

Chemistry Faculty Publications

2000-2010

2000

Papers

- Williams, R. E.; Ji, G.; Bausch, J. W. Nido-6<V> Versus Nido-6<IV> Configurations for the known species, C2B4H62- and N2B4H6, and some calculated analogs, B6H64-, CB5H63-, NB5H62-, SB5H52-, OB5H52-, NCB4H61-, SCB4H51-, OCB4H51-, SNB4H5, ONB4H5, S2B4H4, OSB4H4 and O2B4H4, *Contemporary Boron Chemistry*, Royal Society of Chemistry: London, 2000, 497-505.
- Rolison, D. R.; Bessel, C. A. Electrocatalysis and Charge-Transfer Reactions at Redox-Modified Zeolites, *Accts. Chem. Res.*, 2000, *33*(11), 737-744.
- Bell-Loncella, E. T.; Bessel, C. A. *cis*-Bis(bipyridine)(dimethylglyoxime)ruthenium(II): An Electrochemical and Spectroscopic Investigation of Proton-Coupled Electron Transfer, *Inorg. Chim. Acta*, 2000, *303*, 199-205.
- Smith, G. R.; Villani, Jr., F. J.; Failli, L.; Giuliano, R. M. Synthesis of Phenyl 3,4-Di-*O*-benzyl-2,6-dideoxy-3-*C*-methyl-1-thio- α , β -L-xylo-hexopyranoside. A Glycosyl Donor for Axenose, *Tetrahedron Asymmetry*, 2000, *11*, 139-149.
- Smith, G. R.; Giuliano, R. M. Synthesis of Methyl α -L-vancosaminide, *Carbohydrate Research*, 2000, *323*, 208-212.
- Lagalante, A. F.; Spadi, M.; Bruno, T. J. Kamlet-Taft Solvatochromic Parameters of Eight Alkanolamines, *J. Chem. Eng. Data*, 2000, *45*(2), 382-385.
- Hoffman, T. L.; Canziani, G.; Jia, L.; Rucker, J. B.; Doms, R. W. A biosensor assay for studying ligand-membrane receptor interactions: binding of antibodies and HIV-1 Env to chemokine receptors, *Proc. Natl. Acad. Sci. USA*, 2000, *97*(21), 11215-11220.
- Selinsky, B. S.; Smith, R.; Frangiosi, A.; Vonbaur, B.; Pedersen, L. Squalamine is not a proton ionophore, *Biochim. Biophys. Acta*, 2000, *1464*, 135-141.
- Zubris, D. L.; Veghini, D.; Herzog, T. A.; Bercau, J. E. Reactivity and mechanistic studies of stereocontrol for Ziegler-Natta polymerization utilizing doubly-silylene bridged group 3 and group 4 metallocenes, *ACS Symposium Series*, 2000, *749*(Olefin Polymerization), 2-14.

Presentations

- Bausch, J. W., "Some Recent and Not So Recent Advances in Carborane Chemistry," University of Notre Dame, September 15, 2000.
- Bausch, J. W., "The Structure of the Carborane C₂B₆H₁₂," Boron USA VIII Conference, University of Pittsburgh, June 8-10, 2000.
- Chilenski, J. R.; Barton, J. T.; Mason, M.; Bausch, J. W., "A Computational Analysis of Pentaborate," HHMI Summer 2000 Research Program Poster Session, Villanova University, July 2000.
- Takeuchi, K. J.; Marschilok, A. C.; Dollahon, N.; Bessel, C. A., "Preparation of Iron Catalysts for the Formation of Carbon Nanofibers," 220th ACS National Meeting, Washington, D.C. August 20-24, 2000.

