

Michael Gerken, Ph.D.**Current Position**

Professor,
Department of Chemistry and Biochemistry,
University of Lethbridge

Director,
Canadian Centre for Research in Advanced Fluorine Technologies
(C-CRAFT), University of Lethbridge

Address

Home 420 – 14th Street South
Lethbridge, Alberta
T1J 2X7, Canada
(403) 320-6867

Business Department of Chemistry and Biochemistry
University of Lethbridge
4401 University Drive
Lethbridge, Alberta
T1K 3M4, Canada
(403) 329-2173
FAX: (403) 329-2057
E-mail: michael.gerken@uleth.ca

Personal Data

Citizenship German, Canadian
Date of Birth April 17, 1969
Marital Status Married
Spoken/Written Languages Fluent in German and English

Education

Sept., 2000	Ph.D. in Inorganic Chemistry Thesis: <i>"Syntheses and Characterization of XeO₄ and Oxide Fluorides of Xenon(VIII), Osmium(VIII), Iodine(VII), and Xenon(II)"</i> Supervisor: Prof. Gary J. Schrobilgen	McMaster University, Hamilton
Sept., 1995 - Sept., 2000	Graduate Student (Inorganic Chemistry) Average: 11.3/12 (A)	McMaster University, Hamilton Department of Chemistry
Aug., 1995	Diplom der Chemie (equivalent to M.Sc.) Average: 1.1 (equivalent to A ⁺) Thesis: <i>"NMR Spectroscopic Characterization of Mixed Oxides"</i> Supervisor: Prof. Wiebren Veeman	Gerhard Mercator Universität Duisburg
Oct., 1992 - Aug., 1995	Hauptstudium (graduate studies)	Gerhard Mercator Universität Duisburg Department of Chemistry

Sept., 1993 - April, 1994	Exchange Program 4 th year thesis project, A ⁺ Thesis: <i>"Synthesis and Structural Characterization by Multi-NMR Spectroscopy and X-ray Crystallography of New Tin(IV) Tellurium Zintl Anions"</i> Supervisor: Prof. Gary J. Schrobilgen	McMaster University, Hamilton Department of Chemistry
Aug., 1992	Chemie Vordiplom (equivalent to B.Sc.) Average: 1.0 (equivalent to A ⁺)	Gerhard Mercator Universität Duisburg Department of Chemistry
Oct., 1990 - Aug., 1992	Grundstudium (undergraduate studies)	Gerhard Mercator Universität Duisburg Department of Chemistry

Professional Organizations

Member of
 the German Chemical Society (GDCh)
 the Canadian Society for Chemistry (CSC)
 the American Chemical Society (ACS)
 and the Division of Fluorine Chemistry of the ACS

Employment History

Jan. – June 2015	Study Leave	University of Lethbridge
Since July 2014	Professor In Inorganic Chemistry	University of Lethbridge Department of Chemistry and Biochemistry
Jan. 2010 – June 2010	Visiting Professor (Leave from the U of L)	Bergische Universität Wuppertal
July 2009 – Dec. 2009	Study Leave/Visiting Professor	Bergische Universität Wuppertal
July 2008 – June 2014	Associate Professor In Inorganic Chemistry	University of Lethbridge Department of Chemistry and Biochemistry
July, 2008	Award of Tenure	University of Lethbridge
July – Dec. 2006	Parental Leave	University of Lethbridge
Sept. 2002 – June 2008	Assistant Professor (tenure-track) In Inorganic Chemistry	University of Lethbridge Department of Chemistry and Biochemistry
Oct. 2000 – Aug. 2002	Research Associate (postdoctoral fellow) In Inorganic Fluorine Chemistry	University of Southern California Loker Hydrocarbon Research Institute
2000	Tutor for Introductory Chemistry	McMaster University Department of Chemistry
1995 - 2000	Graduate Student	McMaster University Department of Chemistry
1995	Research Assistant	Gerhard Mercator Universität Duisburg Department of Physical Chemistry
June 1989 - Sept., 1990	Civil Service, Individual Care for Seriously Disabled	Wesel, Germany Caritas Verband

Honours

2000 – 2002	NSERC PDF Scholarship	University of Southern California
2000	Nomination for the NSERC Doctoral Prize 2001 by the Department of Chemistry, McMaster University	McMaster University
1998/99	James A. Morrison Memorial Scholarship	McMaster University
1998	Nomination for the Dow Canada TA Award 1998	McMaster University
1997/98	Ontario Graduate Scholarship (OGS)	McMaster University
1996 - 98	Centennial Scholarships	McMaster University
1996/97	Richard Fuller Memorial Scholarship	McMaster University
1993/94	DAAD (German Academic Exchange Service) Scholarship	Gerhard-Mercator Universität

Research Funding

The University of Lethbridge Start-up Funding	2002	\$100,000
The University of Lethbridge University of Lethbridge Research Fund 'Elucidation of the Re ₂ S ₇ Structure'	2003	\$ 4,500
NSERC Discovery Grant	2003	\$ 35,000
'Novel Transition Metal Sulfide Fluorides and Pentafluorosulfanyl Fluorides and Their Application'	2004	\$ 35,000
Research Corporation Cortell College Award	2004	US-\$ 25,700 (\$ 34,318.45)
'Novel Molybdenum Sulfide Fluorides and Polysulfide Fluoride Complexes'	2005	US-\$ 6,500 (\$ 8,679.76)
CFI (Principal Investigator) New Opportunities 'Raman and NMR Spectroscopy of Fluorine Compounds'	2004	\$483,496
CFI, Infrastructure Operating Fund	2005	\$2,500
	2006	\$12,000
	2007	\$12,000
	2008	\$13,350
	2009	\$18,000
Fluorine Division of the American Chemical Society Moissan Summer Undergraduate Research Fellowship 'Preparation and Characterization of MoSF ₄ '	2004	US-\$ 2,500 (\$ 3,421.22)
NSERC Discovery Grant	2005	\$ 40,000
'Novel Transition Metal Sulfide Fluorides and Pentafluorosulfanyl Fluorides'	2006	\$ 40,000
	2007	\$ 40,000

NSERC (Principal Investigator) Research Tools and Instruments – Category I 'X-ray Diffraction Facility'	2005	\$242,350
NSERC (co-applicant) Research Tools and Instruments – Category I 'NMR Spectrometer'	2005	\$250,000
NSERC Discovery Grant 'Synthesis and Characterization of Transition-Metal Sulfide Fluorides, and Main-Group Fluorides and Oxide Fluorides'	2008 2009 2010 2011 2012	\$ 35,000 \$ 35,000 \$ 35,000 \$ 35,000 \$ 35,000
Fluorine Division of the American Chemical Society Moissan Summer Undergraduate Research Fellowship 'Study of the Fluoride-Ion Acceptor Properties of MoSF ₄ '	2011	US-\$ 3,500 (\$ 3,365.39)
NSERC (together with Paul Hazendonk, Paul Hayes, and René Boéré) Research Tools and Instruments – Category I 'Solution- and Solid-State 500 MHz NMR Facility Upgrade'	2012	\$250,000
CFI (together with Paul Hazendonk and Paul Hayes) Leaders Opportunities Fund 'Multinuclear NMR Facility for Multiphase Materials Science' Including Provincial Matching from the Research Capacity Program	2012	\$1,599,114
NSERC Discovery Grant 'Sulfur in Inorganic Fluorine Chemistry and the Development of a New Class of Weakly Coordinating Anions'	2013 2014 2015 2016 2017 2018 2019	\$ 34,000 \$ 34,000 \$ 34,000 \$ 34,000 \$ 34,000 \$ 34,000 \$ 34,000

Teaching Experience

Spring 2017	Independent Study, Univ. of Lethbridge	Chemistry 2990 (Brian van der Poll)
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Mike Harrison)
Fall 2016	Lecture course, Univ. of Lethbridge	Chemistry 2000, General Chemistry II
	Lecture course, Univ. of Lethbridge	Chemistry 3830, Inorganic Chemistry I
Spring 2016	Lecture course, Univ. of Lethbridge	Chemistry 2000, General Chemistry II
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Mike Harrison)
Fall 2015	Lecture course, Univ. of Lethbridge	Chemistry 2000, General Chemistry II
Summer 2015	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Cole Scory)
Spring 2015	Honor's thesis, Univ. of Lethbridge	Chemistry 4995 (Doug Turnbull)
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Yoyo Yao)
Fall 2014	Lecture course, University of Lethbridge	Chemistry 3830, Inorganic Chemistry I
	Honor's thesis, Univ. of Lethbridge	Chemistry 4995 (Doug Turnbull)
	Independent Study, Univ. of Lethbridge	Chemistry 2990 (Yoyo Yao)
Summer 2014	Independent Study, Univ. of Lethbridge	Chemistry 2990 (Wesley Mosimann)
	Independent Study, Univ. of Lethbridge	Chemistry 4990 (Nathan Kostiuk)
Spring 2014	Lecture course, University of Lethbridge	Chemistry 4000, Applications of Group Theory

