

Curriculum Vitae for NEIL BURFORD January 2010

GENERAL:

Date of Birth: 29 April 1958
Place of Birth: Liverpool, England
Citizenship: British and Canadian
Marital Status: Married (Hélène) 2 Children (Richard 1986, Matthew 1988)
Address: Department of Chemistry
Dalhousie University
Halifax, Nova Scotia B3H 4J3, Canada
Phone: 902-494-3707; fax: 902-494-1310; email: neil.burford@dal.ca

EDUCATION:

1969-1976 West Derby Comprehensive School, Liverpool, England, June 1976
1976-1979 University of Wales College Cardiff, Cardiff, Wales, B.Sc. May 1979
1979-1983 University of Calgary, Calgary, Alberta, Canada, Ph.D, June 1983
(Research Supervisor: Prof. T. Chivers)

RESEARCH POSITIONS and AWARDS:

May 2009, Dalhousie University	Faculty of Science Award for Excellence in Teaching
November 2008-October 2015, Dalhousie University	Tier I Canada Research Chair
July 2008-July 2010, University of Regensburg, Germany	Alexander von Humboldt Fellowship
May 2007, Chemical Institute of Canada	Elected Fellow
May 2006, Canadian Society for Chemistry	Alcan Lecture Award
July 2003-June 2005, Canada Council	Canada Council for the Arts Killam Fellow
November 2001-October 2008, Dalhousie University	Tier I Canada Research Chair
November 2000-June 2023, Dalhousie University	Harry Shirreff Professor of Chemical Research
July 1998-June 2003, Dalhousie University	Faculty of Science Killam Professor in Chemistry
July 1996-June 1997, University of Bielefeld, Germany	Alexander von Humboldt Fellowship
1 July 1995, Dalhousie University	Professor
1 July 1991, Dalhousie University	Associate Professor
January 1987, Dalhousie University	Assistant Professor
October 1984, University of New Brunswick (Supervisor: Prof. J. Passmore)	Research Associate
October 1983, University of Alberta (Supervisor: Prof. R.G. Cavell)	Post-Doctoral Fellow



**DALHOUSIE
UNIVERSITY**

Inspiring Minds

LECTURE EXPERIENCE: (No. of lectures in parentheses) [No. of students in square brackets]

Sept 2009/Dec 2009	Concepts in Chemistry 1011A	(105) [>450]
Jan 2009/Apr 2009	Concepts in Chemistry 1012B	(70) [>300]
Jan 2009/Apr 2009	Topics in Main Group Chemistry 4101A/5101A	(35) [19]
Jan 2008/Apr 2008	Concepts in Chemistry 1012B	(105) [>450]
Jan 2007/Apr 2007	Topics in Non-Metal Chemistry 4101A/5101A	(35) [35]
Sept 2006/Dec 2006	General Chemistry 1011A	(70) [324]
Sept 2005/Dec 2005	Inorganic Chemistry 3101A	(35) [26]
Sept 2005/Dec 2005	Topics in Non-Metal Chemistry 5101A	(35) [16]
Sept 2002/Dec 2002	Advanced Non-Metal Chemistry 6199A	(seminars) [1]
Sept 2002/Dec 2002	Inorganic Chemistry 3101A	(35) [39]
Sept 2002/Dec 2002	Topics in Non-Metal Chemistry 5101A	(35) [10]
Sept 2001/Dec 2001	Advanced Non-Metal Chemistry 6199A	(seminars) [3]
Sept 2001/Dec 2001	Inorganic Chemistry 3101A	(35) [25]
Sept 2001/Dec 2001	Topics in Non-Metal Chemistry 4101A/5101A	(35) [15]
Sept 2000/Dec 2000	Inorganic Chemistry 3101A	(35) [35]
Sept 2000/Dec 2000	Topics in Non-Metal Chemistry 4101A/5101A	(35) [15]
Jan 2000/Apr 2000	Inorganic Chemistry 3101B	(35) [24]
Sept 1999/Dec 1999	Topics in Non-Metal Chemistry 4101A/5101A	(35) [8]
Sept 1998/Dec 1998	Inorganic Chemistry 3101A	(35) [32]
Jan 1998/Apr 1998	Inorganic Chemistry 3101B	(35) [25]
Sept 1997/Dec 1997	Topics in Non-Metal Chemistry 4101A/5101A	(35) [17]
Jan 1996/Apr 1996	Inorganic Chemistry 3101B	(35) [47]
Sept 1995/Dec 1995	Topics in Non-Metal Chemistry 4101A/5101A	(35) [17]
May 1995/June 1995	Introductory Chemistry 1010S	(70) [60]
Jan 1995/Apr 1995	Introductory Inorganic Chemistry 2101B	(35) [45]
Sept 1994/Dec 1994	Inorganic Chemistry 3101A	(35) [34]
May 1994	Introductory Organic Chemistry 2400SS	(35) [95]
Jan 1994/Apr 1994	Introductory Inorganic Chemistry 2101B	(35) [45]
Jan 1994/Apr 1994	Topics in Non-Metal Chemistry 4101A/5101A	(35) [13]
Sept 1993/Dec 1993	Inorganic Chemistry 3101A	(35) [34]
May 1993	Introductory Organic Chemistry 2400SS	(35) [110]
Jan 1993/Apr 1993	Inorganic Chemistry 3110B	(35) [41]
Sept 1992/Dec 1992	Topics in Non-Metal Chemistry 4101A/5101A	(35) [22]
Sept 1992/Dec 1992	Introductory Chemistry Enriched 1030R	(35) [36]
May 1992	Introductory Chemistry 1010S	(35) [51]
Jan 1992/Apr 1992	Advanced Non-Metal Chemistry 6108B	(35) [2]
Sept 1991/Apr 1992	Introductory Chemistry Enriched 1030R	(35) [37]
Sept 1991/Dec 1991	Inorganic Chemistry 3110A	(35) [43]
May 1991	Introductory Chemistry 1010S	(35) [45]
Jan 1991/Apr 1991	Advanced Non-Metal Chemistry 6100B	(35) [2]
Jan 1991/Apr 1991	Inorganic Chemistry 3110B	(35) [53]
Sept 1990/Apr 1991	Introductory General Chemistry 1100R	(70) [84]
May 1990/June 1990	Introductory Chemistry 1010S	(70) [37]
Sept 1990/Dec 1990	Topics in Non-Metal Chemistry 4100A/5100A	(35) [14]
Sept 1989/Dec 1989	Inorganic Chemistry 3110A	(35) [32]

Sept 1989/Apr 1990	Introductory General Chemistry 1100R	(70) [97]
Jan 1989/Apr 1989	Advanced Non-Metal Chemistry 6130B	(35) [4]
Sept 1988/Dec 1988	Topics in Main Group Chemistry 5130A	(35) [4]
Sept 1988/Dec 1988	Introductory Inorganic Chemistry 2110A	(35) [63]
Sept 1988/Apr 1989	Introductory General Chemistry 1100R	(70) [84]
Jan 1988/Apr 1988	Introductory Inorganic Chemistry 2110B	(35) [29]
Sept 1987/Apr 1988	Introductory General Chemistry 1100R	(70) [78]
Jan 1987/May 1987	Topics in Main Group Chemistry 5130	(35) [8]
Oct 1985/Dec 1985	Topics in Main Group Chemistry 4201, UNB	(35) [12]
Feb 1985/Mar 1985	Topics in Main Group Chemistry 4222, UNB	(11) [12]

UNDERGRADUATE RESEARCH (HONOURS AND SUMMER) STUDENT SUPERVISION:

- 1. Christopher J. Levy, B.Sc. 1989:** *"Non-Metal Heterocycles Containing New Bonding Arrangements"*; Presently: Associate Professor, Kansas State University.
- 2. J. Marc Whalen, B.Sc. 1990:** *"Adduct Chemistry of Tricoordinate Phosphorane"*; Presently: Sessional Lecturer, Dalhousie University, Mount St. Vincent University.
- 3. Robin G. Hicks, B.Sc. 1990:** *"Studies of Trivalent Antimony Chloroamides"*; Presently: Professor, University of Victoria.
- 4. James Jonasson, B.Sc. 1991:** *"Preparation of the First Nitrogen, Phosphorus, Selenium, Silicon Ring: A Genuine Heterocycle"*.
- 5. Craig MacKinnon, B.Sc. 1992:** *"Non-Octet Pnictogen Centres: Cationic Carbene Analogues"*; (R. J. Boyd, co-supervisor); Presently: Assistant Professor, Lakehead.
- 6. Derek Gates, B.Sc. 1993:** *"Halogenated Monophosphazenes"*; Presently: Associate Professor, UBC.
- 7. Paul Duval, B.Sc. 1993:** *"Arsenium and Stibonium Cations"*; Presently: Assistant Professor, Missouri.
- 8. Vasiliky Kyrimis, B.Sc. 1993:** *"An Unprotected Phosphenium Cation"*.
- 9. Brian Moulton, B.Sc. 1994:** *"Competitive Lewis Acid/Base Reactions of Group 13 Trichlorides"*. Presently: Assistant Professor, Brown.
- 10. Nicole Aucoin, B.Sc. 1994:** *"Elimination of a Secondary Amine from a Trisaminophosphine"*; (R. J. Boyd co-supervisor); Presently: Lecturer, Calgary.
- 11. Charles Macdonald, B.Sc. 1994:** *"Lewis Base Adducts of 2-Chloro-1,3,2-dithiabismutholidine: Potential Ulcer Medications"*; Presently: Associate Professor, Windsor.
- 12. Jason Wiles, B.Sc. 1994:** *"Complexation of Bifunctional p-Donors to Main Group Lewis Acids"*; Harvard; Presently: Research Scientist with Achillion Pharmaceuticals, New Haven.
- 13. Stephanie D. Warner, B.Sc. 1995:** *"Infrared and Raman Characterization of the NP Bond"*; Presently: Patent Officer.
- 14. Jason Nugent, B.Sc. 1995:** *"The Chemistry of a Neutral Zwitterionic Phosphenium"*.
- 15. Andrew McWilliams, B.Sc. 1996:** *"Preparation and Characterization of Complexes Involving a neutral Phosphorus Acceptor"*; Presently: Assistant Professor, Ryerson.
- 16. Aaron Hoskin, B.Sc. 1996:** *"Synthesis and Characterization of New Pnictogenium Cations"*; Presently: PDF with Niecke, Bonn, Germany.

17. **Chi Minh Phi, B.Sc. 1996:** *"New Phosphenium Cations from Insertion of the Phosphoazonium Cation into Element Hydrogen Bonds"*; Presently: Physician.
18. **Wendy Ortiz-Ojeda, B.Sc. 1996:** *"Mass Spectrometric Studies of Pnictogenium Derivatives"*.
19. **Teresa Brown, B.Sc. 1998:** *"Synthesis, Characterisation and Preliminary Antimicrobial Assessment of a Series of Trithiabismocane Thiolate Derivatives"*; Presently: Physician.
20. **Luke Chen, B.Sc. 1999:** *"Electrospray Ionization Mass Spectrometry Studies of Bismuth(III) Carboxylates in Solution"*; Presently: Physician.
21. **Nadia Aumeerally, B.Sc. Mount Allison University 2000:** *"Bismuth Complexes with Mixed Bifunctional Thiolate Ligands"*; Presently: Pre-med student.
22. **Devon Moore, B.Sc. 2000:** *"Potential Precursors to Compounds Containing Antimony-Tungsten and Antimony-Molybdenum Double Bonds"*; Presently: Research Scientist with IMP, Halifax, NS.
23. **Natasha Zwarun, B.Sc. 2000:** *"Synthesis and UV-Visible Spectroscopic Characterisation of Compounds Containing Nitrogen-Heavier Pnictogen Bonds"*; Presently: Research scientist.
24. **Bobby Ellis, B.Sc. 2001:** *"Pnictetidine Interactions with Lewis Acids"*; Presently: Assistant Professor, Acadia University.
25. **Deanna McKay, B.Sc. 2001:** *"Mixed Bifunctional Thiolate Ligands on Bismuth"*; Presently: Physician.
26. **Faisal Aldaye, B.Sc. 2002:** *"Characterisation of Bismuth Salicylate Complexes"*. Presently: NSERC Postdoctoral Fellow, Harvard
27. **Korey Conroy, B.Sc. 2002:** *"Oligomerisation and Polymerisation of Iminophosphines"*. Presently: Postdoctoral Fellow with Piers, Calgary.
28. **Chris Andrews, B.Sc. 2003:** *"Phosphazane dimers and Iminophosphine Monomers"*; Presently: Research scientist, Sepracor.
29. **Mark D'eon, B.Sc. 2003:** *"Synthesis of a Novel Phosphino-diketimine"*.
30. **David Herbert, B.Sc. 2004 (NSERC USRA)** *"Phosphine-Phosphenium Cations: Exploiting Homoatomic P-P Coordination Chemistry"*; Presently: Graduate student with Manners, Bristol.
31. **Meaghan Grundy, B.Sc. 2004** *"Diphosphine Chelate Complexes of the Phosphadiazonium Cation"*.
32. **Wes LeBlanc, B.Sc. 2004** *"Electrospray Ionization Mass Spectrometric Identification of Heavy Metal-Amino Acid Adducts"*.
33. **Ezra Edelstein, B.Sc. 2005** *"Synthesis and Characterisation of New Stibazanes Through the Dehydrohalide Coupling of Antimony Trichloride and 2,4-Dimethylaniline"*.
34. **Frank Bezanson, B.Sc. 2005** *"Reactions of Strong Lewis Bases with Cyclo-1,3-di-tert-butyl-2,4-dihalodiphospha-1,3-diazane"*.
35. **Mark Little, B.Sc. 2005** *"Systematically Investigating Interactions of Hg, Tl, Pb and Bi with Sulfur-Containing Amino Acids"*.
36. **Gabriel Menard, B.Sc. University of Ottawa 2006 (NSERC USRA)** *"Protonation of Phosphines and Polyphosphines"*, Presently: Graduate student with Fryzuk, UBC.
37. **Rebecca Neu, B.Sc. 2006** *"An Electrospray Ionization MS study of the Interactions of Biologically Relevant Ligands with Thallium(I)"*, Presently: Graduate student with Stephan, Toronto.
38. **Ian Mallov, B.Sc. 2006** *"New Phosphonium Cations"*; Presently: Graduate student with Richeson, Ottawa.
39. **Devin Mahnke, B.Sc. Victoria 2007** *"New catena-Phosphorus Cations"*, Presently: Graduate

student, Berkeley.

