Zhongxin Zhou, Ph.D., MBA, FCIC

PROFESSIONAL EXPERIENCE

June 2017 – Present

Executive Director, Head of Process R&D and Manufacturing (150 staff)
Gilead Alberta ULC, Edmonton, Alberta

- Responsible for the process research and development, technical operations and the manufacturing at Gilead Alberta
- Managing the resources and directing the research and development of organic chemical processes for the manufacture of intermediates and active pharmaceutical ingredients (API) at all stages of the drug development: from preclinical to commercial launch (12-15 multi-step organic synthetic projects on average each year)
- Looking after the manufacturing facilities and directing the manufacturing activities at all scales in the kilo lab and plants covering both development and commercial drug substances
- Promoting in depth application of Design of Experiment (DoE), Flow Chemistry, and Process Analytical Technology (PAT) into process development and formalization the guidance document for these technologies for future training and application
- Continuing deepening the implementation of Green and Sustainability Chemistry, including Biocatalysis, in drug development, resulting in the features of our work on Gilead's annual reports in three consecutive years
- A member of the site management team looking after the strategic planning and management of the business of the entire site
- A member of corporate clinical project review committee in Pharmaceutical Development and Manufacturing
- Serving as lead reviewer and approver of all site technical and quality reports that may be revealed to governmental regulatory bodies, as well as CMC packages for regulatory submissions
- Providing vision and direction for the governance of site EH&S, quality and regulatory compliance
- Coordinating the development and manufacturing activities with the headquarter to ensure the alignment of site activities with corporate strategies and objectives
- A mentor on the corporate mentoring program for future leaders of Gilead
- Participated in the design and leading the construction of site manufacturing Process Tower #2 that has been in operation since June 2019
- Led the design and costing for the site maintenance building that is currently under construction

January 2013 – June 2017

Executive Director, Head of Research and Development (up to 90 staff)
Gilead Alberta ULC, Edmonton, Alberta

- Managed the resources of the R&D department of up to 90 scientists spreading in three sections: Process R&D, Process Safety, and Kilo Lab/Potent Compound Lab manufacturing
- Directed the activities of all projects on the organic process research and development for the manufacture of pharmaceutical ingredients (12-15 multiple-step organic synthetic projects on average each year)
- Led the activities between the R&D department and other departments, such as Quality Assurance, Analytical Chemistry, EH&S and Manufacturing Plants
- Promoted and directed the implementation of Design of Experiment (DoE), Flow Chemistry, and Process Analytical Technology (PAT) into daily process development
- Advocated and implemented Green and Sustainability Chemistry in drug development
- A member of the site management team looking after the strategic planning and management of the business of the entire site
- A member of corporate clinical project review committee in Pharmaceutical Development and Manufacturing
- Served as lead reviewer and approver of all site technical and quality reports that may be revealed to governmental regulatory bodies, as well as CMC packages for regulatory submissions
- Providing vision and direction for the governance of site EH&S, quality and regulatory compliance

- Coordinated the inspection readiness preparations, including mock presentations and staff trainings, and participated in many regulatory inspections by various health authorities
- Coordinating the development and manufacturing activities with the headquarter to ensure the alignment of site activities with corporate strategies and objectives
- A mentor on the corporate mentoring program for future leaders of Gilead
- Led the planning, design, and construction of two state-of-the-arts laboratory buildings that have won Big Project Sustainability award and have been requested by many organizations as reference for their renovation and/or new lab building construction.

November 2006 – December 2012

Director, Head of Research and Development (up to 50 staff)
Gilead Alberta ULC, Edmonton, Alberta

- Managed the resources of the R&D department of 50 scientists spreading in three sections: Process R&D, Process Safety, and Kilo Lab/Potent Compound Lab manufacturing
- Directed the activities of all projects on the organic process research and development for the manufacture of pharmaceutical ingredients (8-10 multiple-step organic synthetic projects at present
- Lead the activities between the R&D department and other departments, such as Quality Assurance, Analytical Chemistry, and Manufacturing Plants
- Participated in the planning and construction of the new R&D laboratories
- A member of the site management team looking after the strategic planning and management of the business of the entire site
- A member of corporate clinical project review committee in Pharmaceutical Development and Manufacturing
- Served as lead reviewer and approver of all site technical reports that may be revealed to governmental regulatory bodies
- Coordinated the inspection readiness preparations, including mock presentations and staff trainings, and participated in many regulatory inspections by various health authorities
- Responsible for the recruiting and performance management of the department and participated in the resource planning/recruiting of other departments.

