# Dr. Christopher A. Hansen 1528 Ceila Dr. Wichita Falls, Texas 76302

# **Education and professional certifications**

**Ph.D.**, 1999, Organic chemistry, Washington State University, thesis advisor; Professor Robert C. Ronald. Isolation and Characterization of the Compounds in the Bile of Rainbow Trout (Onchorynchus Mykiss) which have Antiviral Activity Against the Infectious Hematopoietic Necrosis Virus.

MS, 1995, Chemistry, WSU

**BS**, 1991, Chemistry, Midwestern State University, Wichita Falls, TX.

## **Professional experience**

September 2015-Present Associate professor/ Chair September 2014-2015 Associate professor/Interim Chair September 2010-2014 Associate professor

• Chemistry Instructor

July 2000-August 2010 Assistant professor

• Chemistry Instructor

August 1998-July 2000 Teacher/Coach

- Chemistry Instructor, integrated physics and chemistry, and soccer coach January 1998-July 1998 Post Doc/Research Assistant
- Polymer characterization and synthesis

1991-1997 Graduate research

- Purified material with flash chromatography, GC, and HPLC.
- Characterized products with NMR, IR, UV-VIS, and MS.
- Operated GC-MS in determine fatty acids.
- Interact with research advisor and graduate students on a daily basis.
- Reviewed literature

1991-1997 Teaching assistant

- Assisted in rewriting the laboratory manual for one semester organic laboratory
- Supervised new graduate students
- Planned and led tutorials; conducted lab sessions and graded lab reports
- Communicated material on an individual level

1993-1996 Summer Instructor: Organic chemistry

- Prepare and conduct lecture in a clear and organized manner
- Monitored laboratories and TA's

## **Teaching responsibilities**

CHEM 1103 Introduction to general chemistry

CHEM 1203 Introduction to organic and biochemistry

CHEM 1143 General chemistry, 1<sup>st</sup> semester

CHEM 1141 General chemistry laboratory, 1<sup>st</sup> semester

CHEM 1243 General chemistry, 2<sup>nd</sup> semester

CHEM 2001 Organic laboratory, 1st semester

CHEM 2003 Organic lecture, 1<sup>st</sup> semester

CHEM 2011 Organic laboratory, 2<sup>nd</sup> semester

CHEM 2013 Organic lecture, 2<sup>nd</sup> semester

CHEM 4001 Chemistry seminar

CHEM 4133 Advanced organic CHEM 4900 Independent study CHEM 4911 Independent study CHEM 4922 Independent study CHEM 4933 Independent study

# Research and scholarly activity

#### **Publications:**

- \* Jianguo Shao, Alex Johnson, Christopher A. Hansen, Karl M. Kadish, Baocheng Han, Electroreductive dechlorination of γ-Hexachlorocyclohexane catalyzed by Rh<sub>2</sub>(dpf)<sub>4</sub> in nonaqueous media, where dpf = N,N'-Diphenylformamidinate (1-) ion, *Journal of Electroanalytical Chemistry*, 837 (**2019**) 208 218.
- \* Jianguo Shao, Kema Richards, Dwayne Rawlins, Baocheng Han, and Christopher A. Hansen, "Synthesis, electrochemistry, spectroelectrochemistry and catalytic properties in DDT reductive dechlorinationin of iron(II) phthalocyanine, 2,3- and 3,4-tetrapyridinoporphyrazine complexes" *J of Porphyrins and Phthalocyanines*, 2013; **17:04**, 317-330
- \* Jianguo Shao, Abegayl Thomas, Baocheng Han, Christopher A. Hansen, "DDT reductive dechlorination catalyzed by cobalt phthalocyanine, 2,3- and 3,4-tetrapyridoporphyrazine complexes in nonaqueous media" *J of Porphyrins and Phthalocyanines*, 2010; **14**: 133–141
- \* Jianguo Shao, Juliette Commodore, Baocheng Han, Cynthia Pruente, Christopher A. Hansen, "Electrochemical, Spectroelectrochemical and ESR Spectroscopic Characterization of 2,3- and 3,4-Cobalt Tetrapyridoporphyrazine Isomers in Nonaqueous Media" *J of Porphyrins and Phthalocyanines*, 2009; **13**: 876–887

