

LAW OFFICES
BRODSKY SMITH

9465 WILSHIRE BLVD., STE. 300
BEVERLY HILLS, CA 90212
877.534.2590
www.brodskysmith.com

NEW JERSEY OFFICE
20 BRACE RD., STE. 350
CHERRY HILL, NJ 08034
856.795.7250

NEW YORK OFFICE
240 MINEOLA BOULEVARD
MINEOLA, NY 11501
516.741.4977

PENNSYLVANIA OFFICE
TWO BALA PLAZA, STE. 805
BALA CYNWYD, PA 19004
610.667.6200

May 4, 2026

President/CEO The TJX Companies, Inc. c/o The Corporation Trust Company Corporation Trust Center 1209 Orange Street Wilmington, DE 19801	President/CEO The TJX Companies, Inc. dba HomeGoods c/o The Corporation Trust Company Corporation Trust Center 1209 Orange Street Wilmington, DE 19801
Member/Manager HomeGoods, LLC c/o CT Corporation System 330 N. Brand Blvd., Suite 700 Glendale, CA 91203	President/CEO The TJX Companies, Inc. c/o CT Corporation System 101 Federal Street Boston, MA 02110
President/CEO Intrada Italy c/o Sonia Zaven 1933 S. Broadway St., Showroom 800 Los Angeles, CA 90007	President/CEO Intrade Imports Inc. c/o Zaven Kassbian 1933 S Broadway, #807 Los Angeles, CA 90007

60-Day Notice of Violation of California Safe Drinking Water and Toxic Enforcement Act¹

To Whom It May Concern:

This Notice of Violation (the "Notice") is provided to you pursuant to and in compliance with California Health & Safety Code § 25249.7(d).

Brodsky Smith represents Ema Bell ("Bell"), a citizen of the State of California acting in the interest of the general public to promote awareness of exposures to toxic chemicals from use of consumer products sold in California and to improve human health and the environment by reducing hazardous substances.

With respect to the Product herein, Bell has identified a violation of California's Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65") codified at Cal. Health & Safety Code § 25249.5, et seq. This violation has occurred and continues to occur because the alleged Violator(s) failed to provide a clear and reasonable health hazard warning in connection with the sale or use of the Product in California. Health & Safety Code § 25249.6 provides that "[n]o person in the course of doing business shall knowingly and intentionally expose any individual to a chemical known to the State to cause cancer or reproductive toxicity without first providing a clear and reasonable warning to such individual ..." Without proper warnings regarding the toxic effects of exposures to the Listed Chemical resulting from use of the

¹ The public enforcement agencies that have been served with copies of this Notice are identified in the attached distribution list accompanying the Certificate of Service.

Product, California citizens lack the information necessary to make informed decisions on whether and/or how to eliminate (or reduce) the risk of exposure to the Listed Chemical from the reasonably foreseeable use of the Product.

I. DESCRIPTION OF THE VIOLATION

1. **Enforcer:** Ema Bell, 222 S. Figueroa St. Apt. 1212, Los Angeles, CA 90012-2581; (Ph) 424-332-3817.
2. **Alleged Violator(s):** The TJX Companies, Inc.; The TJX Companies, Inc. dba HomeGoods; HomeGoods, LLC; Intrada Italy; Intrade Imports Inc.
3. **Time Period of Exposure:** Violations have been occurring since at least May 4, 2026 and are continuing to this day.
4. **Listed Chemical:** Lead. Lead is listed under Proposition 65 as a chemical known to the State to cause cancer and birth defects or other reproductive harm.
5. **Product:**

Product²	Non- Exclusive Examples of the Product
Intrada ceramic canisters with colored artwork, designs and/or markings on the exterior surface that are offered for sale and/or sold in California by The TJX Companies, Inc.	Lucchero Food Canister 31 384468

6. **Description of Exposure:** The exposures that are the subject of this Notice result from the purchase and recommended use of the Product. The primary route of exposure to the Listed Chemical is through dermal absorption directly through the skin when consumers use, touch, or handle the Products. Some amount of exposure through ingestion can occur by touching the Product with subsequent touching of the user's hand to mouth. No clear and reasonable warning is provided with the Products regarding the health hazards of exposure to the Listed Chemical.

II. PROPOSITION 65 INFORMATION

For the Violators' reference, enclosed is a copy of "Proposition 65: A Summary" that has been prepared by the Office of Environmental Health Hazard Assessment ("OEHHA"). For more information concerning the provisions of Proposition 65, contact OEHHA at 916.445.6900.