	Lecture course, University of Lethbridge	Chemistry 2000, General Chemistry II
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Nathan Kostiuk)
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Doug Turnbull)
	Independent Study, Univ. of Lethbridge	Chemistry 4990 (Kyle Wynnyk)
Fall 2013	Lecture course, University of Lethbridge	Chemistry 1000, General Chemistry I
	Lecture course, University of Lethbridge	Chemistry 1000, General Chemistry I
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Nathan Kostiuk)
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Doug Turnbull)
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Kyle Wynnyk)
Spring 2013	Lecture course, University of Lethbridge	Chemistry 3840, Inorganic Chemistry II
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Nathan Kostiuk)
Fall 2012	Lecture course, University of Lethbridge	Chemistry 2000, General Chemistry II
	Lecture course, University of Lethbridge	Chemistry 3830, Inorganic Chemistry I
Spring 2012	Lecture course, University of Lethbridge	Chemistry 4000, Applications of Group Theory
Fall 2011	Lecture course, University of Lethbridge	Chemistry 1000, General Chemistry I
	Lecture course, University of Lethbridge	Chemistry 2000, General Chemistry II
	Independent Study, Univ. of Lethbridge	Chemistry 2990 (Nathan Kostiuk)
Spring 2011	Lecture course, University of Lethbridge	Chemistry 1000, General Chemistry I
	Lecture course, University of Lethbridge	Chemistry 3840, Inorganic Chemistry II
	Independent Study, Univ. of Lethbridge	Chemistry 3990 (Tyler Richardet)
	Independent Study, Univ. of Lethbridge	Chemistry 5990 (Rudraksha Dutta Majumdar)
Fall 2010	Lecture course, University of Lethbridge	Chemistry 1000, General Chemistry I
	Lecture course, University of Lethbridge	Chemistry 3830, Inorganic Chemistry I
Nov 11, and Dec. 7, 14, 2010	Three lectures, Universität Wuppertal	Inorganic Chemistry for M. Sc. students
Spring 2009	Lecture course, University of Lethbridge	Chemistry 3840, Inorganic Chemistry II
	Lecture course, University of Lethbridge	Chemistry 4000, Fluorine Chemistry
Fall 2008	Lecture course, University of Lethbridge	Chemistry 3830, Inorganic Chemistry I
	Lecture course, University of Lethbridge	Chemistry 2000, General Chemistry II
	Independent Study, Univ. of Lethbridge	Chemistry 2990 (Phil Kubara)
Spring 2008	Lecture course, University of Lethbridge	Chemistry 1000, General Chemistry I
	Lecture course, University of Lethbridge	Chemistry 2000, General Chemistry II
Fall 2007	Lecture course, University of Lethbridge	Chemistry 1000, General Chemistry I
	Lecture course, University of Lethbridge	Chemistry 4000, Applications of Group Theory
Spring 2007	Lecture course, University of Lethbridge	Chemistry 1000, Atoms, Molecules and Chemical Reactions
	Lecture course, University of Lethbridge	Chemistry 2810, Introductory Inorganic Chemistry
	Independent Study, Univ. of Lethbridge	Chemistry 5990, Spectroscopy and Group Theory
Fall 2005	Lecture course, University of Lethbridge	Chemistry 3810, Main Group Chemistry
	Lab courses, University of Lethbridge	Chemistry 3810, Main Group Chemistry
Spring 2005	Lecture course, University of Lethbridge	Chemistry 1000, Atoms, Molecules and Chemical Reactions
	Lecture course, University of Lethbridge	Chemistry 2810, Introductory Inorganic Chemistry
Fall 2004	Lecture course, University of Lethbridge	Chemistry 3820, Transition Metal Chemistry
	Lab course, University of Lethbridge	Chemistry 3820, Transition Metal Chemistry
Spring 2004	Lecture course, University of Lethbridge	Chemistry 1000, Atoms, Molecules and Chemical Reactions
	Lecture course, University of Lethbridge	Chemistry 2810, Introductory Inorganic Chemistry
Fall 2003	Lecture course, University of Lethbridge	Chemistry 1000A, Atoms, Molecules and Chemical Reactions
	Lecture course, University of Lethbridge	Chemistry 1000B, Atoms, Molecules and Chemical Reactions
Spring 2003	Lecture course, University of Lethbridge	Chemistry 1000, Atoms, Molecules and Chemical Reactions
	Lecture course, University of Lethbridge	Chemistry 2000, Chemical Equilibrium & Electrochemistry

Fall 2002	Lecture course, University of Lethbridge	Chemistry 1000, Atoms, Molecules and Chemical Reactions
Nov. 2002	Summer School, Oulu University, Finland	Instructor at the Finnish Summer School 2002 on Synthetic Main-Group Chemistry
1995 - 2000	Tutorials and labs, McMaster Univ.	Teaching Assistant for Introductory, Inorganic (2nd year), Physical (3rd year), Analytic (2nd year), and Organic Chemistry (2nd and 3rd year)
Sept. 1998	Workshop, McMaster University	"Marking Assigned Problems/Lab Reports" workshop

Graduate Student Supervisory Experience

Daniel Stuart, B.Sc. McMaster Univ.

since 2015, M.Sc.

Douglas Turnbull, B.Sc. U of L

since 2015, M.Sc.

**(NSERC CGS-M, Silver Medal of the Governor General of Canada)
(2 poster awards at Chinook Symposia, 1 poster award at the WFC, Florida)**

Yeasmin Ratna, M.Sc. Univ. of Hyogo, Japan

since 2015, M.Sc. (co-supervised by P. Hazendonk)

(Tuition award, Dean's Scholarship)

Nathan Kostiuk, B.Sc. U of L

since 2014, M.Sc.

(3 poster awards at Chinook Symposia, Indigenous Graduate Scholarship)

Praveen Chaudhary, M.Sc. U of L

2012 - 2016, Ph.D. thesis titled "Properties of $[\text{SF}_3][\text{MF}_6]$ (M = Sb, As), WOF_4 derivatives, 1-ethyl-3-methylimidazolium bifluoride, perfluorocarboxylic acids and perfluorocarboxylates" (co-supervised by P. Hazendonk)

**(Alberta Innovates - Technology Futures, Graduate Scholarship,
Len Bolger Scholarship)**

Currently Lab technologist at Agropur, Lethbridge

Rudraksha Dutta Majumdar, B. Tech. Heritage Institute of Technology, Kolkata, India

2010 - 2015, Ph.D. thesis titled "A nuclear magnetic resonance spectroscopic investigation of the molecular structure and aggregation behavior of asphaltenes" (co-supervised by P. Hazendonk)

**(3rd place and people's choice award for 3 Minute Thesis (3MT), Lethbridge,
2015, two other presentation prizes)**

Currently, postdoctoral fellow at the U of T at Scarborough

James T. Goettel, B. Sc. U of A

2011 - 2013, M.Sc. thesis titled "Structure and chemistry of SF_4 "

(2 poster awards at Chinook Symposia, 1 poster award at the WFC, Florida)

*Currently Ph.D. student at McMaster University, NSERC Alexander Graham Bell
Scholarship*

Praveen Chaudhary, M.E. Delhi Univ., India

2009 - 2012, M.Sc. thesis titled "Lewis-acid and fluoride-ion donor properties of SF_4 and solid-state NMR spectroscopy of Me_3SnF " (co-supervised by P. Hazendonk)

Jared Nieboer, B.Sc. U of L

2005 - 2007, M.Sc. thesis titled "Tungsten and molybdenum sulfide fluorides"

Currently high school teacher

In addition, supervision of 13 undergraduate students, two postdoctoral fellows and two research assistants.

Professional Activities*Service at the International Level*

Since 2013	Member of the Editorial Board of the Journal of Fluorine Chemistry (Published by Elsevier since 1971; Impact factor: 1.95)	
Since 2013	Elected Member of the Executive Committee of the Fluorine Division of the American Chemical Society (ACS)	American Chemical Soc.
Since 2010	Member of the International Steering Committee for International and European Symposia on Fluorine Chemistry	
2014 to 2015	International Advisory Board for the 21 st International Symposium on Fluorine Chemistry in Como, Italy (August 2015)	
2014	Member of Standing Committee for Evaluation of Moissan Summer Undergraduate Research Fellowship applications	American Chemical Soc.
2014	International Advisory Board of the 1 st International Symposium on Inorganic Fluorine Chemistry (ISIF-2014) in Tomsk, Russia	
2013 to 2014	Main organizer of a symposium titled “Exploring the Frontiers of Fundamental and Applied Fluorine Chemistry: a Symposium in Honor of Gary J. Schrobilgen” at the 248 th ACS National Meeting, in San Francisco, California, USA (Aug. 10 to 14, 2014). Speakers: 51 from 11 countries; 3 and ½ day-Symposium	
2013	Chair of the 21 st Winter Fluorine Conference in St. Petersburg, Florida (Jan. 13 to 18, 2013) International Biennial Conference Attendees: 171; (68 lectures, 28 posters) The assigned co-chair was completely inactive, leaving me as the sole chair of this conference (organizational support from the ACS office)	
2005 - 2008	Elected Member of the Executive Committee of the Fluorine Division of the American Chemical Society (ACS)	American Chemical Soc.

Service at the National Level

Since Sept 2016 Member of the NSERC Chemistry Evaluation Group (1504) for NSERC Discovery Grants

Service at the University of Lethbridge

Since June 2013	Founding Director of the Canadian Centre for Research in Advanced Fluorine Technologies (C-CRAFT) (C-CRAFT is the first centre focused on fluorine chemistry in Canada; currently bringing together 8 PIs and 26 graduate students)	University of Lethbridge
Since 2007	Departmental Graduate Education Committee	Department of Chemistry and Biochemistry University of Lethbridge
Since 2003	Departmental Graduate Studies Coordinator (first one since establishment of this position) As Coordinator: - Chair of Departmental Defenses, if not member of the supervisory committee	Department of Chemistry and Biochemistry University of Lethbridge

	<ul style="list-style-type: none"> - Development of Departmental Policies - Review of graduate student applications to the Depart. of Chem. and Biochem. 	
2017	External Member on the Search Committee of the Psychology Dept. (active)	University of Lethbridge
2016	Departmental Member of STP Committee (3 applications)	University of Lethbridge
2016	Chair of the Working Group on Graduate Student Funding	Department of Chemistry and Biochemistry University of Lethbridge
2015/16	Member of the Self-Study Group for AQA review and the CSC accreditation of the B.Sc. in Chemistry	Department of Chemistry and Biochemistry University of Lethbridge
2014	Co-chair (with T. Montana) of a symposium titled "A Symposium celebrating NMR Spectroscopy and Fluorine Chemistry at the University of Lethbridge" at the University of Lethbridge (Dec. 5, 2014). Speakers: 9, including two external speakers	
2012/13	Departmental Member of STP Committee (2 applications)	University of Lethbridge
2012	Co-organizer (with Dr. H.J. Wieden) of the 6 th Chinook Symposium in Chemistry and Biochemistry (Sept 26, 2012)	University of Lethbridge
2011 - 2013	Member of General Faculties Council (GFC), which is responsible for academic affairs at the University	University of Lethbridge
2010 - 2012	Chair of the GFC Travel Committee	University of Lethbridge
2008/2009	Member on the Executive Committee of the School of Graduate Studies	University of Lethbridge
2008/2009	Member of Graduate Council	University of Lethbridge
2008/2009	GFC Honorary Degrees Committee	University of Lethbridge
2008/2009	GFC Travel Committee	University of Lethbridge
2007 - 2009	Member of the Arts & Science Executive Committee	Faculty of Arts & Science, University of Lethbridge
2003 - 2005	Member of the NSERC Scholarship Selection Committee	University of Lethbridge

Publications

(a) Journal Articles

53. R. Dutta Majumdar, T. Montana, O. C. Mullins, M. Gerken, P. Hazendonk* "Insights into Asphaltene Aggregate Structure Using Ultrafast MAS Solid-state ¹H NMR Spectroscopy" Fuel **2017**, *193*, 359-368.
52. J. T. Goettel, M. Gerken,* "Synthesis and Characterization of Adducts between Interactions between SF₄ and Oxygen-Bases: Example of O---S(IV) Chalcogen Bonding" Inorganic Chemistry **2016**, *55*, 12441 - 12450.

