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|  | Mark Draganjac(870)972-3272mdraganj@astate.edu |  |

### Current Position

Position Title:

Current Academic Rank: Full Professor

Rank Since: Fall 1993

### Degrees

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| --- | --- |
| Ph D | Chemistry: , University of Iowa, Iowa City, IA 1983 Dissertation: Synthesis, Structure and Reactivity of Binary Molybdenum-Sulfur Complexes  |
| BS | Chemistry, Biology: , Southeastern Oklahoma State University, Durant OK 1978  |

### Scholarly Contributions and Creative Productions

Grants

Jeong (PI), D., & Draganjac (co-PI), M. (2011). Acquisition of a DSC (Differential Scanning Calorimetry) System for. National Science Foundation MRI - 138,288.

Journal Publications

Lue, C., Sullivan, M., Draganjac, M., & Reeve, S. (2012). Cavity ringdown laser absorption spectroscopy of 13C2H2 in the 13,300 cm-1 region. J Mol Spect., 273, 6-10.

Draganjac, M. (2012). Cavity ringdown laser absorption spectroscopy of 13C2H2 in the 13,300 cm-1 region. J Mol Spect.

Draganjac, M., Foster, L., Hardin, J., & Noll, B.C. (2010). Molecular structure of fac-aquadichlorotris(dimethylsulfoxide)ruthenium(II). Journal of the Arkansas Academy of Science, 64,134-5.

Draganjac, M., & Benjamin, E. (2009). Microwave Syntheses and Thermal Gravimetric Analysis of trans-Hydrogen bis(dimethylsulfoxide)tetrachlororuthenate(III). Journal of the Arkansas Academy of Science, 63, 180-181.

Draganjac, M., Harvey, A., Chui, S., & Benjamin, E. (2009). Microwave Synthesis of cis-Dichlorotetrakis(dimethylsulfoxide)ruthenium(II). Journal of the Arkansas Academy of Science, 63, 185.

Muthyala, S., & Draganjac, M. (2013). Microwave assisted synthesis of chloropentahaptocylopentadienediphenylphosphinoethane-ruthenium(II). Journal of the Arkansas Academy of Science 2.

Draganjac, M., Nave, P., & Cordes, A. (2013). Molecular Structure of [CpRu(PPh3)(tht)2]Otf. Journal of the Arkansas Academy of Science.

Presentations

Muthyala, S., & Draganjac, M. (2013). Microwave assisted synthesis of chloropentahaptocylopentadienediphenylphosphinoethane-ruthenium(II). 97th Meeting, Arkansas Academy of Science.

Draganjac, M., Nave, P., & Cordes, A. (2013). Molecular Structure of [CpRu(PPh3)(tht)2]Otf.. 97th Meeting, Arkansas Academy of Science.

Clark, J., Muthyala, S., Draganjac, M., Stone, M., & Gerasimchuk, N. (2013). Molecular structure of {(mu-dtoxa)[CpRudppe]2}(BF4)2.. 21st Meeting, Mid-south Inorganic Chemists Association.

Muthyala, S., & Draganjac, M. (2012). Microwave Synthesis of CpRu(dppe)Cl. 20th Mid-south Inorganic Chemists Association.

Lue, C.J., Sullivan, M.N., Draganjac, M., & Reeve, S. (2011). Cavity Ringdown spectroscopy of 13C2H2 in the 12900-13400 cm-1 region. International Molecular Spectroscopy Symposium.

Draganjac, M., & Addaguduru, V. (2011). Preliminary Analysis of Thermally Induced Condensed Phase Electron Transfer Reactions of Cadmium Chloride and Lead Chloride with Electropositive Metals. 17th Mid-south Inorganic Chemists Association.

Kamineni, R., & Draganjac, M. (2011). Preliminary Analysis of Thermally Induced Condensed Phase Electron Transfer Reactions of Cobalt Chloride and Cobalt Bromide with Electropositive Metals. 17th Mid-south Inorganic Chemists Association.

Draganjac, M., & Kamineni, R. (2011). Preliminary Analysis of Thermally Induced Condensed Phase Electron Transfer Reactions of Nickel Chloride with Electropositive Metals. 17th Mid-south Inroganic Chemists Association.

