

UNIVERSITY OF VICTORIA - CURRICULUM VITAE

Last Update: March, 2019

Name: Neil Burford

Faculty: Science

Department: Chemistry

1. EDUCATION and TRAINING

Degree	Institution	Year obtained
BSc	University of Wales College Cardiff	1979
PhD	University of Calgary	1983

Postdoctoral experience

October 1983 - October 1984, University of Alberta

2. POSITIONS HELD PRIOR to APPOINTMENT at UVic

October 1984 - December 1986, Research Associate, University of New Brunswick

January 1987 – June 1991, Assistant Professor, Dalhousie University

July 1991 – June 1995, Associate Professor, Dalhousie University

July 1995 – June 2011, Professor, Dalhousie University

July 1998 – June 2003, Killam Professor, Dalhousie University

July 2003 – June 2005, Canada Council Killam Fellow, Dalhousie University

November 2000 – June 2011, Harry Shirreff Professor of Chemical Research, Dalhousie University

November 2001 – October 2008, Canada Research Chair Tier I, Dalhousie University

July 2008 – June 2011, Chair of the Department of Chemistry, Dalhousie University

November 2008 – June 2011, Canada Research Chair Tier I, Dalhousie University

3. APPOINTMENTS at the UNIVERSITY of VICTORIA

Period	Rank	Academic unit
July 2011 – present	Professor	Chemistry
July 2011 – present	Chair of the Department	Chemistry

4. MAJOR FIELD(S) of SCHOLARLY or PROFESSIONAL INTEREST

Inorganic chemistry, synthesis, characterization, molecular structure, chemical bonding, phosphorus, arsenic, antimony, bismuth, silicon, germanium, tin, lead, mercury, spectroscopy

5. RESEARCH GRANTS and FELLOWSHIPS

a. Research operating grants

Agency	Title	Grant holders (indicate PI)	Time period	Amount awarded per annum to me
NSERC	Phosphorus Chemistry	Burford	1987-1989	22,500
ACS-PRF	Phosphorus Chemistry	Burford	1988-1990	20,000
NSERC	Phosphorus Chemistry	Burford	1989-1991	32,205
ACS-PRF	Phosphorus Chemistry	Burford	1990-1992	20,000

NSERC	Phosphorus Chemistry	Burford	1991-1993	49,140
NSERC	Phosphorus Chemistry	Burford	1993-1997	53,839
P&G	Bismuth Chemistry	Burford	1996-1997	48,000
NSERC	Bismuth Chemistry	Burford	1996-1998	81,000
NSERC	Bismuth Chemistry	Burford	1998-1999	87,300
NSERC	Phosphorus Chemistry	Burford	1997-1998	69,000
NSERC	Phosphorus Chemistry	Burford	1998-1999	75,900
NSERC	Phosphorus Chemistry	Burford	1999-2001	79,695
P&G	Bismuth Chemistry	Burford	2000-2001	45,000
NSERC	Bismuth Chemistry	Burford	2000-2001	34,000
CRC	Pnictogen Chemistry	Burford	2001-2011	30,000
NSERC	Pnictogen Chemistry	Burford	2001-2005	99,000
NSERC	p-Block Chemistry	Burford	2006-2010	105,000
NSERC	p-Block Chemistry	Burford	2011-2015	100,000
NSERC	p-Block Chemistry	Burford	2016-2021	75,000
				Total \$3,378,636

b. Equipment grants

<u>Agency</u>	<u>Equipment</u>	<u>Grant holders</u>	<u>Year</u>	<u>Amount awarded</u>
NSERC	Dry box	Burford	1987	19,260
NSERC	IR Spec	Burford	1992	71,061
NSERC	Dry box	Burford	1993	30,750
NSERC	Raman	Burford	1994	112,622
NSERC	IR spec	Burford	2000	36,116
NSERC	Raman upgrade	Burford	2001	71,000
NSERC	Dry box	Burford	2001	49,000
CFI	Lab	Burford	2001	200,000
NSRIT	Lab	Burford	2001	200,000
CFI	Lab	Burford	2013	62,000
BCKDF	Lab	Burford	2013	62,000

c. Honours, fellowships, and scholarships

1996 – 1997:	Alexander von Humboldt Fellowship, University of Bielefeld
1998 – 2003:	Killam Professor, Dalhousie University
2000 – 2011:	Harry Shirreff Professor of Chemical Research, Dalhousie University
2001 – 2008:	Canada Research Chair Tier I, Dalhousie University
2003 – 2005:	Canada Council Killam Fellow, Dalhousie University
2006:	Alcan Lecture Award, Canadian Society for Chemistry
2008 – 2011:	Canada Research Chair Tier I, Dalhousie University
2008:	Alexander von Humboldt Fellowship, University of Regensburg
2009:	Faculty of Science Award for Excellence in Teaching, Dalhousie University
2014:	Alexander von Humboldt Fellowship, University of Regensburg
2017:	Montreal Medal, Chemical Institute of Canada
2019:	Alexander von Humboldt Fellowship, University of Regensburg

6. PUBLICATIONS and PRESENTATIONS

a. Articles published in refereed journals (list all articles published, accepted for publication, in press, or submitted; include reviews)

2019

178. A. Swidan, J.F. Binder, P.B. St.onge, R. Suter, N. Burford and C.L.B. Macdonald, *Dalton Trans.*, 2019, 48, 1284–1291.

2018

177. R. Suter, A. Swidan, H.S. Zijlstra, C.L.B. Macdonald, J. Scott McIndoe and N. Burford, "Synthesis, Characterization and Mass Spectrometric Analysis of $[\text{LSn(IV)F}_{4-x}]^{x+}$ Salts [L = tris ((1-ethyl-benzoimidazol-2-yl)methyl)amine, $x = 1-4$]", *Dalton Trans.*, 2018, 47, 16729-16736 (Full paper).
176. A. Swidan, R. Suter, C.L.B. Macdonald and N. Burford, "Tris(benzoimidazol)amine (L) Complexes of Pnictogen(III) and Pnictogen(V) Cations and Assessment of the $[\text{LP}]^{3+}/[\text{LPF}_2]^{3+}$ Redox Couple", *Chem. Sci.*, 2018, 9, 5837-5841 (Full paper).
175. H. Sinclair, R. Suter, N. Burford, R. McDonald and M.J. Ferguson, "Pyridine, Thiophosphine and Selenophosphine Complexes of the Phenylphosphine Dication", *Can. J. Chem.*, 2018, 96(7), 689-693 (Full paper).
174. R. Suter, A. Swidan, C.L.B. Macdonald and N. Burford, "Oxidation of a Germanium(II) Dication to Access Cationic Germanium(IV) Fluorides", *Chem. Commun.*, 2018, 54, 4140-4143 (Communication).
173. R. Suter, P. A. Gray, N. Burford, and R. McDonald, "Tris(1-methyl-imidazol-2-yl)phosphane Complexes of Pnictogen, Tetrel, and Triel Cations", *Chem. Eur. J.*, 2018, 24, 4718-4723 (Full paper).
172. C. Frazee, N. Burford, R. McDonald, M.J. Ferguson, A. Decken and B.O. Patrick, "Complexes of Stiboranium Mono-, Di-, and Trications", *Chem. Eur. J.*, 2018, 24, 4011-4013 (Communication).
171. M.J. Poller, N. Burford and K. Karaghiosoff, "Reversible Oxidative Se-Se Coupling of Phosphine Selenides by $\text{Ph}_3\text{Sb}(\text{OTf})_2$ ", *Chem. Eur. J.*, 2018, 24, 85-88 (Communication).

2017

170. R. Suter, C. Frazee, N. Burford, R. McDonald and M.J. Ferguson, "Substitution reactions at $\text{Dipp}^{\text{BIAN}}$ supported fluoroantimony cations yielding cyanoantimony and azidoantimony cations", *Chem. Eur. J.*, 2017, 23, 17363-17368 (Full paper).
169. P.A. Gray, K.D. Krause, N. Burford and B.O. Patrick, "Cationic 2-2'-Bipyridine Complexes of Germanium(II) and Tin(II)", *Dalton Trans.*, 2017, 46, 8363-8366 (Communication).
168. R. Suter, H. Sinclair, N. Burford, R. McDonald, M.J. Ferguson and E. Schrader, "Tris(2-pyridyl)phosphine as a Versatile Ligand for Pnictogen Acceptors", *Dalton Trans.*, 2017, 46, 7681-7685 (Communication).
167. P.A. Gray, J.W. Saville, K.D. Krause, N. Burford, R. McDonald and M.J. Ferguson, " $[\text{GaX}_2(\text{dmpe})_2][\text{GaX}_4]$ (X = Cl, Br, I): A Synthetic, Solid State and Computational Study", *Can. J. Chem.*, 2017, 95, 346-350 (Full paper).

2016

166. P.A. Gray and N. Burford, "Coordination Complexes of Pnictogen (V) Cations", *Coord. Chem. Rev.*, 2016, 324, 1-16 (Review).
165. S. Yogendra, S.S. Chitnis, F. Hennersdorf, M. Bodensteiner, R. Fischer, N. Burford and J.J. Weigand, "Condensation Reactions of Chlorophosphanes with Chalcogenides", *Inorg. Chem.*, 2016, 55, 1854-1860 (Full paper).
164. K.L. Bamford, S.S. Chitnis, R.L. Stoddard, J.S. McIndoe and N. Burford, "Bond fission in monocationic frameworks: diverse fragmentation pathways for phosphinophosphonium cations", *Chem. Sci.*, 2016, 7, 2544-2552 (Full paper).
163. A.P.M. Robertson, S.S. Chitnis, S. Chhina, H.J. Cortes S., B.O. Patrick, H.A. Jenkins and N. Burford, "Complexes of Trimethylsilyl Trifluoromethanesulfonate with N, O and P Donors", *Can. J. Chem.*, 2016, 94, 424-429 (Full paper).
162. S.S. Chitnis, K.A. Vos, N. Burford, R. McDonald and M.J. Ferguson, "Distinction between coordination and phosphine ligand oxidation: interactions of di- and triphosphines with Pn^{3+} (Pn = P, As, Sb, Bi) ", *Chem. Commun.*, 2016, 52, 685-688 (Communication).
161. P.A. Gray, Y-Y. Carpenter, N. Burford and R. McDonald, "2-Phosphino-1,3-diphosphonium Ions", *Dalton Trans.*, 2016, 45, 2124-2129 (Full paper).