40. **Patricia Edem, B.Sc. 2007** “*Competition between EDTA and Amino Acids for Lead Using Electrospray Ionization MS*”, Presently: Graduate student with Valliant, McMaster.
41. **Liz Baird, B.Sc. 2007** “*Ligand Stabilized Arsenium Cations*”.
42. **Catherine O’Neill, B.Sc. expected 2009 (NSERC USRA)** “*New Complexes of Lewis Acceptor Phosphorus Cations*”. Presently: Graduate Student with Jessop, Queen’s.
43. **Tom Robinson, B.Sc. Bath expected 2009** “*New catena-Phosphorus Cations*”. Presently: Graduate Student with Hill, Bath,
44. **Mark Whoriskey, B.Sc. expected 2010 (NSERC USRA)** “*New catena-Phosphorus Cations*”.
45. **Richard Burford, B.Sc. Mount Allison University 2008 (NSERC USRA)** “*New catena-Phosphorus Cations*”. Presently: Graduate Student with Piers, Calgary
46. **Lauren Longbardi, B.Sc. expected 2011 (NSERC USRA)** “*Interactions of Biologically Relevant Ligands with Lead*”.
47. **Aled Iaboni, B.Sc. expected 2012 (NSERC USRA)** “*Synthesis of Tethered 2-Phosphino-1,3-diphosphonium Cations*”.
48. **Kim Theriault, B.Sc. expected 2010** “*Complexes involving Pnictogen-pnictogen Bonds*”

GRADUATE STUDENT SUPERVISION:

PhD

1. **Bruce W. Royan, B.Sc. Edinburgh, Ph.D. June 1990:** “*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. **Rupert E. v. H. Spence, B.Sc. Newcastle, Ph.D. April 1991:** “*Tetra- and Tri-Coordinate Phosphoryl Systems*”; Presently: Research scientist with DuPont, Kingston, Canada.
3. **Trenton Parks, B.Sc. Lethbridge, Ph.D. August 1994:** “*Pnicoglydenes*”; Presently: Research scientist with City of Calgary, Canada.
4. **Jason Clyburne, B.Sc. Acadia, Ph.D. April 1995:** “*New Nitrogen-Phosphorus Chemistry Dependent on the 2,4,6-Tri-*t*-butylphenyl Substituent*”; Presently: Associate Professor and Canada Research Chair, St. Mary’s University.
5. **Pierre Losier, B.Sc. New Brunswick, Ph.D. August 1995:** “*Coordination Chemistry of Phosphenium Centers*”; Presently: Process Chemist with Bowater-Mersey, Nova Scotia.
6. **Lisa Agocs, B.Sc. Waterloo, Ph.D. July 1997:** “*Design of Bioactive Chalcogenobismuth(III) Heterocycles*”; Presently: Research Scientist with Shell, Holland.
7. **Charles Macdonald, B.Sc. Dalhousie, Ph.D. May 1998:** “*Steric and Electronic Control of Low Coordinate Pnictogen Bonding*”; **Leffek Prize 1998** for best Ph.D. thesis in Chemistry at Dalhousie; Presently: Associate Professor, University of Windsor.
8. **Glen Briand, B.Sc. St. Francis Xavier, Ph.D. July 1999:** “*Bifunctional Ligands in Discerning and Developing the Fundamental and Medicinal Chemistry of Bismuth(III)*”; **Leffek Prize 1999** for best Ph.D. thesis in Chemistry at Dalhousie. Presently: Associate Professor and Chair of Chemistry, Mount Allison University.
9. **Andrew Phillips, B.Sc. Toronto, Ph.D. January 2001:** “*Synthesis and Characterisation of Complexes Involving Phosphino-centres as Lewis Acids*”; Presently: Lecturer, Dublin.

10. **Denise Walsh**, B.Sc. Eire, **Ph.D. December 2001**: “*Synthesis and Characterisation of Bisaminopnictines*”.
11. **Melanie Eelman**, B.Sc. Mount Allison, **Ph.D. December 2003**: “*Systematically Developing the Chemistry of Bismuth and Other Heavy Metals with Biorelevant Ligands*”; Presently: Postdoctoral Fellow with Fogg, Ottawa.
12. **Paul Ragogna**, B.Sc. Brock, **Ph.D. February 2004**: “*New Developments in the Lewis Acid Chemistry of Phosphorus (III)*”; **Leffek Prize 2004** for best Ph.D. thesis in Chemistry at Dalhousie; Presently: Assistant Professor, University of Western Ontario.
13. **Heather Spinney**, B.Sc. Mount Allison, **Ph.D. March 2005** “*Coordination Chemistry of a Phosphadiazonium Lewis Acceptor*”; Presently: Postdoctoral Fellow with Cummins, MIT, June 2010 begins as Senior Chemist at Dow Chemical in Midland, Michigan.
14. **Robyn Ovans**, B.Sc. Victoria; Presently: Sessional Lecturer, Luther College, Iowa.
15. **Jeff Landry**, B.Sc. McMaster, **Ph.D. June 2006** “*Pnictazane Oligomers RNPnX – Towards Polypnictazanes*”; Presently: First Year Chemistry Coordinator McMaster University.
16. **Adam Dyker**, B.Sc. UNB, **Ph.D. December 2006** “*catena-Phosphorus Cations*”; Presently: Assistant Professor, UNB.
17. **Heather Phillips**, B.Sc. Calgary, **Ph.D. August 2007**, “*Investigating the Interactions of Bismuth and Other Metals with Biologically Relevant Molecules*”. Presently: Industry Liaison University of Calgary.
18. **Reagan Davidson**, B.Sc., M.Sc. Mount Allison, **Ph.D. August 2009**, “*Precursors to Oligo- and Polypnictazanes*”.
19. **Cheryl Saunders**, B.Sc. Queen’s, **Ph.D. August 2009**, “*Isolation of Lead-Amino Acid and Mercury-Amino Acid Complexes with Characterization in the Solid State, the Solution State and the Gas Phase*”. Presently: Postdoctoral Fellow with Burford.
20. **Yuen-Ying Carpenter**, B.Sc. UBC, **Ph.D. expected 2010**.
21. **Eamonn Conrad**, B.Sc. St. Francis Xavier, **Ph.D. expected 2010**.

MSc

1. **John D. McInnis**, B.Sc. Mount Allison, **M.Sc. September 1992**: Presently: Research technician with Louisiana Pacific, Canada.
2. **Bradley Yhard**, B.Sc. St. Francis Xavier, **M.Sc. April 1996**: Presently, high school teacher.
3. **Laura Stark**, B.Sc. Acadia, **M.Sc. August 2000**.
4. **Katie Groom**, B.Sc. Toronto, **M.Sc. August 2005**. Presently: Ph.D. student Queen’s.
5. **Kendall Sharp**, B.Sc. Bishop’s, **M.Sc. April 2006**. Presently: Research technician with Immunovaccine Technologies, NS.
6. **Susanne Riegel**, B.Sc. Calgary, **M.Sc. July 2007**. Presently: Ph.D. student Calgary.
7. **Dane Knackstedt**, B.Sc. Mount Allison, **M.Sc. expected 2010**.
8. **Janet Pickup**, B.Sc. Cape Breton, **M.Sc. expected 2011**.
9. **Elizabeth MacDonald**, B.Sc. UNB, **M.Sc. expected 2011**.

POSTDOCTORAL SUPERVISION:

1. **Melbourne J. Schriver**, Ph.D. UNB, Killam Postdoctoral Fellowship 1988 - 1990. Presently:

Professor, Atlantic Baptist University, Moncton, NB.

2. **Simon Mason**, Ph.D. Leicester, 1991-1993.
3. **Daren LeBlanc**, Ph.D. McMaster, 1997-2000; Presently: Research Scientist, Maxxam Analytics.
4. **Roland Rösler**, Ph.D. Bremen, Killam Postdoctoral Fellowship 1999 – 2001; Presently: Associate Prof., Calgary.
5. **Jan Weigand**, Ph.D. Munich, Feodor Lynen Postdoctoral Fellowship 2005-2007; Presently: Habilitand, Muenster.
6. **Cheryl Saunders**, Ph.D. Dalhousie, 2009-2010.

RESEARCH FUNDING:

Operating (external)

1987-1988	NSERC Operating grant	\$22,500 per year
1988-1989	Petroleum Research Fund ACS	\$20,000US per year
1989-1990	NSERC Operating grant	\$32,205 per year
1991-1992	Petroleum Research Fund ACS	\$20,000US per year
1991-1992	NSERC Research grant	\$49,140 per year
1993-1996	NSERC Research grant	\$53,839 per year
1995-1996	Contract Procter & Gamble (with one co-applicant)	\$48,000
1996-1998	NSERC Strategic grant (with three co-applicants)	\$81,000 per year
1998-1999	NSERC Strategic grant (with three co-applicants)	\$87,300 per year
1997-1998	NSERC Research grant	\$69,000 per year
1998-1999	NSERC Research grant	\$75,900 per year
1999-2001	NSERC Research grant	\$79,695 per year
2000-2001	Contract Procter & Gamble	\$45,000
2000-2001	NSERC Collaborative Research and Development grant	\$34,000 per year
2001-2005	NSERC Research grant	\$99,000 per year
2006-2010	NSERC Discovery grant	\$105,000 per year

Equipment (external)

1987	NSERC Equipment grant, Inert atmosphere apparatus	\$19,260
1991	NSERC Equipment grant (1 of 7 applicants), X-ray diffractometer	\$153,000
1991	NSERC Major Installation (1 of 9 applicants) Wide bore NMR	\$877,000
1992	NSERC Equipment grant with M. A. White, FT-IR spectrometer	\$71,061
1993	NSERC Equipment grant, Inert atmosphere apparatus	\$30,750
1993	NSERC Equipment grant (1 of 7 applicants), Computer	\$72,480
1994	NSERC Equipment grant with M. A. White, FT-Raman spectrometer	\$112,622
1994	NSERC Equipment grant (1 of 6 applicants), X-ray rotating anode	\$109,155
1994	NSERC Equipment grant (1 of 7 applicants), Mass spectrometer	\$324,629
1997	NSERC Equipment grant (1 of 7 applicants), NMR Console	\$490,000
1997	NSERC Equipment grant (1 of 7 applicants), Computer	\$71,000
1999	NSERC Equipment grant (1 of 7 applicants), X-ray powder	\$95,798
2000	NSERC Equipment grant (1 of 7 applicants), FT-IR spectrometer	\$36,116
2001	NSERC Equipment grant with M. A. White, FT-Raman spectrometer	\$71,000
2001	NSERC Equipment grant, Inert atmosphere apparatus	\$49,000
2002	NSERC Major Installation (1 of 10 applicants), 500 MHz NMR	\$800,000

2003	NSERC Equipment grant (1 of 7 applicants), Computer	\$69,000
2006	NSERC Equipment grant (1 of 7 applicants), ESI-TOF	\$150,000
2006	NSERC Equipment grant (1 of 7 applicants), Image plate detector	\$149,686

Other funding

2000-2023	Harry Shirreff endowment	\$6,000 per year
2001-2015	Canada Research Chair	\$30,000 per year
2003-2005	Killam Fellowship, Canada Council for the Arts	Teaching salary
1998-2003	Killam Professorship, Dalhousie University	\$2,000 per year
2001	CFI, Installation of a New Synthetic Laboratory	\$200,000
2002	NSRIT, Installation of a New Synthetic Laboratory	\$200,000

INVITED AND PLENARY LECTURES:

Acadia University, January 1989.

Chemical Institute of Canada Atlantic Conference, Memorial University of Newfoundland, July 1989.

Northern Illinois University, October 1989.

Dalhousie Summer Science Institute for High School Teachers, July 1990.

73rd Canadian Chemical Congress, Halifax, July 1990.

Dalhousie Student Symposium on Inorganic Chemistry, October 1990.

Lecture Tour of Texas and New Mexico, February 1991:

University of Texas at Austin, Texas Christian University, Texas Tech, Southern Methodist University, University of Texas at El Paso and University of New Mexico.

Royal Society of Chemistry Annual Congress, Manchester, April 1992.

APICS Atlantic Tour Speaker 1992, visiting UNB, Mount Allison U, UPEI, Memorial U of Newfoundland and Sir Wilfred Grenfell.

University of Guelph, March 1993.

30th International Conference on Coordination Chemistry, Kyoto, Japan, July 1994, CNC/IUPAC Travel Award.

Universities of Braunschweig, Bonn, Karlsruhe, Bremen, Technical University of Berlin, 1997.

VIIth International Conference on Inorganic Ring Systems, Loughborough, England, August 1997.

CSC Conference, Whistler, BC, May 1998.

