "Smart Molecular Materials for Sensors, Displays and Nanodevices", Colette Boskovic & Lorenzo Sorace, \$375,100 (100 % of funds), 2015-2017
- ARC Discovery Projects Grant DP110100155, "Switchable Molecules for Molecular Nanoscience", Colette Boskovic, \$345,000, 2011-2013
- ARC Discovery Projects Grant DP0877704, "New Approaches to Bistable Spin Clusters", Colette Boskovic, \$280,000, 2008-2010
- ARC Discovery Projects Grant DP0556120, "Polynuclear Metal Complexes as Molecular Nanomagnets", Colette Boskovic & Hans U Güdel, \$256,000 (100 % of funds), 2005-2007

### **National Competitive Grants – ARC Linkage, Infrastructure, Equipment and Facilities (LIEF) Grants:**

- ARC LIEF Grant LE170100065, "Molecular Structure Elucidation Facility", Jonathan White, Colette Boskovic, *et al.*, \$830,000, 2017
- ARC LIEF Grant LE100100197, "National Magnetochemical Facility", Keith Murray, Colette Boskovic, *et al.*, \$200,000, 2010
- ARC LIEF Grant LE100100109, "Victorian X-ray Molecular Structure Elucidation Facility (MSEF)", Jonathan White, Colette Boskovic, *et al.*, \$530,000, 2010
- ARC LIEF Grant LE0882977, "Enhanced NMR Research, Characterisation and Analysis Facility", Steven Langford, Colette Boskovic, *et al.*, \$600,000, 2008
- ARC LIEF Grant LE0775660, "A National Biomedical Electron Paramagnetic Resonance and Molecular Imaging Facility", Harald Schmidt, Colette Boskovic, *et al.*, \$500,000, 2007
- ARC LIEF Grant LE0775481, "X-ray Molecular Structure Elucidation Facility", Jonathan White, Colette Boskovic, *et al.*, \$304,000, 2007

### **Other Research Grants**

- Australian Synchrotron, Collaborative Access Program (CAP) "Single crystal X-ray diffraction investigations of metal complexes and supramolecular systems" Brendan Abrahams, Colette Boskovic, Chris Ritchie, \$92,888 (in kind), 2018-2019
- Australian Centre for Neutron Scattering, Neutron Beam Instrument Proposal "Elucidating the Crystal Field Splitting and Exchange Coupling in Lanthanoid-Semiquinonate Single-Molecule Magnets" Colette Boskovic, Maja Dunstan, Richard Mole, Simone Calvello, Alessandro Soncini \$87,400 (in kind), 2018
- Australian Centre for Neutron Scattering, Neutron Beam Instrument Proposal "Determination of Lanthanoid-Radical Exchange Interactions" Alessandro Soncini, Colette Boskovic, Richard Mole, Simone Calvello, Maja Dunstan \$84,800 (in kind), 2018
- Australian Centre for Neutron Scattering, Neutron Beam Instrument Proposal 2018 " Elucidating the Crystal Field Splitting in Lanthanoid-Dioxolene Single-Molecule Magnets" Colette Boskovic, Richard Mole, Simone Calvello, Aiden Atkin, Alessandro Soncini, \$74,200 (in kind), 2018
- Australian Centre for Neutron Scattering, Neutron Beam Instrument Proposal 2017 "Elucidating the Crystal Field Splitting in Lanthanoid-Crown-Ether Single-Molecule Magnets ", Colette Boskovic, Richard Mole, Aiden Atkin, Maja Dunstan, Elodie Rousset, \$84,800 (in kind), 2017
- Bragg Institute, Neutron Beam Instrument Proposal Round: 2015-1 Neutron, "Crystal Field Splitting of Lanthanoid-Polyoxometalate Single-Molecule Magnets", Michele Vonci, Colette Boskovic, Richard Mole, \$78,000 (in kind), 2015
- Bragg Institute, Neutron Beam Instrument Proposal Round: 2015-2 Neutron, "Understanding Single-Molecule Magnet Behaviour through Crystal Field Splitting of Lanthanoid Complexes", Marcus Giansiracusa, Michele Vonci, Colette Boskovic, Richard Mole, \$67,900 (in kind), 2015