2015

160. S.S. Chitnis, A.P.M. Robertson, N. Burford, B.O. Patrick, R. McDonald and M.J. Ferguson, "Bipyridine Complexes of E^{3+} ($E = P, As, Sb, Bi$): Strong Lewis Acids, Sources of $E(OTf)_3$ and Synthons for $E(I)$ and $E(V)$ Cations", *Chem. Sci.*, 2015, 6, 6545-6555 (Full paper).
159. S.S. Chitnis, N. Burford, J.J. Weigand and R. McDonald, "Reductive Catenation of Phosphine Antimony Complexes", *Angew. Chem. Int. Ed.*, 2015, 54, 7828-7832 (Communication).
158. A.P.M. Robertson, S.S. Chitnis, H.A. Jenkins, R. McDonald, M.J. Ferguson and N. Burford, "Establishing the Coordination Chemistry of Antimony(V) Cations: Systematic Assessment of $Ph_4Sb(OTf)$ and $Ph_3Sb(OTf)_2$ as Lewis Acceptors", *Chem. Eur. J.*, 2015, 21, 7902-7913 (Full paper).
157. S.S. Chitnis, A.P.M. Robertson, N. Burford, J.J. Weigand and R. Fischer, "Synthesis and reactivity of cyclo-tetra(stibinophosphonium) tetracations: redox and coordination chemistry of phosphine-antimony complexes", *Chem. Sci.*, 2015, 6, 2559-2574 (Full paper).
156. K.L. Bamford, A.P.M. Robertson, H.A. Jenkins, B.O. Patrick and N. Burford, "Phosphine Chalcogenide Complexes of Antimony (III) Halides", *Can. J. Chem.*, 2015, 93, 375-379 (Full paper).
155. S.S. Chitnis and N. Burford, "Phosphine Complexes of Lone Pair Bearing Lewis Acceptors", *Dalton Trans.*, 2015, 44, 17-29 (Review).

2014

154. A.P.M. Robertson, C.A. Dyker, P.A. Gray, P.O. Patrick, A. Decken and N. Burford, "Diverse Reactivity of the cyclo-Diphosphinophosphonium Cation $[(PtBu)_3Me]^+$: Parallels with Epoxides and New catena-Phosphorus Frameworks", *J. Am. Chem. Soc.*, 2014, 136, 14941-14950 (Full paper).
153. S.S. Chitnis, J.M. Whalen and N. Burford, "Influence of Charge and Coordination Number on Bond Dissociation Energies, Distances and Vibrational Frequencies for the Phosphorus-Phosphorus Bond", *J. Am. Chem. Soc.*, 2014, 136, 12498-12506 (Full paper).
152. A.P.M. Robertson, J.N. Friedmann, H.A. Jenkins and N. Burford, "Exploring Structural Trends for Complexes of $Me_2E(OSO_2CF_3)_2$ ($E = Si, Ge, Sn$) with Pyridine Derivatives", *Chem. Commun.*, 2014, 50, 7979-7981 (Communication).
151. S.S. Chitnis, N. Burford, R. McDonald and M. J. Ferguson, "Prototypical Phosphine Complexes of Antimony(III)", *Inorg. Chem.*, 2014, 53, 5359-5372 (Full paper).
150. A.P.M. Robertson, N. Burford, R. McDonald and M.J. Ferguson, "Coordination Complexes of Ph_3Sb^{2+} and Ph_3Bi^{2+} : Beyond Pnictonium Cations", *Angew. Chem. Int. Ed.*, 2014, 53, 3480-3483 (Communication).
149. A.P.M. Robertson, P.A. Gray, N. Burford, "Interpnictogen Cations: Exploring New Vistas in Coordination Chemistry", *Angew. Chem. Int. Ed.*, 2014, 53, 6050-6069 (Review).

2013

148. S.S. Chitnis, N. Burford, A. Decken and M.J. Ferguson, "Coordination Complexes of Bismuth Triflates with Tetrahydrofuran and Diphosphine Ligands", *Inorg. Chem.*, 2013, 52, 7242-7248 (Full paper).
147. M.H. Holthausen, D. Knackstedt, N. Burford and J.J. Weigand, "Chloronium-Addition and Phosphenium-Insertion Reactions involving the cyclo-Phosphanes $(t-BuP)_n$ ($n = 3, 4$)", *Aus. J. Chem.*, 2013, 66, 1155-1162 (Full paper).
146. S.S. Chitnis, Y-Y. Carpenter, N. Burford, R. McDonald and M.J. Ferguson, "Assembly of a cyclo-Tetrastibinotetraphosphonium Tetracation by Reductive Elimination", *Angew. Chem. Int. Ed.*, 2013, 52, 4863-4866 (Communication).
145. S.S. Chitnis, N. Burford and M.J. Ferguson, "2,2-Bipyridine Complexes of Antimony via Sequential Fluoride Ion Abstraction from SbF_3 by Exploiting the Fluoride-Ion-Affinity of Me_3Si^+ ", *Angew. Chem. Int. Ed.*, 2013, 52, 2042-2045 (Communication).

2012

144. E. MacDonald, L. Doyle, S.S. Chitnis, U. Werner-Zwanziger, N. Burford, and A. Decken, " Me_3P Complexes of p-Block Lewis Acids $SnCl_4$, $SnCl_3^+$ and $SnCl_2^{2+}$ ", *Chem. Commun.*, 2012, 48, 7922-7924 (Communication).
143. S.S. Chitnis, E. MacDonald, N. Burford, U. Werner-Zwanziger and R. McDonald, "P-P Menshutkin Preparation of Prototypical Phosphinophosphonium Salts", *Chem. Commun.*, 2012, 48, 7359-7361 (Communication).

142. M. Donath, E. Conrad, P. Jerabek, G. Frenking, R. Frohlich, N. Burford and J.J. Weigand, "Ligand Stabilised $[P_4]^{2+}$ Cations", *Angew. Chem. Int. Ed.*, 2012, 51, 2964-2967 (Communication).
- 2011
141. S.S. Chitnis, B. Peters, E. Conrad, N. Burford, R. McDonald and M. Ferguson, "Structural Diversity for Phosphine Complexes of Stibenium and Stibinidenium Cations", *Chem. Commun.*, 2011, 47, 12331-12333 (Communication).
140. E. MacDonald, L. Doyle, N. Burford, U. Werner-Zwanziger and A. Decken, "Stannylphosphonium Cations", *Angew. Chem. Int. Ed.*, 2011, 50, 11474-11477 (Communication).
139. Y-Y. Carpenter, N. Burford, Michael D. Lumsden and R. McDonald, " ^{31}P NMR Studies Demonstrating the Assembly of *catena*-Phosphorus Frameworks from Chlorophosphinochlorophosphonium Cations", *Inorg. Chem.*, 2011, 50, 3342-3353 (Full paper).
138. C.D.L. Saunders, L.E. Longobardi, N. Burford, M.D. Lumsden, U. Werner-Zwanziger, B. Chen and R. McDonald, "Comprehensive Chemical Characterization of Complexes Involving Lead-Amino Acid Interactions", *Inorg. Chem.*, 2011, 50, 2799-2810 (Full paper).
- 2010
137. E. Conrad, J. Pickup, N. Burford, R. McDonald and M.J. Ferguson, "Prototypical arsine-triell adducts (R_3AsEX_3 for $E = B, Al$, and Ga)", *Can. J. Chem.*, 2010, 88(8) 797-803 (Full paper).
136. E. Conrad, N. Burford, R. McDonald and M.J. Ferguson, "Bismuthenium-pnictonium Dications $[R'BiPnR_3]^{2+}$ ($Pn = As, Sb$) Containing Carbenoid Bismuth Centers and Rare Bi-Sb Bonds", *Chem. Commun.*, 2010, 46, 4598-4600 (Communication).
135. E. Conrad, N. Burford, U. Werner-Zwanziger, R. McDonald and M.J. Ferguson, "Phosphinopnictinophosphonium Frameworks", *Chem. Commun.*, 2010, 46, 2465-2467 (Communication).
- 2009
134. J.J. Weigand, N. Burford, R.J. Davidson, T.S. Cameron and P. Seelheim, "New Synthetic Procedures to *catena*-Phosphorus Cations: Preparation and Dissociation of the First cyclo-Phosphino-halophosphonium Salts", *J. Am. Chem. Soc.*, 2009, 131, 17943-17953 (Full paper). Article highlighted in *Chemical & Engineering News*, 2009, December 7, 42.
133. E. Conrad, N. Burford, R. McDonald and M.J. Ferguson, "Phosphinopnictonium Cations: High Yield and General Preparative Procedures for New Interpnictogen Frameworks Exploiting $As \rightarrow P$ and $Sb \rightarrow P$ Coordinate Bonds", *J. Am. Chem. Soc.*, 2009, 131, 17000-17008 (Full paper).
132. E. Conrad, N. Burford, R. McDonald and M.J. Ferguson, "Coordination of Arsine Ligands as a General Synthetic Approach to Rare Examples of Arsenic-Antimony and Arsenic-Bismuth Bonds", *J. Am. Chem. Soc.*, 2009, 131, 5066-5067 (Communication). Article highlighted as an Editor's Choice in *Science*, 2009, 324, 149-150.
- 2008
131. Y-Y. Carpenter, C.A. Dyker, N. Burford, M.D. Lumsden and A. Decken, "2,3-Diphosphino-1,4-diphosphonium Cations", *J. Am. Chem. Soc.*, 2008, 130, 15732-15741 (Full paper).
130. J.J. Weigand, N. Burford and A. Decken, "The Binary $Ph_2PCl:GaCl_3$ System: A Room Temperature Molten Medium for P-P Bond Formation", *Eur. J. Inorg. Chem.*, 2008, 4868-4872 (Communication).
129. C.D.L. Saunders, N. Burford, U. Werner-Zwanziger and R. McDonald, "Preparation and Comprehensive Characterization of $[Hg_6(ala)_4(NO_3)_4] \cdot H_2O$ ", *Inorg. Chem.*, 2008, 47, 3693-3699 (Full paper).
128. E. Conrad, N. Burford, R. McDonald and M.J. Ferguson, "Phosphinoarsonium and Diarsonium Cations from Halide Abstraction Induced Pnictogen Coupling", *Inorg. Chem.*, 2008, 47, 2952-2954 (Communication).
127. H.A. Phillips and N. Burford, "Identification of Bismuth-Thiolate-Carboxylate Clusters by Electrospray Ionization Mass Spectrometry", *Inorg. Chem.*, 2008, 47, 2428-2441 (Full paper).
126. C.A. Dyker and N. Burford, "*catena*-Phosphorus Cations", *Chem. Asian J.*, 2008, 3, 28-36 (Invited Review).
- 2007
125. R.J. Davidson, J.J. Weigand, N. Burford, T.S. Cameron, A. Decken and U. Werner-Zwanziger, "Bifunctional Diphosphorus Lewis Acids from cyclo-Diphosphadiazanes", *Chem. Commun.*, 2007, 4671-4673 (Communication).