51. R. Dutta Majumdar, K. D. Bake, Y. Ratna, A. E. Pomerantz, O. C. Mullins, M. Gerken, P. Hazendonk* "Single-Core PAHs in Petroleum- and Coal-Derived Asphaltenes: Size and Distribution from Solid-State NMR Spectroscopy and Optical Absorption Measurements" Energy & Fuels **2016**, *30*, 6892-6906.
50. J. T. Goettel, N. Kostiuk, M. Gerken,* "Interactions between SF₄ and Fluoride: A Crystallographic Study of Solvolysis Products of SF₄-Nitrogen Base Adducts by HF" Inorganic Chemistry **2016**, *55*, 7126-7134.
49. P. Chaudhary, M. Bieringer, P. Hazendonk,* M. Gerken* "The Structure of Trimethyltin Fluoride" Dalton Transactions **2015**, *44*, 19651-19658. (INVITED)
48. P. Chaudhary, J. T. Goettel, H. P. A. Mercier, S. Sowlati-Hashjin, P. Hazendonk, M. Gerken* "Lewis Acid Behavior of SF₄: Synthesis, Characterization and Computational Study of SF₄ Adducts with Pyridine and Pyridine-Derivatives Techniques" Chemistry – A European Journal **2015**, *21*, 6247-6256.
47. R. Dutta Majumdar, M. Gerken, P. Hazendonk* "Solid-State ¹H and ¹³C NMR Spectroscopy of Athabasca Oil Sands Asphaltenes: Evidence for Interlocking π -Stacked Nanoaggregates with Intercalated Alkyl Side Chains" Energy & Fuels **2015**, *29*, 2790-2800.
46. J. T. Goettel, D. Turnbull, M. Gerken,* "A New Synthetic Route to Rhenium and Iodine Oxide Fluoride Anions: The Reaction between Oxoanions and Sulfur Tetrafluoride" Journal of Fluorine Chemistry **2015**, *174*, 8-13. (INVITED - International Conference on Fluorine Chemistry 2014 Tokyo Edition)
45. R. Dutta Majumdar, M. Gerken, R. Mikula, P. Hazendonk* "Validation of the Yen-Mullins model of Athabasca Oil-Sands Asphaltenes using Solution-State ¹H NMR Relaxation and 2D HSQC Spectroscopy" Energy & Fuels **2013**, *27*, 6528-6537. **HIGHLIGHTED in Local Media**
44. M. Ambeskovic, E. Fuchs, P. Beaumier, M. Gerken, G. A. Metz* "Hair Trace Elementary Profiles in Aging Rodents and Primates: Links to Altered Cell Homeodynamics and Disease" Biogerontology **2013**, *14*, 557-567.
43. J. T. Goettel, N. Kostiuk, M. Gerken* "The Solid-State Structure of SF₄: The Final Piece of the Puzzle" Angewandte Chemie, **2013**, *125*, 8195-8198; Angewandte Chemie International Edition, **2013**, *52*, 8037-8040. **HIGHLIGHTED in Nachrichten aus der Chemie**, **2013**, *61*, 999 and covered in **TRENDS IN INORGANIC CHEMISTRY 2013 in Nachrichten aus der Chemie**, **2014**, *62*, 233.
42. J. T. Goettel, P. Chaudhary, P. Hazendonk, H. P. A. Mercier, M. Gerken* "SF₄·N(C₂H₅)₃: The First Conclusively Characterized SF₄ Adduct with an Organic Base" Chemical Communications, **2012**, *48*, 9120-9122.
41. J. Nieboer, R. Haiges, W. Hillary, X. Yu, T. Richardet, H. P. Mercier, M. Gerken* "Fluoride-Ion Acceptor Properties of WSF₄: Synthesis, Characterization, and Computational Study of the WSF₅⁻ and W₂S₂F₉⁻ Anions, and ¹⁹F NMR Spectroscopic Characterization of the W₂OSF₉⁻ Anion" Inorganic Chemistry, **2012**, *51*, 6350-6359.
40. J. Nieboer, X. Yu, P. Chaudhary, H. P. Mercier, M. Gerken* "Synthesis, Characterization, and Computational Study of WSF₄·NC₅H₅" Zeitschrift für anorganische und allgemeine Chemie **2012**, *638*, 520-525. **INVITED** (Birthday Edition for Prof. H. Willner)
39. E. M. van Oosten, M. Gerken, P. Hazendonk, R. Shank, S. Houle, A. A. Wilson, N. Vasdev* "Regioselective Ring Opening of 2-Methylazirdine Derivatives with ¹⁸F- and ¹⁹F-Fluoride" Tetrahedron Letters **2011**, *52*, 4114-4116.
38. C. M. Kane, T. B. Meyers, X. Yu, M. Gerken,* M. Etzkorn* "Bergman Cyclization of Fluorinated Benzoenediynes to Naphthalene Derivatives: Syntheses and Structures" European Journal of Organic Chemistry, **2011**, 2969-2980.
37. M. Etzkorn,* S. D. Smeltz-Zapata, T. B. Meyers, X. Yu, M. Gerken "From anti-tricyclo[4.2.1.1^{2,5}]deca-3,7-dione to 4,5,6,7-tetrachloro-isoindone derivatives" Tetrahedron Letters **2010**, *51*, 6075-6077.

36. X. Zeng, M. Gerken,* H. Beckers, H. Willner* "Synthesis and Characterization of Carbonyl Diazide, OC(N₃)₂" Inorganic Chemistry **2010**, *49*, 9694-9699.
HIGHLIGHTED in Chemical and Engineering News, 2010, Oct. 11, 34.
35. N. V. Belova,* H. Oberhammer, X. Zeng, M. Gerken, H. Willner, R. Berger, S. A. Hayes, N. W. Mitzel "The keto/enol tautomerism in acetoacetyl fluoride: properties, spectroscopy, and gas-phase and crystal structures of the enol form" Physical Chemistry Chemical Physics **2010**, *12*, 11445-11453.
34. X. Zeng, M. Gerken,* H. Beckers, H. Willner* "Anomeric Effects in Sulfonyl Compounds: An Experimental and Computational Study of Fluorosulfonyl Azide, FSO₂N₃, and Trifluoromethylsulfonyl Azide, CF₃SO₂N₃" Journal of Physical Chemistry A **2010**, *114*, 7624-7630.
33. J. Nieboer, J. P. Mack, H. P. A. Mercier, M. Gerken* "Synthesis, Characterization, and Computational Study of MoSF₄." Inorganic Chemistry **2010**, *49*, 6153-6159.
32. M. Gerken,* G. Pawelke, E. Bernhardt, H. Willner "Syntheses and Characterization of (C₂F₃)₃BCO and (C₃F₇)₃BCO" Chemistry, A European Journal **2010**, *16*, 7527-7536.
31. M. Hughes, M. Gerken, H. P. A. Mercier, G. J. Schrobilgen* "Syntheses and Multi-NMR Study of *fac*- and *mer*-OsO₃F₂(NCCH₃) and the X-ray Crystal Structure of (*n* = 2) and Raman Spectrum of (*n* = 0) of *fac*-OsO₃F₂(NCCH₃)·*n*CH₃CN" Inorganic Chemistry **2010**, *49*, 4768-4780. **FEATURED ON COVER OF JOURNAL**
30. M. Etzkorn,* J. C. Timmerman, M. D. Brooker, X. Yu, M. Gerken "Preparation, structures and preliminary host-guest studies of fluorinated syn-bis-quinoxaline molecular tweezers" Beilstein Journal of Organic Chemistry **2010**, *6*, No. 39; doi:10.3762/bjoc.6.39.
29. X. Zeng, M. Gerken, H. Beckers,* H. Willner "Spectroscopic and Structural Studies of Difluorophosphoryl Azide F₂P(O)N₃, Difluorophosphoryl Isocyanate F₂P(O)NCO, and Difluorophosphoric Acid Anhydride, F₂(O)POP(O)F₂" Inorganic Chemistry **2010**, *49*, 3002-3010.
28. J. Nieboer, W. Hillary, X. Yu, H. P. A. Mercier, M. Gerken* "Syntheses, Characterization, and Computational Study of WSF₄ and WSF₄·CH₃CN" Inorganic Chemistry, **2009**, *48*, 11251-11258.
27. M. Gerken, M. D. Moran, H. P. A. Mercier, B. E. Pointner, G. J. Schrobilgen,* B. Hoge, K. O. Christe,* J. A. Boatz "On the XeF⁺/H₂O System: Synthesis and Characterization of the Xenon(II) Oxide Fluoride Cation, FXeOXeFXe⁺" Journal of the American Chemical **2009**, *131*, 13474-13489.
26. M. Etzkorn,* M. del Rosario I. Amado-Sierra, S. D. Smeltz, M. Gerken "Diels-Alder reactivity of *anti*-tricyclo[4.2.1.1^{2,5}]deca-3,7-diene derivatives" Tetrahedron Letters **2009**, *50*, 2991-2993.
25. J. P. Mack, J. A. Boatz, M. Gerken* "Synthesis, NMR and vibrational spectroscopic characterization, and computational study of the *cis*-IO₂F₃²⁻ anion" Inorganic Chemistry **2008**, *47*, 3243-3247.
24. M. Gerken,* P. Hazendonk A. Iuga, J. Nieboer, M. Tramsek, E. Goreshnik, B. Zemva, S. Zheng, J. Autschbach "Solid-state NMR spectroscopic study of coordination compounds of XeF₂ with metal cations and the crystal structure of [Ba(XeF₂)₅][AsF₆]₂" Inorganic Chemistry **2007**, *46*, 6069-6077.
23. A. Iuga, D. Iuga, A. Cross, M. Gerken, P. Hazendonk* "Observation of satellite signals due to scalar coupling to spin-1/2 isotopes in solid-state nuclear magnetic resonance spectroscopy" Journal of Chemical Physics **2007**, *126*, 054305/1-054305/10.
22. M. A. M. Forgeron, R. E. Wasylishen,* M. Gerken, G. J. Schrobilgen "Solid-state ¹²⁹Xe and ¹³¹Xe NMR study of the perxenate anion XeO₆⁴⁻" Inorganic Chemistry **2007**, *46*, 3585-3592.