September 1998 – October 2006

Research Manager (1998-2002)
R&D Manager (2003-2006), Head of Research and Development
Raylo Chemicals, Edmonton, Alberta

- A member of the site management team looking after the strategic planning and management of the business of Raylo Chemicals that was one of the top CMOs in the world
- Played the role as coordinator, with the Head of Commercial Department, responsible for the business and project management for projects from all clients to ensure the alignment of all departmental activities with company and clients objectives
- Interacted with various clients on project costing, quoting and contract negotiating
- Managed the resources of the R&D department of 30-36 scientists spreading in three sections: Process R&D, Process Safety and Kilo Lab/Potent Compound Lab Manufacturing, and directed the activities of all projects on the organic process research and development for the manufacture of pharmaceutical ingredients (more than 100 multi-step organic synthetic projects)
- Led the activities between the R&D department and other departments, such as Quality Assurance, Analytical Chemistry, and Manufacturing Plants
- Established a formal system and tool kits to guide the scientists and supervisors from different departments in the company on process development and project management
- Worked together with the quality departments (quality assurance and quality control) to establish/excel the quality system at Raylo Chemicals, with many critical document templates being established according to CMC regulatory requirements
- Coordinated the inspection readiness preparations, including mock presentations and staff trainings, and participated in many regulatory inspections by various health authorities
- Organized project management training on selected scientists and supervisors
- Participated in the planning and construction of the various new R&D laboratories
- Served as lead reviewer and approver of all site technical reports that may be related to governmental regulatory bodies and clients
- Responsible for the recruiting and performance management of the department and participated in the resource planning/recruiting of other departments

July 1996 – August 1998

Senior Research Chemist, Raylo Chemicals Inc, Edmonton, Alberta

- Led a team of up to 6 scientists working on a number of multi-step organic synthetic projects on the process research and development for the manufacture of active pharmaceutical ingredients under cGMP
- Developed and optimized a set of tools for the practical project management of projects for various clients, which set the foundation for the standardization of the tool kits at a later stage
- Designed and conducted multi-step organic synthesis and optimized the process conditions for the scale-up and manufacture of active pharmaceutical ingredient;
- Managed multiple projects from process development to client expectation, from raw material organization to document preparation, from analytical methods development and specification preparation to process piloting in the plants
- Gained insights into the application of various modern tools, such as NMR, IR, MS, HPLC, GC in assisting in the process research;
- Participated in the recruiting and performance management of a group of 2-4 people.

July 1994 – June 1996

Postdoctoral Fellow, Department of Chemistry, University of Ottawa,
Ottawa, Ontario, Canada
Advisor: Dr. Howard Alper

- Carried out research in the development of methodologies of transition metal mediated catalytic hydrogenation and carbonylation for use in the syntheses of organic compounds with importance in pharmaceutical and fine chemical industries
- Extensive hands-on operation of various instruments and applications of such methodologies as NMR, IR, HPLC, GC and MS in resolving the problems during the research
- Taught a graduate/senior level course (35 students): Transition Metal Mediated Organic Synthesis, Principle and Application
- Assisted the review of a number of papers for peer-reviewing journals in chemistry

September 1990 – June 1994

Research Assistant, Ph.D. candidate, Department of Chemistry, Memorial University of Newfoundland, St. John's Newfoundland, Canada
Advisor: Dr. Chet Jablonski

- Carried out research in chiral-at-metal transition metal mediated asymmetric synthesis of phosphinates**;**
- Synthesized numerous η^5 –indenyl and cyclopentadienyl piano-stool type templates with extensive structural characterization with various tools, such as single crystal x-ray diffraction, NMR, IR, MS and elemental analysis, and solution conformational analysis
- Performed reaction kinetics and mechanistic studies of the transition metal mediated chiral induction in addition to theoretical calculations and predication of the conformational preferences and their roles in defining the outcome of the Arbuzov reactions
- Exploited the stereochemical and electronical effects of the ligands and incoming reagents onto the metal center on the extent of the chiral induction

