

## Student Publications: 2000 – 2004

(Chemistry undergraduate authors are underlined)

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### 2000

Rodgers, J.T.; Patel, P.; Hennes, J.L.; Balognia, S.L.; Mascotti, D.P. Use of Biotin-labeled Nucleic Acids for Protein Purification and Agarose-based Chemiluminescent Electromobility Shift Assays. *Anal. Biochem.*, **2000**, 277, 254-259.

### 2001

### 2002

### 2003

### 2004

Kwan, M.L.; Battiste, M.A.; Macala, M.K.; Aybar, S.C.; James, N.C.; Haoui, J.J. Diethylaluminum Chloride Mediated Vinylsilane Synthesis: Comparison of Different Solvent Systems. *Synth. Commun.*, **2004**, 34, 1943-1950.

## Student Presentations: 2000 – 2004

(Chemistry undergraduate presenters are underlined; awards received are **bold underlined**)

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### 2000

Bellar, J.; Waner, M. Examination of Concanavalin A Structure at the Solid/Liquid Interface by Atomic Force Microscopy. Presented at The 16<sup>th</sup> Biennial Conference on Chemical Education, University of Michigan, Ann Arbor, MI, August 2000.

Giannios, N.; Mascotti, D.M. Determining Effects of Iron-starvation on E. coli Promoters Using Green Fluorescent Protein. Presented at The 16<sup>th</sup> Biennial Conference on Chemical Education, University of Michigan, Ann Arbor, MI, August 2000.

Homer, C.; Nichols, M.A. The Effects of Co-Solvents on the Formation of Mixed Alkali Metal Complexes. Presented at Cleveland Section ACS Meeting-in-Miniature, Baldwin Wallace College, Berea, OH, March 2000.

Homer, C.; Nichols, M.A. The Effects of Co-Solvents on the Formation of Mixed Alkali Metal Complexes. Presented at the 75<sup>th</sup> Anniversary Celebration of Iota Sigma Pi, Cleveland State University, Cleveland, OH, March 2000.

Jagodnik, K.; Ewing, D.W. Determination of Kinetic Parameters of Hydrocarbon Abstraction Reactions Using Ab Initio Methods. Presented at The 16<sup>th</sup> Biennial Conference on Chemical Education, University of Michigan, Ann Arbor, MI, August 2000.

Lewis, M.; Shaneyfelt, K.; Miller, C.M. New Methods of Extraction and Purification of the Blue Copper Oxidase Laccase. Presented at Bridges to Success in the Sciences Poster Session, Cuyahoga Community College, Metro Campus, Cleveland, OH, April 2000.

Nemeth, D.; Nichols, M.A. A Chemical and Microbiological Survey an Urban Watershed: Euclid Creek. Presented at The 16<sup>th</sup> Biennial Conference on Chemical Education, University of Michigan, Ann Arbor, MI, August 2000.

Rogers, J.T.; Mascotti, D.M. Quantitative Dual Membrane Nitrocellulose Filter Binding Assays. Presented at The 16<sup>th</sup> Biennial Conference on Chemical Education, University of Michigan, Ann Arbor, MI, August 2000.

Salwan, A.; Mascotti, D.M. Dependence of the Extent of Ion Association with Polynucleotides and Peptides as a Function of Solution Dielectric. Presented at the 44<sup>th</sup> Annual Meeting of the Biophysical Society of New Orleans, New Orleans, LA, February 2000.

Shaneyfelt, K. Intracellular Proteolytic Cleavage of dppB During Thrombin Activation. Presented at the 75<sup>th</sup> Anniversary Celebration of Iota Sigma Pi, Cleveland State University, Cleveland, OH, March 2000.

Shaneyfelt, K.; Miller, C. New Methods of Extraction and Purification of the Blue Copper Oxidase, Laccase. Presented at Cleveland Section ACS Meeting-in-Miniature, Baldwin Wallace College, Berea, OH, March 2000.

Shaneyfelt, K.; Miller, C. New Methods of Extraction and Purification of the Blue Copper Oxidase, Laccase. Presented at CUR Posters on The Hill, Washington, D.C., April 2000.

## 2001

Bellar, J.; Waner, M.J. Measurement of Concanavalin A Structure at the Solid/Liquid Interface. Presented at Cleveland Section ACS Meeting-in-Miniature, Ursuline College, Pepper Pike, OH, March 2001.