III. RESOLUTION OF THE CLAIMS

Based on the allegations set forth in this Notice, Brodsky Smith intends to file a citizen enforcement lawsuit on behalf of Bell against the alleged Violator(s) unless such Violator(s) agree in a

² The specifically identified example of the Product in this Notice is to assist the recipients' investigation of, among other things, the magnitude of potential exposures to the Listed Chemical from other items within the definition of Products. This example is not intended to be an exhaustive or comprehensive identification of each specific offending Product. It is Bell's position that the alleged Violators are obligated to conduct a good faith investigation into other Products that may have been manufactured, distributed, sold, shipped, stored (or otherwise within the alleged Violators' custody or control) during the relevant period to ensure that requisite health hazard warnings were and are provided to California citizens prior to purchase and use.

binding written agreement to: (1) recall Products already sold; (2) provide Proposition 65 compliant exposure warnings for Products sold in the future or reformulate the Products to eliminate exposures to the Listed Chemical; and (3) pay an appropriate civil penalty based on the factors enumerated in Health & Safety Code § 25249.7(b). Consistent with the public interest goals of Proposition 65 and the desire to have these violations of California law quickly rectified, Bell is interested in seeking a constructive resolution of the claims in this Notice without engaging in costly and protracted litigation.

Bell has retained me as legal counsel in connection with this Notice. **Please direct all communications regarding this Notice to my attention at Brodsky Smith, 9465 Wilshire Blvd., Ste. 300, Beverly Hills, CA 90212, (877) 534-2590, esmith@brodskysmith.com.**

Sincerely,



Evan J. Smith

Attachments

Certificate of Merit

Certificate of Service


The Safe Drinking Water and Toxic Enforcement Action of 1986 (Proposition 65): A Summary

CERTIFICATE OF MERIT
Health & Safety Code Section 25249.7(d)

I, Evan J. Smith, hereby declare:

- (1) This Certificate of Merit accompanies the attached sixty-day notice in which it is alleged the parties identified in the notice have violated Health & Safety Code Section 25249.6 by failing to provide clear and reasonable warnings.
- (2) I am the attorney for the noticing party, Ema Bell.
- (3) I have consulted with one or more persons with relevant and appropriate experience or expertise who has reviewed facts, studies or other data regarding the alleged exposure to the listed chemicals that are the subject of the action.
- (4) Based on the information obtained through these consultations, and on all other information in my possession, I believe there is a reasonable and meritorious case for the private action. I understand that "reasonable and meritorious case for private action" means that the information provides a credible basis that all elements of the plaintiffs' case can be established and the information did not prove that the alleged violator(s) will be able to establish any of the affirmative defenses set forth in the statute.
- (5) The copy of this Certificate of Merit served on the Attorney General attaches to it factual information sufficient to establish the basis for this certificate, including information identified in Health & Safety Code Section 25249.7(h)(2), i.e., (1) the identity of the persons consulted with and relied on by the certifier, and (2) the facts, studies, or other data reviewed by those persons.

Dated: May 4, 2026



Evan J. Smith
Attorney for Ema Bell

CERTIFICATE OF SERVICE

I, the undersigned, declare under penalty of perjury under the laws of the State of California that the following is true and correct:

I am a citizen of the United States, over the age of 18 years of age, and am not a party to the within action. My business address is 2 Bala Plaza, Suite 805, Bala Cynwyd, Pennsylvania. I am employed in Montgomery County where the mailing occurred.

On May 4, 2026 I served the following documents:

1. 60-Day Notice of Intent to Sue under Health & Safety Code Section 25249.6
2. Certificate of Merit; Health & Safety Code Section 25249.7(d)
3. Certificate of Merit (Attorney General Copy); Factual information sufficient to establish the basis of the certificate of merit (*only sent to Attorney General*)
4. The Safe Drinking Water and Toxic Enforcement Action of 1986 (Proposition 65): A Summary on the alleged violator(s) listed below via First Class Mail through the United States Postal Service by placing a true and correct copy in a sealed envelope, addressed to the entity listed below and providing such envelope to a United States Postal Service