Lecture Tour of BC and Alberta:

University of British Columbia, Simon Fraser University, University of Victoria, University of Calgary and University of Alberta, October 1998.

Universite de Montreal and McGill University, November 1999.

Queen's University, September 2000.

Keynote lecture, Pacificchem 2000, Honolulu, Hawaii, USA

University of Toronto, March 2001.

University of Alberta, April 2001.

University of South Florida, April 2002.

University of Alabama, May 2002.

IUPAC/CSC Conference, Ottawa, August 2003.

ACS Conference, Anaheim, March 2004.

CSC Conference, London, Ontario, May 2004.

International Conference on Coordination Chemistry, Merida, Mexico, July 2004.

International Conference on Organometallic Chemistry, Vancouver, July 2004.

University of New Brunswick, September 2004.
Lecture Tour of Texas, February 2005: University of Texas A&M, Rice University and Texas Christian University.
University of Manitoba, April 2005.
New Mexico State University, November 2005.
International Conference on Inorganic Ring Systems, Oulu, Finland, August 2006.
Main Group Chemistry Symposium, University of Bristol, UK, July 2006.
University of Western Ontario, December 2006.
CSC Conference, Winnipeg, Manitoba, May 2007, Bioinorganic Chemistry.
CSC Conference, Winnipeg, Manitoba, May 2007, Main Group Chemistry.
International Conference on Heteroatom Chemistry, California at Riverside, August 2007.
Plenary Lecture, Zing Conference on Heterocycles and Heteroatoms, Cancun, February 2008
CSC Conference, Edmonton, Alberta, May 2008, Bioinorganic Chemistry.
Lecture Tour of Germany, June 2008: Munich (LMU), Bonn, Bielefeld, Erlangen, Regensburg, Leipzig, Munster.
Lecture Tour of Germany and Austria, June 2009: Stuttgart, Freiburg, Karlsruhe, Jena, Rostock, Berlin (TU), Graz.
Plenary Lecture, International Conference on Inorganic Ring Systems, Goa, India, August 2009.
University of Saskatchewan, March 2010.
Pacifichem 2010, Honolulu, Hawaii, USA

COLLABORATIONS:

X-Ray Crystallography:

Prof. T. Stanley Cameron (Dalhousie) since 1987.
Prof. John F. Richardson (Louisville) 1989-1995.
Prof. Arnold Rheingold (San Diego) 1998-2001.
Dr. Bob McDonald (Alberta) since 1999.
Dr. Michael Ferguson (Alberta) since 2002.
Prof. Hilary Jenkins (St. Mary's) 1999-2001.
Dr. Andreas Decken (UNB) since 2002.

Mass Spectrometry:

Dr. Jonathan Curtis, National Research Council, IMB (Halifax), 1992-1996.
Dr. Dev Pinto, National Research Council, IMB (Halifax), 2003-2007.

Antimicrobial Activity of Bismuth Compounds:

Since 1993 an extensive collaborative group including Dr. David Mahony (Immunology & Microbiology) and Dr. Sander van Zanten (Gastroenterology) has been coordinated by N. Burford with a common goal of investigating the potential antimicrobial and other bioactivity of new bismuth compounds.

NMR Spectroscopy:

Prof. Rod E. Wasylishen (Dalhousie, now Alberta) since 1987.
Prof. Joe W. Zwanziger (Dalhousie) since 2004.
Prof. Ulli Werner-Zwanziger (Dalhousie) since 2004.

Phosphorus Chemistry:

Jan J. Weigand (Munster) since 2007.

ADMINISTRATIVE POSITIONS:

2008-2011: Chair of the Department of Chemistry, Dalhousie University (Univ.)
2006-2009: Member of the Board of Directors for CSC and Director of Subject Divisions (National)
2006-2012: Chair of Canadian National Committee for IUPAC (National)
2005-2008: Member of Faculty of Graduate Studies Scholarship Committee, Dalhousie (Univ.)
2005-2007: Chair of Graduate Studies Committee (Coordinator), Dalhousie, Chemistry (Dept.)
2004-2010: Member of Canadian National Committee for IUPAC (National)
2006: Inorganic Program Coordinator for Canadian Society for Chemistry Conference, Halifax
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.)
2002-2005: Chair of NMR Users Committee of Atlantic Region Magnetic Resonance Centre (Region)
2001-2004: Member of MFA Grants Selection Committee (NSERC)
2002-2004: Past Chair of Division of Inorganic Chemistry of Canadian Society for Chemistry (Natl.)
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.)
2000-2002: Chair of Division of Inorganic Chemistry of Canadian Society for Chemistry
1999-2000: Chair of Grants Selection Committee 024 (NSERC)
1998-2000: Vice Chair of Division of Inorganic Chemistry of Canadian Society for Chemistry
1997-1999: Member of Grants Selection Committee 024 (NSERC)
1995-1998: Member of Faculty of Graduate Studies Council, Dalhousie (Univ.)
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.)
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.)
1990-1991: Publicity Representative, Dalhousie, Chemistry (Dept.)
1990: Substitute Member of the Dalhousie Undergraduate Scholarships Committee (Univ.)

EDITORIAL POSITIONS:

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

JOURNAL REVIEWING (refereeing):

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

REFEREED ARTICLES:

134. J.J. Weigand, N. Burford, R.J. Davidson, T.S. Cameron and P. Seelheim, **2009**, “New Synthetic Procedures to catena-Phosphorus Cations: Preparation and Dissociation of the First cyclo-Phosphino-halophosphonium Salts”, *J. Am. Chem. Soc.*, 131, in press (Full paper). Article highlighted in *Chemical & Engineering News*, **2009**, December 7, 42.
133. E. Conrad, N. Burford, R. McDonald and M.J. Ferguson, **2009**, Phosphinopnictonium Cations: High Yield and General Preparative Procedures for New Interpnictogen Frameworks Exploiting As→P and Sb→P Coordinate Bonds”, *J. Am. Chem. Soc.*, 131, 17000-17008 (Full paper).
132. E. Conrad, N. Burford, R. McDonald and M.J. Ferguson, **2009**, “Coordination of Arsine Ligands as a General Synthetic Approach to Rare Examples of Arsenic-Antimony and Arsenic-Bismuth Bonds”, *J. Am. Chem. Soc.*, 131, 5066-5067 (Communication). Article highlighted as an Editor’s Choice in *Science*, **2009**, 324, 149-150.
131. Y-Y. Carpenter, C.A. Dyker, N. Burford, M.D. Lumsden and A. Decken, **2008**, “2,3-Diphosphino-1,4-diphosphonium Cations”, *J. Am. Chem. Soc.*, 130, 15732-15741 (Full paper).
130. J.J. Weigand, N. Burford and A. Decken, **2008**, “The Binary Ph₂PCl:GaCl₃ System: A Room Temperature Molten Medium for P-P Bond Formation”, *Eur. J. Inorg. Chem.*, 4868-4872 (Communication).
129. C.D.L. Saunders, N. Burford, U. Werner-Zwanziger and R. McDonald, **2008**, “Preparation and Comprehensive Characterization of [Hg₆(ala)₄(NO₃)₄]•H₂O”, *Inorg. Chem.*, 47, 3693-3699 (Full paper).
128. E. Conrad, N. Burford, R. McDonald and M.J. Ferguson, **2008**, “Phosphinoarsonium and Diarsonium Cations from Halide Abstraction Induced Pnictogen Coupling”, *Inorg. Chem.*, 47, 2952-2954 (Communication).
127. H.A. Phillips and N. Burford, **2008**, “Identification of Bismuth-Thiolate-Carboxylate Clusters by Electrospray Ionization Mass Spectrometry”, *Inorg. Chem.*, 47, 2428-2441 (Full paper).
126. C.A. Dyker and N. Burford, **2008**, “catena-Phosphorus Cations”, *Chem. Asian J.*, 3, 28-36 (Invited Review).
125. R.J. Davidson, J.J. Weigand, N. Burford, T.S. Cameron, A. Decken and U. Werner-Zwanziger, **2007**, “Bifunctional Diphosphorus Lewis Acids from cyclo-Diphosphadiazanes”, *Chem. Commun.*, 4671-4673 (Communication).
124. S.D. Riegel, N. Burford, M.D. Lumsden and A. Decken, **2007**, “Synthesis and Characterization of Elusive Cyclo-di- and -tri-phosphino-1,3-diphosphonium Salts: Fundamental Frameworks in catena-Organophosphorus Chemistry”, *Chem. Commun.*, 4668 - 4670 (Communication).
123. J.J. Weigand, N. Burford, A. Decken and A. Schulz, **2007**, “Preparation and Characterization of a Ligand-Stabilized Trimethylphosphane Dication”, *Eur. J. Inorg. Chem.*, 4868-4872 (Communication).
122. J.J. Weigand, N. Burford, D. Mahnke and A. Decken, **2007**, “Coordination Complexes of the Dimethylthiophosphonium Cation and Ligand Exchange”, *Inorg. Chem.*, 46, 7689-7691 (Communication).

121. J.J. Weigand, S.D. Riegel, N. Burford and A. Decken, **2007**, "Prototypical Phosphorus Analogues of Ethane: General and Versatile Synthetic Approaches to Hexaalkylated P-P Diphosphonium Cations", *J. Am. Chem. Soc.*, 129, 7969-7976 (Full paper).
120. C.A. Dyker, S.D. Riegel, N. Burford, M.D. Lumsden and A. Decken, **2007**, "Cyclotetraphosphinophosphonium Ions: Synthesis, Structures and Pseudorotation", *J. Am. Chem. Soc.*, 129, 7464-7474 (Full paper).
119. C.A. Dyker, N. Burford, G. Menard, M.D. Lumsden and A. Decken, **2007**, "Monocyclic Di- and Triphosphinophosphonium Cations: New Foundational Frameworks for *catena*-Phosphorus Chemistry", *Inorg. Chem.*, 46, 4277-4285 (Full paper).
118. H.A. Phillips, M.D. Eelman and N. Burford, **2007**, "Cooperative Influence of Thiolate Ligands on the Bio-Relevant Coordination Chemistry of Bismuth", *J. Inorg. Biochem.*, 101, 736-739 (Communication).
117. J.J. Weigand, N. Burford, and A. Decken, **2006**, "A Melt Approach to the Synthesis of *catena*-Phosphorus Dications to Access Derivatives of $[P_6Ph_4R_4]^{2+}$ ", *Angew. Chem. Int. Ed.*, 45, 6733-6737 (Communication).
116. C.A. Dyker, N. Burford, M.D. Lumsden and A. Decken, **2006**, "Acyclic *catena*-Diphosphinodiphosphonium Dications $[R_3P-PR'-PR'-PR_3]^{2+}$ or Bisphosphine-Diphosphonium Complexes $[R_3PPR'-PR'PR_3]^{2+}$: Synthesis by Reductive P-P Coupling of $[R_3P-PR'Cl]^+$ and Phosphine Ligand Exchange", *J. Am. Chem. Soc.*, 128, 9632-9633 (Communication).
115. N. Burford and P.J. Ragogna, **2006**, "Coordination Chemistry of Phosphorus(III) as a Lewis Acceptor", *A.C.S. Symposium Series*, 917, 280-292 (Invited review).
114. N. Burford, P.J. Ragogna, K. Sharp, R. McDonald and M.J. Ferguson, **2005**, "Arsinophosphonium Cations from Arsenium-Phosphine and -Bisphosphine Coordination Chemistry" *Inorg. Chem.*, 44, 9453-9460 (Full paper).
113. N. Burford, E. Edelstein, J.C. Landry, M.J. Ferguson and R. McDonald, **2005**, "Identification of New N-Sb Topologies: Understanding the Sequential Dehydrochloride Coupling of Primary Amines and Trichloropnictines", *Chem. Commun.*, 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. Wasylishen, **2005**, "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.*, 44, 8058-8064 (Full paper).
111. N. Burford, M.D. Eelman, and K.Groom, **2005**, "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.*, 99, 1992-1997 (Full paper).
110. N. Burford, C.A. Dyker, M. Lumsden and A. Decken, **2005**, "Small Cyclo-polyphosphinophosphonium cations: Systematic Development of Fundamental *Catena*-Phosphorus Frameworks", *Angew. Chem. Int. Ed.*, 44, 6196-6199 (Communication).
109. N. Burford, J.C. Landry, M.J. Ferguson and R. McDonald, **2005**, "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.*, 44, 5897-5902 (Full paper).
108. N. Burford, C.A. Dyker and A. Decken, **2005**, “Facile Synthetic Methods for the Diversification of *Catena*-Polyphosphorus Cations”, *Angew. Chem. Int. Ed.*, 44, 2364-2367 (Communication).
107. N. Burford, A.D. Phillips, H.A. Spinney, M. Lumsden, U. Werner-Zwanziger, M.J. Ferguson and R. McDonald, **2005**, “Hypervalent, Low-Coordinate Phosphorus(III) Centers in Complexes of the Phosphadiazonium Cation with Chelate Ligands”, *J. Am. Chem. Soc.*, 127, 3921-3927 (Full Paper).
106. D.E. Mahony, A. Woods, M.D. Eelman, N. Burford and S.J.O. Veldhuyzen van Zanten, **2005**, “Interaction of Bismuth Subsalcylate with Fruit Juices, Ascorbic Acid and Thiol-containing Substrates to Produce Soluble Bismuth Products Active Against *Clostridium difficile*”, *Antimicrobial Agents and Chemotherapy*, 49, 431-433 (Full paper).
105. N. Burford, D.E. Herbert, P.J. Ragona, R. McDonald and M.J. Ferguson, **2004**, “Diphosphine-Phosphenium Coordination Complexes Representing Monocations with Pendant Donors and Ligand Tethered Dications”, *J. Am. Chem. Soc.*, 126, 17067-17073 (Full paper).
104. N. Burford, C.A. Dyker, A.D. Phillips, H.A. Spinney, A. Decken, R. McDonald, P.J. Ragona and A.L. Rheingold, **2004**, “Ylidene→Iminophosphine Coordination Complexes and Reversible Dissociation of Dichlorophosphetidines”, *Inorg. Chem.*, 43, 7502-7507 (Full paper).
103. N. Burford, H.A. Spinney, M.J. Ferguson and R. McDonald, **2004**, “Donor-rich and acceptor-rich pyridine-phosphadiazonium adducts: Diversifying the Lewis acceptor chemistry of phosphorus(III)”, *Chem. Commun.*, 2696-2697 (Communication).
102. N. Burford, K.D. Conroy, J.C. Landry, P.J. Ragona M.J. Ferguson and R. McDonald, **2004**, “Gallium Halide Induced Heterocycle Expansion of Dihalodiphosphadiaryldiazanes [(XPNR)₂] to the Corresponding Triphosphatriazanes [(XPNR)₃]”, *Inorg. Chem.*, 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, **2004**, “Identification, Isolation and Characterization of Cysteinate and Thiolactate Complexes of Bismuth”, *Inorg. Chem.*, 43, 6495-6500 (Full paper).
100. N. Burford, M.D. Eelman, and W.G. LeBlanc, **2004**, “Identification of Complexes Involving Toxic Heavy Metals with Amino Acid Ligands by Electrospray Ionization Mass Spectrometry”, *Can. J. Chem.*, 82, 1254-1259 (Full paper).
99. N. Burford, M.D. Eelman, W.G. LeBlanc, T.S. Cameron and K.N. Robertson, **2004**, “Definitive Identification of Lead-Amino Acid Adducts and the Solid State Structure of a Lead-Valine Complex”, *Chem. Commun.*, 332-333 (Communication).
98. N. Burford, M. D’eon, P.J. Ragona, R. McDonald and M.J. Ferguson, **2004**, “Synthesis and Structures of Complexes Demonstrating the Coordinative Versatility of the 2,4-Diimino-3-Phosphinopentene Anion”, *Inorg. Chem.*, 43, 734-738 (Full paper).
97. N. Burford, P.J. Ragona, R. McDonald and M.J. Ferguson, **2003**, “Phosphine Coordination Complexes of the Diphenylphosphenium Cation: A Versatile Synthetic Methodology for P-P Bond Formation”, *J. Am. Chem. Soc.*, 125, 14404-14410 (Full paper).