- Bessel, C. A.; Laubernds, K.; Rodriguez, N. M.; Baker, R. T. K., "Use of Platinum Supported on Graphite Nanofibers for Methanol Oxidation," 220th National American Chemical Society Meeting, Washington, D.C., August 20-25, 2000.
- Bessel, C. A.; Laubernds, K.; Rodriguez, N. M.; Baker, R. T. K., "Methanol Oxidation by Platinum Supported on Graphite Nanofibers," 220th National American Chemical Society Meeting, Washington, D.C., August 20-25, 2000.
- Bessel, C. A.; Laubernds, K.; Rodriguez, N. M.; Baker, R. T. K., "Catalysis with Unusual Materials," Department of Chemistry Colloquium, Northeastern University, Boston, MA, May 25, 2000.
- Bessel, C. A.; Rodriguez, N. M.; Baker, R. T. K., "Electrochemical Characterization of Graphite Nanofibers Catalytically Grown from Metal Particles," 197th Electrochemical Society Meeting, Toronto, Canada, May 15, 2000.
- Bessel, C. A.; Laubernds, K.; Rodriguez, N. M.; Baker, R. T. K., "Catalysis with Unusual Materials," Department of Chemistry Colloquium, St. John's University, Queens, NY, April 3, 2000.
- Bessel, C. A., "Synthesis and Characterization of New Carbon Anode Materials for Implantable Medical Batteries," Bunting Science Exhibit Poster Presentation, The Radcliffe Institute for Advanced Studies, Harvard University, Boston, MA, October 6, 2000.
- Bessel, C. A., "Carbon: Teaching an Old Dog New Tricks," The Radcliffe Institute of Advanced Studies, Harvard University, Boston, MA, October 20, 2000.
- Rich, P.; Casillas, E. G., "Strategies Towards the Total Synthesis of Pisatin and Mechanism Based Inactivators of Pisatin Demethylase," Villanova Summer Undergraduate Research Poster Session, October 12, 2000.
- Nunez, J.; Casillas, E. G., "Preparation of 4-Hydroxymethyl-2-cyclopentenone, a Route Towards Desmethylprehelminthosporol," Villanova Summer Undergraduate Research Poster Session, October 12, 2000.
- DeFeo, C.; Edwards, J. R., "Kinetic Properties of an α -Glucosidase from *Saccharomyces cerevisiae*," Villanova Summer Undergraduate Poster Session, October 12, 2000.
- Nguyen, J. D.; Edathil, J.; Boyko, W. J.; Giuliano, R. M., "Synthesis of Vinyl Glycosides from Glycosyl Acetals," Chemistry Department Research Presentation (for Local Industrial Sponsors), Villanova University, October 12, 2000.
- Dyckman, D.; Giuliano, R. M., "Use of Methyl Cerium Alkylation in the Synthesis of Methyl-Branched Amino Sugar Derivatives," Chemistry Department Research Presentation (for Local Industrial Sponsors), Villanova University, October 12, 2000.
- Micalizzi, D. S.; Dougherty, J. P.; Giuliano, R. M., "Synthetic Studies of the Polyketomycin Disaccharide," Chemistry Department Research Presentation (for Local Industrial Sponsors), Villanova University, October 12, 2000.
- Nguyen, J. D.; Edathil, J.; Boyko, W. J.; Giuliano, R. M., "Synthesis of Vinyl α -D-Glycosides from Glycosyl Acetals," 20th International Carbohydrate Symposium, Hamburg, Germany, August 27-September 1, 2000.
- Nguyen, J. D.; Edathil, J.; Boyko, W. J.; Giuliano, R. M., "Synthesis of Vinyl Glycosides from Glycosyl Acetals," Poster Session, Howard Hughes Medical Institute Summer Research Program, Villanova University, August 2, 2000.
- Dyckman, D.; Giuliano, R. M., "Use of Methyl Cerium Alkylation in the Synthesis of Methyl-Branched Amino Sugar Derivatives," Poster Session, Summer Research Program, Villanova University, August 2, 2000.