President/CEO The TJX Companies, Inc. c/o The Corporation Trust Company Corporation Trust Center 1209 Orange Street Wilmington, DE 19801	President/CEO The TJX Companies, Inc. dba HomeGoods c/o The Corporation Trust Company Corporation Trust Center 1209 Orange Street Wilmington, DE 19801
Member/Manager HomeGoods, LLC c/o CT Corporation System 330 N. Brand Blvd., Suite 700 Glendale, CA 91203	President/CEO The TJX Companies, Inc. c/o CT Corporation System 101 Federal Street Boston, MA 02110
President/CEO Intrada Italy c/o Sonia Zaven 1933 S. Broadway St., Showroom 800 Los Angeles, CA 90007	President/CEO Intrade Imports Inc. c/o Zaven Kassbian 1933 S Broadway, #807 Los Angeles, CA 90007

as well as by filing electronically a true and correct copy thereof as permitted through the website of the California Office of the Attorney General via link at oag.ca.gov/prop65:

State of California Department of Justice
Office of the Attorney General of California
Filing link: oag.ca.gov/prop65

Copies of the notice were also provided to the public enforcers by placing a true and correct copy thereof in a sealed envelope, addressed to each of the District Attorney and City Attorney offices the parties listed on the attached Distribution List. The District Attorney and City Attorney offices that have requested electronic service only were served electronically via the email addresses listed on the Distribution List.

I declare under penalty of perjury that under the laws of the State of California the foregoing is true and correct.

Executed May 4, 2026, in Bala Cynwyd, Pennsylvania.



Evan J. Smith

MainLine Environmental, LLC
9350 Wilshire Blvd., Ste. 203
Beverly Hills, CA 90212
323-300-6305

Thank you for allowing us to perform an exposure assessment on the *Ceramic Food Container*. As part of the assessment, we reviewed the analytical test results on the product performed by Positive Lab Service to determine the concentration of surface lead on the item by a surface wipe test using NIOSH Method 9100. Lead adsorbed on the surface wipe was acid digested and quantified by EPA 6020 inductively coupled plasma mass spectrometry (ICP-MS). Results of the wipe test conclude the amount of lead present on the fruit graphic of the *Ceramic Food Container* is 200 µg. This exposure report is based, in part, on and contingent upon the Positive Lab Service test results.

California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) is intended to protect California citizens and the State's drinking water sources from chemicals known to cause cancer or reproductive harm, and to inform citizens about exposures to such chemicals. Pursuant to Proposition 65, businesses are required to provide warnings before they knowingly expose anyone to a chemical that is known by the State of California to cause cancer or reproductive harm. This requires that a "clear and reasonable" warning be placed on a product or its packaging clearly communicating to consumers that the product contains a chemical known by the State of California to cause cancer, birth defects, or other reproductive harm.

The California Office of Environmental Health Hazard Assessment (OEHHA) is the agency responsible for implementing Proposition 65. In that role, OEHHA maintains the list of chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm, and has established daily dose rates for many chemicals below which the exposure is deemed to pose no significant risk of cancer or is significantly below levels observed to cause birth defects or other reproductive harm. For chemicals that are listed as causing cancer, the "no significant risk level" (NSRL) is defined as the level of exposure that would result in not more than one excess case of cancer in 100,000 individuals exposed to the chemical over a 70-year lifetime. For chemicals that are listed as causing birth defects or reproductive harm, the "no observable effect level" (NOEL) is determined by identifying the level of exposure that has been shown to not pose any harm to humans or laboratory animals. Proposition 65 then requires the NOEL to be divided by 1,000 to calculate the "maximum allowable dose level" (MADL) in order to provide an ample margin of safety. These NSRLs and MADLs are established in regulation in Title 27, California Code of Regulations, Sections 25705, 25709 and 25805.

Lead has been listed under Proposition 65 as a chemical known to cause reproductive toxicity for developmental and both male and female reproductive toxicity endpoints since February 27, 1987. The substance "lead and lead compounds" has been listed as known to cause cancer since October 1, 1992. Under Title 27 of the California Code of Regulations, the MADL for lead is 0.5 µg day⁻¹ for reproductive toxicity and the NSRL for lead is 15 µg/day for carcinogenic toxicity.