124. S.D. Riegel, N. Burford, M.D. Lumsden and A. Decken, "Synthesis and Characterization of Elusive Cyclo-di- and -tri-phosphino-1,3-diphosphonium Salts: Fundamental Frameworks in catena-Organophosphorus Chemistry", *Chem. Commun.*, 2007, 4668 - 4670 (Communication).
 123. J.J. Weigand, N. Burford, A. Decken and A. Schulz, "Preparation and Characterization of a Ligand-Stabilized Trimethylphosphane Dication", *Eur. J. Inorg. Chem.*, 2007, 4868-4872 (Communication).
 122. J.J. Weigand, N. Burford, D. Mahnke and A. Decken, "Coordination Complexes of the Dimethylthiophosphonium Cation and Ligand Exchange", *Inorg. Chem.*, 2007, 46, 7689-7691 (Communication).
 121. J.J. Weigand, S.D. Riegel, N. Burford and A. Decken, "Prototypical Phosphorus Analogues of Ethane: General and Versatile Synthetic Approaches to Hexaalkylated P-P Diphosphonium Cations", *J. Am. Chem. Soc.*, 2007, 129, 7969-7976 (Full paper).
 120. C.A. Dyker, S.D. Riegel, N. Burford, M.D. Lumsden and A. Decken, "Cyclotetraphosphinophosphonium Ions: Synthesis, Structures and Pseudorotation", *J. Am. Chem. Soc.*, 2007, 129, 7464-7474 (Full paper).
 119. C.A. Dyker, N. Burford, G. Menard, M.D. Lumsden and A. Decken, "Monocyclic Di- and Triphosphinophosphonium Cations: New Foundational Frameworks for catena-Phosphorus Chemistry", *Inorg. Chem.*, 2007, 46, 4277-4285 (Full paper).
 118. H.A. Phillips, M.D. Eelman and N. Burford, "Cooperative Influence of Thiolate Ligands on the Bio-Relevant Coordination Chemistry of Bismuth", *J. Inorg. Biochem.*, 2007, 101, 736-739 (Communication).
- 2006
117. J.J. Weigand, N. Burford, and A. Decken, "A Melt Approach to the Synthesis of catena-Phosphorus Dications to Access Derivatives of $[P_6Ph_4R_4]^{2+}$ ", *Angew. Chem. Int. Ed.*, 2006, 45, 6733-6737 (Communication).
 116. C.A. Dyker, N. Burford, M.D. Lumsden and A. Decken, "Acyclic catena-Diphosphinodiphosphonium Dications $[R_3P-PR'-PR'-PR_3]^{2+}$ or Bisphosphine-Diphosphonium Complexes $[R_3P \rightarrow PR'-PR' \leftarrow PR_3]^{2+}$: Synthesis by Reductive P-P Coupling of $[R_3P-PR'Cl]^+$ and Phosphine Ligand Exchange", *J. Am. Chem. Soc.*, 2006, 128, 9632-9633 (Communication).
 115. N. Burford and P.J. Ragogna, "Coordination Chemistry of Phosphorus(III) as a Lewis Acceptor", *A.C.S. Symposium Series*, 2006, 917, 280-292 (Invited review).
- 2005
114. N. Burford, P.J. Ragogna, K. Sharp, R. McDonald and M.J. Ferguson, "Arsinophosphonium Cations from Arsenium-Phosphine and -Bisphosphine Coordination Chemistry" *Inorg. Chem.*, 2005, 44, 9453-9460 (Full paper).
 113. N. Burford, E. Edelstein, J.C. Landry, M.J. Ferguson and R. McDonald, "Identification of New N-Sb Topologies: Understanding the Sequential Dehydrochloride Coupling of Primary Amines and Trichloropnictines", *Chem. Commun.*, 2005, 5074-5076 (Communication).
 112. N. Burford, T.S. Cameron, C.L.B. Macdonald, K.N. Robertson, R. Schurko, D. Walsh, R. McDonald and R.E. Wasylshen, "Dissociation of 2,4-Bis(2,4,6-tri-t-butylphenyl)-cyclo-1,3-dipnicta-2,4-diazanes (pnict = P, As, Sb) Imposed by Substituent Steric Strain: A Cyclobutane/Olefin Analogy" *Inorg. Chem.*, 2005, 44, 8058-8064 (Full paper).
 111. N. Burford, M.D. Eelman, and K.Groom, "Identification of Complexes Containing Glutathione with As(III), Sb(III), Cd(II), Hg(II), Tl(I), Pb(II) or Bi(III) by Electrospray Ionisation Mass Spectrometry", *J. Inorg. Biochem.*, 2005, 99, 1992-1997 (Full paper).
 110. N. Burford, C.A. Dyker, M. Lumsden and A. Decken, "Small Cyclo-polyphosphinophosphonium cations: Systematic Development of Fundamental Catena-Phosphorus Frameworks", *Angew. Chem. Int. Ed.*, 2005, 44, 6196-6199 (Communication).
 109. N. Burford, J.C. Landry, M.J. Ferguson and R. McDonald, "Synthesis of Cyclo-2,4,6-triarsa-1,3,5-triazanes from Cyclo-2,4-diarsa-1,3-diazanes Demonstrating the General Influence of Substituent Steric Strain on the Relative Stability of Pnictazane Oligomers", *Inorg. Chem.*, 2005, 44, 5897-5902 (Full paper).
 108. N. Burford, C.A. Dyker and A. Decken, "Facile Synthetic Methods for the Diversification of Catena-Polyphosphorus Cations", *Angew. Chem. Int. Ed.*, 2005, 44, 2364-2367 (Communication).

107. N. Burford, A.D. Phillips, H.A. Spinney, M. Lumsden, U. Werner-Zwanziger, M.J. Ferguson and R. McDonald, "Hypervalent, Low-Coordinate Phosphorus(III) Centers in Complexes of the Phosphadiazonium Cation with Chelate Ligands", *J. Am. Chem. Soc.*, 2005, 127, 3921-3927 (Full Paper).
106. D.E. Mahony, A. Woods, M.D. Eelman, N. Burford and S.J.O. Veldhuyzen van Zanten, "Interaction of Bismuth Subsalicylate with Fruit Juices, Ascorbic Acid and Thiol-containing Substrates to Produce Soluble Bismuth Products Active Against *Clostridium difficile*", *Antimicrobial Agents and Chemotherapy*, 2005, 49, 431-433 (Full paper).

2004

105. N. Burford, D.E. Herbert, P.J. Ragogna, R. McDonald and M.J. Ferguson, "Diphosphine-Phosphenium Coordination Complexes Representing Monocations with Pendant Donors and Ligand Tethered Dications", *J. Am. Chem. Soc.*, 2004, 126, 17067-17073 (Full paper).
104. N. Burford, C.A. Dyker, A.D. Phillips, H.A. Spinney, A. Decken, R. McDonald, P.J. Ragogna and A.L. Rheingold, "Ylidene→Iminophosphine Coordination Complexes and Reversible Dissociation of Dichlorophosphetidines", *Inorg. Chem.*, 2004, 43, 7502-7507 (Full paper).
103. N. Burford, H.A. Spinney, M.J. Ferguson and R. McDonald, "Donor-rich and acceptor-rich pyridine-phosphadiazonium adducts: Diversifying the Lewis acceptor chemistry of phosphorus(III)", *Chem. Commun.*, 2004, 2696-2697 (Communication).
102. N. Burford, K.D. Conroy, J.C. Landry, P.J. Ragogna, M.J. Ferguson and R. McDonald, "Gallium Halide Induced Heterocycle Expansion of Dihalodiphosphadiaryldiazanes [(XPNR)₂] to the Corresponding Triphosphatriazanes [(XPNR)₃]", *Inorg. Chem.*, 2004, 43, 8245-8251 (Full paper).
101. G.G. Briand, N. Burford, M.D. Eelman, N. Aumeerally, L. Chen, T.S. Cameron, and K.N. Robertson, "Identification, Isolation and Characterization of Cysteinate and Thiolactate Complexes of Bismuth", *Inorg. Chem.*, 2004, 43, 6495-6500 (Full paper).
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e. Presentations at conferences or institutions (include conference contributions that are not already described in 6b, above; indicate type of presentation, whether poster, plenary talk, seminar, etc.; list co-authors. title, and indicate whether presentation was by invitation)

CCCE = Canadian Chemistry Conference and Exhibition

ACS = Meeting of American Chemical Society

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 82. N. Burford, E. Ocampo, P.J. Ragona and R. McDonald, "Ligand Exchange at Lewis Acidic Phosphine Centres", at the 84th CCCE, Montreal, May 2001.