- [Micalizzi, D. S.](#); [Dougherty, J. P.](#); [Giuliano, R. M.](#), "Synthetic Studies of the Polyketomycin Disaccharide," Poster Session, Howard Hughes Medical Institute Summer Research Program, Villanova University, August 2, 2000.
- [Hensel, M.](#); [Cichowicz, M.](#); [Giuliano, R. M.](#), "An Approach to the Synthesis of Callipeltoside A from Carbohydrates," Sigma Xi Poster Session, Villanova University, April 7, 2000.
- [Edathil, J.](#); [Giuliano, R. M.](#), "Mercury-Free Synthesis of Vinyl α -D-Glucopyranosides," 14th National Conference on Undergraduate Research, University of Montana, Missoula, MT, April 27-29, 2000.
- [Dougherty, J. P.](#); [Giuliano, R. M.](#), "Synthesis of Glycosyl Donors for Amicetose," 14th National Conference on Undergraduate Research, University of Montana, Missoula, MT, April 27-29, 2000.
- [Lagalante, A. F.](#); [Abdulagatov, A.](#); [Bruno, T. J.](#), "Thermosolvatochromic Parameters of Fluorinated Ethers," 14th Symposium on Thermophysical Properties, Boulder, CO, June 25-30, 2000.
- [Spadi, M.](#); [Lagalante, A. F.](#); [Bruno, T. J.](#), "Solution Thermodynamics of Propylene Glycol Phenyl Ether Determined by Gas-Liquid Chromatography," 14th Symposium on Thermophysical Properties, Boulder, CO, June 25-30, 2000.
- [Lagalante, A. F.](#); [Bruno, T. J.](#), "Kamlet-Taft Parameters and Predictive Models for the Design and Selection of Alternative Supercritical Solvents," 14th Symposium on Thermophysical Properties, Boulder, CO, June 25-30, 2000.
- [Andersen, W. C.](#); [Sievers, R. E.](#); [Lagalante, A. F.](#); [Bruno, T. J.](#), "Solubilities and Modeling of Iron(III), Cerium(IV) And Terbium(III) β -Diketonates In Supercritical Carbon Dioxide," 14th Symposium on Thermophysical Properties, Boulder, CO, June 25-30, 2000.
- [Paul, C.](#); [Rucker, J. B.](#), "Monitoring the Response of Vanilloid Receptor-Expressing Cells to Capsaicin and Capsaicin Analogs Using a Fluorimeter-Based Calcium Assay," Villanova Summer Undergraduate Research Poster Session, October 12, 2000.
- [Hensel, M.](#); [Kumar, A.](#); [Rucker, J. B.](#), "Monitoring the Effects of the Chemokines MDC and TARC on Chemokine Receptor CCR4 Desensitization Using an Intracellular Calcium Assay," Villanova Summer Undergraduate Research Poster Session, October 12, 2000.
- [Denis, C.](#); [Selinsky, B. S.](#), "Purification of Inner and Outer Cell Membranes from *E. coli*," Villanova Summer Undergraduate Research Poster Session, October 12, 2000.
- [Moyer, K. L.](#); [Zwaal, R. F. A.](#); [Comfurius, P.](#); [Selinsky, B. S.](#); [Stern, A.](#), "Characterization and mechanism of a new anticoagulant from rat peritoneal mast cells," Biophysical Society Annual Meeting, New Orleans, LA, February 2000.
- [Selinsky, B. S.](#); [Loll, P. J.](#); "The structure of ovine prostaglandin H₂ synthase to 2.7 Å resolution," Biophysical Society Annual Meeting, New Orleans, LA, February 2000.
- [Kavanagh, C.](#); [Wojcik, J. F.](#), "Exploring the Kinetics of the Bromination of Acetone: An Exercise in Rewriting Education," Villanova Summer Undergraduate Research Poster Session, October 12, 2000.
- [Maany, P.](#); [Wojcik, J. F.](#), "Preparation of Future Chemistry Experiments Using the Cary 50 and Bomb/Solution Calorimeter," Villanova Summer Undergraduate Research Poster Session, October 12, 2000.
- [Orlando, K.](#); [Wojcik, J. F.](#), "A Kinetic Study of the Decarboxylation of 2-[(Carboxymethyl)(4-Methylphenyl)amino]-acetic acid," Villanova Summer Undergraduate Research Poster Session, October 12, 2000.