Insoluble lead compounds have a variety of uses. Lead arsenate was formerly used as an insecticide and herbicide but is not currently used. Lead azide and lead styphnate both are used in munitions manufacture. Lead carbonate, lead fluoride, lead fluoborate, and lead naphthenate are used as catalysts, with additional uses in the electronic and optical industries (lead fluoride), in coatings for thermographic copying (lead carbonate), as a curing agent for epoxy resins (lead fluoborate), and as a varnish drier (lead

naphthenate). Lead phosphate and lead stearate are both used as stabilizers in the plastics industry. Lead iodide and lead sulfate are used in photography; lead iodide is also used in thermoelectric materials, and lead sulfate with zinc in galvanic batteries. Lead oxide and lead sulfide are used in ceramics; lead oxide is also used as a vulcanizing agent in rubber and plastics, and lead sulfide as a humidity sensor in rockets. Lead chromate is used as a pigment in paints, rubber, and plastics; lead tetroxide is used in plasters, ointments, glazes, and varnishes.

A recognized source of lead intake originates from glazed ceramicware. Lead compounds have long been used for glazing ceramics as they impart low surface tension and low viscosity over a wide temperature range which results in greater smoothness, luster, and brilliance in the glaze. Lead was abundantly used in the Roman Empire to glaze cooking vessels as well as to counteract the astringent flavor of tannic acid in wine [2]. The primary glaze used in the manufacture of ceramic vessels is lead oxide (also known as *greta*), which is added as a flux to reduce firing temperatures and to produce a lustrous glaze. Because the firing temperature is lowered, the vessels are fired at a temperature lower than is needed to permanently fix the lead to the pottery allowing the lead to extract into foods cooked, and in contact, with the leaded glazed surface. Lead poisoning cases can result from the consumption of acidic foods and liquids in contact with glazed ceramic surfaces [3]. Increased food volume, cooking times, food acidity, and temperatures increase lead leachate levels [3-8]. Increases in lead extraction from lead glazed ceramic have been measured due to microwave heating [9] and conventional heating with dramatic increases above 60 °C [6, 8, 10]. Children are particularly sensitive to this poisoning because of their lead-vulnerable developing nervous system [11]. Until 2012, the Centers for Disease Control (CDC) identified children as having a blood lead level (BLL) of concern if BLLs are 10 µg dL⁻¹ or higher [2, 12]. The CDC is no longer using the term "level of concern" and is instead using 10 µg dL⁻¹ to identify children who have been exposed to lead and who require case management. A new, lowered reference level of 5 µg dL⁻¹ or higher is now used to identify children with elevated BLLs [11]. This new level is based on the U.S. population of children ages 1-5 years who are in the highest 2.5% of children when tested for lead in their blood. This reference value is based on the 97.5th percentile of the National Health and Nutrition Examination Survey (NHANES) blood lead distribution in children from 2007-2008 and 2009-2010.

Positive Lab Service test results conclude significant concentrations of lead are present on the surface of the *Ceramic Food Container*. When the surface of the item is held with bare hands, dermal adsorption of lead will occur. Ingestion of lead can occur during subsequent hand-to-mouth contact following handling of the item. As such, it is my opinion, within a reasonable degree of scientific certainty, that the cumulative lead levels exceed the 0.5 µg lead d⁻¹ MADL for reproductive toxicity.

As a result, it is our opinion that persons who use this product will be exposed to levels of lead that require Proposition 65 warnings under the Clear and Reasonable Warnings section 25601 of Title 27, California Code of Regulations.

Signed for and on behalf of MainLine Environmental, LLC

A handwritten signature in black ink, appearing to be a stylized name, possibly "H. S. R.", written over a white background.