September 1985 – August 1990

Associate Scientist, Hubei Research Institute of Chemistry, Wuhan, Hubei, China

- Led a group of up to 8 chemists focusing on process research and development for the preparation of commercially imported fine chemicals
- Performed the business development of a number of projects from various clients and government agencies
- Negotiated contracts with defined terms, conditions and objectives
- Developed and commercialized 5 organic and catalytic processes that were transferred to different vendors for manufacturing of fine chemicals at multi-hundred kilogram to multi-metric ton scales
- Served on the Executive Committees as the Secretaries and Treasurers of Organic Chemistry, Physical Chemistry, as well as Chemical Engineering Divisions of Chemical Societies of Provinces in Central China; organized and chaired a number of scientific conferences

September 1982 – September 1985

Research Assistant, M. Sc. Candidate, Hubei Research Institute of Chemistry, Wuhan, Hubei, China

Advisor: Professor Manzheng Zhang

- Studied ion-exchange resin-supported palladium catalyzed hydrogenation of nitro-compounds
- Exploited the structure active relationship between the states of palladium, catalysts and the reaction rates, with the use of various modern tools such as XPS, SEM, UV and GC
- Elucidated the kinetics and mechanism of the hydrogenation reactions

September 1981 – August 1982

Undergraduate Honor Degree Thesis Research, Department of Chemistry, Central China Normal University, Wuhan, Hubei, China
Advisor: Professor Fan Liu

- Focused on the resolution of the Schrodinger equation with the factorization method.

EDUCATION

September 2008 – June 2010

MBA, School of Business, University of Alberta

September 1990 – June 1994

Ph. D in Organometallics, Department of Chemistry, Memorial University of Newfoundland, St. John's Newfoundland, Canada
Advisor: Dr. Chet Jablonski, FCIC

- Thesis: "Transition metal-mediated diastereoselective synthesis of metallophosphinates".

September 1982 – September 1985

M.Sc., Hubei Research Institute of Chemistry, Wuhan, Hubei, China
Advisor: Professor Manzheng Zhang

- Thesis: "Studies on the hydrogenation of nitro-compounds by ion-exchange resin-supported palladium catalysts".

October 1978 – August 1982

B Sc. (honors), Department of Chemistry, Central China Normal University, Wuhan, Hubei, China
Advisor: Professor Fan Liu

- Thesis: "Using Factorization method to resolve the Schrodinger equation".

LANGUAGE SKILLS

- **English:** Proficient in reading, listening, spoken and written.
- **Mandarin:** Proficient in reading, listening, spoken and written.

SCHOLARSHIPS AND AWARDS

- 2018: FCIC
- 1994: First prize in the first-ever Chemistry Colloquium Contest, Department of Chemistry, Memorial University of Newfoundland
- 1991-1994: Fellow of Graduate Studies, Memorial University of Newfoundland
- 1992: Best Post Presentation on the 17th Annual Atlantic Student Chemistry Conference, Corner Brook, Newfoundland
- 1990-1994: Graduate Fellowship, Memorial University of Newfoundland
- 1988: First-ever award to Top Ten Young Scientist of Hubei Province, China
- 1986-1990: Excellent Scientific Paper Writer award of the Science and Technology Association, 5 consecutive years
- Numerous best student awards during undergraduate and graduate studies in China

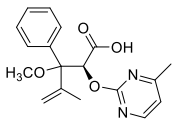
PROFESSIONAL AFFILIATIONS

- 1982-1990: Chinese Chemical Society, Treasure/Executive Committee Member for Centre China Organic Chemistry Division and Physical Chemistry Division
- 1991-present: Chemical Institute of Canada, FCIC (Elected in 2018), Member of Organic Division Executive Committee (Since 2016)

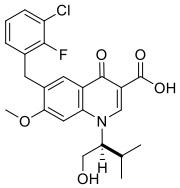
- 1996-present: American Chemical Society