McGill, S.; Morris, J.J.; Challen, P.R.; Ewing, D.W. Characterization of HAT-(CN)<sub>6</sub> Anions. Presented at Ohio-Michigan REU Poster Session, John Carroll University, University Heights, OH, July 2001.

## 2002

Bellar, J.; Mascotti, D.; Ewing, D. Determination of Cosolvent Effects on Peptide/Nucleotide Interactions. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2002.

Cannon, J.; Nichols, M.A. Determination of the Efficiency of Artificial Wetland Use for Remediation of Urban Run-Off Water. Presented at Cleveland Section ACS Meeting-in-Miniature, Case Western Reserve University, Cleveland, OH, March 2002.

Ehrlich, J.; Challen, P. Synthesis of Metal Complexes of HAT-(CN)<sub>6</sub>. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2002.

Jagodnik, K.; Ewing, D.W. Determination of Kinetic Parameters of Hydrogen Abstraction Reactions Using *Ab Initio* Methods. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2002.

Lenchak, L.; Mascotti, D. Quantitative Determination of the Thermodynamic Equilibrium Constant for the Interaction of the Iron Responsive Protein-1 with the Iron Responsive Element. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2002.

Lenchak, L.M.; Mascotti, D.P. Quantitative Determination of the Thermodynamic Equilibrium Constant for the Interaction of the Iron Responsive Protein-1 with the Iron Responsive Element. Presented at CUR Posters on The Hill, Washington, D.C., April 2002.

Macala, M.; Kwan, M.L. Organoaluminum Reagents in a One-Pot Synthesis of Vinylsilanes. Presented at Ohio-Michigan REU Poster Session, Kent State University, Kent, OH, July 2002.

McGill, S.; Morris, J.; Challen, P. Characterization of HAT-(CN)<sub>6</sub> Anions. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2002.

Morris, J.; Challen, P. Synthesis of Metal Complexes of HAT-(CN)<sub>6</sub>. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2002.

Shaneyfelt, E.; Nichols, M.A. Polymerization Reactions of Styrene Using Trimethylsilylmethylithium as an Initiator. Presented at Cleveland Section ACS Meeting-in-Miniature, Case Western Reserve University, Cleveland, OH, March 2002.

Sterk, L.; Waner, M.J. Analysis of Valerate Modified Aluminum Isopropoxide as a Precursor for Sol-gel Formation of Alumina Films. Presented at Cleveland Section ACS Meeting-in-Miniature, Case Western Reserve University, Cleveland, OH, March 2002.

Waner, M.J.; Sterk, L.; Kopp, K. Analysis of Carboxylate Modified Aluminum Isopropoxide as a Precursor for Sol-Gel Synthesis of Aluminina Thin Films. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2002.

## 2003

Caraman, E.; Westerfield, L.; Miller, C. Determination of Isotopic Exchange in the Copper Isotopomers of Laccase Using ICPMs and IDMs. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2003.

Fatkins, D.; Ewing, D. Quantum Mechanical Study of Hydrogen Transfer Reactions of Hydrocarbons with the ONIOM Method. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2003.

Haoui, J.; Macala, M.; Kwan, M.L. Application of Organoaluminum Reagents in a One-Pot Synthesis of Vinylsilanes. Presented at the 38<sup>th</sup> National Organic Symposium, Indiana University, Bloomington, IN, June 2003.

Hudach, K.; Kwan, M.L. Stereoselective One-Pot Synthesis of Vinylsilane from Aromatic Aldehydes. Presented at the 38<sup>th</sup> National Organic Symposium, Indiana University, Bloomington, IN, June 2003.

Hudach, K.; James, N.; Kwan, M.L. Diethylaluminum Chloride Mediated Vinylsilane Synthesis: Comparison of Different Solvent Systems. Presented at ACS Central Regional Meeting, Pittsburgh, PA, October 2003.

James, N.; Macala, M.; Kwan, M.L. Organoaluminum Reagents in Vinylsilane Synthesis. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2003.

Macala, M.; Kwan, M.L. Application of Organoaluminum Reagents in a One-pot Synthesis of Vinylsilanes. Presented at Cleveland Section ACS Meeting-in-Miniature, Oberlin College, Oberlin, OH, March 2003.

March, M.; Setter, M.; Nichols, M. Evaluation of Doan Brook for Metals Contamination and Accumulation using ICP-MS. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2003.