2001

Papers

- Mohamed, M. B.; Ahmadi, T. S.; Link, S.; Braun, M.; El-Sayed, M. A. Hot electron and phonon dynamics of gold nanoparticles embedded in a gel matrix, *Chemical Physics Letters*, 2001, *343*(1,2), 55-63.
- Bessel, C. A.; Aggarwal, P.; Marschilok, A. C.; Takeuchi, K. J. *Trans*-spanning Phosphine Ligands, *Chem. Rev.*, 2001, *101*, 1031-1066.
- Meyers, C. J.; Shah, S. D.; Patel, S. C.; Sneeringer, R. M.; Bessel, C. A.; Leising, R. A.; Takeuchi, E. S. Templated Synthesis of Carbon Materials from Zeolites (Y, Beta and ZSM-5) and a Montmorillonite Clay (K10): Physical and Electrochemical Characterization, *J. Phys. Chem., B*, 2001, *105*, 2143-2152.
- Llanguri, R.; Morris, J. J.; Stanley, W. C.; Bell-Loncella, E. T.; Turner, M.; Boyko, W. J.; Bessel, C. A. Electrochemical and Spectroscopic Investigations of Oxime Complexes of Bis(bipyridyl)ruthenium(II), *Inorg. Chim. Acta*, 2001, *315*, 53-65.
- Bessel, C. A.; Laubernds, K.; Rodriguez, N. M.; Baker, R. T. K. Graphite Nanofibers as an Electrode for Fuel Cell Applications, *J. Phys. Chem.*, 2001, *105*(6), 1115-1118.
- Edathil, J.; Nguyen J.; Hughes, K.; Boyko, W. J.; Giuliano, R. M. Synthesis of Vinyl a-D-Glucopyranosides from Mixed Acetal Glycosides, *Journal of Carbohydrate Chemistry*, 2001, *20*, 81-95.
- Grotjahn, D. B.; Van, S.; Kassel, W. S.; Rheingold, A. L. Hydrogen Bonding in the Crystal Structure of Bis[[3-(thiomethyl)methyl]pyrazole]copper(II) Perchlorate, *Journal of Bioinorganic Chemistry*, 2001, *85*, 61-65.
- Andersen, W. C.; Sievers, R. E.; Lagalante, A. F.; Bruno, T. J. Solubility of Cerium(IV), Terbium(III), and Iron(III) β -Diketonates in Supercritical Carbon Dioxide, *J. Chem. Eng. Data*, 2001, *46*(5), 1045-1049.
- Ludwig, O. G. A Rationalization for the Freshman Rules for the H-atom Quantum Numbers, *Journal of Chemical Education*, 2001, *78*, 634.
- Perrin, C. L.; Ohta, B. K. Symmetry of N-H-N Hydrogen Bonds in 1,8-Bis(dimethylamino)naphthalene*H⁺ and 2,7-Dimethoxy-1,8-bis(dimethylamino)naphthalene*H⁺, *J. Am. Chem. Soc.*, 2001, *123*, 6520-6526.
- Selinsky, B. S.; Gupta, K.; Sharkey, C. T.; Loll, P. J. Structural analysis of NSAID binding by prostaglandin H₂ synthase: Time-dependent and time-independent inhibitors elicit identical enzyme conformations, *Biochemistry*, 2001, *40*, 5172-5180.
- Loll, P. J.; Sharkey, C. T.; O'Connor, S. J.; Dooley, C. M.; O'Brien, E.; Devocelle, M.; Nolan, K. B.; Selinsky, B. S.; Fitzgerald, D. J. *O*-Acetylsalicylhydroxamic acid, a novel acetylating inhibitor of prostaglandin H₂ synthase: Structural and functional characterization of enzyme-inhibitor interactions, *Mol. Pharmacol.*, 2001, *60*, 1407-1413.