Dr. Anthony Lagalante, Ph.D.
Analytical Chemist

1. Cheng, J., 4.6 *Inductively coupled plasmaatomic emission spectrometric determination of cadmium and lead extracted from ceramic foodware*, in *Elemental Analysis Manual for Food and Related Products 2010*, U.S. Food and Drug Administration.
2. Needleman, H., Lead poisoning. *Annual Review of Medicine*, (2004) 55, 209-222.
3. deMejia, E.G. and Craigmill, A.L., Transfer of lead from lead-glazed ceramics to food. *Archives of Environmental Contamination and Toxicology*, (1996) 31(4), 581-584.
4. Lynch, R., Elledge, B., and Peters, C., An assessment of lead leachability from lead-glazed ceramic cooking vessels. *Journal of Environmental Health*, (2008) 70(9), 36-40.
5. Henderson, R.W., Andrews, D., and Lightsey, G.R., Leaching of lead from ceramics. *Bulletin of Environmental Contamination and Toxicology*, (1979) 21(1-2), 102-104.
6. Dong, Z.H., Lu, L.X., Liu, Z.G., Tang, Y.L., and Wang, J., Migration of Toxic Metals from Ceramic Food Packaging Materials into Acid Food Simulants. *Mathematical Problems in Engineering*, (2014).
7. Dong, Z.H., Lu, L.X., and Liu, Z.G., Migration Model of Toxic Metals from Ceramic Food Contact Materials into Acid Food. *Packaging Technology and Science*, (2015) 28(6), 545-556.
8. Seth, T.D., Sircar, S., and Hasan, M.Z., Studies on lead extraction from glazed pottery under different conditions. *Bulletin of Environmental Contamination and Toxicology*, (1973) 10(1), 51-56.
9. Sheets, R.W., Turpen, S.L., and Hill, P., Effect of microwave heating on leaching of lead from old ceramic dinnerware. *Science of the Total Environment*, (1996) 182(1-3), 187-191.
10. Mohamed, N., Chin, Y.M., and Pok, F.W., Leaching of lead from local ceramic tableware. *Food Chemistry*, (1995) 54(3), 245-249.
11. *Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention Centers for Disease Control and Prevention*, (2012)
12. Villalobos, M., Merino-Sanchez, C., Hall, C., Grieshop, J., Gutierrez-Ruiz, M.E., and Handley, M.A., Lead (II) detection and contamination routes in environmental sources, cookware and home-prepared foods from Zimatlan, Oaxaca, Mexico. *Science of the Total Environment*, (2009) 407(8), 2836-2844.



EDUCATION **B.S. Chemistry, May 1990.**
Virginia Polytechnic Institute and State University, Blacksburg, VA.

Ph.D. Analytical Chemistry, August 1995.
University of Colorado, Boulder, CO.
Thesis Title: *The Measurement, Modeling and Applications of Metal β -Diketonate Complexes Dissolved in Supercritical Carbon Dioxide*, Advisor: Dr. Robert E. Sievers

Post-Doctoral Researcher, August 1995 – October 1998
National Institute of Standards and Technology (NIST), Boulder, CO

**TEACHING
AND RESEARCH
APPOINTMENTS**

Villanova University, Villanova, PA
Professor of Chemistry, September 2014 – present
Associate Professor of Chemistry, September 2010 – August 2014
Assistant Professor of Chemistry, June 2004 – August 2010

Courses Taught: Instrumental Analysis, Instrumental Analysis Laboratory, Quantitative Analysis Laboratory, Graduate Special Topics: Chromatography and Mass Spectrometry, General Chemistry, General Chemistry Laboratory, The Science of Art, The Science of Art Laboratory, Renaissance Art through the Lens of Science (Art History).

Service: Departmental Instrumentation Committee (2005-2013), Departmental Curriculum Committee (2005-2015), Chairperson Evaluation Committee (member, 2017-2022), Departmental American Chemical Society Committee on Professional Training Recertification Committee (2011, 2014), Departmental Committee on Faculty (Chair, 2015-present), Departmental Search Committees (5 Chaired, 8 total), University Search Committees (University Director of Research, University Provost), Committees to Establish Majors/Departments (Biochemistry Major, Department of Geography and the Environment), College of Liberal Arts and Sciences Committee on Academic Programs (2012-2015, At-Large Representative), College of Liberal Arts and Sciences Rank and Tenure Committee (2014-2017, Natural Science Seat), University Summer Grants Review Committee (2018-2021), Committee to Assess the University's Office of Research and Sponsored Programs (2011).

University of Delaware, Newark, DE
Adjunct Professor, Department of Art Conservation, August 2010 – present

National Science Foundation, Chemistry Collaborations, Workshops, and Community of Scholars (cCWCS). Instructor for *Advanced Chemistry and Art Workshop*. Workshop dates: June 21-26, 2009; June 2-7, 2010; June 6-11, 2012; June 8-13, 2014; July 31-August 4, 2017.

Penn State University, Worthington Scranton Campus, Dunmore, PA
Assistant Professor of Chemistry, August 2001 – August 2004

National Institute of Standards and Technology, Boulder, CO
Staff Chemist, October 1998 – August 2001; Faculty Researcher Status, August 2001-August 2011
Research: Initiated and led a diverse experimental and theoretical research program in solvent-solute intermolecular interactions of chlorofluorocarbon replacement solvent systems.

**ACADEMIC
SCHOLARSHIPS
AND AWARDS**

Villanova University Innovative Teaching Award, 2016.
University of Colorado/NIST Postdoctoral Fellowship, 1995-1998.
University of Colorado/NIST Graduate Fellowship, 1993-1995.
Cooperative Institute for Research in Environmental Studies Fellowship, 1991-1992.
Virginia Tech Department of Chemistry Undergraduate Research Scholarship, 1987-1990.