Morris, J.J.; Challen, P.R.; Ewing, D.W. Synthesis and Studies of HAT-(CN)<sub>6</sub> and Metal Complexes. Presented at Cleveland Section ACS Meeting-in-Miniature, Oberlin College, Oberlin, OH, March 2003. **Outstanding Undergraduate Research Award**

Morris, J.; Challen, P. Metal Complexes of HAT-(CN)<sub>6</sub>. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2003.

## **2004**

Czerwinski, J.D.; Mascotti, D.P. Chemiluminescent Nitrocellulose Filter Binding Assays: SOD/DNA Interaction as an Example. Presented at the 48<sup>th</sup> Annual Biophysical Society Meeting, Baltimore, MD, February 2004.

Czerwinski, J.D.; Mascotti, D.P. Chemiluminescent Nitrocellulose Filter Binding Assays: SOD/DNA Interaction as an Example. Presented at Cleveland Section ACS Meeting-in-Miniature, John Carroll University, University Heights, OH, March 2004.

Czerwinski, J.D.; Mascotti, D.P. Chemiluminescent Nitrocellulose Filter Binding Assays: SOD/DNA Interaction as an Example. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2004.

Jackson, H.; LaMarca, K.; Kwan, M.L. Biochemical Advances in Green Chemistry. Presented at Celebration of Scholarship Panel Discussion, John Carroll University, University Heights, OH, March 2004.

Haoui, J. Polymeric Clones. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2004.

Haoui, J.; Kelley, M.; Kwan, M.L. Recoverable Reagents and Catalysts. Presented at Celebration of Scholarship Panel Discussion, John Carroll University, University Heights, OH, March 2004.

Hudach, K.; Kwan, M.L. Diethylaluminum Chloride Mediated Vinylsilane Synthesis: Comparison of Different Solvent Systems. Presented at Celebration of Scholarship Poster Session, John Carroll University, John Carroll University, University Heights, OH, March 2004.

Hudach, K.; Kwan, M.L. Diethylaluminum Chloride Mediated Vinylsilane Synthesis: Comparison of Different Solvent Systems. Presented at Cleveland Section ACS Meeting-in-Miniature, John Carroll University, University Heights, OH, March 2004.

Kelley, M.; Ewing, D. Theoretical Calculations on HAT-(CN)<sub>6</sub>. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2004.

Kelley, M.; Harris, J.M. SERS-Based Spectroelectrochemical Investigation of DNA Hybridization: Possible Control of Hybridization Equilibria of Surface Immobilized DNA Using Applied Potential. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2004.

Kudach, K.; Catanese, J.; Weber, J.; Kwan, M.L. The Chemistry of Tire Recycling with a Focus on Surface Coatings. Presented at Celebration of Scholarship Panel Discussion, John Carroll University, University Heights, OH, March 2004.

Kwan, M.L.; Conry, S.; Carfagna, C. Preparation and Characterization of Pd(II) Complexes of a <sup>19</sup>F NMR-Reporter Pincer Ligand. Presented at ACS Northeast Regional Meeting, Rochester, NY, October 2004.

LaMarca, K.; Starke, D.; Mielal, J. Mercapto Succinic Acid: Inhibitor and Probe for New Enzymatic Activity. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2004.

Leonberg, A.; Penn, M. Detecting the Presence of Infectious Diseases within Atherosclerotic Plaques. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2004.

Macala, M.; Grande-Allen, J. Biochemical Analysis of Mitral Valves from Heart Transplant Patients. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2004.

Macala, M.; Carfagna, C.; Kwan, M.L. A Greener Approach to Industrial Organic Solvents Utilizing Surfactants for Carbon Dioxide. Presented at Celebration of Scholarship Panel Discussion, John Carroll University, University Heights, OH, March 2004.

Newbould, E.; Setter, M.P. Dissolution of Copper(II) Oxide in Various Concentrations of Nitric Acid to Determine the Surface Composition Using Atomic Absorption Spectroscopy. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2004.

Orovets, A.; Mikols, K.; Gedeon, A. Pesticides. Presented at Celebration of Scholarship Panel Discussion, John Carroll University, University Heights, OH, March 2004.



Stucke, K.; Major, J.A.; Hamilton, T.A. Chemokine Expression in a Heart Ischemia/Reperfusion Model. Presented at Celebration of Scholarship Poster Session, John Carroll University, University Heights, OH, March 2004.