96. N. Burford, P.J. Ragogna, R. McDonald and M.J. Ferguson, **2003**, "Homoatomic P→P Coordination: A Versatile Synthetic Approach to Polyphosphorus Dications", *Chem. Commun.*, 2066-2067 (Communication).
95. N. Burford, A.D. Phillips, H.A. Spinney, K.N. Robertson, T.S. Cameron, and R. McDonald, **2003**, "Chalcogeno-urea Ligands on a Phosphadiazonium Lewis Acceptor: A New Synthetic Approach to Ch-P Bonds (Ch = O, S, Se)", *Inorg. Chem.*, 42, 4949-4954 (Full paper).
94. L. Agocs, G.G. Briand, N. Burford, * M.D. Eelman, N. Aumeerally, D. MacKay, K.N. Robertson and T.S. Cameron, **2003**, "A Generally Applicable Synthetic Approach for Heteroleptic Thiolate Complexes of Bismuth", *Can. J. Chem.*, 81, 632-637 (Full paper).
93. G.G. Briand, N. Burford, M.D. Eelman, T.S. Cameron, and K.N. Robertson, **2003**, "Synthesis and Structures of the First Bismuth-Ester Complexes using Hetero-Bifunctional Thiolate Anchored Ligands and Mass Spectrometric Identification of Ligand Bridged Derivatives", *Inorg. Chem.*, 42, 3136-3141 (Full paper).
92. P.J. Ragogna, N. Burford, M. Deon and R. McDonald, **2003**, "Inhibited Chelation in the New γ -Phosphino- β -diketimate to give Phosphine→Arsine Coordination", *Chem. Commun.*, 1052-1053 (Communication).
91. N. Burford, P. Losier, A.D. Phillips, P.J. Ragogna and T.S. Cameron, **2003**, "Nitrogen Ligands on Phosphorus(III) Lewis Acceptors: A Versatile New Synthetic Approach to Unusual N-P Structural Arrangements", *Inorg. Chem.*, 42, 1087-1091 (Full paper).
90. N. Burford, M.D. Eelman, D.E. Mahony and M. Morash, **2003**, "Definitive Identification of Cysteine and Glutathione Complexes of Bismuth by Mass Spectrometry: Assessing the Biochemical Fate of Bismuth Pharmaceutical Agents", *Chem. Commun.*, 146-147 (Communication).
89. N. Burford and P.J. Ragogna, **2002**, "New Synthetic Opportunities Using Lewis Acidic Phosphines", *J. Chem. Soc., Dalton Trans.*, 4307-4315 (Invited review).
88. N. Burford, M.D. Eelman and T.S. Cameron, **2002**, "Comprehensive Characterisation of Bismuth Thiosalicylate Complexes: Models for Bismuth Subsalsicylate" *Chem. Commun.*, 1402-1403 (Communication).
87. M. Gee, R.E. Wasylishen, P.J. Ragogna N. Burford, and R. McDonald, **2002**, "Characterisation of Indirect P-P Spin-Spin Coupling and Phosphorus Chemical Shift Tensors in Pentaphenylphosphonium tetrachlorogallate" *Can. J. Chem.*, 80, 1488-1500 (Full paper).
86. N. Burford, T. S. Cameron, K.D. Conroy, B. Ellis, M. Lumsden, C.L.B. Macdonald, R. McDonald, A.D. Phillips, P.J. Ragogna, R.W. Schurko, D. Walsh and R.E. Wasylishen, **2002**, "Transformations Between Monomeric, Dimeric and Trimeric Phosphazanes: Oligomerising NP Analogues of Olefins", *J. Am. Chem. Soc.*, 124, 14012-14013 (Communication).
85. N. Burford T.S. Cameron, K.D. Conroy, B. Ellis, C.L.B. Macdonald, R. Ovans, A.D. Phillips, P.J. Ragogna and D. Walsh, **2002**, "Sequential Dehydrochloride Coupling of Trichlorophosphine with 2,6-Di-isopropylaniline: Aminophosphine Precursors to Phosphetidines" *Can. J. Chem.*, 80, 1404-1409 (Full paper).

84. N. Burford, P.J. Ragogna, Katherine N. Robertson, T.S. Cameron, N.J. Hardman and P.P. Power, **2002**, "Coordination Chemistry Umpolung: A Gallane Ligand on a Phosphine Lewis Acceptor", *J. Am. Chem. Soc.*, 124, 382-383 (Communication).
83. N. Burford, T.S. Cameron, P.J. Ragogna, E. Ocando-Mavarez, M. Gee, R. McDonald and R.E. Wasylishen, **2001**, "Phosphine Ligand Exchange at a Phosphine Lewis Acceptor: The First Structural Characterisation of Homoleptic Phosphinophosphonium Salts", *J. Am. Chem. Soc.*, 123, 7947-7948 (Communication).
82. N. Burford, T.S. Cameron, K-C. Lam, D.J. LeBlanc, C.L.B. Macdonald, A.D. Phillips, A.L. Rheingold, L. Stark and D. Walsh, **2001**, "Synthesis and Characterisation of an Homologous Series of Bis(amido)diazadipnictetides (Pnict = P, As, Sb, Bi)" *Can. J. Chem.*, 79, 342-348 (Full paper).
81. N. Burford, T.S. Cameron, K.N. Robertson, A.D. Phillips and H.A. Jenkins, **2000**, "Nitrogen Ligands on a Phosphinic Lewis Acceptor Including a 2,2'-Dipyridyl Chelate Complex" *Chem. Commun.*, 2087-2088 (Communication).
80. H.J. Breunig, N. Burford and R. Rösler, **2000**, "Stabilization of a Pentastibacyclopentadienyl Ligand in the Triple-Decker Sandwich Complexes $[\{(\eta^5\text{-}1,2,4\text{-tBu}_3\text{C}_5\text{H}_2)\text{Mo}\}_2(\mu, \eta^5\text{-Sb}_5)]$ and $[\{(\eta^5\text{-}1,2,4\text{-tBu}_3\text{C}_5\text{H}_2)\text{Mo}\}_2(\mu, \eta^5\text{-Sb}_5)\text{Mo}(\eta^5\text{-}1,4\text{-tBu}_2\text{-}2\text{-MeC}_5\text{H}_2)\text{Mo}\}_2(\mu, \eta^5\text{-Sb}_5)]$ ", *Angew. Chem. Int. Ed. Engl.*, 39, 4148-4150 (Communication).
79. N. Burford, T.S. Cameron, D.J. LeBlanc, A.D. Phillips, T.E. Concolino, K-C. Lam, and A.L. Rheingold, **2000**, "Iminophosphide Bonding Environments from Carbene Complexes of Iminophosphines", *J. Am. Chem. Soc.*, 122, 5413-5414 (Communication).
78. G.G. Briand and N. Burford, **2000**, "Coordination Complexes of Bismuth(III) involving Organic Ligands with Pnictogen and Chalcogen Donors", *Adv. Inorg. Chem.*, 50, 285-357 (Invited Review).
77. N. Burford, C.L.B. Macdonald, D.J. LeBlanc and T.S. Cameron, **2000**, "Synthesis and Characterization of Bis(2,4,6-tris[trifluoromethyl]phenyl) Derivatives of Arsenic and Antimony: X-ray Crystal Structures of $\text{As}(\text{R}_F)_2\text{Cl}$, $\text{Sb}(\text{R}_F)_2\text{Cl}$ and $\text{Sb}(\text{R}_F)_2\text{OSO}_2\text{CF}_3$ ", *Organometallics*, 19, 152-155 (Full paper).
76. G.G. Briand, N. Burford and T.S. Cameron, **2000**, "The First Ester Complexes of Bismuth(III) using Thiolate Anchored Bifunctional Ligands", *Chem. Commun.*, 13-14 (Communication).
75. G.G. Briand and N. Burford, **1999**, "Bismuth Compounds and Preparations with Biological or Medicinal Relevance", *Chem. Rev.*, 99, 2601-2657 (Invited Review).
74. N. Burford and D.J. LeBlanc, **1999**, "Iminophosphine Cycloaddition Reactions of a Diazaphosphoniaaluminatocyclobutane and a Novel Intramolecular Phosphiridine P-P Coordination", *Inorg. Chem.*, 38, 2248-2249 (Communication).
73. P. Jutzi and N. Burford, **1999**, "The Structurally Diverse π -Cyclopentadienyl Complexes of the Main Group Elements", *Chem. Rev.*, 99, 969-990 (Review).
72. D.E. Mahony, S. Lim-Morrison, L. Bryden, G. Faulkner, P.S. Hoffman, L. Agocs, G.G. Briand, N. Burford and H. Maguire, **1999**, "Antimicrobial Activity of Synthetic Bismuth Compounds Against *Clostridium difficile*", *Antimicrobial Agents and Chemotherapy*, 43, 582-588 (Full paper).

71. G.G. Briand, N. Burford, T.S. Cameron and W. Kwiatkowski, **1998**, "Defining and Controlling the Aminoethanethiolate Chemistry of Bismuth(III): Synthesis and Comprehensive Characterization of Homologous Thiolatobismuth Series", *J. Am. Chem. Soc.*, 120, 11374-11379 (Full paper).
70. G.S. Sandha, R. LeBlanc, T.D. Sitland, S.J.O. Veldhuyzen van Zanten, L. Agocs, N. Burford, D.J. Leddin, L. Best and D.E. Mahony, **1998**, "Chemical Structure of Bismuth Compounds Determine their Ulcer Healing Efficacy and Anti-Helicobacter pylori Activity", *Digestive Diseases and Science*, 12, 2727-2732 (Full paper).
69. R.J. Boyd, N. Burford and C.L.B. Macdonald, **1998**, "Ab initio Studies of the Contrasting Cheletropic and Diels-Alder Reactivity Observed for 'Carbenic' Phosphorus (Phosphenium) and Arsenic (Arsenium) Cations", *Organometallics*, 17, 4014-4029 (Full paper).
68. N. Burford, A.D. Phillips, R.W. Schurko, R.E. Wasylshen and J.F. Richardson, **1997**, "Isolation and Comprehensive Solid State Characterisation of $\text{Cl}_3\text{AlOPCl}_3$ ", *Chem. Commun.*, 2363-2364 (Communication).
67. G.G. Briand, N. Burford and T.S. Cameron, **1997**, "Ammoniumthiolatobismuth halides: A new thiolate bonding environment for Bi(III) as an alternative to metathesis and chelation", *Chem. Commun.*, 2365-2366 (Communication).
66. N. Burford, T.S. Cameron, D. LeBlanc, P. Losier, S. Sereda and G. Wu, **1997**, "Structural Alternatives in $\text{R}_2(\text{Cl})\text{P}:\text{GaCl}_3$ Systems (R = alkyl and phenyl) Including Examples of Intermolecular $\text{P}\rightarrow\text{P}$ Coordination", *Organometallics*, 16, 4712-4717 (Full paper).
65. N. Burford, J.A.C. Clyburne and M.W.S. Chan, **1997**, "Substituent Steric Strain: Enthalpic Estimates for the Consequences of Interactions between Bulky Substituents", *Inorg. Chem.*, 36, 3204-3206 (Note).
64. L. Agocs, G.G. Briand, N. Burford, T.S. Cameron, W. Kwiatkowski and K.N. Robertson, **1997**, "The Structurally Flexible Bicyclobishydroxyethanethiolatebismuth(III) Complex: A Model for Asymmetric Monoanionic Chelation of Bismuth (III)", *Inorg. Chem.*, 36, 2855-2860 (Full paper).
63. N. Burford, J.A.C. Clyburne, D. Silvert, S. Warner, W.A. Whitla and K. Valenta Darvesh, **1997**, "Nitrogen-Phosphorus Multiple Bond Vibrational Assignments in the Infrared and Raman", *Inorg. Chem.*, 36, 482-484 (Note).
62. K. Eichele, R.E. Wasylshen, R.W. Schurko, N. Burford and W.A. Whitla, **1996**, "An Unusually Large Value of $^1\text{J}(^{31}\text{P}, ^{31}\text{P})$ for a Solid Triphenylphosphine Phosphoazonium Cationic Complex: Determination of the Sign of J from 2D Spin-Echo Experiments", *Can. J. Chem.*, 74, 2372-2377 (Full paper).
61. N. Burford, C.L.B. Macdonald, T.M. Parks, G. Wu, B. Borecka, W. Kwiatkowski and T.S. Cameron, **1996**, "Preparation and Structure of 2-Chloro-1,3-dimethyldiaza-2-arsenane, 1,3-Dimethyldiaza-2-arsenanium Tetrachlorogallate and Butadiene Cycloadducts of Diazarsenium Cations", *Can. J. Chem.*, 74, 2209-2216 (Full paper).
60. N. Burford, T.S. Cameron, J.A.C. Clyburne, K. Eichele, K.N. Robertson, S. Sereda, R.E. Wasylshen and W.A. Whitla, **1996**, "Nucleophilic Addition of CH, NH and OH Bonds to the Phosphoazonium Cation and Interpretation of ^{31}P Chemical Shifts at Dicoordinate Phosphorus