83. N. Burford, T.S. Cameron, B. Ellis, C.L.B. Macdonald, D. Walsh and R. McDonald, "Synthesis and Characterisation of the First Trimeric Iminophosphine: A Tri(phosphazane)", at the 84th CCCE, Montreal, May 2001.
84. N. Burford, T.S. Cameron, K.D. Conroy, B. Ellis, K.N. Robertson and D. Walsh, "Lewis Acid Induced Phosphazane Ring Expansion", at the 85th CCCE, Vancouver, June 2002.
85. N. Burford, M.D. Eelman and R. Ngan, "Mass Spectrometric Identification of Bismuth (III) Complexes Containing Biorelevant Ligands", at the 85th CCCE, Vancouver, June 2002.
86. N. Burford, T.S. Cameron, A.D. Phillips, K.N. Robertson and H.A. Spinney, "Coordination Complexes of Iminophosphines as Lewis Acceptors", at the 85th CCCE, Vancouver, June 2002.
87. N. Burford, T.S. Cameron, K.D. Conroy, R.Ovans, K.N. Robertson and D. Walsh, "Stoichiometric Options for Dehydrohalogen Coupling of PnCl_3 ($\text{Pn} = \text{P}, \text{As}, \text{Sb}$) with Primary Amines", at the 85th CCCE, Vancouver, June 2002.
88. N. Burford, P.J. Ragogna and T.S. Cameron, "New Developments in Cationic Phosphorus Chemistry", at the 85th CCCE, Vancouver, June 2002.
89. N. Burford, P.J. Ragogna, T.S. Cameron and K.N. Robertson, "Ligand Exchange at Electron-Rich Phosphorus Centres as a New Synthetic Methodology", at the 85th CCCE, Vancouver, June 2002.
90. P.J. Ragogna and N. Burford, "New Developments in the Lewis Acid Chemistry of Phosphorus(III)", at the 86th CCCE, Ottawa, August 2003.
91. M.D. Eelman and N. Burford, "Systematic Assessment of the Coordination Chemistry of Bismuth with Biorelevant Ligands", at the 86th CCCE, Ottawa, August 2003.
92. N. Burford, "Understanding the Chemistry of Bioactive Bismuth Compounds", at the 86th CCCE, Ottawa, August 2003.
93. C.A. Dyker, N. Burford, A. Decken and R.E. Wasylishen, "Dissociation of Phosphetidines by Coordination with Lewis Bases", at the 86th CCCE, Ottawa, August 2003.
94. J.C. Landry, N. Burford, K.D. Conroy, P.J. Ragogna and R. McDonald, "Synthetic Origins for Phosphazane Dendrimeric Structures", at the 86th CCCE, Ottawa, August 2003.
95. R. Ovans and N. Burford, "Small Molecule Precursors to Phosphazane Oligomers", at the 86th CCCE, Ottawa, August 2003.
96. H.A. Spinney, N. Burford and A.D. Phillips, "Coordination Chemistry of a Phosphadiazonium Lewis Acceptor", at the 86th CCCE, Ottawa, August 2003.
97. H.A. Spinney, N. Burford and A.D. Phillips, "Coordination Chemistry of a Phosphadiazonium Lewis Acceptor", at the 10th IRIS, Burlington, Vermont, August 2003.
98. P.J. Ragogna, N. Burford, C.L.B. Macdonald and B. Ellis, "Relative Acidity of Dicoordinate Phosphenium Lewis Acids", at the 10th IRIS, Burlington, Vermont, August 2003.
99. M.D. Eelman and N. Burford, "Assessing the Chelate Chemistry and Structural Diversity of Bismuth(III) Complexes Containing Biomolecules", at the 10th IRIS, Burlington, Vermont, August 2003.
100. P.J. Ragogna and N. Burford, "New Developments in the Lewis Acid Chemistry of Phosphorus(III)", at the 10th International Conference on Inorganic Ring Systems, Burlington Vermont, August 2003.
101. N. Burford, K.D. Conroy, C.A. Dyker, J.C. Landry, R. Ovans, P.J. Ragogna and D. Walsh "Pnictazane Heterocycles: Building Blocks for Oligomers and Polymers", at the 10th IRIS, Burlington, Vermont, August 2003.
102. J.C. Landry, N. Burford and R. McDonald, "Cyclophosphazanes as Building Blocks Towards $[\text{P(III)-N}]$ Oligomers", at the 87th CCCE, London, Ontario, May 2004.
103. N. Burford and P.J. Ragogna, "Coordination Chemistry of Phosphines as Lewis Acids", at the 87th CCCE, London, Ontario, May 2004.
104. P.J. Ragogna and N. Burford, "Rearrangements and Rings Containing Lewis Acidic Phosphorus Centres and a General Synthetic Approach for Coordination Complexes of Pnictenium Cations ($\text{Pn} = \text{P}, \text{As}, \text{Sb}$)", at the 87th CCCE, London, Ontario, May 2004.
105. L. Groom, N. Burford and M.D. Eelman, "Mass Spectrometric Identification of Complexes between Glutathione and Traditional Toxic Heavy Metals", at the 87th CCCE, London, Ontario, May 2004.
106. H.A. Phillips, N. Burford, M.D. Eelman and W.G. LeBlanc, "Interactions of Heavy Metals with Biological Molecules", at the 87th CCCE, London, Ontario, May 2004.
107. C.A. Dyker, N. Burford and A. Decken, "Dissociation of Phosphetidines by Ligand-Phosphine Coordination",

- at the 87th CCCE, London, Ontario, May 2004.
108. N. Burford and P.J. Ragogna, "Coordination Chemistry of Phosphines as Lewis Acids", at the International Conference on Coordination Chemistry, Merida, Mexico, July 2004.
 109. N. Burford and P.J. Ragogna, "Coordination Chemistry of Phosphines as Lewis Acids", at the International Conference on Organometallic Chemistry, Vancouver, July 2004.
 110. N. Burford, J.C. Landry, M. Ferguson and R. McDonald, "Sequential Development of Pnictazane Oligomers", at the 88th CCCE, Saskatoon, May 2005.
 111. C.A. Dyker, N. Burford, A. Decken and M. Lumsden, "Contributions Towards the Chemistry of Phosphorus Continued: Synthesis and Characterisation of Catena-Polyphosphorus Cations", at the 88th CCCE, Saskatoon, May 2005.
 112. H.A. Spinney and N. Burford, "Hypervalent, Low Coordinate Phosphorus(III) Centers in Coordination Complexes of the Phosphadiazonium Cation", at the 88th CCCE, Saskatoon, May 2005.
 113. N. Burford and H.A. Phillips, "Towards Understanding the Bioactivity of Bismuth-Based Pharmaceuticals", at the 88th CCCE, Saskatoon, May 2005.
 114. R. Ovens and N. Burford, "Polymerising NP Analogues of Olefins", at the 88th CCCE, Saskatoon, May 2005.
 115. N. Burford and H.A. Phillips, "Towards Understanding the Bioactivity of Bismuth-Thiolate Complexes", at the 89th CCCE, Halifax, May 2006.
 116. S.D. Riegel, N. Burford and A. Decken, "Further Developments in Fundamental catena-Cyclophosphorus Cation Chemistry", at the 89th CCCE, Halifax, May 2006.
 117. C.A. Dyker, N. Burford, A. Decken and M. Lumsden, "New Developments in Fundamental Phosphorus Chemistry: Linear catena-Phosphorus Cations", at the 89th CCCE, Halifax, May 2006.
 118. N. Burford and J.C. Landry, "Identification and Isolation of Intermediates in the Lewis Acid Induced Ring Expansion of Cyclodipnictazanes to the Corresponding Cyclotripnictazanes", at the 89th CCCE, Halifax, May 2006.
 119. J.J. Weigand, N. Burford, A. Decken and M. Lumsden, "Recent Advances in the Synthesis and Characterization of New Cyclic catena-Phosphorus Dications", at the 89th CCCE, Halifax, May 2006.
 120. C. Saunders and N. Burford, "Interactions of Toxic Heavy Metals with Biologically Relevant Chelating Ligands", at the 89th CCCE, Halifax, May 2006.
 121. INVITED: N. Burford, "Homoatomic P-P Coordination Complexes: A New Direction in the Chemistry of Phosphorus", at the Main Group Chemistry Symposium, University of Bristol, July 2006.
 122. INVITED: N. Burford, C.A. Dyker, J.C. Landry, J.J. Weigand, S.D. Riegel, A. Decken, R. McDonald and M. Lumsden, "New Inorganic Phosphorus Ring Systems", at the 11th IRIS, Oulu, Finland, August 2006.
 123. S. Riegel, N. Burford, M. Lumsden and A. Decken, "Methylation of Phosphinophosphonium Species to access Cyclic Di- and Tri- Phosphinophosphonium Salts", at the 90th CCCE, Winnipeg, May 2007.
 124. N. Burford, Y.Y. Carpenter, E. Conrad, C.A. Dyker, S. Riegel and J.J. Weigand, "Catenated Phosphorus Cations: A New Direction in the Chemistry of Phosphorus", at the 90th CCCE, Winnipeg, May 2007.
 125. N. Burford, K. Groom, H. A. Phillips and C. Saunders, "Understanding Chemical Interactions between Heavy Metals and Bio-Ligands" at the 90th CCCE, Winnipeg, May 2007.
 126. C. Saunders and N. Burford, "Synthesis and Characterisation of Mercury-Alanine Complexes" at the 90th CCCE, Winnipeg, May 2007.
 127. INVITED: N. Burford, K. Groom, H. A. Phillips and C. Saunders, "Understanding Chemical Interactions between Heavy Metals and Bio-Ligands" at the 8th International Conference on Heteroatom Chemistry, Riverside, California, August 2007.
 128. J.J. Weigand, N. Burford, T.S. Cameron and A. Decken, "Ligand Stabilized Tricoordinate Cationic Phosphorus Centers", at the 234th ACS, Boston, August 2007.
 129. INVITED: N. Burford, "Catena Phosphorus Chemistry", at the Zing Conference on Main Group Chemistry, Cancun, February 2008.
 130. C.D.L. Saunders, N. Burford, U. Werner-Zwanziger, B. Chen, R. McDonald, "Synthesis and Characterization of Lead-Amino Acid Complexes", at the 91st CCCE, Edmonton, May 2008.
 131. E.D. Conrad, N. Burford, R. McDonald and M.R. Ferguson, "Phosphinoarsonium and Diarsonium Cations from Chloride Abstraction Induced Pnictogen Coupling", at the 91st CCCE, Edmonton, May 2008.
 132. Y. Carpenter, N. Burford, A. Decken, R. McDonald and M.R. Ferguson, "Donor-Stabilization and Reductive Coupling of Halostibonium Cations", at the 91st CCCE, Edmonton, May 2008.