21. S. Schneider,* M. Gerken, R. Haiges, T. Schroer, J. A. Boatz, D. A. Dixon, D. J. Grant, K. O. Christe* "Synthesis and Characterization of Silyldichloramines, their Reactions with F⁻ Ions, instability of N₂Cl₂ and NCl₂⁻, and Formation of NCl₃" Inorganic Chemistry, **2007**, 46, 93-102.
20. M. Gerken,* P. Hazendonk A. Iuga, J. P. Mack, H. P. A. Mercier, G. J. Schrobilgen* "The solid-state ¹⁹F NMR spectrum of [N(CH₃)₄][IO₂F₂], a vibrational study of [N(CH₃)₄][IO₃] and [N(CH₃)₄][IO₃]·2H₂O, and the X-ray crystal structures of [N(CH₃)₄][IO₂F₂] and [N(CH₃)₄][IO₃]" Journal of Fluorine Chemistry **2006**, 127, 1328-1338.
19. R. Haiges, M. Gerken,* A. Iuga, R. Bau, K. O. Christe* "Are the NF₄⁺ Cations in NF₄BF₄ Really Nontetrahedral?" Inorganic Chemistry **2006**, 45, 7981-7984.
18. R. Haiges,* J. A. Boatz, A. Vij, V. Vij, M. Gerken, S. Schneider, T. Schroer, M. Yousufuddin, K. O. Christe* "Polyazide Chemistry. Preparation and Characterization of As(N₃)₅, Sb(N₃)₅, and [P(C₆H₅)₄][Sb(N₃)₆]" Angewandte Chemie, **2004**, 116, 6844-6848; Angewandte Chemie, International Edition, English **2004**, 43, 6676-6680.
17. M. Gerken,* J. P. Mack, G. J. Schrobilgen,* R. J. Suontamo "Synthesis, vibrational and NMR spectroscopic characterization of [N(CH₃)₄][IO₂F₂] and X-ray crystal structure of [N(CH₃)₄]₂[IO₂F₂][HF₂]" Journal of Fluorine Chemistry, **2004**, 125, 1663-1670.
16. M. Gerken,* P. Hazendonk, J. Nieboer, G. J. Schrobilgen* "NMR spectroscopic study of xenon fluorides in the gas phase and of XeF₂ in the solid state" Journal of Fluorine Chemistry, **2004**, 125, 1163-1168.
15. A. Vij,* W. W. Wilson, V. Vij, R. Corley, F. S. Tham, M. Gerken, R. Haiges, S. Schneider, T. Schroer, R. I. Wagner "Methyl Tin(IV) Derivatives of HOTeF₅ and HN(SO₂CF₃)₂: A Solution Multinuclear NMR Study and X-ray Crystal Structures of (CH₃)₂SnCl(OTeF₅) and [(CH₃)₃Sn(H₂O)₂][N(SO₂CF₃)₂]" Inorganic Chemistry, **2004**, 43, 3189-3199.
14. R. Haiges,* A. Vij, J. A. Boatz, S. Schneider, T. Schroer, M. Gerken, K. O. Christe* "First Structural Characterization of Binary As(III) and Sb(III) Azides" Chemistry, A European Journal, **2004**, 10, 508-517. **FEATURED ON COVER OF JOURNAL**
13. R. Haiges,* J. A. Boatz, A. Vij, M. Gerken, S. Schneider, T. Schroer, K. O. Christe* "Polyazide Chemistry. Preparation and Characterization of Te(N₃)₄ and [P(C₆H₅)₄]₂[Te(N₃)₆] and Evidence for [N(CH₃)₄]₂[Te(N₃)₅]" Angewandte Chemie, **2003**, 115, 6027-6031.
12. J. A. Boatz, K. O. Christe*, D. A. Dixon, B. A. Fir, M. Gerken, R. Z. Gnann, H. P. A. Mercier, and G. J. Schrobilgen* "Synthesis and Characterization of the *trans*-IO₂F₅²⁻ Dianion" Inorganic Chemistry, **2003**, 42, 5282-5292.
11. K. O. Christe,* M. Gerken, R. Haiges, S. Schneider, T. Schroer, I. Tsyba, R. Bau "The (SO₂)₂N₃⁻ Anion" Inorganic Chemistry, **2003**, 42, 416-419.
10. K. O. Christe,* M. Gerken, R. Haiges, S. Schneider, T. Schroer, F. S. Tham, A. Vij "Tritylsulfinylamine: A New Member in the Family of Sulfinylamines." Solid State Sciences, **2002**, 4, 1529-1534.
9. K. O. Christe,* J. A. Boatz, M. Gerken, R. Haiges, S. Schneider, T. Schroer, F. S. Tham, A. Vij, V. Vij, R. I. Wagner, and W. W. Wilson "Synthesis and Characterization of the SO₂N₃⁻, (SO₂)₂N₃⁻, and SO₃N₃⁻ Anions" Inorganic Chemistry, **2002**, 41, 4275-4285.
8. M. Gerken, J. A. Boatz, A. Kornath, R. Haiges, S. Schneider, T. Schroer, K. O. Christe* "The ¹⁹F NMR Shifts are not a Measure for the Nakedness of the Fluoride Anion" Journal of Fluorine Chemistry, **2002**, 116, 49-58.
7. K. O. Christe,* M. Gerken, S. Schneider, T. Schroer "Improved Synthesis of CsN₃" Zeitschrift für anorganische und allgemeine Chemie, **2002**, 628, 909-910.

6. M. Gerken, D. A. Dixon, G. J. Schrobilgen* "The OsO_3F^+ and $\text{Os}_2\text{O}_6\text{F}_3^+$ Cations, Their Syntheses and Study by Raman and ^{19}F NMR Spectroscopy and Electron Structure Calculations; and the X-ray Crystal Structures of $[\text{OsO}_3\text{F}][\text{PnF}_6]$ (Pn = As, Sb), $[\text{OsO}_3\text{F}][\text{HF}]_2[\text{AsF}_6]$, $[\text{OsO}_3\text{F}][\text{HF}][\text{SbF}_6]$, and $[\text{OsO}_3\text{F}][\text{Sb}_3\text{F}_{16}]$ " Inorganic Chemistry, **2002**, 41, 259-277.
5. M. Gerken and G. J. Schrobilgen* "Solution Multi-NMR and Raman Spectroscopic Study of Thermodynamically Unstable XeO_4 ; the First ^{131}Xe NMR Study of a Chemically Bound Xenon Species " Inorganic Chemistry, **2002**, 41, 198-204.
4. B. Fir, M. Gerken, B. E. Pointner, H. P. A. Mercier, D. A. Dixon, G. J. Schrobilgen* "An X-ray Crystallographic Study of $[\text{Xe}_2\text{F}_3][\text{SbF}_6]$ and Dimorphism in $[\text{Xe}_2\text{F}_3][\text{SbF}_6]$ " Journal of Fluorine Chemistry, **2000**, 105, 159-167.
3. M. Gerken, D. A. Dixon, G. J. Schrobilgen* "The OsO_4F^- , $\text{OsO}_4\text{F}_2^{2-}$, and OsO_3F_3^- Anions and Their Study by Vibrational and NMR Spectroscopy and Density Functional Calculations; and the X-ray Crystal Structures of $[\text{N}(\text{CH}_3)_4][\text{OsO}_4\text{F}]$ and $[\text{N}(\text{CH}_3)_4][\text{OsO}_3\text{F}_3]$ " Inorganic Chemistry, **2000**, 39, 4244-4255.
2. M. Gerken, P. Kolb, A. Wegner, H. P. A. Mercier, H. Borrmann, D. A. Dixon, G. J. Schrobilgen* "Tetrachloro- and tetrabromoarsonium(V) Cations: Raman and ^{75}As , ^{19}F NMR Spectroscopic Characterization and X-ray Crystal Structures of $\text{AsCl}_4^+\text{As}(\text{OTeF}_5)_6^-$ and $\text{AsBr}_4^+\text{AsF}(\text{OTeF}_5)_5^-$ " Inorganic Chemistry, **2000**, 39, 2813-2824.
1. J. Campbell, L. A. Devereux, M. Gerken, H. P. A. Mercier, A. M. Pirani, G. J. Schrobilgen* "Ditin(IV) Chalcogenide Anions: ^{77}Se , ^{119}Sn and ^{125}Te Solution NMR Study of the $\text{Sn}_2\text{Ch}_6^{4-}$ and $\text{Sn}_2\text{Ch}_7^{4-}$ (Ch = Se, Te), X-Ray Crystal Structures and Raman Spectra of $\text{K}^+(\text{N}(\text{CH}_3)_4^+)_3\text{Sn}_2\text{Se}_6^{4-}$, $(\text{enH}^+)_2(2,2,2\text{-crypt-K}^+)_2\text{Sn}_2\text{Se}_6^{4-}$, $(\text{K}^+)_2(2,2,2\text{-crypt-K}^+)_2\text{-Sn}_2\text{Te}_6^{4-}$ and X-Ray Crystal Structures of $\text{K}^+(2,2,2\text{-crypt-K}^+)_2\text{HOSnTe}_3^{3-}$ and $\text{K}^+(2,2,2\text{-crypt-K}^+)_2\text{HOSnTe}_3^{3-}\cdot\text{en}$." Inorganic Chemistry, **1996**, 35, 2945-2962.