#### **Presentations:**

- \* Glenna Linthicum, Sebastian Ibarra Chavez, Christopher A. Hansen, Synthesis and Characterization of Aryl Substituted Methylene Malonates with Diethyl Malonate, *MSU Undergraduate Research and Creative Activity Forum*, April, **2023**, P11.
- \* Hae Lee Han, Stefanie Blaine, Christopher A. Hansen, **Jianguo Shao**, Synthesis and Characterization of two aryl substituted dipyrromethenes, *MSU Undergraduate Research and Creative Activity Forum*, April, **2019**, Oral-O6.
- \* Shevon Alexander, Shermali Ratnasinghe, Christopher A. Hansen, **Jianguo Shao**, Synthesis and Characterization of Diethyl-2-(4-Hydroxy-3-Nitrobenzilidene) Malonate and Diethyl-2-(5-Hydroxy-2-Nitrobenzylidene) Malonate, *MSU Under-graduate Research and Creative Activity Forum*, April, **2019**. Poster presentation.
- \* Hae Lee Han, Christopher A. Hansen, Jianguo Shao, synthesis and Spectroscopic studies of Dipyrromethene Complexes, *MSU Undergraduate Research and Creative Activity Forum*, November, **2017**, poster.
- \* Yuxiang Tang, Jianguo Shao, Christopher A. Hansen, DDT degradation electrocatalyzed by a substituted iron porphyrin, *the 72<sup>nd</sup> Southwest Regional Meeting of the American Chemical Society, Galveston*, TX, **2016**, Poster-354, Abstract ID# 2598907.
- \* Gaël Gonzalez-Peltier, John Garman, Christopher Hansen, Jianguo Shao, Synthesis, electrochemistry and spectroscopic characterization of substituted metallo-bis-dipyrromethene complexes, , the 72<sup>nd</sup> Southwest Regional Meeting of the American Chemical Society, Galveston, TX, 2016, Oral presentation-601.
- \* Chanez Symister, Chelsee Arceneaux, Christopher Hansen, Jianguo Shao, "Synthesis and Substituent Effects of Tetraarylazadipyrromethene Complexes", *the 70<sup>th</sup> Southwest Regional Meeting of the American Chemical Society*, Fort Worth, TX, **2014**, Poster 391.