133. N. Burford, H.A. Phillips, and C.D.L. Saunders, "Electrospray Mass Spectrometric Assessment of the Interactions between Heavy Metals and Bio-Ligands", at the 91st CCCE, Edmonton, May 2008.
134. N. Burford, R.J. Burford, Y. Carpenter, E.D. Conrad, C.A. Dyker, D. Knackstedt, S.D. Riegel, J.J. Weigand, T. Robinson and M. Whoriskey, "*catena*-Phosphinophosphonium Cations", at the 92nd CCCE, Hamilton, May 2009.
135. E.D. Conrad, N. Burford, R. McDonald and M.R. Ferguson, "General Synthetic Approaches to Compounds Featuring Pn-Pn' Bonds (Pn = P, As, Sb, Bi)", at the 92nd CCCE, Hamilton, May 2009.
136. Y. Carpenter and N. Burford, "New Synthetic Methods in cationic *catena*-Pnictogen Chemistry", at the 12th IRIS, Goa, India, August 2009.
137. PLENARY: N. Burford, E.D. Conrad, "Interpnictogen Compounds", at the 12th IRIS, Goa, India, August 2009.
138. J.E. Pickup, E.D. Conrad, N. Burford, R. McDonald and M.R. Ferguson, "Pnictinopnictonium Cations: New Interpnictogen Frameworks Exploiting P-Pn Coordination Chemistry", at the 93rd CCCE, Toronto, May 2010.
139. D. Knackstedt, N. Burford, Y. Carpenter, E.D. Conrad, J.J. Weigand, T. Robinson and M. Whoriskey, "*catena*-Phosphinophosphonium Cations", at the 93rd CCCE, Toronto, May 2010.
140. E.D. Conrad and N. Burford, "Pnictinopnictonium and Pnictenumpnictonium Cations", at the 93rd CCCE, Toronto, May 2010.
141. INVITED: N. Burford, "Interpnictogen Compounds", University of Toronto, June 2010.
142. INVITED: N. Burford, "Interpnictogen Compounds", Tour of Germany, Gottingen, Wurzburg, Chemnitz, Regensburg, July 2010.
143. N. Burford, Y.Y. Carpenter, E.D. Conrad and D. Knackstedt, "Catena-phosphinophosphonium Ions", at the 18th International Conference on Phosphorus Chemistry, Wroclaw, Poland, July 2010.
144. INVITED: N. Burford, "Coordination Chemistry of Non-Metal Elements", Canadian Plastics Industry Association Innovation Forum, Toronto, October 2010.
145. INVITED: N. Burford, "Interpnictogen Compounds", at the Pacificchem, Honolulu, USA, December 2010.
146. PLENARY: N. Burford, "Interpnictogen Compounds", at the European Workshop of Phosphorus Chemistry, Munster, Germany, March 2011.
147. E.P. MacDonald, L. Doyle, N. Burford, A. Decken and R. McDonald, "Stannylphosphonium Salts", at the 94th CCCE, Montreal, June 2011.
148. S.S. Chitnis and N. Burford, "Interpnictogen Compounds", at the 94th CCCE, Montreal, June 2011.
149. S. Lucas, E.P. MacDonald and N. Burford, "Synthesis and Characterization of Cyclic Tetraelphosphonium Cations", at the 94th CCCE, Montreal, June 2011.
150. INVITED: N. Burford, "Interpnictogen Compounds", at the IUPAC World Chemistry Congress, Puerto Rico, July 2011.
151. INVITED: N. Burford, "Coordination Chemistry Approaches to Non-Metal Element-Element Bond Formation", University of British Columbia, January 2012.
152. INVITED: N. Burford, "Coordination Chemistry Approaches to Non-Metal Element-Element Bond Formation", University of Washington, March 2012.
153. INVITED: N. Burford, Y. Carpenter and E.D. Conrad, "*catena*-Phosphinophosphonium Cations", at the 95th CCCE, Calgary, May 2012.
154. S.H. Lucas and N. Burford, Y. Carpenter and E.D. Conrad, "Synthesis and Characterization of Chalcogenophosphinophosphonium Cations", at the 95th CCCE, Calgary, May 2012.
155. PLENARY: N. Burford, S.S. Chitnis and E. MacDonald, "Coordination Chemistry Approaches to Non-Metal Element-Element Bond Formation", at the 95th CCCE, Calgary, May 2012.
156. INVITED: N. Burford, C.D.L. Saunders and H.A. Phillips, "Understanding Chemical Interactions Between Heavy Metals (Hg, Pb, Bi) and Amino Acids", at the 95th CCCE, Calgary, May 2012.
157. S.S. Chitnis and N. Burford, "Structural Diversity and Reactivity of Phosphine-stabilized Antimony Cations", at the 95th CCCE, Calgary, May 2012.
158. E.P. MacDonald, N. Burford, U. Werner-Zwanziger and A. Decken, "Tetraelphosphonium Salts", at the 95th CCCE, Calgary, May 2012.
159. PLENARY N. Burford, "Catena-phosphinophosphonium Ions", at the 19th International Conference on Phosphorus Chemistry, Rotterdam, Holland, July 2012.

160. E.P. MacDonald, L. Doyle, S. Chitnis, N. Burford, U. Werner-Zwanziger and A. Decken, "Stannylphosphonium Salts", at the 13th IRIS, Victoria, July 2012.
161. S.H. Lucas and N. Burford, "Synthesis and Characterization of Chalcogenophosphonium Cations", at the 13th IRIS, Victoria, July 2012.
162. S.S. Chitnis and N. Burford, "Structural Diversity and Reactivity of New phosphine-Stabilized Antimony Centers", at the 13th IRIS, Victoria, July 2012.
163. INVITED: N. Burford, "Coordination Chemistry Approaches to Non-Metal Element-Element Bond Formation", Simon Fraser University, January 2013.
164. PLENARY: N. Burford, "Coordination Chemistry Approaches to Non-Metal Element-Element Bond Formation", at the Chemical Communications/Dalton Transactions Symposium, Regensburg, Germany, March 2013.
165. E.P. MacDonald, N. Burford and A. Decken, "Tetraelposphonium Cations", at the 96th CCCE, Quebec City, May 2013.
166. P.A. Gray and N. Burford, "Phosphine Satbilized Aluminum(III) and Gallium(III) Cations: A Synthetic and Spectroscopic Study", at the 96th CCCE, Quebec City, May 2013.
167. A.P.M. Roberston, C.A. Dyker and N. Burford, "Strained Cationic Phosphorus Rings – Diverse and Unexpected Reactivity", at the 96th CCCE, Quebec City, May 2013.
168. S.S. Chitnis, N. Burford, R. McDonald and M.J. Ferguson, "Prototypical Phosphine Complexes of $[SbX_n]^{(3-n)+}$ (X = halogen, n = 0, 1, 2, 3)", at the 96th CCCE, Quebec City, May 2013
169. S.S. Chitnis, N. Burford, R. McDonald and M.J. Ferguson, "A Cyclic Tetra-(stibinophosphonium) Tetracation: Cyclo-[Me₃PSb]₄⁴⁺", at the 96th CCCE, Quebec City, May 2013.
170. INVITED: N. Burford, "Coordination Chemistry Approaches to Non-Metal Element-Element Bond Formation", at the 247th ACS, Dallas, USA, March 2014.
171. K.L. Bamford, S.H. Lucas and N. Burford, "Neutral Phosphine Chalcogenide Complexes of Halostibines", at the 97th CCCE, Vancouver, June 2014.
172. S.S. Chitnis, N. Burford, and J.J. Weigand, "Synthesis and reactivity of highly-charged *catena*-antimony polycations", at the 97th CCCE, Vancouver, June 2014.
173. A.P.M. Robertson, J. Friedmann and N. Burford, "Coordination Chemistry of the Dicationic Main-Group Acceptors Ph₃Pn²⁺ (Pn = Sb or Bi) and Me₂E²⁺ (E = Si, Ge and Sn)", at the 97th CCCE, Vancouver, June 2014.
174. S.S. Chitnis, K. Vos, N. Burford, R. McDonald and M.J. Ferguson, "Coordination Chemistry of E(OTf)₃, E = P, As, Sb, Bi", at the 98th CCCE, Ottawa, June 2015.
175. P.A. Gray, N. Burford and B.O. Patrick, "Preparation and Reactivity of Cationic Germanium(II) and Tin(II) Donor-Acceptor Complexes", at the 98th CCCE, Ottawa, June 2015.
176. S.S. Chitnis, K.L. Bamford, R.L. Stoddart, N. Burford and J.S. McIndoe, "Exploding Phosphinophosphoniums: Fragmentation Pathways of [Me₃PPR₂]⁺", at the 98th CCCE, Ottawa, June 2015.
177. C.M. Frazee, A.P.M. Robertson and N. Burford, "Coordination Chemistry of Antimony(V) Cations", at the 98th CCCE, Ottawa, June 2015.
178. PLENARY: N. Burford, "Evolving the coordination chemistry of p-block element Lewis acceptors", at the 14th IRIS, Regensburg, Germany, July 2015.
179. INVITED: N. Burford, "Evolving the coordination chemistry of Bismuth as a Lewis acceptors", at the Pacifichem, Honolulu, December 2015.
180. INVITED: N. Burford, "Evolving the coordination chemistry of p-block element Lewis acceptors", at the 251st ACS Conference, San Diego, March 2016.
181. PLENARY: N. Burford, "Evolving the coordination chemistry of p-block element Lewis acceptors", at the BC Inorganic Discussion Weekend, Squamish, May 2016.
182. H.C. Sinclair, S.S. Chitnis, A.P.M. Robertson and N. Burford, "The Diverse Reactivity of Salts containing [PL_n]³⁺", at the 99th CCCE, Halifax, June 2016.
183. M.J. Poller, J. Frickel, N. Burford and K. Karaghiosoff, "Reactions of Phosphinophosphonium Cations Leading to New Cationic P-Se Compounds", at the 99th CCCE, Halifax, June 2016.
184. C.M. Frazee and N. Burford, "New Developments in the Coordination Chemistry of Antimony Cations", at the 99th CCCE, Halifax, June 2016.
185. P.A. Gray, N. Burford and B.O. Patrick, "Expanding the Coordination Chemistry of High Oxidation State Main Group Cations", at the 99th CCCE, Halifax, June 2016.