Presentations

- Ahmadi, T. S., "Electron dynamics of metal nanoparticles in solutions and gels," Chemistry Department, Temple University, November 29, 2001.
- Mock, M. T.; Wiacek, K. J.; Boyko, W. J.; Bessel, C. A.; Takeuchi, K. J., "The *In Situ* Synthesis and Characterization of Octahedral Ruthenium Complexes that Contain Di- and Tri-spanning Diphosphine Ligands," 53rd ACS Southeast Regional Meeting, Savannah, GA, September 23-26, 2001.

- **Baum, A.**; Bessel, C. A., "Synthesis, Characterization, and Reactivity of a Graphite Nanofiber-Supported Wacker Catalyst," 53rd ACS Southeast Regional Meeting, Savannah, GA, September 23-26, 2001.
- **Wiacek, K. J.**; Bessel, C. A., "The *In Situ* Synthesis of an Octahedral Ruthenium(II) Complex Containing a *trans*-Di-spanning Diphosphine Ligand," Villanova Summer Undergraduate Research Poster Session, October 11, 2001.
- **Nakazawa, K.**; Bessel, C. A., "The Gas Chromatography - Mass Spectroscopy (GC-MS) of Chinese Herbs," 2nd Annual Howard Hughes Medical Institute Summer Poster Session, Villanova University, Villanova, PA, July 2001.
- **Nakazawa, K.**; Bessel, C. A., "The Absorption of Ag⁺ on Graphite Nanofibers," 2nd Annual Howard Hughes Medical Institute Summer Poster Session, Villanova University, Villanova, PA, July 2001.
- **Dehmer, C. P.**; Bessel, C. A., "Determining the Capabilities of Carbon Nanofibers to Absorb Organic Molecules," 2nd Annual Howard Hughes Medical Institute Summer Poster Session, Villanova University, Villanova, PA, July 2001.
- **Wiacek, K. J.**; **Mock, M. T.**; Bessel, C. A., "The *In Situ* Synthesis of an Octahedral Ruthenium(II) Complex Containing a *trans*-Di-spanning Diphosphine Ligand," 2nd Annual Howard Hughes Medical Institute Summer Poster Session, Villanova University, Villanova, PA, July 2001.
- **Pendergast, M. E.**; Bessel, C. A., "The Absorption Capacity of Carbon Nanofibers Towards Metal Cations in Aqueous Solution," 2nd Annual Howard Hughes Medical Institute Summer Poster Session, Villanova University, Villanova, PA, July 2001.
- **Shimp, H.**; **Clareen, S.**; Casillas, E. G., "Pauson-Khand Approach to the Synthesis of Prehelminthosporol," Summer Undergraduate Research Poster Session, Villanova University, October 11, 2001.
- **McGuire, H.**; Casillas, E. G., "Introductory Steps towards the Total Synthesis of Sarcoglane," Summer Undergraduate Research Poster Session, Villanova University, October 11, 2001.
- **Hyland, K.**; Casillas, E. G., "Synthesis of Vinyl Pisatin and Pisatin," HHMI Poster Session, Villanova University, July 29, 2001.
- **Pascarella, M. R.**; Casillas, E. G., "Synthesis of Sarcoglane," HHMI Poster Session, Villanova University, July 29, 2001.
- **Dulin, M.**; Noecker, L. A.; Kassel, W. S.; Giuliano, R. M., "Glycosylation of Branched Amino Sugars Based on Novel Intermediates Derived from Thioglycosides," ACS Mid-Atlantic Regional Meeting, Towson University, Towson, MD, May 30-June 1, 2001.
- **Giuliano, R. M.**; **Hughes, K. D.**; Boyko, W. J., "Synthetic Approaches to Deoxy Sugar Containing Disaccharides Using Vinyl Ethers and Diels-Alder Methodology," ACS Mid-Atlantic Regional Meeting, Towson University, Towson, MD, May 30 - June 1, 2001.
- **Kocher, P.**; **McGrath, M.**; Kassel, W. S., "Characterization and Reactivity Studies of Solid Base Catalysts," Villanova Summer Undergraduate Research Poster Session, October 11, 2001.
- **Kocher, P.**; **McGrath, M.**; Kassel, W. S., "Characterization and Reactivity Studies of Solid Base Catalysts," 53rd Southeastern Regional Meeting of the American Chemical Society; Savannah, GA, September 2001.
- **Burd, C.**; Kassel, W. S., "Manganese Salicylidene L-Amino Acid Complexes for Asymmetric Oxidations," HHMI Summer Research Institute Poster Session; Villanova, PA, July 2001.
- **Lagalante, A. F.**; Bruno, T. J., "Solvatochromic Parameters of Alternative Refrigerants" Symposium in Honor of Professor Daniel E. Martire, Georgetown University, Washington, DC, May 4-5, 2001.
- **Kim, D.**; **Reczkowski, R.**, "Amplification and Cloning of the *E. coli speA* Gene by the Polymerase Chain Reaction," Villanova Summer Undergraduate Research Poster Session, October 11, 2001.