(b) Contributions to Books

4. M. Gerken "Preparation of Transition Metal Sulfide Fluorides" In Efficient Preparation of Fluorine Compounds; H. Roesky, Ed.; Wiley-VCH, **2013**, 79-81.
3. M. Gerken, G. J. Schrobilgen "Noble-Gas Elements" In Encyclopedia of Magnetic Resonance; R. K. Harris, R. E. Wasylishen, Eds.; Wiley, published online, **2011**.
2. M. Gerken, G. J. Schrobilgen "Osmium(VIII) Oxide and Oxide Fluoride Chemistry" In Inorganic Chemistry in Focus II; G. Meyer, D. Naumann, L. Wesemann, Eds.; Wiley-VCH, **2005**, 243-266.
1. M. Gerken, H. P. A. Mercier, G. J. Schrobilgen "Syntheses and Structures of the Oxide Fluorides of the Main-Group and Transition Metal Elements" In Advanced Inorganic Fluorides: Synthesis, Characterization and Application; T. Nakajima, A. Tressaud, B. Zemva, eds., Elsevier Science, **1999**, 117 - 174.

(c) Review Articles

1. M. Gerken, G. J. Schrobilgen "The Impact of Multi-NMR Spectroscopy on the Development of Noble-Gas Chemistry." Coordination Chemistry Reviews, **2000**, 197, 335-395.

Meetings and Conferences

(a) Oral Presentations:

33. N. Kostiuk, P. Hazendonk, S. D. Wetmore, M. Gerken "Pentafluoroethyl derivatives of sulfur(IV) fluorides", 23rd Winter Fluorine Conference, Clearwater Beach, Florida, January 15 - 20, **2017**. (Abstract WFC 72) (**INVITED TALK**)
32. M. Gerken, D. Turnbull, S. D. Wetmore "Recent progress in imidotungsten(VI) fluoride chemistry", 18th European Symposium on Fluorine Chemistry, Kyiv, Ukraine, August 7 - 12, **2016**. (Abstract B1.2-IL) (**INVITED TALK**)

31. M. Gerken, D. Turnbull "Synthesis and characterization of organylimidotungsten(VI) fluorides", 2015 International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, USA, December 15 - 20, **2015**. (Abstract INOR 1397) **(INVITED TALK)**
30. M. Gerken, P. Chaudhary, J. T. Goettel, N. Kostiuk, H. P. A. Mercier "Recent Progress in SF₄ Chemistry", 21st International Symposium on Fluorine Chemistry, Como, Italy, August 23 to 28, **2015**. **(INVITED TALK)**
29. P. Chaudhary, P. Hazendonk, M. Gerken "Trimethyltin fluoride: Linear or non-linear chain structure in the solid state?", 22nd Winter Fluorine Conference, St. Pete Beach, Florida, January 11 to 16, **2015**. **(INVITED TALK)** (FLUO 40)
28. M. Gerken ""Sulfur fluorides: Bridging fundamental and applied fluorine chemistry", A symposium celebrating NMR spectroscopy and fluorine chemistry at the University of Lethbridge, Lethbridge, Alberta, December 5th, **2014**.
27. M. Gerken "Sulfur Tetrafluoride: New perspectives on an old molecule", Festkolloquium honoring Konrad Seppelt, Berlin, Germany, November 28th, **2014**. **(ONE OF TWO INVITED PLENARY SPEAKERS)**
26. P. Chaudhary, P. Hazendonk, M. Gerken "Properties and reactivity of SF₃⁺ salts", 248th ACS National Meeting and Exposition, San Francisco, CA, August 10th to 14th, **2014**. (Abstract FLUO 84)
25. J. T. Goettel, N. Kostiuk, M. Gerken "Sulfur tetrafluoride: Lewis Acid Interactions in the solid state and its Utility in Inorganic Chemistry", 97th Canadian Chemistry Conference, Vancouver, BC, June 1st to 5th, **2014**. (Abstract 2014)
24. J. T. Goettel, N. Kostiuk, M. Gerken "Sulfur tetrafluoride: Lewis Acid Interactions in the solid state and its Utility in Inorganic Chemistry", International Conference on Fluorine Chemistry 2014 Tokyo, Yokohama, Japan, May 28 to 30, **2014**. **(INVITED TALK)** (Abstract I-20)
23. P. Chaudhary, J. T. Goettel, H. P. A. Mercier, M. Gerken "Reactions of SF₄ and SF₃⁺ with Lewis Bases", 17th European Symposium on Fluorine Chemistry, Paris, France, July 21 to 25, **2013**. (Abstract B10.1)
22. P. Chaudhary, M. Gerken, J. T. Goettel, H. P. A. Mercier "Recent Progress in SF₄ Chemistry", 96th Canadian Chemistry Conference, Quebec, Quebec, May 26 to 30, **2013**. **(INVITED TALK)** (Abstract 0468)
21. P. Chaudhary, J. T. Goettel, H. P. A. Mercier, M. Gerken "Recent Progress in SF₄ Chemistry", 21st Winter Fluorine Conference, St. Pete Beach, Florida, January 13 to 18, **2013**. (FLUO 23)
20. P. Chaudhary, J. Goettel, H. P. A. Mercier, M. Gerken "Lewis Acid Chemistry of SF₄ and SF₃⁺", 20th International Symposium on Fluorine Chemistry, Kyoto, Japan, July 22 to 27, **2012**. **(INVITED TALK)** (Abstract 2B-2)
19. P. Chaudhary, J. Goettel, P. Hazendonk, H. P. A. Mercier, M. Gerken "Recent Progress in SF₄ Chemistry", 95th Canadian Chemistry Conference and Exhibition, Calgary, Alberta, May 26 to 30, **2012**. (Abstract 1738)
18. M. Gerken, G. Pawelke, H. Willner "Synthesis and Characterization of (C₂F₅)₃BCO and (C₃F₇)₃BCO", The 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, USA, December 15 - 20, **2010**. (Abstract INOR 788)
17. M. Gerken, H. P. A. Mercier, J. Nieboer "Synthesis and Characterization of Tungsten and Molybdenum Sulfide Fluorides", 16th European Symposium on Fluorine Chemistry, Ljubljana, Slovenia, July 18 - 23, **2010**. **(INVITED KEYNOTE SPEAKER)** (Abstract B21-IN)
16. P. Chaudhary, M. Gerken, A. Iuga, R. Shank "Solid-state NMR spectroscopy of xenon fluorides: Structural Characterization and Trends in Lewis Acidity.", 92nd Canadian Society for Chemistry Conference, Hamilton, Ontario, Canada, May 31 – June 3, **2009**. **(INVITED TALK)** (Abstract IN3)
15. M. Gerken "Starting an Academic Career in Inorganic Fluorine Chemistry", McMaster Chemistry Alumni Symposium, Hamilton, Ontario, Canada, Oct. 18, **2008**. **(INVITED TALK)**
14. J. Nieboer, M. Gerken, "Synthesis and Characterization of Tungsten and Molybdenum Sulfide Fluorides", 91th Canadian Society for Chemistry Conference, Edmonton, Alberta, Canada, May 24 – 28, **2008**. (Abstract IN9)
13. M. Gerken, A. Abo-Amer, P. Hazendonk, A. Iuga, J. P. Mack, J. A. Nieboer, G. J. Schrobilgen, B. Zemva "Solid-state NMR spectroscopy of xenon and iodine fluorides.", 234th ACS National Meeting, Boston, August 21 – 22, **2007**. **(INVITED TALK)** (Abstract FLUO 0039)
12. M. Gerken, P. Hazendonk, A. Iuga, J. P. Mack "Solid-state ¹⁹F NMR spectroscopy of the IO₂F₂⁻ and IO₂F₃²⁻ anions." 15th European Symposium on Fluorine Chemistry, Prague, Czech Republic, July 15 – 20, **2007**. (Abstract B24)
11. M. Gerken, P. Hazendonk, A. Iuga, J. P. Mack "Solid-state ¹⁹F NMR spectroscopy of the IO₂F₂⁻ and IO₂F₃²⁻ anions.", 90th Canadian Chemistry Conference, Winnipeg, Manitoba, May 26 – 30, **2007**. (Abstract IN6)
10. M. Gerken, P. Hazendonk, W. Hillary, A. Iuga, J. Mack, J. Nieboer "Synthesis and Characterization of [N(CH₃)₄][SSiMe₃] and Solid-State NMR Spectroscopy of IO₂F₂⁻", 18th International Symposium on Fluorine Chemistry, Bremen, Germany, July 30 to August 4, **2006**.
9. M. Gerken, P. Hazendonk, J. Mack, J. Nieboer, G. J. Schrobilgen, M. Tramšek, B. Žemva "Recent Progress in