- \* Alex Johnson, **Jianguo Shao**, Baocheng Han, Christopher A. Hansen, Electrochemical Dechlorination of Hexachlorocyclohexane (Lindane) Catalyzed by A Dirhodium Complex, *the 70<sup>th</sup> Southwest Regional Meeting of the American Chemical Society*, Fort Worth, TX, **2014**, Poster 355.
- \* Chanez Symister, Chelsee Arceneaux, Christopher Hansen, **Jianguo Shao**, Synthesis and Substituent Effects of Tetraarylazadipyrromethene Complexes, *the 70<sup>th</sup> Southwest Regional Meeting of the American Chemical Society*, Fort Worth, TX, **2014**, Poster 391.
- \* Chelsee Arceneaux, Donnicia James, Christopher A. Hansen, Jianguo Shao, Synthesis and Characterization of Tetra-3,3',5,5'-arylazadipyrromethenes, *The Fifth Annual Scholarship Colloquium at Midwestern State University*, **2014**, Poster.
- \* Alex Johnson, Jianguo Shao, Baocheng Han, Christopher A. Hansen, Electrochemical Dechlorination of Hexachlorocyclohexane Catalyzed by A Dirhodium Complex, *MSU Undergraduate Research and Creative Activity Forum*, April, **2014**, poster.
- \* Anne Lamb, Damali Greenaway, Christopher A. Hansen, Jianguo Shao, Synthesis and Characterization of Metallo-tetraphenylazadipyrromethene, ACS 69<sup>th</sup> Southwest Regional Meeting Waco, TX, **2013**, Poster.
- \* Chanez Symister, Mary Iseguede, Christopher A. Hansen, Jianguo Shao, Synthesis, Electrochemistry, UV-visible and NMR Spectroscopic Characterization of Two Arylazadipyrromethanes, *Undergraduate Research Day at the Capitol*, Austin, TX, 2013, Poster.
- \* Chanez Symister, Mary Iseguede, Christopher A. Hansen, Jianguo Shao, Synthesis, Electrochemistry, UV-visible and NMR Spectroscopic Characterization of Two Arylazadi-pyrromethanes, , *The Fourth Annual Scholarship Colloquium at Midwestern State University*, **2013**, Poster.
- \* Matlock Baggett, Christopher A. Hansen, Jianguo Shao, Synthesis, Electrochemical and Spectroscopic Characterization of Tetraphenylazadipyrromethene, *the third Annual Scholarship Colloquium at Midwestern State University*, **2012**, Oral Presentation.
- \* Jared Dopp, Christopher A. Hansen, Jianguo Shao, Synthesis of a Dipyridinium Ion, *the third Annual Scholarship Colloquium at Midwestern State University*, **2012**, Oral Presentation.
- \* Matlock Baggett, Christopher A. Hansen, Jianguo Shao, Synthesis, Electrochemical and Spectroscopic Characterization of Tetraphenylazadipyrromethene, 2012 Oklahoma ACS Pentasectional Meeting, Lawton, OK, 2012, Oral Presentation.
- \* Mbwidiffu Malgwi, Donald Fru, Christopher A. Hansen, Jianguo Shao, Synthesis, electrochemical and spectroscopic characterization and DDT catalytic dechlorination of a cobalt tetrapyrazinoporphyrazine complex, ACS 67th Southwestern Regional Meeting Austin, 2011, Poster.
- \* Dwayne Rawlins, Christopher A. Hansen, Jianguo Shao, Synthesis, Electrochemistry and Spectroscopic Properties of 2,3-Fe-PyD and 3,4-Fe-PyD, *the First Annual Scholarship Colloquium at Midwestern State University*, **2010**, Oral Presentation.
- \* Kema Richards, Jianguo Shao, Christopher A. Hansen, Synthesis, Electrochemistry and Spectroscopic Properties of 3,4-Ni(II)-PyD, the First Annual Scholarship Colloquium at Midwestern State University, 2010, Poster.
- \* Sheldon Hilaire, Jianguo Shao, Christopher A. Hansen, Synthesis, Electrochemistry and Spectroscopic Properties of Co(II) Tetrapyrazinoporphyrazine, *the First Annual Scholarship Colloquium at Midwestern State University*, **2010**, Poster.
- \* Jonpaul Wright, Jianguo Shao, Christopher A. Hansen, Synthesis, electrochemistry and spectroscopic properties of 2,3-Ni(II) PyD, the First Annual Scholarship Colloquium at Midwestern State University, 2010, Poster.