- Bragg Institute, Neutron Beam Instrument Proposal Round: 2015-2 Neutron, "Geometry distortion effects on magnetic properties: study on a series of structurally related compounds from the single-molecule family  $\text{Na}_9[\text{Ln}(\text{W}_5\text{O}_{18})_2]$ " Michele Vonci, Marcus Giansiracusa, Colette Boskovic, Richard Mole \$77,600 (in kind), 2015

#### University of Melbourne Research Grants:

- Melbourne Researcher Grant Support Scheme, "Smart Molecular Materials for Sensors, Displays and Nanoscale Devices", Colette Boskovic, \$44,983, 2014
- University of Melbourne Interdisciplinary Seed Funding, "Hybrid graphene-single molecule magnet spintronics", Kin Kiong Lee, Jeff McCallum, Alessandro Soncini, Colette Boskovic, \$40,000 (25 % of funds), 2011
- University of Melbourne Research Grant Scheme, "Magnetically Isolated Molecular Nanomagnets Encapsulated in Polyoxometalate Frameworks", Colette Boskovic, \$26,254, 2008
- Early Career Researcher Grant, University of Melbourne, "Synthesis and Investigation of Molecular Nanomagnets", Colette Boskovic, \$39,609, 2005
- International Collaborative Research Grant, University of Melbourne, "Inelastic Neutron Scattering Study of Molecular Nanomagnets Synthesised by Solvothermal Methods", Colette Boskovic, Hans U Güdel, \$9,800, 200 (100 % of funds), 2004

#### Research Personnel Supervised:

- Postdoctoral (6)
- PhD (9) & visiting PhD (3)
- MSc (8)
- BSc(Honours) (7)
- undergraduate (26)

#### Keynote and Invited Conference Presentations:

- "Lanthanoid Crown Ether Complexes: Interplay of Raman & Phonon Bottleneck Processes in Slow Magnetic Relaxation", "Frontiers in f-Element Coordination Chemistry" session *International Conference on Coordination Chemistry (ICCC)*, Sendai, Japan, July 2018
- "Lanthanoid Single-Molecule Magnets: Inelastic Neutron Scattering & Ab Initio Studies", *ANSTO User Meeting*, Melbourne, November 2017
- "Lanthanoid Complexes with Redox-Active Ligands", *3MET Workshop*, Karlsruhe Institute of Technology, Germany, October 2017 (**keynote**)
- "Inelastic neutron scattering and ab initio investigations of lanthanoid single-molecule magnets", *AMN8 8th International Conference on Advanced Materials and Nanotechnology*, Queenstown, New Zealand, February 2017 (**keynote**)
- "An Introduction to Single-Molecule Magnets – a tutorial", *SANZOMAG Southampton-Australian-New Zealand-Otago Workshop on Molecular Magnetism*, Dunedin, New Zealand, 2017
- "Lanthanoid Single-Molecule Magnets: Inelastic neutron scattering and ab initio investigations", *US-Australia Chemistry Symposium*, Melbourne, Australia, December 2016
- "Lanthanoid-Polyoxometalates: Single-Molecule Magnetism, Inelastic Neutron Scattering and Ab Initio Studies" *Frontiers in Metal Oxide Cluster Science International Symposium*, Newcastle-Upon-Tyne, United Kingdom, 2016
- "The Inorganic Chemistry Detective: Characterisation of mixed-metal, mixed-valence, chiral, nanoscale hybrid polyoxometalates", *Sixth North America-Greece-Cyprus Workshop on Paramagnetic Materials*, Athens, Greece, June 2015
- "A Modular Approach to Functional Polyoxometalate Hybrids", *Frontiers in Metal Oxide Cluster Science International Symposium*, Maffliers, France, 2014
- "Spin orbit coupling, zero-field splitting and magnetic exchange – a tutorial", *SANZMAG Southampton-Australian-New Zealand Workshop on Molecular Magnetism*, Sydney, Australia, 2014
- "Inorganic Molecules for Molecular Nanoscience", *Italian-Australian Workshop on Nanostructured Materials for Magnetic and Spintronic Devices*, Canberra, Australia, 2012