- Turner, M.; Reczkowski, R., "Amplification and Cloning of the *E. coli speA* Gene by the Polymerase Chain Reaction," Villanova Summer Undergraduate Research Poster Session, October 11, 2001.
- DeFeo, C.; Rucker, J. B., "The Use of Receptor Chimeras to Understand the Capsaicin Binding Site on VR1," Villanova Summer Undergraduate Research Poster Session, October 11, 2001.
- Crisuoli, M.; Rucker, J. B., "Development of a Cell-Cell Fusion Assay for the Study of CD4-Independent HIV Infection," Villanova Summer Undergraduate Research Poster Session, October 11, 2001.
- Paul, C.; Rucker, J. B., "Development of Tools to Analyze the Structure of Vanilloid Receptor-1," Villanova Summer Undergraduate Research Poster Session, October 11, 2001.
- Maresca, M.; Selinsky, B. S., "Attempts at Squalamine Crystallization," Villanova Summer Undergraduate Research Poster Session, October 11, 2001.
- Decker, L.; Selinsky, B. S., "Association of a fluorescent squalamine analog with phospholipid vesicles as measured by fluorescence anisotropy," Biophysical Society Annual Meeting, Boston, MA, February 2001.

2002

Papers

- Williams, R. E.; Bausch, J. W. Energy/architectural patterns among the five to twelve-vertex closo-carboranes; 6k-borons "trump" 5k-carbons. Boron Chemistry at the Beginning of the 21st Century, *Proceedings of the International Conference on the Chemistry of Boron*, 11th, Moscow, Russian Federation, July 28-August 1, 2002.
- Shore, S. G.; Hamilton, E. J. M.; Bridges, A. N.; Bausch, J. W.; Krause-Bauer, J. A.; Dou, D.; Liu, J.; Liu, S.; Du, B. The Solid State Structure of [B₁₀H₁₁] and its Dynamic NMR Spectra in Solution, *Inorg. Chem.*, 2002, 42, 1175-1186.
- Takeuchi, K. J.; Marschilok, A. C.; Bessel, C. A.; Dollahon, N. R. Synthesis, Characterization and Catalytic Use of Acicular Iron Particles, *J. Catal.*, 2002, 208, 150-157.
- Noecker, L. A.; Giuliano, R. M.; Cooney, M.; Boyko, W. J.; Zajac, Jr., W. W. Ozone/OXONE-Mediated Oxidations of Amino and *O*-Benzyloxyamino Sugars, *Journal of Carbohydrate Chemistry*, 2002, 21, 539-544.
- Albert, M. R.; Grannas, A. M.; Bottenheim, J.; Shepson, P. B.; Perron, F. E. Processes and properties of snow-air transfer in the high Arctic with application to interstitial ozone at Alert, Canada, *Atmospheric Environment*, 2002, 36, 2779-2787.
- Guimbaud, C.; Grannas, A. M.; Shepson, P. B.; Fuentes, J. D.; Boudries, H.; Bottenheim, J. W.; Domine, F.; Houdier, S.; Perrier, S.; Biesenthal, T. B.; Splawn, B. G. Snowpack processing of acetaldehyde and acetone in the Arctic atmospheric boundary layer, *Atmospheric Environment*, 2002, 36, 2743-2752.
- Grannas, A. M.; Shepson, P. B.; Guimbaud, C.; Sumner, A. L.; Albert, M.; Simpson, W.; Domine, F.; Boudries, H.; Bottenheim, J.; Beine, H. J.; Honrath, R.; Zhou, X. A study of photochemical and physical processes affecting carbonyl compounds in the Arctic atmospheric boundary layer, *Atmospheric Environment*, 2002, 36, 2733-2742.
- Spicer, C. W.; Plastridge, R. A.; Foster, K. L.; Finlayson-Pitts, B. J.; Bottenheim, J. W.; Grannas, A. M.; Shepson, P. B. Molecular halogens before and during ozone depletion events in the Arctic at polar sunrise: concentrations and sources, *Atmospheric Environment*, 2002, 36, 2721-2731.