PUBLICATIONS, PRESENTATIONS AND PROJECTS WORK

- Published more than 40 scientific papers in peer reviewed journals and national/international conferences from the work prior to working in the industry
- Conducted/directed process research and development for more than 200 molecules that were intended as drug substances, each of which involves in multi-step organic syntheses (6-45 steps) in the pharmaceutical industry. About ***20 of these*** **molecules (drug substances)** were commercialized in the world that are saving lives and meeting the unmet medical needs of millions of people in various therapeutic areas, including HIV, HCV, oncology, inflammation and respiratory (selected structures that are in the public domain and allowed to be disclosed are attached).



Ambrisentan



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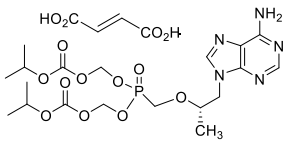
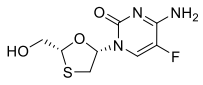


Tenofovir Disoproxil Fumarate



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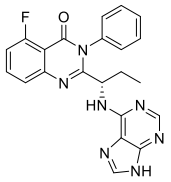

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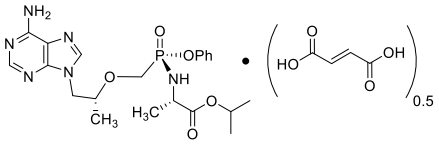
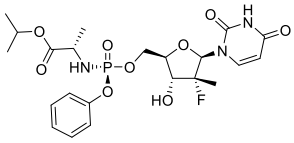
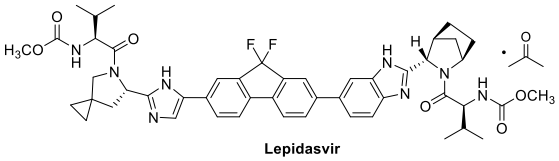


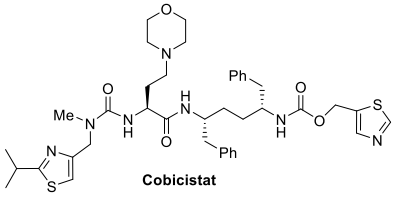
Tenofovir Alafenamide Fumarate



Sofosbuvir



Lepidasvir



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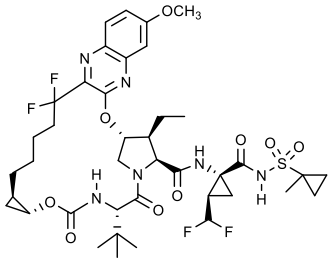

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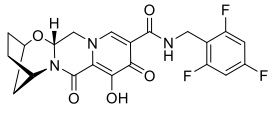
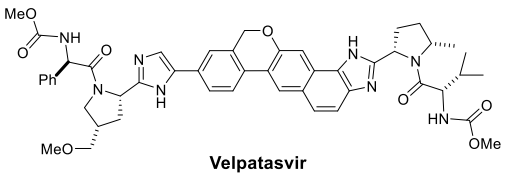


Bictegravir



Velpatasvir

A Publications

1. Zhou. Z.; Facey, G.; James B.R. and Alper, H. (1996) “Interconversion between Zwitterionic and Cationic Rhodium, (I) Complexes of Demonstrated Value as Catalysts in Hydroformylation, Silylformation, and Hydrogenation Reactions. Dynamic $^{31}P\{^{1}H\}$ NMR Studies of $(\eta^{6}\text{-}PhBPh_3)^{-}Rh^{+}(DPPB)$ and $[Rh(DPPB)_2]^{+}BPh_4^{-}$ in Solution” ***Organometallics***, 15, 2496-2503.
2. Zhou, Z and Alper, H. (1996) “Stereospecific Synthesis of Bicylic ß-Lactams via Metal-Catalyzed Carbonylative Coupling and Cyclization Reactions”, ***J. Org. Chem***., 61 (4) 1256-1260.