- "Lanthanoid-Polyoxometalate Complexes as Functional Molecules", *IC11 RACI Inorganic Chemistry Division Conference*, Perth, Australia, 2011 (**keynote**)
- "Switchable molecules: valence tautomers and single-molecule magnets", "Functional Molecule-Based Magnets Symposium", *Pacifichem*, Honolulu, USA, 2010
- "Polynuclear metal complexes with redox-active polynucleating ligands", "Redox Redux: The Renaissance of Non-Innocent Ligand Complex Symposium", *Pacifichem*, Honolulu, USA, 2010
- "Towards magnetically isolated single-molecule magnets", *Murraystock Symposium*, Monash University, 2007
- "Polynuclear metal complexes as molecular nanomagnets", *Chemistry Education Association November Chemistry Lectures*, Melbourne, Australia, 2005
- An invitation to speak at the 2009 Asian Conference on Coordination Chemistry (Nanjing, China) was declined due to proximity to the birth of my second child

#### Contributed Conference Presentations:

- "Rare Earth Complexes with Redox-Active Tetraoxolene-Based Ligands" *Royal Society of Chemistry Coordination and Organometallic Chemistry Discussion Group meeting*, Lancaster University, UK, 2017
- "Lanthanoid Single-Molecule Magnets: INS & Ab Initio Studies", *European Conference on Molecular Magnetism (ECMM)*, Bucharest, Romania, 2017
- "Lanthanoid Single-Molecule Magnets: Inelastic Neutron Scattering & Ab Initio Studies", *Asian Conference on Coordination Chemistry (ACCC)*, Melbourne, 2017
- "The Effect of Spiroconjugation in Mediating Two-Step Valence Tautomerism in Dinuclear Cobalt Complexes", *International Conference on Coordination Chemistry (ICCC)*, Singapore, 2014
- "A Two-step Valence Tautomeric Transition in a Dinuclear Cobalt Complex: the Role of Spiroconjugation of the Redox-Active Bridging Ligand", *IC13 RACI Inorganic Chemistry Division Conference*, Brisbane, Australia, 2030
- "Dinuclear Cobalt-Dioxolene Complexes: A Two-Step Valence Tautomeric Transition", *13th International Conference on Molecule-Based Magnets (ICMM)*, Orlando, USA, 2012
- "Lanthanoid-Polyoxometalate Complexes as Functional Molecules", *Vth International Conference on Molecular Materials (MOLMAT)*, Barcelona, Spain, 2012
- "Lacunary Polyoxometalates as Ligands for Lanthanoid Complexes" *New Frontiers in Polyoxometalate Chemistry Symposium*, *Pacifichem*, Honolulu, USA, 2010
- "Towards Metal Complexes with Multiple Valence Tautomeric Transitions", *International Conference on Coordination Chemistry (ICCC)*, Adelaide, Australia, 2010
- "Towards magnetically isolated single-molecule magnets: polyoxotungstate-encapsulated lanthanoid spin clusters", *IC08 RACI Inorganic Chemistry Division Conference*, Christchurch, New Zealand, 2008
- "Solvation effects on a valence tautomeric cobalt complex" *Satellite Meeting to ICMM2008 on Switchable Molecular Materials*, Florence, Italy, 2008
- "New families of spin clusters as potential molecular nanomagnets", *IC07 RACI Inorganic Chemistry Division Conference*, Hobart, Australia, 2007
- "Studies of new families of spin clusters", "Magnetism: Molecules to Functional Materials Symposium", *Pacifichem*, Honolulu, USA, 2005
- "A spectroscopic and magnetochemical investigation of a new Ni<sub>4</sub> spin cluster", *Connect 2005: the 12th RACI Convention*, Sydney, Australia, 2005

#### Invited Departmental Seminars:

- University of NSW, 2018
- Universities of Manchester (UK), Barcelona (Spain), Valencia (Spain), Institute of Materials Science of Barcelona (Spain), Bordeaux (France), University Pierre and Marie Curie (France), 2017
- La Trobe University, 2016
- University Rovira i Virgili (Spain), Australian National University, 2015
- University of Berne (Switzerland); Massey University and Universities of Otago and Canterbury (New Zealand), Curtin University and Universities of Sydney, Queensland, Western Australia and NSW, 2014
- University of Adelaide, 2013