- \* Dwayne Rawlins, Christopher A. Hansen, Jianguo Shao, "Synthesis, Electrochemistry and UV-Visible Spectroscopic Properties of Iron(II) Tetrapyridoporphyrazines", 64<sup>th</sup> Southwest Regional Meeting of the American Chemical Society, Little Rock, AR, 2008, Oral presentation, Abstract #258.
- \* Abegayl Thomas, Jianguo Shao, Christopher A. Hansen, "DDT Dechlorination Catalyzed by Cobalt Pyridino-porphyrazines", 2008 Oklahoma ACS Pentasectional Meeting, Duncan, OK, 2008, Abstract# E-05.
- \* Abegayl Thomas, Jianguo Shao, Christopher A. Hansen, "DDT Dechlorination Reaction Catalyzed by Cobalt Tetrapyridinoporphyrazine Complexes in Pyridine Solution" *234<sup>th</sup> ACS Meeting*, Boston, **2007**, Abstract\* CHED 178.
- \* Christopher A Hansen, Nyall Tavernier abstracts of papers, *Synthesis of acyloxynitrobenzoic acids*, 1<sup>st</sup> meeting in miniature Lawton/Duncan local ACS, Ardmore, OK. April 2006.
- \* Christopher A Hansen, Robbie Graham abstracts of papers, *Synthesis and Structural Studies of Colbalt (II) tetra-3,4-pyridinoporphyrazine*, 230<sup>th</sup> National Meeting of the American Chemical Society, Washington, DC, April 2006.
- \* Christopher A Hansen, Charmaine Munro abstracts of papers, Synthesis of Carbenes and their precursors, 230<sup>th</sup> National Meeting of the American Chemical Society, Washington, DC, April 2006.
- \* Christopher A Hansen, Nyall Tavernier abstracts of papers, *Synthesis of acyloxynitrobenzoic acids*, 230<sup>th</sup> National Meeting of the American Chemical Society, Washington, DC, Sept. 2005. paper 233
- \* Christopher A Hansen, Robbie Graham abstracts of papers, *Synthesis and Structural Studies of Colbalt (II) tetra-3,4-pyridinoporphyrazine*, 230<sup>th</sup> National Meeting of the American Chemical Society, Washington, DC, Sept 2005. paper 230
- \* Christopher A Hansen, Charmaine Munro abstracts of papers, *Synthesis of Carbenes and their precursors*, 230<sup>th</sup> National Meeting of the American Chemical Society, Washington, DC, Sept. 2005. paper 229
- \* Dr. Christopher A. Hansen abstract of papers, Carbenes and their precursors, UGROW Mini Symposium, Wichita Falls, TX, May 2005. Seminar #6
- \* Robbie Graham, Charmaine Munro, Dr. Christopher A. Hansen abstracts of papers, *Synthesis and Structural Studies of Colbalt (II) tetra-3,4-pyridinoporphyrazine*, 2<sup>nd</sup> MWSU symposium, Wichita Falls, TX, April 2005. paper 4
- \* Telesford, Judlyn M.; Mastumura, M.; Hansen, C.A.; Voegel, P.D. Comparison of Products Formed by Aerobic and Electrochemical Oxidation of Thiols Using a Pryidine-Based Cobalt Phthalocyanine Analog as Catalyst, Southwest Regional Meeting of the ACS, Fort Worth, TX, September 2004. (Oral)
- \* Telesford, Judlyn M.; Mastumura, M.; Hansen, C.A.; Voegel, P.D. "Evaluation of the Electrochemical Properties of a Newly Synthesized Pyridine-Based Cobalt Phthalocyanine Analog," Southwest Regional Meeting of the ACS, Fort Worth, TX, September 2004. (Poster)
- \* John Ward, Julie Weger, Christopher A. Hansen, Magaly Rincón-Zachary abstracts of papers, *Determination of melatonin in wheat, Triticum aestivum*, MWSU symposium, Wichita Falls, TX, April 2004. paper P06
- \* Todd Topley, Daniel Clopton, Christopher A. Hansen *Synthesis of Polyhydroxyalkyl Carbamates*, MWSU symposium, Wichita Falls, TX, April 2004. paper P07
- \* Michiko Matsumura, Christopher A. Hansen Synthesis of Metal Phthaloycyanine Complexes, MWSU symposium, Wichita Falls, TX, April 2004. paper P12
- \* Jeremy White, Latisha Karber, Christopher A Hansen, Rodney Cate *Synthesis of acyloxynitrobenzoic acids*, MWSU symposium, Wichita Falls, TX, April 2004. paper P05

- \* Voegel, P.D.; Rumsey, Kim; Hansen, C.A.; Mastumura, Michiko. *Synthesis, Analysis, and Application of Modified Phalocyanines*, Pittsburgh Conference, Chicago, IL, March 2004. (Oral)
- \* Jeremy White, Latisha Karber, Christopher A Hansen, Rodney Cate abstracts of papers, Synthesis of acyloxynitrobenzoic acids, 225<sup>th</sup> National Meeting of the American Chemical Society, New Orleans, LA, March 2003. paper 567
- \* John Ward, Julie Weger, Christopher A. Hansen, Magaly Rincón-Zachary abstracts of papers, *Determination of melatonin in wheat, Triticum aestivum*, 225<sup>th</sup> National Meeting of the American Chemical Society, New Orleans, LA, March 2003. paper 204
- \* Christopher A. Hansen, Robert C. Ronald, Scott E. LaPatra, Jeanene de Avila, and Sandra S. Ristow *Preliminary Characterization of a Virus Inhibitor Present in Fractions Obtained from Rainbow Trout (Oncorhynchus Mykiss)*, presented at the 37<sup>th</sup> Annual Western Fish Disease Workshop, Corvallis, Oregon, June 1996.
- \* Christopher A. Hansen, Robert C. Ronald, Scott E. LaPatra, Leslie Grabowski, Jeanene de Avila, and Sandra S. Ristow abstracts of papers, Characterization of compounds from the bile Rainbow Trout which Inhibit Infectious Hematopoetic Necrosis Virus, 52<sup>nd</sup> Northwest Regional Meeting of the American Chemical Society, Moscow, Idaho, June 1997; Paper 151.
- \* Christopher A. Hansen, Robert C. Ronald, Scott E. LaPatra, Leslie Grabowski, Jeanene de Avila, and Sandra S. Ristow abstracts of papers, Characterization of compounds from the bile Rainbow Trout which Inhibit Infectious Hematopoetic Necrosis Virus, 7th Congress of the International Society of Developmental and Comparative Immunology, Williamsburg, Virgina, July 1997, paper KP3.