**SOCIETIES AND
AFFILIATIONS**

Alpha Chi Sigma Chemistry Honor Society
Phi Eta Sigma National Honor Society
Golden Key National Honor Society
American Chemical Society, Analytical Chemistry Division
American Chemical Society, Chromatography Division

American Chemical Society, Philadelphia Local Section (Awards Committee)
 The Society of Environmental Toxicology and Chemistry (SETAC)
 American Institute of Conservation of Historic and Artistic Works (AIC)
 Delaware Valley Mass Spectrometry Discussion Group, Coordinator
 American Society for Mass Spectrometry (ASMS)

FUNDING

- Villanova University Summer Research Grant "Development of Mass Spectrometric Methods to Measure Bisphenols in Printed Thermal Paper. Implications for Human Exposure.", (6/2017-6/2018) \$12,500.
- Villanova Institute for Teaching and Learning (VITAL) Interdisciplinary Grant "Italian Renaissance Art through the Lens of Science", (6/2015-6/2016) \$12,500.
- North American Maple Syrup Council (through the USDA) "Measuring Imidacloprid Contamination of Maple Sap and Syrup following Prescribed Asian Longhorned Beetle Quarantine Treatment" (1/2013-1/2015) \$12,136.
- Villanova Summer Research Fellowship "Scientific Analysis of Pietro da Cortona's *The Triumph of David*", (6/2014-9/2014) \$12,500.
- The Kress Foundation "Using Technical, Collaborative, and Digital Means to Promote the Conservation of Pietro da Cortona's *David and Goliath*", (9/2014-12/2015) \$24,000.
- National Science Foundation Award No. 1241473/1241469 "Collaborative Research: Materials Characterization toward Understanding the Cleaning and Preservation of Painted Modern Art Surfaces", (9/2012-9/2015) \$300,000 (\$210,000 Villanova, \$90,000 University of Delaware).
- National Park Service (through the University of Tennessee) "Hemlock Woolly Adelgid Insecticide Treatment Assessment in Great Smoky Mountains National Park" (10/2010-10/2013) \$189,000.
- National Science Foundation Award No. 0718530 "RUI: Development of alternative solvent extraction methods and tandem mass spectrometric analysis of polybrominated diphenyl ethers in automobile interior dust", (9/2007-9/2010) \$191,000.
- U.S. Department of Agriculture, U.S. Forest Service "Evaluation of imidacloprid and metabolites in hemlock treated with imidacloprid" (7/2004-6/2010) \$110,144.
- U.S. Department of Agriculture, U.S. Forest Service "Measurement of phytochemicals in *Tsuga* cultivars and an evaluation of their role in host resistance to the hemlock woolly adelgid (*Adelges tsugae*)" (7/2005-9/2007) \$75,000.
- National Science Foundation Award No. IOS-0720018 (role: co-investigator) "RIG: Chemical signaling, paternity, and the heritability of promiscuity: sexual selection in a polygamous moth", (9/2007-9/2009) \$146,007.
- National Science Foundation Award No. 0619394 "MRI: Acquisition of a Liquid Chromatograph/Mass Spectrometer", (8/2006-8/2009) \$329,236.
- Villanova Center for Undergraduate Research, CURF funding for summer research students (2005, 2006, 2008, 2011).
- Villanova Institute for Teaching and Learning (VITAL) "Addition of a Painting Authentication/ Conservation Laboratory to the CHM3501 Instrumental Analysis Laboratory", (2006) \$6,000.
- U.S. Environmental Protection Agency "Pollution Prevention of Pharmaceutically Active Chemicals from University Dormitories and Municipal Wastewater Treatment Plants" (11/2005 – 10/2007) \$133,750.
- Penn State Undergraduate Research Equipment Grant "Purchase of a Milli-Q water purification system" (2003) \$8,000.
- U.S. Department of Agriculture, U.S. Forest Service "Measurement and function of terpenoids in *Adelges tsugae* infested *Tsuga*" (2002-2004) \$70,000.
- Penn State, Dr. Richard J. & Sally Matthews Award for Scholarly Activity, (2003) \$1,000.
- Greater Scranton Penn State Chapter Faculty Research Endowment (2003-2004) \$1,600.
- Penn State Research and Development Grant (2001-2004) \$7,500.