- University of Florence (Italy), Karlsruhe Institute of Technology (Germany), 2012
- La Trobe University and Universities of Sydney and Queensland, 2011
- University of Barcelona (Spain), Universities of Manchester, Leeds and Glasgow (UK), 2008
- Universities of Sydney and NSW, 2005
- Monash University, 2004

## **LEADERSHIP, SERVICE & ENGAGEMENT**

### **University of Melbourne Representative:**

- Australian Institute of Nuclear Science and Engineering (AINSE) Councillor, 2017-present

### **Professional Society Committees:**

- Victorian representative, RACI Inorganic Chemistry Division Committee, 2014-present
- Divisional Archivist, RACI Inorganic Chemistry Division Committee, 2016-present
- Committee member, Inorganic Chemistry Group, Victorian Branch, Royal Australian Chemical Institute, 2006-present

### **Conference/Symposium Organising Committees:**

- Committee member, organising committee for *International Conference on Organometallic Chemistry/RACI Inorganic Division Conference*, Melbourne 2016
- Committee member, organising committee for the "New Frontiers in Polyoxometalate Chemistry" symposium at *Pacificchem 2010*
- Committee member, organising committee for the annual *Victorian RACI Inorganic Chemistry Postgraduate Symposium*, 2004, 2005, 2007, 2009-2014, 2016
- Committee Member, organising committee for a Victorian RACI "*Women in Chemistry Career Symposium*", 1997

### **Other Activities:**

- **Guest Editor**, "Women in Chemistry II" special edition of *Australian Journal of Chemistry*, for publication in 2020
- **Journal referee** for J. Am. Chem. Soc., Inorg. Chem., Chem. Science, Chem. Commun., Dalton Trans., Angew. Chem., Chem. Eur. J., Eur. J. Inorg. Chem., Polyhedron, Aust. J. Chem., Chem. Soc. Rev., Coord. Chem. Rev., (approximately 25 manuscripts refereed per year).
- **Grant referee** for ARC Discovery Project Grants, Future Fellowships, DECRA's and LIEF grants, Israeli National Science Foundation Grant, Science Foundation Ireland Grant.

## **PUBLICATIONS**

- Published 75 refereed journal articles: 5 review articles & 70 research articles
- Published 2 book chapters
- Hirsch Index: h = 29
- Total citations = 3109, average citations per paper = 41.0
- ORCID: 0000-0002-1882-2139
- SCOPUS ID: 55902779800
- RESEARCHER ID: D-8468-2014

### **Book Chapters**

1. C. Ritchie, C. Boskovic, "Polyoxometalates as ligands for functional lanthanoid complexes" in *"Polyoxometalate Chemistry Some Recent Trends"*, F. Sécheresse (ed.), **2013**, World Scientific Series in Nanoscience and Nanotechnology, World Scientific, Singapore, Chapter 6, 177-214, ISBN: 9789814458979.
2. C. Boskovic, "Valence tautomeric transitions in cobalt-dioxolene complexes" in *"Spin-crossover materials - properties and applications"*, M. A. Halcrow (ed.), **2013**, John Wiley & Sons, Chichester, UK. Chapter 7, 203-224, ISBN: 9781119998679.