Draganjac, M., & Anumula, M. (2011). Preliminary Analysis of Thermally Induced Condensed Phase Electron Transfer Reactions of Zinc Chloride, Chromium Chloride and Lead Chloride with Electropositive Metals. 17th Mid-south Inorganic Chemists Association.

Draganjac, M., Sullivan, M.E., Lue, C.J., & Reeve, S. (2010). Cavity Ringdown Laser Absorption Spectroscopy of Isotopically Labeled Acetylene in the 12,500 - 13,600 cm-1 Region: Observation of a Previously Unreported Vibrational Band. Joint 66th South West and 62nd South East Regional ACS Meeting.

Draganjac, M., Johnson, T., Burns, W., & Reeve, S. (2010). IR Spectrum of NO. 15th Meeting, Midsouth Inorganic Chemists Assoication.

Draganjac, M., Reinhart, B., Foster, L., Hardin, J., & Noll, B.C. (2010). Molecular Structure of fac-Ru(dmso)3Cl2OH2. 15th Meeting, Midsouth Inorganic Chemists Association.

Draganjac, M., Foster, L., Hardin, J., & Noll, B.C. (2010). Molecular Structure of fac-Ru(dmso)3Cl2OH2. 94th Meeting, Arkansas Academy of Science.

Draganjac, M. (2010). Nomenclature: Whats in a name?. 15th Meeting, Midsouth Inorganic Chemists Association.

Draganjac, M., Burns, W., Kennon, J.T., Panigot, M., Ontko, A., Koizumi, H., Warby, R., Cron, S., & Rougeau, B.L. (2010). Pre- and post-assessment of general chemistry students. 240th ACS National Meeting.

Draganjac, M., Kothuru, I., Foster, L., & Hardin, J. (2010). Preliminary study of the thermally induced condensed phase electron transfer of copper chlorides with electropositive metals. 15th Meeting, Midsouth Inorganic Chemists Association.

Draganjac, M., Harvey, A., Chiu, S., Snell, R., & Benjamin, E. (2009). Microwave assisted synthesis of ruthenium-dmso complexes. 237th National ACS Meeting.

Draganjac, M., Harvey, A., Chiu, S., Snell, R., & Benjamin, E. (2009). Microwave assisted synthesis of ruthenium-dmso complexes. 93rd Meeting, Arkansas Academy of Science.

Draganjac, M., Chiu, S., & Foster, L. (2009). Preliminary Thermal Studies of Ru-DMSO-Cl Complexes. 13th Meeting, Mid-South Inorganic Chemists Association.

Draganjac, M., & Chui, S. (2009). TGA and DTA studies of selected Ru-dmso complexes. 93rd Meeting, Arkansas Academy of Science.

Harvey, A., Chui, S., Snell, R., Draganjac, M., & Benjamin, E. (2008). Greener Synthesis of Ruthenium DMSO Complexes. 60th South East Regional ACS Meeting.

Draganjac, M. (2008). MICA Inorganic Spectral Data Base. 64th South West Regional ACS Meeting.

Chui, S., Harvey, A., Snell, R., Draganjac, M., & Benjamin, E. (2008). Microwave Synthesis of Ruthenium  DMSO Complexes. 64th South West Regional ACS Meeting.

Draganjac, M., Hutson, S., Harvey, A., Noall, N., Rodery, L., & Hutchison, M. (2008). October at Arkansas State University. 235th National ACS meeting.

Kennon, J.T., Burns, W., Draganjac, M., Redeker, K., Dowling, C., Cron, S., Rougeau, B., & Bryant, M. (2008). Pre- and post-assessment of general chemistry students. 235th National ACS meeting.

Harvey, A., Chui, S., Snell, R., Draganjac, M., & Benjamin, E. (2008). Preliminary Investigation of the Microwave Reactions of RuCl3 in DMSO. University of Memphis Undergraduate Research Conference.

Draganjac, M. (2007). An Assessment of the Inorganic Lab Sequence at Arkansas State University. 10th Meeting, Mid south Inorganic Chemists Association.

Poster Presentations

Fournier, K., Tony, D., Jeong, D., & Draganjac, M. (2013). DSC Analysis of the Reaction of Cu with Select Metal Halides. 97th Meeting, Arkansas Academy of Science.

Fournier, K., Tony, D., Jeong, D., & Draganjac, M. (2013). DSC Analysis of the Reaction of Cu with Select Metal Halides. 21st Meeting, Mid-south Inorganic Chemists Association.