- Centers", *Inorg. Chem.*, 35, 5460-5467 (Full paper).
59. N. Burford, C.L.B. Macdonald, K.N. Robertson and T.S. Cameron, **1996**, "Synthesis and Structures of $\text{Sb}[\text{N}(\text{H})(\text{C}_6\text{H}_2^t\text{Bu}_3)]_3$ and $\text{Bi}[\text{N}(\text{H})(\text{C}_6\text{H}_2^t\text{Bu}_3)]_3$: Implications for the Steric Limits of Supermesityl Substitution", *Inorg. Chem.*, 35, 4013-4016 (Full paper).
58. L. Agocs, N. Burford, J.M. Curtis, T.S. Cameron, J.F. Richardson, K.N. Robertson and G.B. Yhard, **1996**, "Spectroscopic, Structural, and Mass Spectrometric Studies on Two Systematic Series of Dithiabisbismuth(III) Heterocycles: Identification of Bismuthenium Cations and Their Solvent Complexes", *J. Am. Chem. Soc.*, 118, 3225-3232 (Full paper).
57. N. Burford, P. Losier, P.K. Bakshi and T.S. Cameron, **1996**, "Coordination Chemistry of a Neutral Phosphorus Species", *Chem. Commun*, 307-308 (Communication).
56. N. Burford, J.A.C. Clyburne, J.A. Wiles, T.S. Cameron and K.N. Robertson, **1996**, "Tethered Di-arenes as Four Site Donors to SbCl_3 ", *Organometallics*, 15, 361-364 (Full paper).
55. N. Burford, J.A.C. Clyburne, M. Lumsden, J.A. Pincock, P.K. Bakshi and T.S. Cameron, **1995**, "Novel Ring Expansion Isomerism of a Fluorenylidene phosphonium", *Organometallics*, 14, 3762-3767 (Full paper).
54. N. Burford, J.A.C. Clyburne, P.K. Bakshi and T.S. Cameron, **1995**, " π -Coordination of Arenes to Phosphorus: Models of Stable π -Complex Intermediates in Electrophilic Aromatic Substitution", *Organometallics*, 14, 1578-1585 (Full paper).
53. R. LeBlanc, S.J.O. Veldhuyzen Van Zanten, N. Burford, L. Agocs, and D.J. Leddin, **1995**, "The Efficacy of Novel Bismuth Compounds in Healing Gastric Ulceration in the Rat Varies with Chemical Structure: Implication for *Helicobacter pylori* Treatment", *Gastroenterology*, 108, A860 (Communication).
52. N. Burford, P. Losier, S. Mason, P.K. Bakshi and T.S. Cameron, **1994**, "Oxidative Addition of Elemental Sulfur to Phosphenium Centers and the Structure of a Novel Heterobis(spiro)tricyclic Dimer", *Inorg. Chem.*, 33, 5613-5614 (Communication).
51. N. Burford, S.J.O. Veldhuyzen Van Zanten, L. Agocs, L. Best, T.S. Cameron, G.B. Yhard and J.M. Curtis, **1994**, "Anti-*Helicobacter pylori* Properties of New Bismuth Compounds", *Gastroenterology*, 106, A59 (Communication).
50. N. Burford, P. Losier, S.V. Sereda and T.S. Cameron and G. Wu, **1994**, "Base-Induced Coordination of a Prototypical Phosphenium Cation to Gallium Trichloride", *J. Am. Chem. Soc.*, 116, 6474-6475 (Communication).
49. N. Burford, T.M. Parks, P.K. Bakshi and T.S. Cameron, **1994** "The First Cycloaddition Reactions of Arsenium Cations", *Angew. Chem. Int. Ed. Engl.*, 33, 1267-1268 (Communication).
48. J.M. Curtis, N. Burford and T.M. Parks, **1994** "Evidence for the Existence of Phosphoazonium (Iminophosphenium) and Arsenoazonium Ions in the Gas Phase by Mass Spectrometry", *Org. Mass Spectrom.*, 29, 414-418 (Full paper).
47. N. Burford, J.A.C. Clyburne, D.P. Gates, M.J. Schriver and J.F. Richardson, **1994**, "Monomeric Iminophosphoryl Halides: Simple Preparations of New Monomeric Trihalogenophosphine imides", *J. Chem. Soc. Dalton Trans.*, 997-1001 (Full paper).

46. N. Burford, P. Losier, C. Macdonald, V. Kyrimis, P.K. Bakshi and T.S. Cameron, **1994**, "Anionic and Steric Factors Governing Coordinative Unsaturation at Carbenic Phosphenium Centers", *Inorg. Chem.*, 33, 1434-1439 (Full paper).
45. N. Burford, J. Muller and T.M. Parks, **1994**, "Simple and Versatile Vacuum and Pressure Reactors for Air-Sensitive Materials", *J. Chem. Educ.*, 71, 807-809 (Full paper).
44. N. Burford, J.A.C. Clyburne, P.K. Bakshi and T.S. Cameron, **1993**, " η^6 -Arene Complexation to a Phosphenium Cation", *J. Am. Chem. Soc.*, 115, 8829-8830 (Communication).
43. N. Burford, J.A.C. Clyburne, S. Mason and J.F. Richardson, **1993**, "Spontaneous Formation of a Dicoordinate Iminophosphine from a Tricoordinate Trisaminophosphine Via a Tetracoordinate Phosphorane", *Inorg. Chem.*, 32, 4988-4989 (Communication).
42. N. Burford, P. Losier, P.K. Bakshi and T.S. Cameron, **1993**, "Evidence for Anionic Shielding of a Phosphenium Centre", *J. Chem. Soc., Dalton Trans.*, 201-202 (Communication)
41. N. Burford, T.M. Parks, B.W. Royan, B. Borecka, T.S. Cameron, J.F. Richardson, E.J. Gabe and R. Hynes, **1992**, "Aza and Thia Arsolidinium Cations: Novel Structural Features for Carbene Analogues", *J. Am. Chem. Soc.*, 114, 8147-8153 (Full paper).
40. R.D. Curtis, B.W. Royan, R.E. Wasylshen, M.D. Lumsden and N. Burford, **1992**, "A Phosphorus-31 Solid State Nuclear Magnetic Resonance Study of Several Thiaphospholium Cations", *Inorg. Chem.*, 31, 3386-3390 (Full paper).
39. N. Burford, S. Mason, R.E.v.H. Spence, J.M. Whalen, J.F. Richardson and R.D. Rogers, **1992**, " 'Genuine Heterocycles' from the Versatile Acid-Induced Cyclisation of (Silylamino)(imino)-(chalcogeno)phosphoranes and as a Result of Chloride Ion Abstraction from Bis[bis(trimethylsilyl)amino]thiophosphoryl chloride", *Organometallics*, 11, 2241-2250 (Full paper).
38. N. Burford, T.M. Parks, B.W. Royan, J.F. Richardson and P.S. White, **1992**, "Benzothiarsolium Cations: Evidence for $p\pi$ -Bonding Between Arsenic and Sulfur in the First Structurally Characterised Arsenium System", *Can. J. Chem.*, 70, 703-709 (Full paper).
37. N. Burford, **1992**, "Modes of Coordination for the Phosphorylic Unit", *Coord. Chem. Rev.*, 112, 1-18 (Review).
36. N. Burford, R.E.v.H. Spence and J.F. Richardson, **1991**, "Covalent Alternatives for the Elusive Iminophosphonium Cation. Crystal Structures of $\text{PCl}(\text{NPr}^i)_2\text{NPh}.\text{AlCl}_3$ and $\text{P}(\text{NPr}^i)_2[\text{NPh}(\text{SO}_2\text{CF}_3)]\text{O}$ ", *J. Chem. Soc., Dalton Trans.*, 1615-1619 (Full paper).
35. N. Burford, R.G. Hicks, B.W. Royan, T.S. Cameron and B. Borecka, **1991**, "The Crystal Structure of Diphenylaminetrichloro-aluminum(III) Adduct", *Acta Crystallogr.*, C47, 1066-1067 (Note).
34. N. Burford, J.D. McInnis, M.J. Schriver and R.D. Rogers, **1991**, "Structure of Bis[bis(trimethylsilyl)methylene]-methoxyphosphorane", *Acta Crystallogr.*, C47, 884-885 (Note).
33. N. Burford, B.W. Royan, R.E.v.H. Spence, T.S. Cameron, A. Linden, R.D. Rogers, **1990**, "Linear Coordinative Bonding at Oxygen: A Spectroscopic Study of Phosphine Oxide-Group 13 Lewis Acid Adducts", *J. Chem. Soc., Dalton Trans.*, 1521-1528 (Full paper).

32. B.W. Royan, N. Burford, J. Waluk and J. Michl, **1990**, "Magnetic Circular Dichroism of Cyclic p-Electron Systems. 29: Bicyclic Phospholium and Arsolium Cations with P-S, As-S, P-N, and As-N π -Bonding", *Organometallics*, 9, 1085-1088 (Full paper).
31. N. Burford, B.W. Royan, R.E.v.H. Spence and R.D. Rogers, **1990**, "NMR Spectroscopic Characterisation and the Crystal and Molecular Structures of $\text{Ph}_3\text{PS}\cdot\text{AlCl}_3$ and $\text{Ph}_3\text{PSe}\cdot\text{AlCl}_3$: A Classification of the Coordinative Bonding Modes of the Phosphine Chalcogenides", *J. Chem. Soc., Dalton Trans.*, 2111-2117 (Full paper).
30. N. Burford, R.E.v.H. Spence and R.D. Rogers, **1990**, "The Chemistry of the Diaminochalcogenophosphoryl Chloride-Aluminum Chloride System: Preparation, Crystal Structures and Spectroscopic Characterisation of Diaminochalcogenophosphonium Cations", *J. Chem. Soc., Dalton Trans.*, 3611-3619 (full paper).
29. E. Awere, N. Burford, R. Haddon, S. Parsons, J. Passmore, J.V. Waszczak and P.S. White, **1990**, "The X-ray Crystal Structures of $\text{C}_6\text{H}_4\text{S}_2\text{N}$ and $\text{C}_6\text{H}_4\text{S}_2\text{N}^+ \text{Cl}^- \cdot \text{SO}_2$, a Comparison of the Molecular and Electronic Structures of the Benzo-3,5-dithia-4-azene Cation and the neutral Benzo-3,5-dithia-4-azolyl Radical, and the Magnetic Susceptibility of Solid and Liquid $\text{C}_6\text{H}_4\text{S}_2\text{N}$ ", *Inorg. Chem.*, 29, 4821-4830 (Full paper).
28. N. Burford, A.I. Dipchand, B.W. Royan and P.S. White, **1990**, "Experimental Evidence for Comparable Strength of P-S and P-N $p\pi$ -Bonding Within the Heteronaphthalenic Framework: Spectroscopic and Structural Studies of the 1,3,2-Benzazathiaphospholium System as a Cation and as Neutral Halides", *Inorg. Chem.*, 29, 4938-4944 (Full paper).
27. N. Burford, R.E.v.H. Spence, J.M. Whalen, R.D. Rogers and J.F. Richardson, **1990**, "The Syntheses and Crystal Structures for the First Two Examples of the Four-Membered PNSiS Heterocycle", *Organometallics*, 9, 2854-2856 (Communication).
26. N. Burford, B.W. Royan, J.M. Whalen, R.D. Rogers and J.F. Richardson, **1990**, "Coordinatively Unsaturated Pnictogens: The Isolation and Crystal Structure of a Novel Dimeric Dithia-arsolidinium Cation", *Chem. Commun.*, 1273-1275 (Communication).
25. N. Burford, R.E.v.H. Spence, T.S. Cameron and A. Linden, **1990**, "The Structures of the Isostructural Adducts Triphenylphosphine Oxide Trifluoroboron and Triphenylarsine Oxide Trifluoroboron", *Acta Crystallogr.*, C46, 92-95 (Note).
24. N. Burford, B.W. Royan and P.S. White, **1990**, "Structure of Tris(phenylthio)phosphine", *Acta Crystallogr.*, C46, 274-276 (Note).
23. N. Burford, B.W. Royan, A. Linden and T.S. Cameron, **1989**, " $p\pi$ - $p\pi$ Bonding Between Phosphorus and Sulfur: The Synthesis and Characterisation of a Dithiaphospholium Cation", *Inorg. Chem.*, 28, 144-150 (Full paper).
22. N. Burford, J. Passmore and J.P. Sanders, **1989**, "The Preparation, Structure and Energetics of the Homopolyatomic Cations of Groups 16 and 17", in "*Molecular Energetics*", VCH Publishers, 11, "From Atoms to Polymers", 53-108 (Review).
21. N. Burford, B.W. Royan and P.S. White, **1989**, "Preparation, Spectroscopic Characterisation and Crystal and Molecular Structure of 1,3,2-Benzothiazarsolium Tetrachloroaluminate: A Dicoordinate Arsenic Cation containing As-S and As-N $p\pi$ Bonding", *J. Am. Chem. Soc.*, 111, 3746-3747 (Communication).