186. P.A. Gray, N. Burford and B.O. Patrick, "Synthesis and Reaction Chemistry of E(OTf)₂ Donor-Acceptor Complexes (E = Ge, Sn)", at the 99th CCCE, Halifax, June 2016.
187. INVITED: N. Burford, "Evolving the coordination chemistry of p-block element Lewis acceptors", at the University of Kassel, Kassel, Germany July 2016.
188. INVITED: N. Burford, "Evolving the coordination chemistry of p-block element Lewis acceptors", at the Tour of University of Guelph, Western University, McMaster University, Brock University, October 2016.
189. INVITED: N. Burford, "Evolving the coordination chemistry of p-block element Lewis acceptors", at the University of Alberta, December 2016.
190. R. Suter, H.C. Sinclair and N. Burford, "Tris(2-pyridyl)phosphine Complexes of Arsenic", at the 100th CCCE, Toronto, June 2017.
191. H.C. Sinclair, N. Burford, R. McDonald and M.J. Ferguson "Expanding the Ligand Scope for Phosphorus Dications RP²⁺", at the 100th CCCE, Toronto, June 2017.
192. M.J. Poller, T. Huber, J.S. Frickel and N. Burford, "Studies on the Reactivity of Phosphinophosphonium Cations", at the 100th CCCE, Toronto, June 2017.
193. P.A. Gray, R. Suter, N. Burford, R. McDonald and M.J. Ferguson, "Ligand Influence on the Isolation and Characterization of Group 14 and 15 Cations", at the 100th CCCE, Toronto, June 2017.
194. C.M. Frazee and N. Burford, "New Developments in the Coordination Chemistry of Antimony (V) Cations", at the 100th CCCE, Toronto, June 2017.
195. PLENARY: N. Burford, Montreal Medal Lecture, "Shifts, Δ s, Hybridization and Characterization of the Chemistry Discipline", at the 100th CCCE, Toronto, June 2017.
196. INVITED: N. Burford, "Evolving the coordination chemistry of p-block element Lewis acceptors", at the University of Toronto, August 2017.
197. P.A. Gray, R. Suter, N. Burford, B. Patrick, R. McDonald and M.J. Ferguson, "High Oxidation State Main Group Cations: Towards a New Class of Lewis Superacids", at the 101st CCCE, Edmonton, May 2018.
198. C.M. Frazee and N. Burford, "Structure and Reactivity of Highly Charged, High Oxidation State Pnictogens", at the 101st CCCE, Edmonton, May 2018.
199. A. Swidan, B. St. Onge, R. Suter, C.L.B. Macdonald and N. Burford, "Synthesis and Reactivity of Novel Pincer Complexes of Group 13 and 14 Elements", at the 101st CCCE, Edmonton, May 2018.
200. R. Suter, N. Burford, A. Swidan and C.L.B. Macdonald "Main Group Cations [LGe]²⁺ and [LP]³⁺ as Nucleophiles (L = tris(1-ethyl-benzimidazol-2-ylmethyl)amine)", at the 101st CCCE, Edmonton, May 2018.

7. SERVICE and PROFESSIONAL ACTIVITIES

a. University and Faculty committees (include any offices held and dates)

- 2015-2017: Chair of the Senate Committee on University Budget (Univ.)
- 2014-2016: Member of the Enhanced Planning Tools Advisory Committee (Univ.)
- 2011-: Chair of the Department of Chemistry, University of Victoria (Univ.)
- 2011-2017: Member of the Senate Committee on University Budget (Univ.)
- 2010-2011: Chair of the Committee to revise the Dalhousie Scholarly Integrity Policy, Dalhousie University (Univ.)
- 2009-2010: Chair of the Review Committee for Neuroscience, Faculty of Graduate Studies, Dalhousie (Univ.)
- 2009-2010: Chair of the Review Committee for Environmental Sciences, Faculty of Science, Dalhousie (Univ.)
- 2008-2011: Chair of the Department of Chemistry, Dalhousie University (Univ.)
- 2007-2008: Member of the VP Task Force on Graduate Student Funding (Univ.)
- 2005-2008: Member of Faculty of Graduate Studies Scholarship Committee, Dalhousie (Univ.)
- 2002-2003: Chair of Faculty of Graduate Studies Scholarship Committee, Dalhousie (Univ.)
- 2000-2002: Member of Faculty of Graduate Studies Scholarship Committee, Dalhousie (Univ.)
- 2001-2002: Chair of Faculty of Science, Tenure and Promotions Committee, Dalhousie (Univ.)
- 2000-2003: Member of Faculty of Science, Tenure and Promotions Committee, Dalhousie (Univ.)
- 1995-1998: Member of Faculty of Graduate Studies Council, Dalhousie (Univ.)
- 1990: Substitute Member of the Dalhousie Undergraduate Scholarships Committee (Univ.)

b. Departmental committees and responsibilities

2005-2007: Chair of Graduate Studies Committee (Coordinator), Dalhousie, Chemistry (Dept.)
2002-2003: Chair of Mass Spectrometry Faculty Search Committee, Dalhousie, Chemistry (Dept.)
2002-2003: Chair of Graduate Studies Committee (Coordinator), Dalhousie, Chemistry (Dept.)
2002: Acting Chair of Graduate Studies Committee (Coordinator), Dalhousie, Chemistry (Dept.)
1997-1999: Chair of Graduate Studies Committee (Coordinator), Dalhousie, Chemistry (Dept.)
1994-1996: Chair of Graduate Studies Committee (Coordinator), Dalhousie, Chemistry (Dept.)
1997-2003: Member of Graduate Studies Committee, Dalhousie, Chemistry (Dept.)
1990-1991: Publicity Representative, Dalhousie, Chemistry (Dept.)
1987-1996: Member of Graduate Studies Committee, Dalhousie, Chemistry (Dept.)
1987-1990: Member of Undergraduate Studies Committee, Dalhousie, Chemistry (Dept.)
1988-1990: Invited Speaker (Seminar) Coordinator, Dalhousie, Chemistry (Dept.)

c. Membership and service on international, national and provincial professional bodies and societies (include any offices held and dates; do not include grant selection committees - these belong in 7e, below)

2019-2020: Past Chair of the Chemical Institute of Canada (National)
2018-2019: Chair of the Chemical Institute of Canada (National)
2017-2018: Vice Chair of the Chemical Institute of Canada (National)
2016-2017: Past President of Canadian Society for Chemistry (National)
2015-2016: President of Canadian Society for Chemistry (National)
2014-2015: Vice President of Canadian Society for Chemistry (National)
2013-2015: Chair of Canadian Council of University Chemistry Chairs CCUCC (National)
2006-2019: Chair of Canadian National Committee for IUPAC (National)
2006-2009: Member of the Board of Directors for CSC and Director of Subject Divisions (National)
2004-2012: Member of Canadian National Committee for IUPAC (National)
2002-2005: Chair of NMR Users Committee of Atlantic Region Magnetic Resonance Centre (Region)
2002-2004: Past Chair of Division of Inorganic Chemistry of Canadian Society for Chemistry (National)
2000-2002: Chair of Division of Inorganic Chemistry of Canadian Society for Chemistry (National)
1998-2000: Vice Chair of Division of Inorganic Chemistry of Canadian Society for Chemistry (National)

d. Conference organisational committees (indicate position in organisation)

2021: Chair of the Organizing Committee for the International Union for Pure and Applied Chemistry (IUPAC) 51st General Assembly and 48th World Chemistry Congress, Montreal
2012: Conference Chair for the 13th International Symposium on Inorganic Ring Systems, Victoria
2006: Inorganic Program Coordinator for Canadian Society for Chemistry Conference, Halifax

e. Grant committees (agency, committee, period served)

2014: Member of the Multidisciplinary Assessment Committee for Major Science Initiatives CFI (National)
2009-: Member of the EPSRC Peer Review College (International)
2007-2009: Member of DAS (Discovery Accelerator Supplement) Grants Selection Committee (NSERC)
2001-2004: Member of MFA (Major Facilities Access) Grants Selection Committee (NSERC)
1999-2000: Chair of Grants Selection Committee 024 (NSERC)
1997-1999: Member of Grants Selection Committee 024 (NSERC)

f. Grant proposals reviewed (include site visits)

g. Visiting scientists hosted (include lab visitors who have spent more than two weeks in your group)

h. Editorships

2011-:	Member of the Editorial Advisory Board for Reviews in Inorganic Chemistry (International)
2007-:	Member of the Editorial Advisory Board for Heteroatom Chemistry (International)
2006-9:	Member of the Editorial Advisory Board for Canadian Journal of Chemistry (National)
1993-2010:	Associate Editor (Main Group Chemistry), "Coordination Chemistry Reviews"
1991-2010:	Member of the Editorial Board of "Coordination Chemistry Reviews".