- Solid-State NMR Spectroscopy of Inorganic Fluorides", Pacificchem-2005, Honolulu, Hawaii, USA, December 15 – 20, **2005. (INVITED TALK)** (Abstract INOR 1115)
8. M. Gerken, P. Hazendonk, J. Nieboer "Recent Progress in Solid-State NMR Spectroscopy of Xenon Compounds", 88th Canadian Society for Chemistry Conference, Saskatoon, Saskatchewan, Canada, May 28 – June 1, **2005. (INVITED TALK)**
 7. M. Gerken, J. P. Mack, G. J. Schrobilgen "Lewis-acid properties of the IO_2F_2^- anion", 87th Canadian Society for Chemistry Conference, London, Ontario, Canada, May 29 – June 1, **2004. (INVITED TALK)**
 6. M. Gerken, J. P. Mack, G. J. Schrobilgen "Lewis-acid properties of the IO_2F_2^- anion", The International Conference on Fluorine Chemistry '04 Kyoto, Kyoto, Japan, May 9 - 11, **2004. (INVITED TALK)**
 5. M. Gerken, P. Hazendonk, G. Lin, J. Nieboer "Characterization of XeF_2 by Solid-State NMR Spectroscopy", 39th IUPAC Congress and 86th Canadian Society for Chemistry Conference, Ottawa, Ontario, Canada, August 10 - 15, **2003.**
 4. M. Gerken, P. Hazendonk, and G. J. Schrobilgen, "NMR Spectroscopic Characterization of Xenon Compounds", 225th American Chemical Society National Meeting, New Orleans, Louisiana, March 23-27, **2003. (INVITED TALK)**
 3. M. Gerken, K. O. Christe, and J. A. Boatz, "Study of ^{19}F Chemical Shifts of the Fluoride Anion in Solution", 85th Canadian Society for Chemistry Conference, Vancouver, British Columbia, Canada, June 1 - 5, **2002.**
 2. M. Gerken and G.J. Schrobilgen, "Xenon(VIII) and Osmium(VIII) Oxide Fluoride Chemistry", 84th Canadian Society for Chemistry Conference, Montreal, Quebec, Canada, May 26 - 30, **2001.**
 1. M. Gerken and G.J. Schrobilgen, "Fluoride Ion Donor-Acceptor Properties of Osmium(VIII) Oxofluorides", 82nd Canadian Society for Chemistry Conference, Toronto, Ontario, Canada, May 30 - June 2, **1999.**
- (b) Poster Presentations:**
7. M. Gerken and G.J. Schrobilgen, "Xenon(VIII) and Osmium(VIII) Oxide Fluoride Chemistry", 2000 International Chemical Congress of Pacific Basin Societies, Honolulu, Hawaii, December 14 - 19, **2000.**
 6. M. Gerken and G.J. Schrobilgen, "Lewis Acid-Base Properties of Osmium(VIII) Oxide Fluorides", 16th International Symposium on Fluorine Chemistry, Durham, UK, July 16 - 21, **2000.**
 5. M. Gerken, G. J. Schrobilgen, K. O. Christe, B. Hoge, and X. Zhang, "The $\text{XeF}^+/\text{H}_2\text{O}$ System - A Surprisingly Complex System", 82nd Canadian Society for Chemistry Conference, Toronto, Ontario, Canada, May 30 - June 2, **1999.**
 4. M. Gerken, G. J. Schrobilgen, K. O. Christe, B. Hoge, and X. Zhang, "The $\text{XeF}^+/\text{H}_2\text{O}$ System - A Surprisingly Complex System", 14th Winter Fluorine Conference, St. Petersburg, Florida, USA, January 17 -22, **1999.**
 3. M. Gerken and G. J. Schrobilgen, "New Developments in Xe(VIII) Chemistry", 29th Inorganic Discussion Weekend, McGill University, Montreal, Quebec, November 1-3, **1996.**
 2. B. Fir, M. Gerken, G. J. Schrobilgen, "New Developments in Xe(VIII) and Os(VIII) Chemistry", 15th International Symposium on Fluorine Chemistry, Vancouver, B.C., August 2-7, **1997.**
 1. B. Fir, M. Gerken, G. J. Schrobilgen, "New Developments in Xe(VIII) and Os(VIII) Chemistry", 80th Canadian Society for Chemistry Conference and Exhibition, Windsor, Ontario, June 1 - 4, **1997.**
- (c) Co-authored Presentations:**
76. D. Stuart, D. Turnbull, S. D. Wetmore, M. Gerken "Exploring adducts of SF_4 and $[\text{SF}_3]^+$ with various oxygen bases", 23rd Winter Fluorine Conference, Clearwater Beach, Florida, January 15 - 20, **2017.** (Abstract WFC 34)
 75. D. Turnbull, S. D. Wetmore, M. Gerken "Synthesis, characterization, and computational study of fluorodio(imido)tungsten(VI) complexes", 23rd Winter Fluorine Conference, Clearwater Beach, Florida, January 15 - 20, **2017.** (Abstract WFC 32) **(POSTER AWARD)**
 74. Y. Ratna, P. Hazendonk, M. Gerken "A Structural Analysis of Asphaltenes Using NMR Spectroscopy Techniques", 10th Chinook Symposium, Lethbridge, Alberta, Oct. 14, **2016.** (Poster, Abstract 34)
 73. D. Stuart, M. Gerken "Exploring Adducts of $[\text{SF}_3]^+$ with Various Oxygen-Bases", 10th Chinook Symposium, Lethbridge, Alberta, Oct. 14, **2016.** (Poster, Abstract 41)
 72. D. Turnbull, S. D. Wetmore, M. Gerken "Fluorido(imido)tungsten(VI) Complexes", 10th Chinook Symposium, Lethbridge, Alberta, Oct. 14, **2016.** (Poster, Abstract 44) **1st M.Sc. POSTER AWARD (chemistry division)**
 71. Y. Yoyo, M. Gerken "Syntheses and Characterization of $[\text{SF}_3\text{py}_n]^+$ Salts ($n = 1,2$)", 10th Chinook Symposium, Lethbridge, Alberta, Oct. 14, **2016.** (Poster, Abstract 48)
 70. P. Hazendonk, R. Dutta Majumdar, M. Gerken "Aggregation and Clustering of Asphaltenes, Molecular Insights into Improving Flow and Fouling Properties of Heavy Crude Oils", 99th Canadian Chemistry Conference and Exhibition, Halifax, Nova Scotia, June 5-9, **2016.** (Talk, Abstract 00190)
 69. R. Dutta Majumdar, P. Hazendonk, M. Gerken "Comparison of petroleum and coal derived asphaltenes using

- solution- and solid-state NMR spectroscopy", 65th Canadian Chemical Engineering Conference, Calgary, Alberta, Oct 4-7, **2015**. (Talk, Abstract 00007)
68. D. Turnbull, N. Kostiuk, M. Gerken "Syntheses and Characterization of Substituted Tungsten(VI) Fluorides", 9th Chinook Symposium, Lethbridge, Alberta, Sept 18, **2015**. (Poster, Abstract 37) **1st UNDERGRADUATE POSTER AWARD (chemistry division)**
67. P. Hazendonk, R. Dutta Majumdar, M. Gerken, O. C. Mullins, "Comparison of Petroleum and Coal Derived Asphaltene Structure using 2D-HSQC NMR Spectroscopy and the Effect of Concentration on Relaxation and Diffusion Behavior", PetroPhase 2015, Riviera Maya, Mexico, June 7 - 11, **2015**. (Oral Presentation, Abstract O-39)
66. R. Dutta Majumdar, P. Hazendonk, M. Gerken, O. C. Mullins, "Comparison of Petroleum and Coal Derived Asphaltene Structure using Solid-State Nuclear Magnetic Resonance Spectroscopy", PetroPhase 2015, Riviera Maya, Mexico, June 7 - 11, **2015**. (Poster, Abstract P-55)
65. R. Dutta Majumdar, M. Gerken, P. Hazendonk, "What's Blocking That Pipeline? - Investigating the Cholesterol of Petroleum Using Nuclear Magnetic Resonance Spectroscopy", Meeting of the Minds, 9th Annual Graduate Students' Association Multidisciplinary Research Conference, Lethbridge, Alberta, March 20-21, **2015**. (Oral Presentation, Abstract A08)
64. P. Hazendonk, P. Chaudhary, A. H. Karoyo, M. Gerken, L. D. Wilson "A solid-state ¹⁹F NMR investigation into the binding and dynamics of perfluorinated guests in β -cyclodextrin hosts", 22st Winter Fluorine Conference, St. Pete Beach, Florida, January 11 to 16, **2015**. (Oral Presentation, FLUO 81)
63. P. Chaudhary, Y. Yao, P. Hazendonk, M. Gerken "[SF₃][MF₆] (M = Sb, As) salts: Properties, reactivity and their use as selective fluorinating reagents?", 22st Winter Fluorine Conference, St. Pete Beach, Florida, January 11 to 16, **2015**. (Poster, FLUO 13)
62. N. Kostiuk, J. T. Goettel, M. Gerken "The Coordination of SF₄ to Non-Pyridine Nitrogenous Bases", 8th Chinook Symposium, Lethbridge, Alberta, Sept 26, **2014**. (Poster, Abstract 21) **2ND UNDERGRADUATE POSTER AWARD (chemistry division)**
61. R. Dutta Majumdar, M. Gerken, P. Hazendonk, R. Mikula "Validation of the Yen-Mullins Model of Athabasca Oil-Sands Asphaltenes Using Solution-State ¹H NMR Relaxation and 2D HSQC Spectroscopy", PetroPhase XV, Galveston, TX, June 8 - 12, **2014**. (Poster, Abstract P-55)
60. R. Dutta Majumdar, M. Gerken, P. Hazendonk, R. Mikula "Athabasca Oil-Sands Asphaltenes: Using Solid-State NMR Spectroscopy to Characterize Molecular Structure and Aggregation in a Solvent-free Environment", PetroPhase XV, Galveston, TX, June 8 - 12, **2014**. (Poster, Abstract P-65)
59. P. Chaudhary, P. Hazendonk, M. Gerken "Properties and Reactivity of SF₃⁺ Salts", 97th Canadian Chemistry Conference, Vancouver, BC, June 1st to 5th, **2014**. (Poster, Abstract 938)
58. N. Kostiuk, J. T. Goettel, M. Gerken "The Coordination of SF₄ to Non-pyridine Nitrogenous Bases", 97th Canadian Chemistry Conference, Vancouver, BC, June 1st to 5th, **2014**. (Poster, Abstract 962)
57. J. T. Goettel, N. Kostiuk, M. Gerken "Sulfur Tetrafluoride in the Solid State", 46th Inorganic Discussion Weekend, York University, Toronto, Ontario, November 8 to 10, **2013**. (Oral Presentation, OB9)
56. N. Kostiuk, J. T. Goettel, M. Gerken "The Coordination of SF₄ Non-Pyridine Nitrogenous Bases", 7th Chinook Symposium, Lethbridge, Alberta, Sept 27, **2013**. (Poster, Abstract 19) **2ND UNDERGRADUATE POSTER AWARD (chemistry division)**
55. R. Dutta Majumdar, M. Gerken, R. Mikula, P. Hazendonk "A Fresh Look at an Old Problem: Understanding Asphaltenes from an NMR Spectroscopist's Perspective", 7th Chinook Symposium, Lethbridge, Alberta, Sept 27, **2013**. (Oral Presentation, Abstract 8) **Lorne Hepler Gold Medal for best Ph.D. Talk**
54. P. Chaudhary, P. Hazendonk, M. Gerken "The SF₃⁺ Cation and Its Adducts with Lewis Bases", 7th Chinook Symposium, Lethbridge, Alberta, Sept 27, **2013**. (Poster, Abstract 7)
53. J. T. Goettel, N. Kostiuk, M. Gerken "Solvolysis of SF₄•Nitrogen Base Adducts by HF, and the Solid-State Structure of SF₄", 17th European Symposium on Fluorine Chemistry, Paris, France, July 21 to 25, **2013**. (Poster, Abstract P2.37)
52. J. T. Goettel, N. Kostiuk, M. Gerken "Sulfur Tetrafluoride in the Solid State", 96th Canadian Chemistry Conference, Quebec, Quebec, May 26 to 30, **2013**. (Oral Presentation, Abstract 0652)
51. P. Chaudhary, P. Hazendonk, M. Gerken "Synthesis and Characterization of Adducts between [SF₃]⁺ and [SF₂]²⁺ with Nitrogen Bases", 96th Canadian Chemistry Conference, Quebec, Quebec, May 26 to 30, **2013**. (Poster, Abstract 0899)
50. R. Dutta Majumdar, P. Hazendonk, M. Gerken, R. Mikula "Solid-state NMR Analysis of Athabasca Oil-Sands Asphaltenes", 96th Canadian Chemistry Conference, Quebec, Quebec, May 26 to 30, **2013**. (Poster, Abstract 0769)
49. R. Dutta Majumdar, P. Hazendonk, M. Gerken, R. Mikula "Athabasca Oil-Sands Asphaltenes: Solving a Structural