20. N. Burford, R.E.v.H. Spence and R.D. Rogers, **1989**, "Preparation and Characterisation of the Thio- and Seleno- Diaminophosphonium Cations", *J. Am. Chem. Soc.*, 111, 5006-5008 (Communication).
19. N. Burford and B.W. Royan, **1989**, "Preparation and Spectroscopic Characterisation of Dithia-Arsolium and -Stibolium Cations: Evidence for $p\pi$ - $p\pi$ Bonding of Sulphur with Arsenic and Antimony", *Chem. Commun.*, 19-21 (Communication).
18. N. Burford, A.I. Dipchand, B.W. Royan and P.S. White, **1989**, "Structure of N,N'-Dimethyl-1,3,2-benzodiazaphospholium Tetrachloroaluminate: A Heteronaphthalenic 10π -Electron Cation", *Acta Crystallogr.*, C45, 1485-1487 (Note).
17. N. Burford, B.W. Royan, A. Linden and T.S. Cameron, **1988**, "Synthesis and Characterisation of the Unique 10π -Electron 1,3,2-Benzodithiaphospholium Cation", *Chem. Commun.*, 842-844 (Communication).
16. N. Burford, M. Cowie, D. Kennepohl and R.G. Cavell, **1987**, "The Preparation and Characterization of Fluoro(Pentane-2,4-dionato)-phosphorus(V) Derivatives", *Inorg. Chem.*, 26, 650-657 (Full paper).
15. R.E. Wasylishen and N. Burford, **1987**, "The Influence of Charge on NMR Isotope Effects", *Can. J. Chem.*, 65, 2707-2712 (Full paper).
14. R.E. Wasylishen and N. Burford, **1987**, "Large Isotope Effects on the ^{119}Sn NMR Parameters of the Stannyl Ion", *Chem. Commun.*, 1414-1415 (Communication).
13. W.V.F. Brooks, N. Burford, J. Passmore, M.J. Schriver and L.H. Sutcliffe, **1987**, "Paramagnetic Liquids: The Preparation and Characterization of the Thermally Rearrangement to a Second Stable Radical tBuCNSSN", *Chem. Commun.*, 69-71 (Communication).
12. E.G. Awere, N. Burford, C. Mailer, J. Passmore, M.J. Schriver, P.S. White, A.J. Banister, H. Oberhammer and L.H. Sutcliffe, **1987**, "The High Yield Preparation, Characterization and Gas Phase Structure of $\text{CF}_3\text{CSNSCCF}_3$, 4,5-bis(trifluoro-methyl)-1,3,2-dithiazolyl and the X-ray Crystal Structure of Benzo-1,3,2-dithiazolyl", *Chem. Commun.*, 66-69 (Communication).
11. N. Burford, J. Passmore and M.J. Schriver, **1986**, "The Preparation and Isolation of 5-Methyl-1,3,2,4-dithiadiazolyl and the Facile Rearrangement of the 1,3,2,4-Dithiadiazolyl Radicals to the Disulfide Isomers, 2,3,1,4-Dithiadiazolyl", *Chem. Commun.*, 140-142 (Communication).
10. N. Burford, J.P. Johnson, J. Passmore, M.J. Schriver and P.S. White, **1986**, "The General Quantitative Cycloaddition Reactions of the Dithionitronium Cation with Olefins: The Preparation of 1,3,2-Dithiazolium and 2-Dithiazolium Cations and the Crystal and Molecular Structure of 2-Dithiazolium Hexafluoroarsenate(V)", *Chem. Commun.*, 966-968 (Communication).
9. N. Burford, T. Chivers, M. Hojo, W.G. Laidlaw, J.F. Richardson and M. Trsic, **1985**, "Comparison of the Electronic Structure and Electrochemical Reduction of the P_3N_3 , $\text{P}_2\text{N}_3\text{S}$ and S_3N_3 Rings: X-ray Crystal Structures of $(\text{Ph}_2\text{PN})_2(\text{NSX})$ (X = Cl, I, NMe_2 , Ph)", *Inorg. Chem.*, 24, 709-715 (Full paper).
8. N. Burford, T. Chivers, R.T. Oakley and T. Oswald, **1984**, "Synthetic and Kinetic Studies of the Reversible Addition of a Bridging NSN Fragment to the Electron-rich Heterocycles

(R₂PN)(SN)₂ (R = Me, Ph, F)", *Can. J. Chem.*, 62, 1822-1827 (Full paper).

7. N. Burford, T. Chivers, M.N.S. Rao and J.F. Richardson, **1984**, "Oxidative Addition of Halogens to 1,3- and 1,5-(Ph₂RN)₂(SN)₂: X-ray Crystal Structure of 1,5-(Ph₂PN)₂(NSBr)₂ and a Comparison of the Crystal Structure of the Twelve Membered Ring 1,3,7,9-(Ph₂PN)₄(SN)₂ and the Corresponding Dication (Ph₂PN)₄(SN)₂²⁺", *Inorg. Chem.*, 23, 1946-1952 (Full paper).
6. N. Burford, T. Chivers, M.N.S. Rao and J.F. Richardson, **1983**, "Cyclophosphathia-zenes Containing Two or Three Coordinate Sulfur", *A.C.S. Symposium Series*, 232, 82-93 (Review).
5. N. Burford, T. Chivers, A.W. Cordes, W.G. Laidlaw, M.C. Noble, R.T. Oakley and P.N. Sweptson, **1982**, "Preparation and Molecular and Electronic Structures of Cyclophospha-3,5-dithia-2,4,6-triazenes and their Norbornadiene Adducts", *J. Am. Chem. Soc.*, 104, 2182-2190 (Full paper).
4. N. Burford, T. Chivers, P.W. Coddling and R.T. Oakley, **1982**, "Preparation and Crystal, Molecular and Electronic Structure of 1,1,5,5-Tetramethylbicyclo[3.3.0]-1,5-diphospha-3,7-dithia-2,4,6,8-tetrazene: A Bicyclo PSN System with a Sulfur-Sulfur Bond", *Inorg. Chem.*, 21, 982-986 (Full paper).
3. N. Burford, T. Chivers and J.F. Richardson, **1982**, "A ³¹P NMR Investigation of the Reactions of Tetraphenyl- and Tetramethyl-diphosphine and Diphenylphosphine with S₄N₄: Preparation and the Molecular and Electronic Structures of the Two Structural Isomers of the Eight-membered Ring Ph₄P₂S₂N₄", *Inorg. Chem.*, 22, 1482-1487 (Full paper).
2. N. Burford, T. Chivers, R.T. Oakley, W.T. Pennington and P.N. Sweptson, **1981**, "Variable Geometry of the S₄N⁻ Anion: Crystal and Molecular Structure of Ph₄As⁺S₄N⁻ and a Re-refinement of the Structure of PPN⁺S₄N⁻", *Inorg. Chem.*, 20, 4430-4432 (Note).
1. N. Burford, T. Chivers, R.T. Oakley, A.W. Cordes and P.N. Sweptson, **1980**, "Preparation and Crystal Structure of 1,1-Diphenyl-1-phospha-3,5-dithia-2,4,6-triazene, Ph₂PS₂N₃: An Eight π-Electron Inorganic Heterocycle", *Chem. Commun.*, 1204-1205 (Communication).

Other Publications:

12. N. Burford and M. D. Eelman, **2005**, "Bismuth Based Pharmaceuticals", in "Metallotherapeutic Drugs & Metal Based Diagnostic Agents", Chapter 27, pp. 529-540, M. Geilen and E.R. Tiekink Eds., Wiley (Invited contribution).
11. N. Burford, "Bismuth", in "It's Elemental", C&E News, Sept. 8, **2003**, pp. 156 (Invited).
10. P. Jutzi and N. Burford, **1998**, "Main Group Metallocenes", in "Metallocenes: Synthesis, Reactivity and Applications", pp. 3-54, A. Togni and R. L. Haltermann Eds., Wiley, Weinheim.
9. N. Burford, J.A.C. Clyburne, P. Losier, T.M. Parks, T.S. Cameron and J.F. Richardson, **1994**, "Coordination Chemistry of Phosphenium and Arsenium Cations", *Phosphorus, Sulfur and Silicon*, 93-94, 301-304.
8. N. Burford, J.A.C. Clyburne, P.K. Bakshi and T.S. Cameron, **1994**, "Reaction of Mes*NPCl with Triphenylcarbenium Tetrafluoroborate", *Phosphorus, Sulfur and Silicon*, 93-94, 379-380.
7. N. Burford, T.M. Parks and G. Wu, **1994**, "The 2D-COSY NMR Spectrum of 1,3,4,7-Tetramethyl-1-azonia-7-aza-6-arsabicyclo[4.3.0]non-3-ene Tetrachlorogallate", *Phosphorus, Sulfur and Silicon*, 93-94, 397-398.

6. P. Losier, N. Burford, S. Mason, S. Sereda and T.S. Cameron, **1994**, "From a Heterocycle Through a Hetero(spiro)cycle to a 'Genuine Heterocycle' ", *Phosphorus, Sulfur and Silicon*, 93-94, 463-464.
5. N. Burford, J. Passmore and X. Sun, **1994**, "Photolysis of 1,3,2,4-Dithiazolyl RCNSNS Radicals and their Concerted Photochemically Symmetry ALlowed Rearrangement to 1,2,3,5-Dithiazolyl RCNSSN by the Net Exchange of Adjacent S ad N Atoms", *Phosphorus, Sulfur and Silicon*, 93-94, 487-488.
4. N. Burford, P. Losier, S. Mason, B.W. Royan, R.E.v.H. Spence, P.K. Bakshi, B. Borecka, T.S. Cameron, J.F. Richardson, R.D. Rogers, **1993**, "The Stability of Carbenic and Alkenic Phosphorus Environments", *Phosphorus, Sulfur and Silicon*, 76, 17-20.
3. N. Burford, T.M. Parks, B.W. Royan, T.S. Cameron, J.F. Richardson, E.J. Gabe and R. Hynes, **1992**, "Arsolidinium Cations", *Phosphorus, Sulfur and Silicon*, 64, 87-90.
2. N. Burford, R.E.v.H. Spence, J.M. Whalen, R.D. Rogers and J.F. Richardson, **1992**, "Novel Cyclisations of the Chalcogeno-Phosphoryl Unit and the Formation of Genuine Heterocycles", *Phosphorus, Sulfur and Silicon*, 64, 137-144.
1. N. Burford and B.W. Royan, **1989**, " $p\pi$ - $p\pi$ Bonding Between Sulfur and the Heavier Elements of Group 15", *Phosphorus, Sulfur and Silicon*, 41, 37-42.