Clark, J., Muthyala, S., Draganjac, M., Stone, M., & Gerasimchuk, N. (2013). Molecular structure of {(mu-dtoxa)[CpRudppe]2}(BF4)2. 97th Meeting, Arkansas Academy of Science.

Draganjac, M., Chiu, S., Kothuru, I., Addaguduru, V., Anumula, M., Kamineni, R., Kamineni, R., Foster, L., & Hardin, J. (2013). Preliminary analysis of thermally induced condensed phase electron transfer (TICPET) reactions. 245th American Chemical Society National Meeting.

Draganjac, M., & Addaguduru, V. (2011). Preliminary Analysis of Thermally Induced Condensed Phase Electron Transfer Reactions of Cadmium Chloride and Lead Chloride with Electropositive Metals. 17th Mid-south Inorganic Chemists Association.

Draganjac, M., & Kamineni, R. (2011). Preliminary Analysis of Thermally Induced Condensed Phase Electron Transfer Reactions of Nickel Chloride with Electropositive Metals. 17th Mid-south Inroganic Chemists Association.

Draganjac, M., & Anumula, M. (2011). Preliminary Analysis of Thermally Induced Condensed Phase Electron Transfer Reactions of Zinc Chloride, Chromium Chloride and Lead Chloride with Electropositive Metals. 17th Mid-south Inorganic Chemists Association.

### Other Institutional Service

(Committee Member) Gen Chem Committee (University) Summer 2012

(Committee Chair) Graduate Program Committee (University) Fall 2008 - Fall 2009

(Faculty Advisor) American Chemical Society, Student Affiliates (University) Fall 2001 - Summer 2008

(Faculty Advisor) American Chemical Society, Studant Affiliates (University) Fall 1994 - Summer 1995

(Committee Member) PRT (Department) Fall 1989 - Summer 2012

(Faculty Advisor) American Chemical Society, Student Affiliates (University) Fall 1986 - Summer 1992

### Professional Service

Reviewer, Journal Article, J. Chemical Crystallography Summer 2012

Reviewer, Grant Proposal, Petroleum Research Fund Spring 2011

Other, Mid-south Inorganic Chemist Association Fall 2001 - Summer 2012

### Teaching

Fall 2006 Courses:

|  |
| --- |
| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 1013 001 - General Chemistry I |
| CHEM 2004 001 - Descriptive Inorganic Chemistry |
| CHEM 4281 001 - Chemistry Seminar |

Spring 2007 Courses:

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| --- |
| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 1023 002 - General Chemistry II |
| CHEM 4204 001 - Inorganic Chemistry |
| CHEM 427V 003 - RESEARCH IN CHEMISTRY |
| CHEM 5204 1 - INORGANIC CHEMISTRY |

Fall 2007 Courses:

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| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 2004 001 - Descriptive Inorganic Chemistry |
| CHEM 427V 002 - RESEARCH IN CHEMISTRY |
| CHEM 427V 010 - RESEARCH IN CHEMISTRY |
| CHEM 680V 4 - INDEPENDENT STUDY |

Spring 2008 Courses:

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| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 4204 001 - Inorganic Chemistry |
| CHEM 427V 014 - RESEARCH IN CHEMISTRY |
| CHEM 427V 015 - RESEARCH IN CHEMISTRY |
| CHEM 4281 001 - Chemistry Seminar |

Fall 2008 Courses:

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| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 1003 101 - INTRO TO CHEMISTRY |
| CHEM 1013 004 - General Chemistry I |
| CHEM 1013 101 - GENERAL CHEMISTRY I |
| CHEM 2004 001 - Descriptive Inorganic Chemistry |
| CHEM 427V 005 - RESEARCH IN CHEMISTRY |
| CHEM 689V 4 - THESIS |

Spring 2009 Courses:

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| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 4204 001 - Inorganic Chemistry |
| CHEM 427V 001 - RESEARCH IN CHEMISTRY |
| CHEM 427V 010 - RESEARCH IN CHEMISTRY |
| CHEM 427V 011 - RESEARCH IN CHEMISTRY |
| CHEM 6403 1 - ADVANCED INORGANIC CHEMISTRY |
| CHEM 689V 2 - THESIS |

Fall 2009 Courses:

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| CHEM 1003 101 - INTRO TO CHEMISTRY |
| CHEM 1013 004 - General Chemistry I |
| CHEM 2004 001 - Descriptive Inorganic Chemistry |
| CHEM 427V 001 - RESEARCH IN CHEMISTRY |
| CHEM 427V 004 - RESEARCH IN CHEMISTRY |
| CHEM 680V 6 - INDEPENDENT STUDY |
| CHEM 680V 7 - INDEPENDENT STUDY |
| CHEM 689V 2 - THESIS |
| CHEM 689V 3 - THESIS |
| CHEM 689V 4 - THESIS |
| CHEM 689V 5 - THESIS |

Spring 2010 Courses:

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| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 4204 001 - Inorganic Chemistry |
| CHEM 427V 003 - RESEARCH IN CHEMISTRY |
| CHEM 427V 013 - RESEARCH IN CHEMISTRY |
| CHEM 427V 015 - RESEARCH IN CHEMISTRY |
| CHEM 5204 1 - INORGANIC CHEMISTRY |
| CHEM 6343 3 - SP TOP RES IN INORGANIC CHEM |
| CHEM 6403 1 - ADVANCED INORGANIC CHEMISTRY |
| CHEM 680V 2 - INDEPENDENT STUDY |
| CHEM 689V 4 - THESIS |
| CHEM 689V 5 - THESIS |
| CHEM 689V 6 - THESIS |
| CHEM 689V 7 - THESIS |
| CHEM 689V 9 - THESIS |

Fall 2010 Courses:

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| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 2004 001 - Descriptive Inorganic Chemistry |
| CHEM 6343 1 - THERMOGRAVIMETRIC ANALYSIS |
| CHEM 6343 2 - TECHNIQUES IN INORGANIC RESEAR |
| CHEM 689V 1 - THESIS |
| CHEM 689V 2 - THESIS |
| CHEM 689V 6 - THESIS |
| CHEM 689V 7 - THESIS |
| CHEM 689V 8 - THESIS |
| CHEM 689V 9 - THESIS |

Spring 2011 Courses:

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| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 4204 001 - Inorganic Chemistry |
| CHEM 427V 001 - RESEARCH IN CHEMISTRY |
| CHEM 427V 019 - RESEARCH IN CHEMISTRY |
| CHEM 5204 1 - INORGANIC CHEMISTRY |
| CHEM 6343 5 - SPT MOL STRUCT AND DYN OF BACT |
| CHEM 6343 6 - SPT COMP METHOD OF MOL STRUCT |
| CHEM 6403 1 - ADVANCED INORGANIC CHEMISTRY |
| CHEM 689V 1 - THESIS |
| CHEM 689V 3 - THESIS |
| CHEM 689V 5 - THESIS |

Fall 2011 Courses:

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| CHEM 1003 001 - Introduction to Chemistry |
| CHEM 2004 001 - Descriptive Inorganic Chemistry |
| CHEM 427V 003 - RESEARCH IN CHEMISTRY |
| CHEM 427V 004 - RESEARCH IN CHEMISTRY |
| CHEM 689V 5 - THESIS |
| CHEM 689V 7 - THESIS |

Spring 2012 Courses:

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| --- |
| CHEM 1023 001 - General Chemistry II |
| CHEM 4204 001 - Inorganic Chemistry |
| CHEM 427V 002 - RESEARCH IN CHEMISTRY |
| CHEM 427V 004 - RESEARCH IN CHEMISTRY |
| CHEM 427V 006 - RESEARCH IN CHEMISTRY |
| CHEM 427V 008 - RESEARCH IN CHEMISTRY |
| CHEM 6403 1 - ADVANCED INORGANIC CHEMISTRY |
| CHEM 680V 1 - IND ST THERMOGRAVIMETRIC DATA |

Summer 2012 Courses:

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| CHEM 689V 1 - THESIS STUDY OF RUTH COMPOUNDS |

Fall 2012 Courses:

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| CHEM 1003 001 - INTRO TO CHEMISTRY |
| CHEM 2004 001 - DESCRIPTIVE INORGANIC CHEM |
| CHEM 427V 008 - RUTHENIUM CYSTEINE COMPLEXES |
| CHEM 6273 003 - ORGANOMETALLIC RUTH COMPOUNDS |
| CHEM 6273 004 - THERMOCHROMIC COPPER COMPOUND |
| CHEM 680V 002 - IND ST MICROWAVE SYNTHESIS |