i. Reviews for journals, book reviews, published commentaries

Canadian Journal of Chemistry, Chemical Communications, Dalton Transactions, Chemistry – A European Journal, Journal of the American Chemical Society, Heteroatom Chemistry, Bulletin de la Societe Chimique de France, Coordination Chemistry Reviews, Angewandte Chemie, European Journal of Inorganic Chemistry, Inorganic Chemistry, Organometallics, Journal of Inorganic Biochemistry

8. RESEARCH SUPERVISION and TRAINING OF HIGHLY QUALIFIED PERSONNEL

Summary: 75 undergraduate researchers, 9 completed MSc, 24 completed PhD

a. Undergraduate (Honours and project) research students:

1. Christopher J. Levy, BSc Dalhousie 1989: *"Non-Metal Heterocycles Containing New Bonding Arrangements"*; Presently: Instructor, Western University.
2. J. Marc Whalen, BSc Dalhousie 1990: *"Adduct Chemistry of Tricoordinate Phosphorane"*; Presently: Lecturer, Dalhousie University.
3. Robin G. Hicks, BSc Dalhousie 1990: *"Studies of Trivalent Antimony Chloroamides"*; Presently: Professor and Associate Dean, University of Victoria.
4. James Jonasson, BSc Dalhousie 1991: *"Preparation of the First Nitrogen, Phosphorus, Selenium, Silicon Ring: A Genuine Heterocycle"*.
5. Craig MacKinnon, BSc Dalhousie 1992: *"Non-Octet Pnictogen Centres: Cationic Carbene Analogues"*; (R. J. Boyd, co-supervisor); Presently: Professor, Professor and Chair, Lakehead University.
6. Derek Gates, BSc Dalhousie 1993: *"Halogenated Monophosphazenes"*; Presently: Professor, UBC.
7. Paul Duval, BSc Dalhousie 1993: *"Arsenium and Stibonium Cations"*;
8. Vasiliky Kyrimis, BSc Dalhousie 1993: *"An Unprotected Phosphenium Cation"*.
9. Brian Moulton, BSc Dalhousie 1994: *"Competitive Lewis Acid/Base Reactions of Group 13 Trichlorides"*.
10. Nicole Aucoin, BSc Dalhousie 1994: *"Elimination of a Secondary Amine from a Trisaminophosphine"*; (R. J. Boyd co-supervisor); Presently: Lecturer, Calgary.
11. Charles Macdonald, BSc Dalhousie 1994: *"Lewis Base Adducts of 2-Chloro-1,3,2-dithiabismutholidine: Potential Ulcer Medications"*; Presently: Professor and Dean of Science, Carlton University.
12. Jason Wiles, BSc Dalhousie 1994: *"Complexation of Bifunctional p-Donors to Main Group Lewis Acids"*; Presently: Research Scientist with Achillion Pharmaceuticals, New Haven.
13. Stephanie D. Warner, BSc Dalhousie 1995: *"Infrared and Raman Characterization of the NP Bond"*; Presently: Patent Officer.
14. Jason Nugent, BSc Dalhousie 1995: *"The Chemistry of a Neutral Zwitterionic Phosphenium"*.
15. Andrew McWilliams, BSc Dalhousie 1996: *"Preparation and Characterization of Complexes Involving a neutral Phosphorus Acceptor"*; Presently: Assistant Professor, Ryerson.
16. Aaron Hoskin, BSc Dalhousie 1996: *"Synthesis and Characterization of New Pnictogenium Cations"*;
17. Chi Minh Phi, BSc Dalhousie 1996: *"New Phosphenium Cations from Insertion of the Phosphoazonium Cation into Element Hydrogen Bonds"*; Presently: Physician.
18. Wendy Ortiz-Ojeda, BSc Dalhousie 1996: *"Mass Spectrometric Studies of Pnictogenium Derivatives"*.
19. Teresa Brown, BSc Dalhousie 1998: *"Synthesis, Characterisation and Preliminary Antimicrobial Assessment of a Series of Trithiabismocane Thiolate Derivatives"*; Presently: Physician.
20. Luke Chen, BSc Dalhousie 1999: *"Electrospray Ionization Mass Spectrometry Studies of Bismuth(III) Carboxylates in Solution"*; Presently: Physician.

21. Nadia Aumeerally, BSc Mount Allison University 2000: *"Bismuth Complexes with Mixed Bifunctional Thiolate Ligands"*.
22. Devon Moore, BSc Dalhousie 2000: *"Potential Precursors to Compounds Containing Antimony-Tungsten and Antimony-Molybdenum Double Bonds"*; Presently: Research Scientist with IMP, Halifax, NS.
23. Natasha Zwarun, BSc Dalhousie 2000: *"Synthesis and UV-Visible Spectroscopic Characterisation of Compounds Containing Nitrogen-Heavier Pnictogen Bonds"*.
24. Bobby Ellis, BSc Dalhousie 2001: *"Pnictetidine Interactions with Lewis Acids"*; Presently: Assistant Professor, Acadia University.
25. Deanna McKay, BSc Dalhousie 2001: *"Mixed Bifunctional Thiolate Ligands on Bismuth"*; Presently: Physician.
26. Faisal Aldaye, BSc Dalhousie 2002: *"Characterisation of Bismuth Salicylate Complexes"*.
27. Korey Conroy, BSc Dalhousie 2002: *"Oligomerisation and Polymerisation of Iminophosphines"*. Presently: Scientific writer, Calgary.
28. Chris Andrews, BSc Dalhousie 2003: *"Phosphazane dimers and Iminophosphine Monomers"*.
29. Mark D'eon, BSc Dalhousie 2003: *"Synthesis of a Novel Phosphino-diketimine"*.
30. David Herbert, BSc Dalhousie 2004 (NSERC USRA) *"Phosphine-Phosphenium Cations: Exploiting Homoatomic P-P Coordination Chemistry"*; Presently: Assistant Professor, University of Manitoba.
31. Meaghan Grundy, BSc Dalhousie 2004 *"Diphosphine Chelate Complexes of the Phosphadiazonium Cation"*.
32. Wes LeBlanc, BSc Dalhousie 2004 *"Electrospray Ionization Mass Spectrometric Identification of Heavy Metal-Amino Acid Adducts"*.
33. Ezra Edelstein, BSc Dalhousie 2005 *"Synthesis and Characterisation of New Stibazanes Through the Dehydrohalide Coupling of Antimony Trichloride and 2,4-Dimethylaniline"*.
34. Frank Bezanson, BSc Dalhousie 2005 *"Reactions of Strong Lewis Bases with Cyclo-1,3-di-tert-butyl-2,4-dihalodiphospha-1,3-diazane"*.
35. Mark Little, BSc Dalhousie 2005 *"Systematically Investigating Interactions of Hg, Tl, Pb and Bi with Sulfur-Containing Amino Acids"*.
36. Gabriel Menard, BSc University of Ottawa 2006 (NSERC USRA) *"Protonation of Phosphines and Polyphosphines"*, Presently: Assistant Professor, UC Santa Barbara.
37. Rebecca Neu, BSc Dalhousie 2006 *"An Electrospray Ionization MS study of the Interactions of Biologically Relevant Ligands with Thallium(I)"*.
38. Ian Mallov, BSc Dalhousie 2006 *"New Phosphonium Cations"*; Presently: Graduate student, Ottawa.
39. Devin Mahnke, BSc Victoria 2007 *"New catena-Phosphorus Cations"*.
40. Patricia Edem, BSc Dalhousie 2007 *"Competition between EDTA and Amino Acids for Lead Using Electrospray Ionization MS"*, Presently: Graduate student, McMaster University.
41. Liz Baird, BSc 2007 *"Ligand Stabilized Arsenium Cations"*.
42. Catherine O'Neill, BSc Dalhousie 2009 (NSERC USRA) *"New Complexes of Lewis Acceptor Phosphorus Cations"*.
43. Tom Robinson, BSc Bath 2009 *"New catena-Phosphorus Cations"*. Presently: Postdoctoral Fellow, Oxford University.
44. Paul Duschesne, BSc Dalhousie 2011, *"Amino acid-Heavy Metal Complexes"*.
45. Jennifer Lee, BSc Dalhousie 2011, *"Amino acid-Heavy Metal Complexes"*.
46. Sunisha Neupane, BSc Dalhousie 2011, *"Amino acid-Heavy Metal Complexes"*.
47. Jennifer Kalil, BSc Dalhousie 2012, *"Amino acid-Heavy Metal Complexes"*.
48. Jonathan Melong, BSc Dalhousie 2012, *"Amino acid-Heavy Metal Complexes"*.
49. Kyungsoo Shin, BSc Dalhousie 2012, *"Amino acid-Heavy Metal Complexes"*.
50. Marc Whoriskey, BSc 2010 (NSERC USRA) *"New catena-Phosphorus Cations"*. Presently: Medical Student.
51. Richard Burford, BSc Mount Allison University 2008 (NSERC USRA) *"New catena-Phosphorus Cations"*. Presently: Research Scientist at Switch, BC.
52. Lauren Longbardi, BSc 2011 (NSERC USRA) *"Interactions of Biologically Relevant Ligands with Lead"*. Presently: Postdoctoral Fellow.
53. Aled Iaboni, BSc 2012 (NSERC USRA) *"Synthesis of Tethered 2-Phosphino-1,3-diphosphonium Cations"*.
54. Kim Theriault, BSc 2010 *"Complexes involving Pnictogen-pnictogen Bonds"* Presently: Lecturer Vancouver Island University.
55. Bryanna Wood, BSc Dalhousie 2013, *"NMR of Phosphorus Cations"*
56. Lauren Doyle, BSc Dalhousie 2012 (NSERC USRA) *"Tetrael-phosphonium Cations"* Presently: Research Scientist,

Intel.