PUBLICATIONS

1. R.E. Sievers, S.B. Turnipseed, L. Huang and A.F. Lagalante "Volatile Barium β -Diketonates for Use as MOCVD Precursors" *Coordination Chemistry Reviews* **128**(1-2), 285-291 (1993).
2. B.M. Hybertson, K.S. Rutledge, C.J. Beehler, J.E. Repine, A.F. Lagalante and R.E. Sievers "Pulmonary Drug Delivery of Fine Aerosol Particles from Supercritical Fluids" *Journal of Aerosol Medicine* **6**(4), 275-283 (1993).
3. B.N. Hansen, A.F. Lagalante, T.J. Bruno and R.E. Sievers "High-Pressure Cell for Solubility Measurements in Supercritical Fluids" *Reviews of Scientific Instrumentation* **65**(6), 2112-2114 (1994).
4. A.F. Lagalante, B.N. Hansen, T.J. Bruno and R.E. Sievers "Solubility of Copper(II) and Chromium(III) β -Diketonates in Supercritical Carbon Dioxide" *Inorganic Chemistry* **34**(23), 5781-5785 (1995).
5. A.F. Lagalante, R.J. Jacobson and T.J. Bruno "UV/Vis Spectroscopic Evaluation of 4-Nitropyridine N-Oxide as a Solvatochromic Indicator for the Hydrogen-Bond Donor Ability of Solvents" *Journal of Organic Chemistry* **61**(18), 6404-6406 (1996).
6. A.F. Lagalante and T.J. Bruno "Modeling the Water-Supercritical CO₂ Partition Coefficients of Organic Solutes using a Linear Solvation Energy Relationship" *Journal of Physical Chemistry, B* **102**(6), 907-909 (1998).
7. A.F. Lagalante, R.L. Hall and T.J. Bruno "Kamlet-Taft Solvatochromic Parameters of the Sub- and Supercritical Fluorinated Ethane Solvents" *Journal of Physical Chemistry, B* **102**(34), 6601-6604 (1998).