- Houdier, S.; Perrier, S.; Domine, F.; Cabanes, A.; Legagneux, L.; Grannas, A. M.; Guimbaud, C.; Shepson, P. B.; Boudries, H.; Bottenheim, J. W. Acetaldehyde and acetone in the Arctic snowpack during the ALERT2000 campaign. Snowpack composition, incorporation processes and atmospheric impact, *Atmospheric Environment*, 2002, *36*, 2609-2618.
- Boudries, H.; Bottenheim, J. W.; Guimbaud, C.; Grannas, A. M.; Shepson, P. B.; Houdier, S.; Perrier, S.; Domine, F. Distribution and trends of oxygenated hydrocarbons in the high Arctic derived from measurements in the atmospheric boundary layer and interstitial snow air during the ALERT2000 field campaign, *Atmospheric Environment*, 2002, *36*, 2573-2583.
- Sumner, A. L.; Shepson, P. B.; Grannas, A. M.; Bottenheim, J. W.; Anlauf, K. G.; Worthy, D.; Schroeder, W. H.; Steffen, A.; Domine, F.; Perrier, S.; Houdier, S. Atmospheric chemistry of formaldehyde in the Arctic troposphere at Polar Sunrise, and the influence of the snowpack, *Atmospheric Environment*, 2002, *36*, 2553-2562
- Reger, D. L.; Wright, T. D.; Smith, M. D.; Rheingold, A. L.; Kassel, W. S.; Concolino, T.; Rhagitan, B. Syntheses and structures of mono-thiocyanate complexes of cadmium(II) and lead(II) containing bulky nitrogen based polydentate ligands, *Polyhedron*, 2002, *21*, 1795-1807.
- Hevia, E.; Perez, J.; Riera, V.; Miguel, D.; Kassel, W. S.; Rheingold, A. L. New Synthetic Routes to Cationic Rhenium Tricarbonyl Bipyridine Complexes with Labile Ligands, *Inorganic Chemistry*, 2002, *41*, 4673-4679.
- Lagalante, A. F.; Abdulagatov, A.; Bruno, T. J. Kamlet-Taft Thermosolvatochromic Parameters of Hydrofluoroethers and Hydrofluoroether Azeotropic Mixtures, *J. Chem. Eng. Data*, 2002, *47*(1), 47-51.
- Graham B. F.; Harrowfield, J. M.; Trengrove, R. D.; Lagalante, A. F.; Bruno, T. J. Host: Guest Complex Formation Between Carbon Dioxide and the *p*-*t*-Butylcalixarenes, *J. of Inclusion Phenom.*, 2002, *43*(3-4), 179-182.
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- Perrin, C. L.; Ohta, B. K. Symmetry of O-H-O and N-H-N Hydrogen bonds in 6-Hydroxy-2-formylfulvene and 6-Aminofulvene-2-aldimines, *Bioorganic Chemistry*, 2002, *30*, 3-15.
- Shu, Y.; Jones, S. R.; Kinney, W. A.; Selinsky, B. S. The synthesis of spermine analogs of the shark aminosterol squalamine, *Steroids*, 2002, *67*, 291-304.
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Presentations