Conference presentations:

1. N. Burford, T. Chivers, M.N.S. Rao and J.F. Richardson, "Cyclophosphathiazenes Containing Exocyclic S-Br and S-I Bonds", at 66th Canadian Society for Chemistry Conference, Calgary, Alberta, Canada, June **1983**.
2. N. Burford, R.G. Cavell and D. Kennepohl, "Neutral Six-Coordinate Phosphorus Compounds: Trifluoromethylfluoro-phosphorus Acetylacetonates", at 68th Canadian Society for Chemistry Conference, Kingston, Ontario, Canada, June **1985**.
3. R.G. Cavell, N. Burford, D. Kennepohl, "Structural Preferences in Neutral Hexacoordinate Phosphorus Compounds: Structure and Stereochemistry of $F(CF_3)_3P(acac)$ and Related Acetylacetonate Derivatives of Phosphorus(V)", at 191st Meeting of American Chemical Society, New York City, New York, USA, April **1986**.
4. N. Burford, J. Passmore and M.J. Schriver, "Photochemically Symmetry Allowed Isomerisations of C-S-N Radicals", at the 70th Canadian Society for Chemistry Conference, Quebec City, Quebec, Canada, June **1987**.
5. M.J. Schriver, N. Burford and J. Passmore, "Recent Developments in Cycloadditions of SNS+ to Unsaturated Main Group Compounds", at the 70th Canadian Society for Chemistry Conference, Quebec City, Quebec, Canada, June **1987**.
6. J. Passmore, R. Haddon, L. Suttcliffe, N. Burford and M.J. Schriver, "Sulfur-Nitrogen-Carbon Containing Paramagnetic Liquids", at the 70th Canadian Society for Chemistry Conference, Quebec City, Quebec, Canada, June **1987**.
7. N. Burford, J. Passmore and M.J. Schriver, "Photochemically Symmetry Allowed Isomerisations of C-S-N Radicals", at Organic Reaction Mechanisms Halifax Conference, Halifax, Nova Scotia, Canada, August **1987**.
8. N. Burford and B.W. Royan, " $p\pi-p\pi$ Bonding Between Sulfur and the Heavier Elements of Group 15", at the 3rd Chemical Congress of North America, Toronto, Ontario, Canada, June **1988**.
9. N. Burford, P. Folkins and R. Spence, "Studies on Cationic Phosphines", at the 3rd Chemical Congress of North America, Toronto, Ontario, Canada, June **1988**.
10. N. Burford, J. Passmore and M.J. Schriver, "Sulfur-Nitrogen-Carbon Containing Paramagnetic Liquids", at the 3rd Chemical Congress of North America, Toronto, Ontario, Canada, June **1988**.
11. N. Burford and B.W. Royan, " $p\pi-p\pi$ Bonding Between Sulfur and the Heavier Elements of Group 15". at the Fifth International Symposium on Inorganic Ring Systems. Amherst, Massachusetts, USA, Aug **1988**.
12. N. Burford, C. Levy and B.W. Royan, "Stable $p\pi-p\pi$ Bonding Between Phosphorus and Selenium", at the 72nd Canadian Society for Chemistry Conference, Victoria, British Columbia, June **1989**.
13. N. Burford and R.E.v.H. Spence, "Preparation and Characterisation of Unique Dicationic Dithia- and Diselena-Diphosphetane Ring Systems", at the 72nd Canadian Society for Chemistry Conference, Victoria, British Columbia, June **1989**.

14. N. Burford and M.J. Schriver, "Direct Oxidation of Phosphines and Polyphosphines", at the 72nd Canadian Society for Chemistry Conference, Victoria, British Columbia, June **1989**.
15. N. Burford, B.W. Royan and R.E.v.H. Spence, "Spectroscopic and Structural Studies on Adducts of Triphenylphosphine Chalcogenides:", at the 72nd Canadian Society for Chemistry Conference, Victoria, British Columbia, June **1989**.
16. N. Burford and J.D. McInnis, "Low Coordinate Phosphonium Compounds", at the 72nd Canadian Society for Chemistry Conference, Victoria, British Columbia, June **1989**.
17. N. Burford, B.W. Royan and R.E.v.H. Spence, "New Bonding Arrangements for the Heavier Elements of Group 15", Symposium in Honor of R. J. Gillespie, Hamilton, Ontario, Canada, June **1989**.
18. N. Burford, B.W. Royan and R.E.v.H. Spence, "New Bonding Arrangements for the Heavier Elements of Group 15", CIC Conference, Atlantic Section, St. John's, Newfoundland, Canada, June **1989**.
20. N. Burford, B.W. Royan and R.E.v.H. Spence, "New Bonding Arrangements for the Heavier Elements of Group 15", Second International Conference on Heteroatom Chemistry, Albany, New York, July **1989**.
21. N. Burford, B.W. Royan, R.E.v.H. Spence, T.S. Cameron, A. Linden, R.D. Rogers and J.F. Richardson, "Novel Acceptor Features for the Heavier Elements of Group 13 Allowing a Reclassification of the Coordinative Bonding Modes of Phosphine Chalcogenides", at the 73rd Canadian Society for Chemistry Conference, Halifax, Nova Scotia, July **1990**.
22. N. Burford, R.E.v.H. Spence, T.S. Cameron, B. Borecka, R.D. Rogers and J.F. Richardson, "The Reactions of Group 13 Acids with Diaminothiophosphoryl Chlorides", at the 73rd Canadian Society for Chemistry Conference, Halifax, Nova Scotia, July **1990**.
23. N. Burford, B.W. Royan and J.M. Whalen, "Studies on the 1,3,2-Dithiaphospholium Cation", at the 73rd Canadian Society for Chemistry Conference, Halifax, Nova Scotia, July **1990**.
24. N. Burford and M.J. Schriver, "The Attempted Synthesis of Cationic, Two Coordinate Phosphorus Centers", at the 73rd Canadian Society for Chemistry Conference, Halifax, Nova Scotia, July **1990**.
25. N. Burford, R.E.v.H. Spence, J.M. Whalen, J.F. Richardson and R.D. Rogers, "Novel Cyclisations of the Phosphoryl Unit", at the 6th International Conference on Inorganic Ring Systems, Berlin, Germany, August **1991**.
26. N. Burford, T.M. Parks, B.W. Royan, J.F. Richardson, R. Hynes, E.J. Gabe and P.S. White, "Arsolidinium Cations", at the 6th International Conference on Inorganic Ring Systems, Berlin, Germany, August **1991**.
27. N. Burford, "Cationic Pnictogen Centres in New Heterocyclic Systems", Annual Chemical Congress of the Royal Society, Manchester, England. Invited, April **1992**.
28. N. Burford, T.M. Parks, B.W. Royan and J.F. Richardson, "Arsolidinium Cations", at the 75th Canadian Society for Chemistry Conference, Edmonton, June **1992**.
29. N. Burford, J. Clyburne, M.J. Schriver and J.F. Richardson, "Low Coordinate Environments for Phosphorus", at the 75th Canadian Society for Chemistry Conference, Edmonton, June **1992**.

30. N. Burford, S. Mason and R.E.v.H. Spence, "Mechanistic Insights into the Acid-Induced Cyclisation of Trimethylsilyl(butyl)amino(butyl)iminothiophosphorane", at the 75th Canadian Society for Chemistry Conference, Edmonton, June **1992**.
31. N. Burford, "The Stability of Carbenic and Alkenic Phosphorus Environments", XIIIth International Conference on Phosphorus Chemistry, Toulouse, France, July **1992**.
32. N. Burford, J.A.C. Clyburne, P. Losier, P.K. Bakshi and T.S. Cameron, "Influence of Anionic Interactions on the Chemistry of Low Coordinate Phosphorus Cations", Annual Chemical Congress of the Royal Society of Chemistry, Southampton, England, April **1993**.
33. T.M. Parks, N. Burford, T.S. Cameron and J.F. Richardson, "Cyclic Arsenium Cations", 76th Canadian Society for Chemistry Conference, Sherbrooke, Quebec, June **1993**.
34. J.A.C. Clyburne, N. Burford, P.K. Bakshi and T.S. Cameron, "Coordination to the Iminophosphonium Cation", 76th Canadian Society for Chemistry Conference, Sherbrooke, Quebec, June **1993**.
35. N. Burford, J.A.C. Clyburne, S. Mason and J.F. Richardson, "Spontaneous Generation of a Dicoordinate Phosphine from a Tricoordinate Phosphine Via a Phosphorane", 76th Canadian Society for Chemistry Conference, Sherbrooke, Quebec, June **1993**.
36. P. Losier, N. Burford, V. Kyrimis, P.K. Bakshi and T.S. Cameron, "Anionic and Steric Influence on Reactivity of Phosphenium Centres", 76th Canadian Society for Chemistry Conference, Sherbrooke, Quebec, June **1993**.
37. N. Burford, S.J.O. Veldhuyzen van Zanten, L. Agocs, L. Best, T.S. Cameron, B. Yhard and J. M. Curtis, "Anti-Helicobacter Pylori Properties of New Bismuth Compounds" at the American Gastroenterological Association Meeting, New Orleans, Louisiana, May **1994**.
38. N. Burford, J.A.C. Clyburne, P. Losier, T.M. Parks, P.K. Bakshi, S.V. Sereda and T.S. Cameron, "Coordination Chemistry of Phosphenium and Arsenium Cations", at the 30th International Conference on Coordination Chemistry, Kyoto, Japan, July **1994**.
39. N. Burford, J.A.C. Clyburne, P. Losier, T.M. Parks, P.K. Bakshi, S.V. Sereda, T.S. Cameron and J.F. Richardson, "Cyclic Compounds Containing Pnicogenium Centres" at VIIIth International Conference on Inorganic Ring Systems, Banff, Alberta, August **1994**.
40. N. Burford, J.A.C. Clyburne, S.V. Sereda and T.S. Cameron, "Rearrangement of a Severely Distorted Methylene Phosphenium Cation" at VIIIth International Conference on Inorganic Ring Systems, Banff, Alberta, August **1994**.
41. N. Burford, P. Losier, S. Mason, P.K. Bakshi and T.S. Cameron, "Assembly of an Exclusively Main Group Heterospirocyclic" at VIIIth International Conference on Inorganic Ring Systems, Banff, Alberta, August **1994**.
42. N. Burford, T.M. Parks, P.K. Bakshi and T.S. Cameron, "The First Cycloaddition Reactions of Arsenium Cations" at VIIIth International Conference on Inorganic Ring Systems, Banff, Alberta, August **1994**.
43. B. Yhard, L. Agocs, N. Burford and J.M. Curtis, "Mass Spectrometry of some Bismuth Containing Compounds" at 13th International Mass Spectrometry Conference, Budapest, Hungary, August **1994**.

44. B. Yhard, L. Agocs, N. Burford and J. M. Curtis, "Atmospheric Pressure Chemical Ionization of Novel Bismuth Compounds" at 43rd ASMA Conference on Mass Spectrometry and Allied Topics, Atlanta, Georgia, May **1995**.
45. P. Losier, N. Burford, P.K. Bakshi and T.S. Cameron, "Coordination Chemistry of Non-Metal Species: Bridging Two Phosphenium Centres Through a Bidentate Ligand", 78th Canadian Society for Chemistry Conference, Guelph, Ontario, May **1995**.
46. N. Burford, J.A.C. Clyburne, P.K. Bakshi and T. S. Cameron, "New Sterically Shielded Low Coordinate Phosphorus Cations", 78th Canadian Society for Chemistry Conference, Guelph, Ontario, May **1995**.
47. L. Agocs, N. Burford, P.K. Bakshi, K. Robertson, S. Sereda and T.S. Cameron, "Synthesis and Characterization of a Series of Cyclic Dithiabismuth Compounds", 78th Canadian Society for Chemistry Conference, Guelph, Ontario, May **1995**.
48. N. Burford, C.L.B. Macdonald, T.M. Parks, G. Wu, B. Borecka, T. S. Cameron and J.F. Richardson, "Reactivity Comparison of Phosphenium and Arsenium Cations", 78th Canadian Society for Chemistry Conference, Guelph, Ontario, May **1995**.
49. N. Burford, J.A.C. Clyburne, T. S. Cameron, K. Eichele, R.E. Wasylishen and W.A. Whitla, "Coordination Chemistry of Phosphorus", Pacificchem 95, Honolulu, Hawaii, December, **1995**.
50. N. Burford, J.A.C. Clyburne, S. Warner and D. Silvert, "NP Bond Vibration Assignments", Pacificchem 95, Honolulu, Hawaii, December, **1995**.
51. C.L.B. Macdonald, R.J. Boyd, N. Burford, T.M. Parks, B. Boeck, W. Kwiatkowski and T. S. Cameron, "A Naked Arsenium Cation and Pnictogenium Cation Cycloadditions", 79th Canadian Society for Chemistry Conference, St. John's, Newfoundland, June **1996**.
52. L. Agocs, G. G. Briand, N. Burford, T. S. Cameron, W. Kwiatkowski and K. N. Robertson, "Neutral and Ionic Bicyclobishydroxyethanethiolatebismuth(III) Compounds and their Derivatives", 79th Canadian Society for Chemistry Conference, St. John's, Newfoundland, June **1996**.
53. L. Agocs, G. Briand, N. Burford, J.M. Curtis and G.B. Yhard, "Mass Spectrometric Studies of Bismuth Chelate Complexes", 79th Canadian Society for Chemistry Conference, St. John's, Newfoundland, June **1996**.
54. N. Burford, J.A.C. Clyburne, T. S. Cameron, K. Eichele, R.E. Wasylishen and W.A. Whitla, "Coordination Chemistry of Phosphorus", 79th Canadian Society for Chemistry Conference, St. John's, Newfoundland, June **1996**.
55. D. Silvert, N. Burford, J.A.C. Clyburne, P. Losier, J. Mueller and T.M. Parks, "Bringing Research into the Third Year Teaching Lab", 79th Canadian Society for Chemistry Conference, St. John's, Newfoundland, June **1996**.
56. N. Burford, J.A.C. Clyburne, T.S. Cameron, K. Eichele, K. Robertson, S. Sereda, R.E. Wasylishen, W.A. Whitla, "Coordination Chemistry of Phosphorus", at the 31st International Conference on Coordination Chemistry, Vancouver, British Columbia, August **1996**.
57. L. Agocs, N. Burford, T. S. Cameron, W. Kwiatkowski and K. N. Robertson, "Models of Bismuth-Containing Pharmaceuticals", Digby, Nova Scotia, September **1996**.