- Puzzle Using Nuclear Magnetic Resonance Spectroscopy", Meeting of the Minds 2013 Multidisciplinary Conference, Lethbridge, Alberta, March 16, **2013. (Oral Presentation, T13) (PRICE FOR BEST PRESENTATION)**
48. M. Etzkorn, T. B. Meyers, S. A. McMillan, M. Gerken, J. T. Goettel "Tetrafluoro-isoindanone as a synthetic platform: Towards fleeting intermediates, polycycles and extended pi-systems", 21st Winter Fluorine Conference, St. Pete Beach, Florida, January 13 to 18, **2013. (Oral Presentation, FLUO 55)**
 47. J. T. Goettel, N. Kostiuk, M. Gerken "Solvolysis of SF₄•Nitrogen Base Adducts", 21st Winter Fluorine Conference, St. Pete Beach, Florida, January 13 to 18, **2013. (Poster, FLUO 63) (Poster Prize)**
 46. D. Turnbull, P. Chaudhary, M. Gerken "Lewis-Acid Chemistry of Rhenium Hexafluoride", 6th Chinook Symposium, Lethbridge, Alberta, Sept. 28, **2012. (Poster, Abstract 34)**
 45. N. Kostiuk, J. T. Goettel, M. Gerken "Solvolysis of SF₄ N-base Adducts by HF", 6th Chinook Symposium, Lethbridge, Alberta, Sept. 28, **2012. (Poster, Abstract 21) BEST UNDERGRADUATE POSTER AWARD (chemistry division)**
 44. J. T. Goettel, P. Chaudhary, P. Hazendonk, H. P. A. Mercier, M. Gerken "Synthesis and Characterization of SF₄ N-base Adducts", 6th Chinook Symposium, Lethbridge, Alberta, Sept. 28, **2012. (Poster, Abstract 12) BEST M.Sc. POSTER AWARD (chemistry division)**
 43. R. Dutta Majumdar, P. Hazendonk, M. Gerken "Asphaltenes from Oil-Sands Bitumen: Investigating Structure by Solution- and Solid-State NMR Spectroscopy", 6th Chinook Symposium, Lethbridge, Alberta, Sept. 28, **2012. (Poster, Abstract 7)**
 42. P. Chaudhary, P. Hazendonk, M. Gerken "Synthesis and Characterization of SF₃⁺ Nitrogen-Base Adducts", 6th Chinook Symposium, Lethbridge, Alberta, Sept. 28, **2012. (Poster, Abstract 5)**
 41. P. Chaudhary, M. Gerken, P. Hazendonk "Liquid and Solid State NMR Study of 1-Butyl 2,3 Dimethyl Imidazolium Tetrafluoroborate", 54th Annual Rocky Mountain Conference on Analytical Chemistry, Copper Mountain, Colorado, July 15 to 19, **2012. (Poster, Abstract 403)**
 40. R. Dutta Majumdar, P. Hazendonk, M. Gerken, R. Mikula "Asphaltenes from Oil-Sands Bitumen: Investigating Structure by Solution- and Solid-State NMR Spectroscopy", 54th Annual Rocky Mountain Conference on Analytical Chemistry, Copper Mountain, Colorado, July 15 to 19, **2012. (Poster, Abstract 404)**
 39. R. Dutta Majumdar, P. Hazendonk, M. Gerken, R. Mikula "Asphaltenes from Oil-Sands Bitumen: Investigating Structure by Solution- and Solid-State NMR Spectroscopy", 95th Canadian Chemistry Conference and Exhibition, Calgary, Alberta, May 26 to 30, **2012. (Poster, Abstract 1615)**
 38. J. T. Goettel, P. Chaudhary, P. Hazendonk, H. P. A. Mercier, M. Gerken "Synthesis and Characterization of SF₄ N-base Adducts", 95th Canadian Chemistry Conference and Exhibition, Calgary, Alberta, May 26 to 30, **2012. (Poster, Abstract 353)**
 37. P. Chaudhary, P. Hazendonk, M. Gerken "Synthesis and Characterization of SF₃⁺ Nitrogen-Base Adducts", 95th Canadian Chemistry Conference and Exhibition, Calgary, Alberta, May 26 to 30, **2012. (Poster, Abstract 356)**
 36. P. Chaudhary, M. Gerken, P. Hazendonk "Study of Tungsten Oxide Fluoride Based Weakly Coordinating Anions", 5th Chinook Symposium for Chemistry and Biochemistry, Lethbridge, Alberta, September 30, **2011.**
 35. R. Dutta Majumdar, M. Gerken, P. Hazendonk "Investigating Athabasca Oil-Sands Asphaltene Structure, by Solution-State and Solid-State NMR Spectroscopy", 5th Chinook Symposium for Chemistry and Biochemistry, Lethbridge, Alberta, September 30, **2011.**
 34. P. Chaudhary, M. Gerken, J. Goettel, P. Hazendonk "Trimethyltin Fluoride: A High-Resolution ¹¹⁹Sn, ¹³C, and ¹⁹F Solid-State NMR Study.", 4th Chinook Symposium for Chemistry and Biochemistry, Lethbridge, Alberta, October 1, **2010.**
 33. P. Chaudhary, M. Gerken, J. Goettel, P. Hazendonk "Trimethyltin Fluoride: A High-Resolution ¹¹⁹Sn, ¹³C, and ¹⁹F Solid-State NMR Study.", 52nd Annual Rocky Mountain Conference on Analytical Chemistry, Snowmass, Colorado, USA, August 1 - 5, **2010.**
 32. M. Etzkorn, J. C. Timmerman, C. M. Kane, T. B. Meyers, M. Gerken, J. C. Poler, J. R. Alston "Fluorinated Molecular Tweezers with Large Binding Clefts: Syntheses, Structures and Host-Guest Chemistry", 16th European Symposium on Fluorine Chemistry, Ljubljana, Slovenia, July 18 - 23, **2010. (Abstract C2)**
 31. P. Chaudhary, M. Gerken, J. Goettel, P. Hazendonk, H. P. A. Mercier "Sulfur(IV) Chemistry: Adducts of SF₄ with Nitrogen-bases and Phase Properties of SF₃⁺ Salts.", 93rd Canadian Chemistry Conference and Exhibition, Toronto, ON, May 29 – June 2, **2010.**
 30. R. Shank, N. Vasdev, E. van Oosten, M. Gerken, P. Hazendonk "Solution and Solid State NMR Spectroscopic Studies of new Fluoroamines; Applications in Radiopharmaceutical Chemistry", 93rd Canadian Chemistry Conference and Exhibition, Toronto, ON, May 29 – June 2, **2010.**
 29. J. Goettel, P. Chaudhary, M. Gerken, P. Hazendonk "Synthesis and Characterization of Sulfur Tetrafluoride