- Riviello, G.; Bausch, J. W., "Computational Studies of Nido-[C₂B₄] and Sulfide Adducts of B₁₀H₁₀²⁻," Villanova Summer Undergraduate Poster Session, October 2002.
- Williams, R. E.; Bausch, J. W., "Ab Initio Energy/Architectural Patterns Among the Five to Twelve-vertex Closo-Carboranes," 224th ACS National Meeting, Boston, MA, August 18-22, 2002.
- Werner, M. D.; Bausch, J. W., "The Rearrangement Pathway for Nido-4,5-C₂B₆H₁₀," 66th Intercollegiate Student Chemists Convention, Lebanon Valley College, April 20, 2002. (2nd place, Inorganic Division)
- Bausch, J. W.; Shore, S. G., "A Computational Study of B₁₀H₁₁⁻," Sigma Xi Research Day Poster Session, Villanova University, April 5, 2002.

- **Mason, M. E.; Li, S.; Werner, M. D.; Bausch, J. W.**, "The Rearrangement Pathway for *Nido*-4,5-C₂B₆H₁₀," Sigma Xi Research Day Poster Session, Villanova University, April 5, 2002.
- **Bessel, C. A.**, "Carbon Nanofibers: Synthesis, Characterization and Reactivity," Chemistry Department, University of North Carolina at Chapel Hill, Chapel Hill, NC, November 14, 2002.
- **Dallas, K.; Bessel, C. A.**, "Model Studies for the Remediation of Aqueous Waste by Iron Particles," Villanova Summer Undergraduate Research Poster Session, October 2002.
- **Wiacek, K.; Bessel, C. A.**, "The Synthesis and Characterization of a Novel 2,2',6',2 Terpyridine Derivative," Villanova Summer Undergraduate Research Poster Session, October 2002.
- **Bessel, C. A.; Baum, A. M.; Papeafthymiou-Davis, G.; Viescas, A.**, "Synthesis and Characterization of Metal Growth Catalysts and Carbon Nanofibers," American Chemical Society Mid-Atlantic Regional Meeting, George Mason University, May 2002.
- **Bessel, C. A.; Baum, A. M.; Papeafthymiou-Davis, G.; Viescas, A.**, "Synthesis and Characterization of Metal Growth Catalysts and Carbon Nanofibers," Naval Research Laboratory, Washington, D.C., May 2002.
- **Wiacek, K. J.; Mock, M. T.; Bessel, C. A.**, "The *In Situ* Synthesis of an Octahedral Ruthenium(II) Complex Containing a *trans*-Di-spanning Diphosphine Ligand," 2002 Intercollegiate Student Chemistry Convention, Ursinus University, Ursinus, PA, March 2002.
- **Woodbury J.; Boyko, W. J.**, "The Identification and Quantification of Compounds in the Fragrance Fraction of 'ODFS' Fabric Softener Sheets," Villanova Summer Undergraduate Research Poster Session, October 2002.
- **Kaub, C. J.; Carey, K.; Casillas, E. G.; Selinsky, B. S.; Gupta, K.; Loll, P. J.**, "Understanding the Time Dependency of Inhibition of Prostaglandin Synthase I," Middle Atlantic Regional Meeting of the American Chemical Society, Fairfax, VA, May 29, 2002.
- **McGuire, H.; Casillas, E. G.**, "Introductory Steps towards the Total Synthesis of Sarcoglane," ISCC at Lebanon Valley College, April 20, 2002.
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- Sangamkar, S.; Ahmadi, T. S., "Interparticle and Surface Interactions of γ -Iron Oxide and Their Thin Films," 226th American Chemical Society National Meeting, New York, September 10, 2003.
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