### **Refereed Journal Articles**

1. G. K. Gransbury, M. -E. Boulon, S. Petrie, R. W. Gable, R. J. Mulder, L. Sorace, R. Stranger, C. Boskovic, "DFT prediction and experimental investigation of valence tautomerism in cobalt-dioxolene complexes", *Inorganic Chemistry*, **2019**, *58*, 4230-4243.
2. C. Boskovic, "Element 25 – Manganese", *Australian Journal of Chemistry*, **2019**, doi: 10.1071/CH19107
3. M. A. Dunstan, R. A. Mole, C. Boskovic, "Inelastic Neutron Scattering of Lanthanoid Complexes and Single-Molecule Magnets", *European Journal of Inorganic Chemistry*, **2019**, 1090–1105.
4. F. Akhlaghi Bagherjeri, C. Ritchie, R. W. Gable, C. Boskovic, "Photocoloration in Hybrid Amino Acid Polyoxometalates", *European Journal of Inorganic Chemistry*, **2019**, 461-468.
5. E. Rousset, M. Piccardo, M.-E. Boulon, R. W. Gable, A. Soncini, L. Sorace, C. Boskovic, "Slow Magnetic Relaxation in Lanthanoid Crown Ether Complexes: Interplay of Raman and Anomalous Phonon Bottleneck Processes", *Chemistry A European Journal*, **2018**, *24*, 14768-14785.
6. O. Drath, R. W. Gable, B. Moubaraki, K. S. Murray, C. Boskovic, "Synthesis and properties of cobalt(II) coordination polymers linked by 4'-(4-pyridyl)-2,2':6',2"-terpyridine", *Polyhedron*, **2018**, *151*, 323-329.
7. O. Drath, R. W. Gable, C. Boskovic, "Structural investigation of one- and two-dimensional coordination polymers based on cobalt bis(dioxolene) units and 1-hydroxy-1,2,4,5-tetra(4 pyridyl)cyclohexane", *Acta Crystallographica*, **2018**, *C74*, 734-741.
8. O. Drath, C. Boskovic, "Switchable cobalt coordination polymers: spin crossover and valence tautomerism", *Coordination Chemistry Reviews*, **2018**, *375*, 256-266.
9. M.A. Dunstan, E. Rousset, M.-E. Boulon, R. W. Gable, L. Sorace, C. Boskovic, "Slow magnetisation relaxation in tetraoxolene-bridged rare-earth complexes", *Dalton Transactions*, **2017**, *46*, 13756-3767.
10. C. Boskovic, "Rare Earth Polyoxometalates", *Accounts of Chemical Research*, **2017**, *50*, 2205–2214.
11. O. Drath, R. Gable, G. Poneti, L. Sorace, C. Boskovic, "One dimensional chain and ribbon cobalt-dioxolene coordination polymers: a new valence tautomeric compound", *Crystal Growth & Design*, **2017**, *17*, 3156–3162,
12. M. Vonci, M. Giansiracusa, W. Van den Heuvel, R. Gable, B. Moubaraki, K. Murray, D.Yu, Dehong, R. Mole, A. Soncini, C. Boskovic, "Magnetic excitations in polyoxotungstate-supported lanthanoid single-molecule magnets: an inelastic neutron scattering and ab initio study", *Inorganic Chemistry*, **2017**, *56*, 378–394.
13. F. Akhlaghi Bagherjeri, M. Vonci, E. Nagul, C. Ritchie, R. W. Gable, M. B. Taylor, G. Bryant, S. X. Guo, J. Zhang, P. A. Aparicio, X. López, J. M. Poblet, C. Boskovic, "Mixed-metal hybrid polyoxometalates with amino acid ligands: electronic versatility and solution properties", *Inorganic Chemistry*, **2016**, *55*, 12329–12347.