3. Zhou, Z. and Alper, H. (1996) “Lewis Acid Promoted, Nickel Cyanide Catalyzed Double Insertion of Carbon Monoxide and Reaction with Alkynols using PEG-400 as a Phase-Transfer Agent. Role of Phase-Transfer Catalysts in Determining the Stereochemistry of the Reaction” ***Organometallics*****, 15** (15), 3282-3288
4. Zhou, Z.; James, B.R. and Alper, H. (1996) “Hydrogenation of Imines Catalyzed by a Zwitterionic Rhodium Complex” 14 (9), 4209-4212.
5. Jablonski, C.; Zhou, Z.; Bridson, J. (1997) “Synthesis, Structure and Reactivity of Bidentate 2-ketopyrrolyl cobalt(III) Phosphonates and Phosphinates” ***Inorganica Chimica Act.*** 254, 315-328
6. Zhou, Z.; Jablonski, C. and Bridson, J. (1994) “Synthesis, Characterization, and Conformational Aspects of some Chiral η^5-Idenyl and η^5-Cyclopentadienyl Phosphonate and Phosphinates Co(III) Complexes” ***Organometallics,*** 13(3), 781-794
7. Zhou, Z,; Jablonski, C. and Bridson, J. (1993) “Synthesis, Absolute Configuration, and Conformational Analysis of $(S_{co},(S,R)_p,S_C)$-$(\eta^5$-Cp)CO(N-N*)(P(O)(Ph)(OMe)) and Their Precursor $[(S_{co},S_c)$-$(n^5$-$C_p)$Co(N-N*)$(PPh(OMe)_2]^+I^-$(N-N*=Bidentate Schiff Base). Characterization of an Arbuzov Reaction Intermediate with a Strongly Nucleophilic Counterion” ***Organometallics***, 12(9), 3677-3687
8. Zhou, Z.; Jablonski, C. and Bridson, J. (1993) “Synthesis, Structure and Solution Conformation of Some (η^5-Idenyl)(I_{2-n}) (R)$(L_2)Co^{III)(n-1)+}$(n+1, 2; R=perflouroalkyl;L=P-donor) Complexes” ***J.Organomet. Chem.***, 461, 215-227
9. Jablonski, C.; Zhou, Z. and Bridson, J. (1992) “Synthesis, Characterization, Crystal Structure, and Solution Conformation of $(-)_{436}$-(S_{co},S_c)-$(\eta^5$-$C_9H_7)$Co*(C_3F_7)(I)$(Ph_2$PNHC*H(CH_3)Ph). An Easily Resolvable Chiral-at-metal Complex” ***J. Organomet. Chem***. 429, 379-389
10. Jablonski, C. and Zhou, Z. (1992) “Synthesis, Multinuclear NMR and Solution Conformation of (η^5-Idenyl)Co(Iodo)(Perflouroalkyl)(L) Complexes (L= CO, $P(OMe)_3$, $PPh(OMe)_2$)” ***Can J. Chem.*** 70, 2544-2551
11. Hu, Weibing; Yang, Feng; Zhang, Shengmin; Zhou, Zhongxin; Zhang, Manzheng (1998) “Relativity of Catalytic Hydrogenation Activity of Olefins and Substituents Constant on Pd-SnO_2/D3520 catalysts” ***Lizi Jiaohuan Yu Xifu***, 14(2), 144-150
12. Hu, Weibing; Zhou, Zhongxinl Zhang, Manzheng (1997) “Structural Characterization of Pd-Fe_2O_3/D3520 Catalysts” ***Lizi Jiaohuan Yu Xifu*** 13(1), 48-53
13. Hu, Weibing; Zhou, Zhongxin; Zhang, Manzeng (1996) “Structural Characterization of Pd-SnO_2/D3520 Catalysts” ***Chinese Journal of Reactive Polymers***, 5(1-2), 64-70.