#### **Professional involvements:**

American Chemical Society (member 2000-present)

Wichita Falls-Duncan Section: Treasurer 2004-2009

Wichita Falls-Duncan Section: Chair - 2003.

Wichita Falls-Duncan Section: Chair-Elect – 2002, 2012 Wichita Falls-Duncan Section: Secretary/Treasurer - 2001.

Division of Organic Chemistry

**TACT** 

### **Consultations:**

Ameron (Burkburnett ) Rhodia (Vernon) Wichita Falls Waste Water Treatment

#### **Service:**

Health Professions Advisory Committee, Chair (2009-Present)

JAMP Faculty Advisor (2009-2020)

University Tenure and Promotion Committee (2014-2016)

Academic Readmissions Committee (alternate 2008-2010)

Health Professions Advisory Committee (Alternate 2008-2009)

Core Curriculum Committee (2006-2008)

Architectural Selection Committee Meeting (2005-2006)

Biology Graduate Advisory Committee (2004-Present)

Academic Readmissions Committee (alternate 2004-2006)

Student Conduct Committee (alternate 2004-2006) UGROW Selection Committee (spring 2005) Charitable Campaign (2004) Faculty Senate (2003-2005) Intercollegiate Athletics Committee (2001-2003) Faculty Grievance Committee (2001-2003)

#### **Awards and Honors:**

Midwestern State Faculty Award (Dec 2018)
Chemistry Professor of the year (2001, 2002, 2004, 2006, 2007, 2010, 2011, 2012, 2013, 2014, 2015, 2018)
Who's Who Among American Teachers (nominated in 2005 by student)
Empire Who's Who (2002)
United Who's Who (2002)
GWFSA Coach of the year (2002-2003)

### **Research Students (2000-present):**

Gerard Troutman, Justin Smith, Allen Pappas, Angela Snider, Bradley Fairbanks, Chanez Symister, Charmaine Munro, Chelsee Arceneaux, Donnicia James, Cynthia Pruente, Daniel Clopton, Todd Topley, Darren W. Hicklin, David Lowell, Erin Smith, Gaël Gonzalez-Peltier, John Garman, Hae Lee Han, Jared Dopp, Jeremy White, JJune Norford, Daniel Coipel, John Ward, Jonpaul Wright, Alex Johnson, Juliette Commodore, Justin Bonnet, Kadine Gomes, Mandi Nottoli, Matlock Baggett, Michelle Heil, Michiko Matsumura, Nyall Tavernier, Robbie Graham, Shermali Ratnasinghe, Sigmund Courtney, Stefanie Blaine, Steve Jang, Timothy Bannin, William Seymore, Yvonne Albert, Mario Ramirez, Ben Colvin, Aaron Poston, Ajani Thomas, Chaniqua Moses

### **Service (Community):**

Game Announcer for Wichita Falls High School Lady soccer (2016-present) GWFSA coach – 2001-2010

U-6 commissioner, GWFSA – 2006-2011

Manager – Wichita Falls xpress soccer club, 2000 girls – 2010-2014.

Xpress Board – Vice president, coaching director liaison – 2010-2011

Xpress Board – President, 2011 – 2015

WFHS Soccer Booster Club President – 2015-2018

Reviewer of enhancing undergraduate research endeavors and creative activities (EURECA) at Midwestern State University

Judge at Red River Science Fair.

Associate member of Graduate Faculty at Midwestern State University