14. M. J. Giansiracusa, M. Vonci, W. Van den Heuvel, R. W. Gable, B. Moubaraki, K. S. Murray, D. Yu, R. Mole, A. Soncini, C. Boskovic, "Carbonate-Bridged Lanthanoid Triangles: Single Molecule Magnet Behavior, Inelastic Neutron Scattering and Ab Initio Studies", *Inorganic Chemistry*, **2016**, *55*, 5201–5214.
15. O. Drath, R. W. Gable, B. Moubaraki, K. S. Murray, G. Poneti, L. Sorace, C. Boskovic, "Valence Tautomerism in One Dimensional Coordination Polymers", *Inorganic Chemistry*, **2016**, *55*, 4141–4151.
16. M. Vonci, M. J. Giansiracusa, R. W. Gable, W. Van den Heuvel, K. Latham, B. Moubaraki, K. S. Murray, D. Yu, R. Mole, A. Soncini, C. Boskovic, "Ab Initio Calculations as a Quantitative Tool in the Inelastic Neutron Scattering Study of a Single-Molecule Magnet Analogue", *Chemical Communications*, **2016**, *52*, 2091-2094.
17. A. Madadi, M. Itazaki, R. W. Gable, B. Moubaraki, K. S. Murray, C. Boskovic, "Electronic lability in a dinuclear cobalt bis-dioxolene complex", *European Journal of Inorganic Chemistry*, **2015**, 4991-4995.
18. M. Vonci, C. Boskovic, "Polyoxometalate-supported lanthanoid single-molecule magnets", *Australian Journal of Chemistry*, **2014**, *67*, 1542-1552.
19. M. Vonci, F. Akhlaghi Bagherjeri, P. D. Hall, R. W. Gable, A. Zavras, R. A. J. O'Hair, Y. Liu, J. Zhang, M. Field, M. Taylor, J. Du Plessis, G. Bryant, M. Riley, L. Sorace, P. Aparicio, X. López, J. M. Poblet, C. Ritchie, C. Boskovic, "Modular molecules: site-selective metal substitution, photoreduction and chirality in polyoxometalate hybrids", *Chemistry A European Journal*, **2014**, *20*, 14102-14111.
20. S. J. Sabounchei, F. Akhlaghi Bagherjeri, M. Hosseinzadeh, C. Boskovic, R. W. Gable, "X-ray crystal structure and spectral characterization of pseudo five-coordinate Hg(II) polymeric and four-coordinate binuclear complexes of an ambidentate sulfonium ylide", *Comptes Rendus Chimie*, **2014**, *17*, 1257-1263.
21. T. Tezgerevska, K. G. Alley, C. Boskovic, "Valence tautomerism in metal complexes: stimulated and reversible intramolecular electron transfer between metal centers and organic ligands", *Coordination Chemistry Reviews*, **2014**, *268*, 23-40.
22. Y. Mulyana, K. G. Alley, K. M. Davies, B. F. Abrahams, B. Moubaraki, K. S. Murray, C. Boskovic, "Dinuclear cobalt(II) and cobalt(III) complexes of bis-bidentate naphthoquinone ligands", *Dalton Transactions*, **2014**, *43*, 2499-2511.
23. M. R. Healey, R. W. Gable, C. Ritchie, C. Boskovic, "Accessing yttrium-polyoxometalate-carboxylate hybrids from a versatile arsenotungstate(III) precursor", *Polyhedron*, **2013**, *64*, 13-19.
24. K. G. Alley, G. Poneti, P. S. D. Robinson, A. Nafady, B. Moubaraki, J. B. Aitken, S. C. Drew, C. Ritchie, B. F. Abrahams, R. K. Hocking, K. S. Murray, A. M. Bond, H. H. Harris, L. Sorace, C. Boskovic, "Redox activity and two-step valence tautomerism in a family of dinuclear cobalt complexes with a spiroconjugated bis(dioxolene) ligand", *Journal of the American Chemical Society*, **2013**, *135*, 8304-8323.
25. S. J. Sabounchei, F. Akhlaghi Bagherjeri, C. Boskovic, R. W. Gable, "Novel one-dimensional polymeric chlorocadmate sulfonium salts obtained from sulfonium ylides: Synthesis and structural characterization", *Journal of Molecular Structure*, **2013**, *1046*, 39-43.
26. S. J. Sabounchei, F. Akhlaghi Bagherjeri, C. Boskovic, R. W. Gable, R. Karamian, M. Asadbegy, "Reactivity of mercury(II) halides with the  $\alpha$ -keto stabilized sulfonium ylides: Crystal structures of two new polymer and binuclear complexes and in vitro antibacterial study", *Polyhedron*, **2013**, *53*, 1-7.
27. S. J. Sabounchei, F. Akhlaghi Bagherjeri, C. Boskovic, R. W. Gable, R. Karamian, M. Asadbegy, "Synthesis and characterization of novel simultaneous C and O-coordinated and nitrate-bridged complexes of silver(I) with carbonyl-stabilized sulfonium ylides and their antibacterial activities", *Dalton Transactions*, **2013**, *42*, 2520-2529.
28. S. Mandic, M. R. Healey, J. M. Gotthardt, K. G. Alley, R. W. Gable, C. Ritchie, C. Boskovic, "A Polyoxometalate-Based Coordination Polymer with the Diamondoid Topology", *European Journal of Inorganic Chemistry*, **2013**, 1631-1634.
29. S. J. Sabounchei, F. Akhlaghi Bagherjeri, C. Boskovic, R. W. Gable, R. Karamian, M. Asadbegy, "Binuclear mercury(II) complexes of sulfonium ylides: Synthesis, structural characterization and anti-bacterial activity", *Journal of Molecular Structure*, **2013**, *1034*, 265-270.
30. J. M. Gotthardt, K. F. White, B. F. Abrahams, C. Ritchie, C. Boskovic, "The fluorite topology in lanthanoid coordination polymers with di- and trimetallic building blocks", *Crystal Growth and Design*, **2012**, *12*, 4425-4430.
31. K. G. Alley, G. Poneti, J. B. Aitken, R. K. Hocking, B. Moubaraki, K. S. Murray, B. F. Abrahams, H. H. Harris, L. Sorace, C. Boskovic, "A two-step valence tautomeric transition in a dinuclear cobalt complex", *Inorganic Chemistry*, **2012**, *51*, 3944-3946.