14. Hu, Weibing; Zhou, Zhongxin; Zhang, Manzeng; Li, Xiang (1995) “The Influence of Substituents and Nitrogen-containing Additives on the Catalytic Hydrogenation of Olefins in Pd/D3520 Catalyst” ***Lizi Jiaohuan Yu Xifu***, 11(2), 117-21
15. Hu Weibing; Zhang, Manzheng, Zhou, Zhongxin; Zhang, Shengmin (1994) “Structural Characterization of Pd-SnO_2/D3520 Catalysts” ***Lizi Jiaohuan Yu Xifu*** 10(5), 417-22
16. Hu, Weibing; Zhou, Zhongxin; Zhang, Manzheng (1993) “Metal Oxide Modified Pd/D3520 Catalysts and it’s Catalytic Activity for Hydrogenation***” Lizi Jiahuan Yu Xifu***, 9(5), 309-3
17. Hu, W,: Zhang, S.: Zhou, Z. and Zhang, M. (1994) “Studies on the Constituent State and Hydrogenation Activity of Absorbing Resin-supported Bimetallic Catalysts” ***J. Wuhan Univ. of Tech.*** 16, 59-64
18. Zhou, Z.; Zhang, M. and Wan, X. (1991) “Substituent Effect and N-containing Additive Influence on the Catalytic Hydrogenation of Olefins on Pd/C” ***J. Central China Normal Univ.*** 25, 184-189.
19. Zhou, Z. and Zhang, Manzhang (1989) “Effect of Substituents on Catalytic Hydrogenation of Nitrocompounds on Anion-exchange Resin-supported Palladium Catalyst” ***J. Mol. Catal. (China)*** 3, 36-40 (Chem. Abst., CA111(26): 235522w).
20. Zhou, Z.; Chen, J.; Wang, W.; Li, Z. and Zhang, M. (1989) “Study on the Liquid Phase Hydrogenation of o-Nitrotoluene to o-Aminotoluene with Activated Carbon-supported Palladium Catalysts” ***J. Mol. Catal***. (China) 3(2), 148-154 (Chem. Abst., CA11216): 141727k).
21. Zhou, Z. and Zhang, M. (1989) “Studies on the Distribution of Palladium in Pd/Anion-exchange Resin Catalysts with SEM” ***J. Chinese Electron Microscopy Society*** 8, 22-27.
22. Zhu, X.; Zhou, Z. and Zhang, M. (1988) “Studies on the Relation between the Structural Factors of Organic Complexing Agents and Their Enhancement Effect on Atomic Absorption Spectra with Huckel Molecule Orbital Method” ***J. Central China Normal Univ***. 22, 443-448 (Chem.Abst., CA111(17): 153088v)
23. Zhou, Z.; Zhang, M.; Chen, C. and Sun, Y. (1987) “Studies on the Hydrogenation of Nitrocompounds by Ion-exchange Resin-supported Palladium Catalysts” ***J. Catal. (China)*** 8, 69-75 (Chem. Abst., CA107)(2): 9291g).
24. Zhou, Z and Zhang, M. (1987) “Studies on the Hydrogenation of Nitrocompounds Catalyzed by Strong Basic Anion-exchange Resin-supported Palladium” J***. Central China Normal Univ.*** 21, 226-232 (Chem. Abst., CA109(2): 8347h).
25. Zhu, X.; Zhou, Z. and Zhang, M. (1987) “The Correlation Between Catalytic Activities for Hydrochlorination of Acetylene and Properties of Metal Chloride Catalysts” ***J. Central China Normal Univ***. 21, 571-575.
26. Mei, P.; Lei, X. and Zhou, Z. (1987) “Relations for the Stability Constants of Metal Fluorides” ***J. Central China Normal Univ.*** 21, 64-66 (Chem. Abst., CA107(16): 142388j)