58. L. Agocs, L. Best, G.G. Briand, L. Bryden, N. Burford, T.S. Cameron, P.S. Hoffman, R. LeBlanc, D.J. Leddin, D.E. Mahony, S. Lim-Morrison, G.S. Sandha and S.J.O.V. van Zanten, "From Pnictogenium Cations to Bioactive Bismuth Heterocycles", at the 8th International Conference on Inorganic Ring Systems, Loughborough, UK, August **1997**.
59. G.G. Briand, N. Burford and T.S. Cameron, "Aminoethanethiolatobismuth(III) Chlorides" at the 8th International Conference on Inorganic Ring Systems, Loughborough, UK, August **1997**.
60. N. Burford, J.A.C. Clyburne, M.S.W. Chan, C.L.B. Macdonald and A. Phillips, "Substituent Steric Strain: Enthalpic Estimates for the Consequences of Interactions Between Bulky Substituents" at the 8th International Conference on Inorganic Ring Systems, Loughborough, UK, August **1997**.
61. L. Agocs, N. Burford, T.S. Cameron, H.J. Maguire, J.F. Richardson and K.N. Robertson, "1,3-Dithiabismolanes", at the 8th International Conference on Inorganic Ring Systems, Loughborough, UK, August **1997**.
62. L. Agocs, N. Burford, T.S. Cameron, H.J. Maguire, J.F. Richardson and K.N. Robertson, "1,3-Dithiabismolanes", at the 2nd Main Group Chemistry Conference, Fargo, North Dakota, June **1998**.
63. G.G. Briand, N. Burford and T.S. Cameron, "Aminoethanethiolatobismuth(III) Chlorides", at the 2nd Main Group Chemistry Conference, Fargo, North Dakota, June **1998**.
64. L. Agocs, G.G. Briand, N. Burford, T.S. Cameron, H. Maguire, L. Best, L. Bryden, P.S. Hoffman, D.E. Mahony, S. Lim-Morrison and S.J.O.V. van Zanten, "Systematic Development and assessment of Bioactive Bismuth Heterocycles", at the 81st Canadian Society for Chemistry Conference, Whistler, British Columbia, June **1998**.
65. D.J. LeBlanc, N. Burford, T.S. Cameron, J.A.C. Clyburne, P. Losier, C.L.B. Macdonald and A.D. Phillips, "Coordination Chemistry of Phosphorus as an Acceptor", at the 5th International Conference on Heteroatom Chemistry, London, Ontario, July **1998**.
66. C.L.B. Macdonald, N. Burford, T.S. Cameron, W. Kwiatkowski, A.D. Phillips, R.W. Schurko, R.E. Wasylshen and W.A. Whitla, "The Remarkable Dimerization of Mes*NPOTf", at the 14th International Conference on Phosphorus Chemistry, Cincinnati, Ohio, July **1998**.
67. A.D. Phillips, N. Burford, T.S. Cameron, J.A.C. Clyburne, D.J. LeBlanc, P. Losier and C.L.B. Macdonald, "Coordination Chemistry of Phosphorus as an Acceptor", at the 14th International Conference on Phosphorus Chemistry, Cincinnati, Ohio, July **1998**.
68. N. Burford, T.S. Cameron, C.L.B. Macdonald and D. Walsh, "Synthesis of Pnictoazenes, R-N=P-R'", at the 82nd Canadian Society for Chemistry Conference, Toronto, Ontario, June **1999**.
69. G.G. Briand, N. Burford, L.Y.C. Chen, D.J. LeBlanc and T.S. Cameron, "Polycarboxylates of Bismuth", at the 82nd Canadian Society for Chemistry Conference, Toronto, Ontario, June **1999**.
70. N. Aumeerally, G.G. Briand, N. Burford, T.S. Cameron, L.Y.C. Chen, D.J. LeBlanc and D.E. Mahony, "Understanding The Chemistry Of Bioactive Bismuth Chelates", at the 83rd Canadian Society for Chemistry Conference, Calgary, Alberta, May **2000**.
71. N. Burford, T.S. Cameron, T.E. Concolino, K-C. Lam, D.J. LeBlanc, C.L.B. Macdonald, A.D. Phillips, A. Rheingold and Denise Walsh, "New Bonding Environments From The

- Coordination Chemistry Of Phosphorus As An Acceptor”, at the 83rd Canadian Society for Chemistry Conference, Calgary, Alberta, May **2000**.
72. N. Burford, T.S. Cameron, D.J. LeBlanc, S.H.D. Moore, K.N. Robertson and R. Rösler, “Transition Metal Complexes of Low Coordinate Antimony Ligands, at the 83rd Canadian Society for Chemistry Conference, Calgary, Alberta, May **2000**.
73. N. Burford, T.S. Cameron, T.E. Concolino, K-C. Lam, D.J. LeBlanc, C.L.B. Macdonald, A.D. Phillips, A. Rheingold and Denise Walsh, “New Bonding Environments From The Coordination Chemistry Of Phosphorus As An Acceptor” at 34th International Conference on Coordination Chemistry, Edinburgh, Scotland, July **2000**.
74. N. Aumeerally, G.G. Briand, N. Burford, T.S. Cameron, L.Y.C. Chen, D.J. LeBlanc and D.E. Mahony, “Understanding The Chemistry Of Bioactive Bismuth Chelates”, at 34th International Conference on Coordination Chemistry, Edinburgh, Scotland, July **2000**.
75. H.J. Breunig, N. Burford, R. McDonald and R. Rösler, “Novel Coordination Patterns in the Chemistry of Antimony as a Ligand in transition Metal Complexes”, at 34th International Conference on Coordination Chemistry, Edinburgh, Scotland, July **2000**.
76. H.J. Breunig, N. Burford and R. Rösler, “Complexes with Substituent Free Antimony Ligands”, at the 9th International Conference on Inorganic Ring Systems, Saarbrücken, Germany, July **2000**.
77. N. Burford, T.S. Cameron, T.E. Concolino, M. Gee, K-C. Lam, D.J. LeBlanc, C.L.B. Macdonald, E. Ocando-Mavarez, A.D. Phillips, A. Rheingold, R. Rösler, D. Walsh and R.E. Wasylshen, “New Structure And Bonding For The Elements Of Group 15”, at Pacificchem, Honolulu, Hawaii, December **2000**.
78. N. Burford, T.S. Cameron, C.L.B. Macdonald, D. Walsh and R. McDonald, “Synthesis and Characterisation of Amino- and Imino-Pnictine (As, Sb) Derivatives”, at the 84th Canadian Society for Chemistry Conference, Montreal, Quebec, May **2001**.
79. N. Burford, T.S. Cameron, M.D. Eelman, D. McKay and K. Robertson, “Coordination Complexes of Bismuth with Bio-Relevant Ligands”, at the 84th Canadian Society for Chemistry Conference, Montreal, Quebec, May **2001**.
80. N. Burford, T.S. Cameron, D.R. Jackson and K. Robertson, “Characterisation of Definitive Complexes Involving a Thiosalicylate Fragment Bound to Bismuth”, at the 84th Canadian Society for Chemistry Conference, Montreal, Quebec, May **2001**.
81. N. Burford, A.D. Phillips, H.A. Spinney, T.S. Cameron, K. Robertson and R. McDonald, “Coordination Complexes of Iminophosphines as Lewis Acceptors”, at the 84th Canadian Society for Chemistry Conference, Montreal, Quebec, May **2001**.
82. N. Burford, E. Ocando, P.J. Ragnogna and R. McDonald, “Ligand Exchange at Lewis Acidic Phosphine Centres”, at the 84th Canadian Society for Chemistry Conference, Montreal, Quebec, 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 Canadian Society for Chemistry Conference, Montreal, Quebec, 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 Canadian Society for Chemistry Conference, Vancouver, BC, June **2002**.
85. N. Burford, M.D. Eelman and R. Ngan, “Mass Spectrometric Identification of Bismuth (III) Complexes Containing Biorelevant Ligands”, at the 85th Canadian Society for Chemistry Conference, Vancouver, BC, 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 Canadian Society for Chemistry Conference, Vancouver, BC, 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 Canadian Society for Chemistry Conference, Vancouver, BC, June **2002**.
 88. N. Burford, P.J. Ragogna and T.S. Cameron, “New Developments in Cationic Phosphorus Chemistry”, at the 85th Canadian Society for Chemistry Conference, Vancouver, BC, 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 Canadian Society for Chemistry Conference, Vancouver, BC, June **2002**.
 90. P.J. Ragogna and N. Burford, “New Developments in the Lewis Acid Chemistry of Phosphorus(III)”, at the 86th Canadian Society for Chemistry Conference, Ottawa, ON, August **2003**.
 91. M.D. Eelman and N. Burford, “Systematic Assessment of the Coordination Chemistry of Bismuth with Biorelevant Ligands”, at the 86th Canadian Society for Chemistry Conference, Ottawa, ON, August **2003**.
 92. N. Burford, “Understanding the Chemistry of Bioactive Bismuth Compounds”, at the 86th Canadian Society for Chemistry Conference, Ottawa, ON, August **2003**.
 93. C.A. Dyker, N. Burford, A. Decken and R.E. Wasylshen, “Dissociation of Phosphetidines by Coordination with Lewis Bases”, at the 86th Canadian Society for Chemistry Conference, Ottawa, ON, 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 Canadian Society for Chemistry Conference, Ottawa, ON, August **2003**.
 95. R. Ovans and N. Burford, “Small Molecule Precursors to Phosphazane Oligomers”, at the 86th Canadian Society for Chemistry Conference, Ottawa, ON, August **2003**.
 96. H.A. Spinney, N. Burford and A.D. Phillips, “Coordination Chemistry of a Phosphadiazonium Lewis Acceptor”, at the 86th Canadian Society for Chemistry Conference, Ottawa, ON, August **2003**.
 97. H.A. Spinney, N. Burford and A.D. Phillips, “Coordination Chemistry of a Phosphadiazonium Lewis Acceptor”, at the 10th International Conference on Inorganic Ring Systems, 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 International Conference on Inorganic Ring Systems,

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 International Conference on Inorganic Ring Systems, 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 International Conference on Inorganic Ring Systems, Burlington Vermont, August **2003**.
102. J.C. Landry, N. Burford and R. McDonald, "Cyclophosphazanes as Building Blocks Towards [P(III)-N] Oligomers", at the 87th Canadian Society for Chemistry Conference, London, ON, May **2004**.
103. N. Burford and P.J. Ragogna, "Coordination Chemistry of Phosphines as Lewis Acids", at the 87th Canadian Society for Chemistry Conference, London, ON, 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 (Pn = P, As, Sb)", at the 87th Canadian Society for Chemistry Conference, London, ON, 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 Canadian Society for Chemistry Conference, London, ON, 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 Canadian Society for Chemistry Conference, London, ON, May **2004**.
107. C.A. Dyker, N. Burford and A. Decken, "Dissociation of Phosphetidines by Ligand-Phosphine Coordination", at the 87th Canadian Society for Chemistry Conference, London, ON, 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 Canadian Society for Chemistry Conference, Saskatoon, SK, 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 Canadian Society for Chemistry Conference, Saskatoon, SK, 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 Canadian Society for Chemistry Conference, Saskatoon, SK, May **2005**.

113. N. Burford and H.A. Phillips, "Towards Understanding the Bioactivity of Bismuth-Based Pharmaceuticals", at the 88th Canadian Society for Chemistry Conference, Saskatoon, SK, May **2005**.
114. R.Ovans and N. Burford, "Polymerising NP Analogues of Olefins", at the 88th Canadian Society for Chemistry Conference, Saskatoon, SK, May **2005**.
115. N. Burford and H.A. Phillips, "Towards Understanding the Bioactivity of Bismuth-Thiolate Complexes", at the 89th Canadian Society for Chemistry Conference, Halifax, NS, May **2006**.
116. S.D. Riegel, N. Burford and A. Decken, "Further Developments in Fundamental catena-Cyclophosphorus Cation Chemistry", at the 89th Canadian Society for Chemistry Conference, Halifax, NS, 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 Canadian Society for Chemistry Conference, Halifax, NS, 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 Canadian Society for Chemistry Conference, Halifax, NS, 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 Canadian Society for Chemistry Conference, Halifax, NS, May **2006**.
120. Cheryl Saunders and N. Burford, "Interactions of Toxic Heavy Metals with Biologically Relevant Chelating Ligands", at the 89th Canadian Society for Chemistry Conference, Halifax, NS, May **2006**.
121. N. Burford, "Homoatomic P-P Coordination Complexes: A New Direction in the Chemistry of Phosphorus", at the Main Group Chemistry Symposium, University of Bristol, UK, July **2006**.
122. 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 International Conference on Inorganic Ring Systems, 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 Canadian Society for Chemistry Conference, Winnipeg, MN, 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 Canadian Society for Chemistry Conference, Winnipeg, MN, May **2007**.
125. Neil Burford, Katherine Groom, Heather A. Phillips and Cheryl Saunders, "Understanding Chemical Interactions between Heavy Metals and Bio-Ligands" at the 90th Canadian Society for Chemistry Conference, Winnipeg, MN, May **2007**.
126. Cheryl Saunders and Neil Burford, "Synthesis and Characterisation of Mercury-Alanine Complexes" at the 90th Canadian Society for Chemistry Conference, Winnipeg, MN, May **2007**.
127. Neil Burford, Katherine Groom, Heather A. Phillips and Cheryl Saunders, "Understanding Chemical Interactions between Heavy Metals and Bio-Ligands" at the 8th International

Conference on Heteroatom Chemistry, Riverside, CA, August **2007**.

128. J.J. Weigand, N. Burford, T.S. Cameron and A. Decken, "Ligand Stabilized Tricoordinate Cationic Phosphorus Centers", at the 234th American Chemical Society Meeting, Boston, MA, August **2007**.
129. N. Burford, "*Catena* Phosphorus Chemistry", at the Zing Conference on Main Group Chemistry, Cancun, Mexico, 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 Canadian Society for Chemistry Conference, Edmonton, AB, 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 Canadian Society for Chemistry Conference, Edmonton, AB, 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 Canadian Society for Chemistry Conference, Edmonton, AB, 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 Canadian Society for Chemistry Conference, Edmonton, AB, 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 Canadian Society for Chemistry Conference, Hamilton, ON, 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 Canadian Society for Chemistry Conference, Hamilton, ON, May **2009**.