57. Ryan Tilley, BSc Dalhousie 2012 (NSERC USRA) "*New catena-Phosphorus Cations*"
58. Stewart Lucas, BSc 2011 "*Tetraelphosphonium Cations*" Presently: Science Stores, UVic.
59. Brendan Peters, BSc 2011 "*Interpnictogen Cations*".
60. James Sharpe, BSc 2011 "*New catena-Phosphorus Cations*".
61. Ahmed Rashid, BSc 2013 (NSERC USRA) "*Interpnictogen Compounds*".
62. Jordan Friedmann, BSc 2015 "*Cations of the Tetraels*".
63. Karlee Bamford, BSc 2015 (NSERC USRA) "*Phosphorus-Antimony Compounds*" Presently: Graduate student, Toronto.
64. Michelle Kim, BSc 2016 "*Aluminum-Phosphorus Cations*"
65. Diego Martelino, BSc 2016 "*PhosphorusChalcogne-Antimony Complexes*"
66. Hector Cortes, BSc 2014 "*Coordination Complexes of Silicon Cations*"
67. Caitlin Croft, BSc 2016 "*Phosphorus-Antimony Compounds*"
68. Kelvin Chui, BSc 2016 "*Phosphorus-Phosphorus Cations*"
69. Kevin Vos, BSc 2015 "*Phosphorus-Antimony Compounds*". Presently: Graduate student, UVic.
70. Seth Chhina, BSc 2017 "*Silicon-Nitrogen Cations*"
71. Kaitlyn Sahlstrom, BSc 2017 "*Germanium-bipy Complexes*"
72. Katherine Krause, BSc 2018 "*Phosphorus Cations*". Presently: Graduate student, UBC.
73. James Saville, BSc 2018 "*Gallium-phosphine Complexes*"
74. Grayson Tilstra, BSc 2019 "*Amine Complexes of Antimony*"
75. Amanda Ackroyd, BSc 2018 "*Pyridine Complexes of Phosphorus*". Presently: Graduate student, Toronto.

b. MSc students (graduation date in bold):

1. **1992** - John D. McInnis, BSc Mount Allison, Presently: Research technician with Louisiana Pacific, Canada.
2. **1996** - Bradley Yhard, BSc St. Francis Xavier, Presently, high school teacher.
3. **2000** - Laura Stark, BSc Acadia.
4. **2005** - Katie Groom, BSc Toronto, PhD Queen's 2013.
5. **2006** - Kendall Sharp, BSc Bishop's, Presently: Research technician with Immunovaccine Technologies, NS.
6. **2007** - Susanne Riegel, BSc Calgary, Presently: Product Manager with Nanalysis, Calgary.
7. Janet Pickup, BSc Cape Breton, 2009-2010.
8. **2011** - Dane Knackstedt, BSc Mount Allison.
9. Stewart Lucas, BSc 2011, Dalhousie, Presently: Science Stores, UVic.
10. Meehan Yogendra, BSc Munster, Diplome Dresden 2013, Presently: PhD student Dresden.
11. **2017** - Hannah Sinclair, BSc Acadia, Presently, high school teacher.
12. Johanna Frickel, BSc LMU Munich, MSc 2016.
13. Tanja Huber, BSc LMU Munich, MSc 2017.
14. Christoph Riesinger, BSc Regensburg, MSc Regensburg expected 2020.

c. PhD students (graduation date in bold):

1. **1990** - Bruce W. Royan, BSc Edinburgh, "*I. Synthesis and Characterisation of New Main Group Heteronaphthalenic Cations II. An Investigation of the Triphenylphosphine Chalcogenide-Trichloroaluminium(III) Adduct Systems*"; Presently: Research scientist with Infinium, UK.
2. **1991** - Rupert E. v. H. Spence, BSc Newcastle, "*Tetra- and Tri-Coordinate Phosphoryl Systems*"; Presently: Research scientist with DuPont, Kingston, Canada.
3. **1994** - Trenton Parks, BSc Lethbridge, "*Pnicogylidenes*"; Presently: Research scientist with City of Calgary, Canada.
4. **1995** - Jason Clyburne, BSc Acadia, "*New Nitrogen-Phosphorus Chemistry Dependent on the 2,4,6-Tri-t-butylphenyl Substituent*"; Presently: Professor and Canada Research Chair, St. Mary's University.
5. **1995** - Pierre Losier, BSc New Brunswick, "*Coordination Chemistry of Phosphenium Centers*"; Presently: Process Chemist with Bowater-Mersey, Nova Scotia.
6. **1997** - Lisa Agocs, BSc Waterloo, "*Design of Bioactive Chalcogenobismuth(III) Heterocycles*"; Presently:

Research Scientist with Shell, Holland.

7. **1998** - Charles Macdonald, BSc Dalhousie, "*Steric and Electronic Control of Low Coordinate Pnictogen Bonding*"; Leffek Prize 1998 for best PhD thesis in Chemistry at Dalhousie; Presently: Professor and Dean of Science, Carlton University.
8. **1999** - Glen Briand, BSc St. Francis Xavier, "*Bifunctional Ligands in Discerning and Developing the Fundamental and Medicinal Chemistry of Bismuth(III)*"; Leffek Prize 1999 for best PhD thesis in Chemistry at Dalhousie. Presently: Professor, Mount Allison University.
9. **2001** - Andrew Phillips, BSc Toronto, "*Synthesis and Characterisation of Complexes Involving Phosphino-centres as Lewis Acids*"; Presently: Lecturer, University College Dublin.
10. **2001** - Denise Walsh, BSc Eire, "*Synthesis and Characterisation of Bisaminopnictines*".
11. **2003** - Melanie Eelman, BSc Mount Allison, "*Systematically Developing the Chemistry of Bismuth and Other Heavy Metals with Biorelevant Ligands*".
12. **2004** - Paul Ragogna, BSc Brock, "*New Developments in the Lewis Acid Chemistry of Phosphorus (III)*"; Leffek Prize 2004 for best PhD thesis in Chemistry at Dalhousie; Presently: Professor, University of Western Ontario.
13. **2005** - Heather Spinney, BSc Mount Allison, "*Coordination Chemistry of a Phosphadiazonium Lewis Acceptor*"; Presently: Senior Chemist at Dow Chemical, Midland, Michigan.
14. Robyn Ovans, BSc Victoria; Presently: Lecturer, Luther College, Iowa.
15. **2006** - Jeff Landry, BSc McMaster, "*Pnictazane Oligomers RNPnX – Towards Polypnictazanes*".
16. **2006** - Adam Dyker, BSc UNB, "*catena-Phosphorus Cations*"; Presently: Professor, UNB.
17. **2007** - Heather Phillips, BSc Calgary, "*Investigating the Interactions of Bismuth and Other Metals with Biologically Relevant Molecules*"; Presently: Industry Liaison, University of Calgary.
18. **2009** - Reagan Davidson, BSc, MSc Mount Allison, "*Precursors to Oligo- and Polypnictazanes*"; Presently: Regional Manager for Imbrium Systems Inc., Ontario.
19. **2009** - Cheryl Saunders, BSc Queen's, "*Isolation of Lead-Amino Acid and Mercury-Amino Acid Complexes with Characterization in the Solid State, the Solution State and the Gas Phase*". Presently: Michelin, Nova Scotia.
20. **2010** - Eamonn Conrad, BSc St. Francis Xavier, "*General Synthetic Approaches to Pn-Pn' Bond Formation (Pn or Pn' = P, As, Sb, Bi)*" Presently: Scientist, Solvay, Ontario.
21. **2010** - Yuen-Ying Carpenter, BSc UBC, "*Investigations into the Reactivity and Structure of Phosphinophosphonium Cations and Related Species*". Presently: Lecturer, University of Calgary.
22. **2013** - Elizabeth MacDonald, BSc UNB, "*Cationic and Dicationic Phosphine Complexes of Tin and Germanium*". Presently: Scientist, Solid State Pharma Inc., Halifax.
23. **2015** - Saurabh Chitnis, BSc McMaster, "*P-P and P-Sb Coordination Chemistry*". Presently: Assistant Professor, Dalhousie University.
24. **2018** - Paul Gray, BSc Acadia, "*Cationic Complexes of the Group 13-15 Elements Supported by N-, P-, and O-based Ligands*". Presently: Postdoctoral Fellow, University of Manitoba.
25. Kai Schwedtmann, BSc Munster, PhD Dresden expected 2019.
26. Max Poller, BSc LMU Munich, PhD Munich expected 2019.
27. **2018** - Chris Frazee, BSc UNB, "*Coordination Chemistry of Sb (III) and Sb (V) Cations*".
28. Luis Duetsch, BSc Regensburg, PhD Regensburg expected 2019.

d. Postdoctoral Fellows:

1. Melbourne J. Schriver, PhD UNB, Killam Postdoctoral Fellowship 1988 - 1990. Presently: Professor, Atlantic Baptist University, Moncton, NB.
2. Simon Mason, PhD Leicester, 1991-1993.
3. Daren LeBlanc, PhD McMaster, 1997-2000; Presently: Research Scientist, Maxxam Analytics.
4. Roland Rösler, PhD Bremen, Killam Postdoctoral Fellowship 1999 – 2001; Presently: Professor, Calgary.
5. Jan Weigand, PhD Munich, Feodor Lynen Postdoctoral Fellowship 2005-2007; Presently: Professor, Dresden.
6. Cheryl Saunders, PhD Dalhousie, 2009-2010. Presently: Michelin (Nova Scotia).
7. Marc Whalen, PhD McMaster, 2010-2011. Presently: Lecturer, Dalhousie University.
8. Alasdair Robertson, PhD Bristol, 2012-2014. Presently: Postdoctoral Fellow, Heriot Watt.
9. Saurabh Chitnis, BSc McMaster, PhD Victoria, 2015. Presently: Assistant Professor Dalhousie University.
10. Riccardo Suter, BSc/PhD ETH Zurich, 2016-2018.