32. C. Ritchie, V. Baslon, E. G. Moore, C. Reber, C. Boskovic, "Sensitization of lanthanoid luminescence by organic and inorganic ligands in lanthanoid-organic-polyoxometalates", *Inorganic Chemistry*, **2012**, *51*, 1142-1151.
33. C. Ritchie, C. E. Miller, C. Boskovic, "The generation of a novel polyoxometalate-based 3D framework following picolinate-chelation of tungsten and potassium centres", *Dalton Transactions*, **2011**, *40*, 12037-12039.
34. C. Ritchie, M. Speldrich, R. W. Gable, L. Sorace, P. Kögerler, C. Boskovic, "Utilizing the adaptive polyoxometalate  $[\text{As}_2\text{W}_{19}\text{O}_{62}(\text{H}_2\text{O})]^{14-}$  to support a polynuclear lanthanoid-based single-molecule magnet", *Inorganic Chemistry*, **2011**, *50*, 7004-7014.
35. C. Ritchie, E. G. Moore, M. Speldrich, P. Kögerler, C. Boskovic, "Terbium-polyoxometalate-organic complexes: correlation of structure with luminescence properties", *Angewandte Chemie International Edition*, **2010**, *49*, 7702-7705.
36. C. Ritchie, K. G. Alley, C. Boskovic, "Lacunary tungstotellurates:  $[\text{Te}_2\text{W}_{17}\text{O}_{61}]^{12-}$ ,  $[\text{Te}_2\text{W}_{16}\text{O}_{58}(\text{OH})_2]^{14-}$  and  $[\text{Te}_2\text{W}_{18}\text{O}_{62}(\text{OH})_2]^{10-}$ ", *Dalton Transactions*, **2010**, *39*, 8872-8874.
37. Y. Mulyana, G. Poneti, B. Moubaraki, K. S. Murray, B. F. Abrahams, L. Sorace, C. Boskovic, "Solvation effects on the valence tautomeric transition of a cobalt complex in the solid state", *Dalton Transactions*, **2010**, *39*, 4757-4767.
38. C. Ritchie, C. Boskovic, "Disassembly and reassembly of polyoxometalates: the formation of chains from an adaptable precursor", *Crystal Growth and Design*, **2010**, *10*, 488-491.
39. J. C. Ang, Y. Mulyana, C. Ritchie, R. Clérac, C. Boskovic, "Mixed-valent polynuclear cobalt complexes incorporating tetradentate phenoxyamine ligands", *Australian Journal of Chemistry*, **2009**, *62*, 1124-1129.
40. Y. Mulyana, A. Nafady, A. Mukherjee, R. Bircher, B. Moubaraki, K. S. Murray, A. M. Bond, B. F. Abrahams, C. Boskovic, "A new family of ferric spin clusters incorporating redox-active ortho-dioxolene ligands", *Inorganic Chemistry*, **2009**, *48*, 7765-7781.
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