- Adducts and Salts.”, Western Canada Undergraduate Chemistry Conference, Lethbridge, AB, May 6 – 8, **2010**. **BEST POSTER AWARD (inorganic division)**
28. R. Shank, E. van Oosten, N. Vasdev, M. Gerken, P. Hazendonk “Solution and Solid State NMR Spectroscopy: Applications in Radiopharmaceutical Chemistry”, Western Canada Undergraduate Chemistry Conference, Lethbridge, AB, May 6 – 8, **2010**.
 27. R. Shank, P. Hazendonk, M. Gerken, E. van Oosten, N. Vasdev “A Study into the Dynamics of Small Organic Molecules using Nuclear Magnetic Resonance (NMR)”, Western Canada Undergraduate Chemistry Conference, Kamloops, BC, May 7 – 9, **2009**.
 26. M. Etzkorn, M. d. R. I. Amedo Sierra, S. D. Smeltz, M. Gerken “Functionalization Studies of Anti-Tricyclo [4.2.1.1^{2,5}]deca-3,7-diene-9,10-dione and its Derivatives”, 60th Southeastern Regional Meeting of the American Chemical Society, Nashville, TN, Nov. 12-15, **2008**.
 25. R. Shank, P. Hazendonk, M. Gerken, E. van Oosten, N. Vasdev “A Study into the Dynamics of Small Organic Molecules using Nuclear Magnetic Resonance (NMR)”, 2nd Chinook Symposium, Lethbridge, Alberta, Oct. 3, **2008**.
 24. P. Hazendonk, M. Gerken, A. Cross, A. Iuga, T. Montana, D. Iuga, J. Nieboer “¹⁹F NMR Spectroscopy on Highly Reactive Inorganic Fluorides”, 4th Alpine Conference on Solid-state NMR, Chamonix, France, Sept. 10 – 15, **2005**.
 23. P. Hazendonk, M. Gerken, A. Cross, A. Iuga, T. Montana, J. Nieboer “Isotope Selective ¹⁹F NMR spectroscopy of Inorganic Fluorides” ACS 47th Rocky Mountain Conference on Analytical Chemistry, Denver, Colorado, August 1 -5, **2005**.
 22. M. Gerken, P. Hazendonk, J. Nieboer "Solid-State NMR Spectroscopic Characterization of Mg(XeF₂)₄(AsF₆)₂", 88th Canadian Society for Chemistry Conference, Saskatoon, Saskatchewan, Canada, May 28 – June 1, **2005**.
 21. M. Gerken, J. P. Mack, J. A. Boatz "The IO₂F₅²⁻ Anion", 88th Canadian Society for Chemistry Conference, Saskatoon, Saskatchewan, Canada, May 28 – June 1, **2005**.
 20. M. Gerken, P. Hazendonk, J. Nieboer "Fluorine Background Suppression Methods in ¹⁹F MAS NMR Spectroscopy of Xenon Fluorides", 88th Canadian Society for Chemistry Conference, Saskatoon, Saskatchewan, Canada, May 28 – June 1, **2005**.
 19. P. Hazendonk, M. Gerken, J. Nieboer, "Solid-state NMR Spectroscopy of Highly Reactive Inorganic Fluorides: A ¹⁹F and ¹²⁹Xe MAS NMR Study of XeF₂" 46th Rocky Mountain Conference, Symposium on NMR, Denver, Colorado, August 2 - 5, **2004**.
 18. R. Haiges, S. Schneider, T. Schroer, M. Gerken, J. Boatz, A. Vij, M. Yousufuddin, K. Christe, "Fluoride/Azide Ligand Exchange Reactions", 14th European Symposium on Fluorine Chemistry, Poznan, Poland, July 11 - 16, **2004**.
 17. M. Gerken, H. P. A. Mercier, M. D. Moran, B. E. Pointner, G. J. Schrobilgen, C. Steinberg, R. J. Suontamo, "Recent developments in noble-gas chemistry and synthetic applications of noble-gas compounds", The International Conference on Fluorine Chemistry '04 Kyoto, Kyoto, Japan, May 9 - 11, **2004**.
 16. A. Vij, W. W. Wilson, V. Vij, F. S. Tham, M. Gerken, "Methyl tin(IV) derivatives of HOTeF₅ and HN(SO₂CF₃)₂", 226th American Chemical Society National Meeting, New York, NY, September 7 - 11, **2003**.
 15. Schneider, S.; Christe, K. O.; Gerken, M.; Haiges, R.; Schroer, T.; Tsyba, I.; Bau, R. "Azide and fluoride reactions with (R₃Si)_xNCl_y (x, y = 1, 2) compounds. " 225th ACS National Meeting, New Orleans, Louisiana, March 23-27, **2003**.
 14. Haiges, R.; Bau, R.; Boatz, J. A.; Christe, K. O.; Gerken, M.; Schneider, S.; Schroer, T.; Vij, A.; Tham, F. S.; Tsyba, I.; Wagner, R. I. "Main group polyazido compounds."; 225th ACS National Meeting, New Orleans, Louisiana, March 23-27, **2003**.
 13. A. Vij, W. Wilson, V. Vij, F. Tham., M. Gerken, K. O. Christe, "Nitrogen fluoride chemistry", 224th American Chemical Society National Meeting, Boston, Massachusetts, August 18 - 22, **2002**.
 12. M. Gerken and G. J. Schrobilgen, "Lewis Acid-Base Properties of Osmium(VIII) Oxide Fluorides", Conference on Platinum-Group Metals, Southampton, UK, July 7 - 12, **2002**.
 11. A. Vij, W. Wilson, V. Vij, J. Sheehy, J. Boatz, M. Gerken, S. Schneider, T. Schroer, R. Haiges, R. Wagner, F. Tham, and K. O. Christe, "Recent Progress in Nitrogen Fluoride Chemistry", 13th European Symposium on Fluorine Chemistry, Bordeaux, France, July 15 - 20, **2001**.
 10. B.A. Fir, M. Gerken, K. Koppe, J.F. Lehmann, B.E. Pointner, H.P.A. Mercier, and G.J. Schrobilgen, "Structural Studies of Noble-Gas Fluoride and Oxide Fluoride Cations and of the ClF₆⁺, BrF₆⁺, and O₂⁺ Cations", 84th Canadian Society for Chemistry Conference, Montreal, Quebec, Canada, May 26 - 30, **2001**.
 9. B.A. Fir, M. Gerken, K. Koppe, J.F. Lehmann, B.E. Pointner, H.P.A. Mercier, and G.J. Schrobilgen, "Structural Studies of Noble-Gas Fluoride and Oxide Fluoride Cations and of the ClF₆⁺, BrF₆⁺, and H₂F⁺ Cations", 2000 International Chemical Congress of Pacific Basin Societies, Honolulu, Hawaii, December 14 - 19, **2000**.

8. B.A. Fir, M. Gerken, K. Koppe, J.F. Lehmann, B.E. Pointner, H.P.A. Mercier, and G.J. Schrobilgen, "Structural Studies of Noble-Gas Fluoride and Oxide Fluoride Cations and of the ClF_6^+ , BrF_6^+ , and H_2F^+ Cations", 16th International Symposium on Fluorine Chemistry, Durham, UK, July 16 - 21, **2000**.
7. M. Gerken and G. J. Schrobilgen, "Fluoride Ion Donor-Acceptor Properties of Osmium(VIII) Oxofluorides", 14th Winter Fluorine Conference, St. Petersburg, Florida, USA, January 17 - 22, **1999**.
6. K. Christe, B. Hoge, J. Sheehy, X. Zhang, W. Wilson, G. Schrobilgen, M. Gerken, "New Results and Challenges in Chlorine Fluoride and Oxofluoride Chemistry", 12th European Symposium on Fluorine Chemistry, Berlin, Germany, August 29 - September 2, **1998**.
5. M. Gerken, N. LeBlond, H. P. A. Mercier, G. J. Schrobilgen, "Recent Advances in the Oxide Fluoride Chemistry of Technetium(VII), Rhenium(VII), Osmium(VIII), and Xenon(VIII)", 12th European Symposium on Fluorine Chemistry, Berlin, Germany, August 29 - September 2, **1998**.
4. M. Gerken, N. LeBlond, H. P. A. Mercier, G. J. Schrobilgen, "Recent Advances in the Oxide Fluoride Chemistry of Technetium(VII), Rhenium(VII), Osmium(VIII), and Xenon(VIII)", 216th American Chemical Society National Meeting, Boston, Massachusetts, August 23 - 27, **1998**.
3. W. J. Casteel, Jr.; M. Gerken, B. Fir, N. LeBlond, H. P. A. Mercier, G. J. Schrobilgen, "Recent Advances in the Oxide Fluoride Chemistry of Technetium(VII), Osmium(VIII), Iodine(VII) and Xenon(VIII)", 15th International Symposium on Fluorine Chemistry, Vancouver, B.C., August 2-7, **1997**.
2. K. O. Christe, B. Fir, M. Gerken, H. P. A. Mercier, J. C. P. Sanders, G. J. Schrobilgen, "Application of "Naked" Fluoride Ion to the Synthesis of Fluoride and Oxofluoride Anions of the Main-Group Elements in Their Highest Oxidation States and at the Limits of Coordination", 80th Canadian Society for Chemistry Conference and Exhibition, Windsor, Ontario, June 1 - 4, **1997**.
1. J. Campbell, M. Gerken, H.P.A. Mercier, A.M. Pirani and G.J. Schrobilgen, "Classically-Bonded Tin(IV) Selenide and Telluride Zintl Anions", 211th American Chemical Society National Meeting, New Orleans, Louisiana, March 24-28, **1996**.

Invited Lectures and Guest Lectures

19. "Sulfur tetrafluoride: New Perspectives on an Old Molecule", University of Saskatchewan, Saskatchewan, Feb. 26, **2016**. (WUSEP)
18. "Sulfur tetrafluoride: New Perspectives on an Old Molecule", University of Regina, Saskatchewan, Feb. 25, **2016**. (WUSEP)
17. "Sulfur tetrafluoride: New Perspectives on an Old Molecule", University of Manitoba, Manitoba, Feb. 13, **2015**. (WUESP)
16. "Sulfur tetrafluoride: New Perspectives on an Old Molecule", University of Winnipeg, Manitoba, Feb. 12, **2015**. (WUESP)
15. "The Chemistry of SF_4 ", Julius-Maximilians-Universität Würzburg, Germany, July 7, **2014**.
14. "Lewis Acid Properties of SF_4 and SF_3^+ , and the Chemistry of Tungsten Sulfide Fluorides", Kanto Denka Kogyo, Shibukawa, Japan, July 18, **2012**.
13. "Recent Progress in SF_4 Chemistry", University of Lethbridge, March 15, **2012**.
12. "Recent Progress in SF_4 Chemistry", King's University College, Feb. 10, **2012**.
11. "Recent Progress in SF_4 Chemistry", University of Alberta, Feb. 9, **2012**. (WUESP)
10. "Festkörper-NMR-Spektroskopie von Xenonfluoriden und die Chemie von Ioddioxidfluorid-Anionen", Bergische Universität Wuppertal, Nov. 26, **2009**.
9. "Synthese und Charakterisierung von Ioddioxidfluoriden und Übergangsmetalsulfidfluoriden", Albert-Ludwigs-Universität Freiburg, Nov. 4, **2009**.
8. "Solid-state NMR spectroscopy of xenon fluorides, synthesis and characterization of iodine dioxide fluoride anions, and synthesis and chemistry of $[\text{N}(\text{CH}_3)_4][\text{SSi}(\text{CH}_3)_3]$ ", Air Products, Allentown, PA, USA on October 5, **2006**.
7. "Iodine Oxide Fluoride Chemistry and Solid-State NMR Spectroscopy of Xenon Fluorides", Lakehead University, Thunder Bay, March 7, **2005**. (WUESP)
6. "Iodine Oxide Fluoride Chemistry and Solid-State NMR Spectroscopy of Xenon Fluorides", University of Manitoba, Winnipeg, March 4, **2005**. (WUESP)
5. "Iodine Oxide Fluoride Chemistry and Solid-State NMR Spectroscopy of Xenon Fluorides", University of New Brunswick, Fredericton, November 29, **2004**.
4. "Iodine Oxide Fluoride Chemistry and Solid-State NMR Spectroscopy of Xenon Fluorides", Dalhousie University, Halifax, November 26, **2004**.
3. "Iodine Oxide Fluoride Chemistry and Solid-State NMR Spectroscopy of Xenon Fluorides", University of Alberta, Edmonton, Jan. 12, **2003**. (WUESP)

2. "The Chemistry of the +8 Oxidation State", University of Regina, April 3, **2003**. (WUESP)
1. "The Chemistry of the +8 Oxidation State", University of Saskatchewan, April 1, **2003**. (WUESP)

WUESP/WUSEP = Western University Exchange Speakers Program/Western University Speaker Exchange Program