27. Mei, P.; Lei, X. and Zhou, Z. (1986) "Relations for the Acid base Strength of Metal Hydroxides" ***J. Central China Normal Univ.*** 20, 174-178.

B Presentations

1. Zhou, Z. Keynote Speaker, Sponsor and Panel Discussion: ***CIC Professional Development*** on Canadian Chemistry Conference and Exhibition, **2008 through 2018**: covering job market, job searching skills, career preparation, skill development, job interview for chemists from all fields.
2. Zhou, Z. "Pharmaceutical Development and Unmet Medical Needs", "Organic Process Development in Pharmaceutical Industry", "Safety and Quality Culture", "Corporate Sustainability", ***numerous presentations throughout the years to students and faculty members in Departments of Chemistry, Biochemistry, and Schools of Business at the University of Alberta, Simon Fraser University, University of Toronto, McGill University, MacEwan University, and King's College University***, 2008 – 2018.
3. Zhou Z. Keynote Speaker, "The Transformative Therapies for HCV Cure" ***QOMSBOC***, November 2014.
4. Zhou, Z. "A Race for Cure: "Development of Medicines That Transform the Landscape of HCV Therapy", **Department of Chemistry, Queens University**, April 2014; **Department of Chemistry, University of Ottawa**, April 2014; **Department of Chemistry, University of Manitoba,** September 19, 2014
5. Zhou, Z. Keynote Speaker and Panel Discussion: "What do Employers Look for? Who do Employers Hire? How to Market Yourself***?" 91st Canadian Chemistry Conference and Exhibition***, Edmonton, Alberta, Canada, May 24-28, 2008.
6. Zhou, Z. Invited presentation: "Job Marketing, and Advise" ***"Career in Chemistry, U of A"*** Edmonton, Alberta, March 04, 2008.
7. Zhou, Z. Invited presentation "Gilead Sciences Welcomes You" ***"Career Fair, Faculty of Science, U of A"*** Edmonton, Alberta, March 29, 2008.
8. Zhou, Z. Invited presentation: "Searching for the 'Ideal' Process – Case Studies on GMP Process Development for the Manufacturing Of Pharmaceutical Actives" ***6th International Conference on Organic Process Research and Development***, Vancouver, Canada, July 10th-12th, 2002
9. Zhou, Z. and Jablonski, C. (1994) "Transition-Metal-Mediated Arbuzov Reactions Between (η_5-C_5R_5)Co*(X)(PEtNH)(I) and PR'$(OMe)_2$)" ***77th CIC Conference***, Winnipeg, Manitoba, May 29th-June 2, 1994
10. Jablonski, C and Zhou, Z. (1994) "Approaches to η^2-(P = O): An Unknown Phosphoryl Coordination Mode" ***77th CIC Conference***, Winnipeg, Manitoba, May 29th–June 2, 1994.
11. Zhou, Z. and Jablonski, C. (1993) "Synthesis, Structure, Spectroscopic Properties and Solution Conformation on η^5-Indenyl Cobaltophosphonates and Cobaltophosphinates" ***76th CIC Conference***, Sherbrooke, Quebec, May 30–June 3, 1993, Abstract #435
12. Zhou, Z. and Jablonski, C. (1993) "Indenyl Effect and Steric Effect in the Arbuzov Reaction Between (η_5-Indenyl)Co(C_3F_7)(L)(I)(L = P-donor) and PR$(OMe)_2$(R=OMe, Ph)" ***34th IUPAC Conference***, Beijing, China, August 15-22, 1993.
13. Jablonski, C. and Zhou, Z. (1993) "Metallophosphonate Chemistry: Chiral Recognition in the Formation of Binuclear Bis-μ (P=O) Co(III) Complex" ***1st J. Organomet. Chem. Conference on Applied Organometallic Chemistry***, Technische Unic, Munchen, Germany, November 4-5, 1993.
14. Zhou, Z. and Jablonski, C. (1992) "Chiral Induction in the Transition-Metal Mediated Arbuzov Reaction. Synthesis, Crystal Structure, Absolute Configuration, and Conformational Analysis of (S_{co})-(η^5-Cp)(Phosdphinato)(N-N*)Co(III) and It's Precursor (N-N*=Bidentate Schiff Base). ***75th Canadian Chemical Conference***, Edmonton, Alberta, May 31–June 4, 1992, Abstract #365
15. Zhou, Z. and Jablonski, C. (1992) "Chiral Induction in the Transition-Metal Mediated Arbuzov Reaction. Synthesis, Structure, Absolute Configuration, and Conformational Analysis of (S_{co})-(η^5-Cp)Co(N-N*)(P(O)R'(OMe)) and it's Precursor (N_N*=Bidentate Schiff Base). ***17TH Annual Student Chemistry Conference***, Corner Brook, Newfoundland, May 13–16, 1992.
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