8. B.F. Graham, J.M. Harrowfield, R.D. Trengrove, A.F. Lagalante and T.J. Bruno "Solubility of p-t-Butylcalix[n]arenes (n=4,6,8) in Supercritical Carbon Dioxide: A Comparison of Static and Dynamic Measurement Techniques" *Fluid Phase Equilibria* **151**(2), 829-838 (1998).
9. A.F. Lagalante, A.M. Clarke and T.J. Bruno "Modeling the Water-R134a Partition Coefficients of Organic Solutes using a Linear Solvation Energy Relationship" *Journal of Physical Chemistry, B* **102**(44), 8889-8892 (1998).
10. A.F. Lagalante, C. Wood, A.M. Clarke and T.J. Bruno "The Kamlet-Taft Solvatochromic Parameters for 2,5 Glycol Ether Solvents and Glycol Ether Aqueous Solutions" *Journal of Solution Chemistry* **27**(10), 887-900 (1998).
11. A.F. Lagalante, A.M. Clarke and T.J. Bruno "Modeling the Water-R143a Partition Coefficients of Organic Solutes using a Linear Solvation Energy Relationship" *Journal of Physical Chemistry, B* **103**(34), 7319-7323 (1999).
12. A.F. Lagalante "Atomic Absorption Spectroscopy: A Tutorial Review" *Applied Spectroscopy Reviews* **34**(3), 173-190 (1999).
13. A.F. Lagalante "Atomic Emission Spectroscopy: A Tutorial Review" *Applied Spectroscopy Reviews* **34**(3), 191-207 (1999).
14. A.F. Lagalante, M. Spadi and T.J. Bruno "Kamlet-Taft Solvatochromic Parameters of Eight Alkanolamines" *Journal of Chemical and Engineering Data* **45**(2), 382-385 (2000).
15. W.C. Andersen, R.E. Sievers, A.F. Lagalante, and T.J. Bruno "Solubilities of Cerium(IV), Terbium(III), and Iron(III) β -Diketonates in Supercritical Carbon Dioxide" *Journal of Chemical and Engineering Data* **46**(5), 1045-1049 (2001).
16. B.F. Graham, J.M. Harrowfield, R.D. Trengrove, A.F. Lagalante and T.J. Bruno "Host:Guest Complex Formation Between Carbon Dioxide and the p-t-Butylcalixarenes" *Journal of Inclusion Phenomena* **43**(3-4), 179-182 (2002).
17. A.F. Lagalante, A. Abdulagatov, and T.J. Bruno "Kamlet-Taft Thermosolvatochromic Parameters of Hydrofluoroethers and Hydrofluoroether Azeotropic Mixtures" *Journal of Chemical and Engineering Data* **47**(1), 47-51 (2002).
18. A.F. Lagalante and M.E. Montgomery "Analysis of Terpenoids from Tsuga Species by Solid-Phase Microextraction/Gas Chromatography/Ion-Trap Mass Spectrometry" *Journal of Agricultural and Food Chemistry* **51**(8), 2115-2120 (2003).
19. A.F. Lagalante and M.A. Felter "Silylation of acrylamide for analysis by solid-phase microextraction/gas chromatography/ion-trap mass spectrometry" *Journal of Agricultural and Food Chemistry* **52**(12), 3744-3748 (2004).
20. A.F. Lagalante, N. Lewis, M.E. Montgomery and K.S. Shields "Temporal and Spatial Variation of Terpenoids in Eastern Hemlock (*Tsuga canadensis*) in Relation to Feeding by *Adelges tsugae*" *Journal of Chemical Ecology* **32**(11), 2389-2403 (2006).
21. T. Rowhani and A.F. Lagalante "A Colorimetric Assay for the Determination of Polyhexamethylene Biguanide in Pool and Spa Water using Nickel-Nioxime" *Talanta* **71**(2), 964-970 (2007).
22. A.F. Lagalante and P.W. Greenbacker "Flow injection analysis of imidacloprid in natural waters and agricultural matrixes by photochemical dissociation, chemical reduction, and nitric oxide chemiluminescence detection" *Analytica Chimica Acta* **590**, 151-158 (2007).
23. J. Tierney, N. Colasante, J. Eagles, S. Kelly, G. LehMike, O. Lucas, C. Mannikarottu, O. Mehmood, M.D. Nguyen, V. Raj, J. Tsai, V. Koyfman, L.M. Mascavage, and A.F. Lagalante "A Comparison of Substituent Effects Using ¹³C Chemical Shifts for a Series of Substituted 2-Phenyl-3-pyridyl-1,3-thiazolidin-4-ones Compared to Similarly Substituted 1,3-thiazolidin-4-ones" *Heterocyclic Communications* **13**(6), 335-342 (2007).
24. A.F. Lagalante, M.E. Montgomery, F. Calvosa and M. Mirzabeigi "Characterization of Terpenoid Volatiles from Cultivars of Eastern Hemlock (*Tsuga canadensis*)" *Journal of Agricultural and Food Chemistry* **55**(26), 10850-10856 (2007).
25. A.F. Lagalante and T.D. Oswald "Analysis of Polybrominated Diphenyl Ethers (PBDEs) by Liquid Chromatography with Negative-Ion Atmospheric Pressure Photoionization Tandem Mass Spectrometry (LC/NI-APPI/MS/MS): Application to House Dust" *Analytical and Bioanalytical Chemistry* **391**(6), 2249-2256 (2008).
26. J. Tierney, V. Koyfman, K. Cannon, L.M. Mascavage, and A.F. Lagalante "A Second Study - Predicting the ¹³C Chemical Shifts For a Series of Substituted-3-(4-methoxyphenyl)-2-phenyl-1,3-thiazolidin-4-ones" *Heterocyclic Communications* **14**(6), 452-460 (2008).
27. A.F. Lagalante, T.D. Oswald, and F.C. Calvosa "Polybrominated Diphenyl Ether (PBDE) Levels in Dust from Previously Owned Automobiles at United States Dealerships" *Environment International* **35**(3), 539-544 (2009).
28. A.M. Grannas and A.F. Lagalante "So These Numbers Really Mean Something? A Role Playing Scenario-Based Approach to the Undergraduate Instrumental Analysis Laboratory" *Journal of Chemical Education* **87**(4), 416-418 (2010).
29. F.C. Calvosa and A.F. Lagalante "Supercritical Fluid Extraction of Polybrominated Diphenyl Ether (PBDE) Levels from House Dust with 1,1,1,2-Tetrafluoroethane (R134a)" *Talanta* **80**(3), 1116-1120 (2010).
30. M. Eisenback, S.M. Salom, L.T. Kok and A.F. Lagalante "Lethal and sublethal effects of imidacloprid on hemlock woolly adelgid (*Adelges tsugae*, Hemiptera: Adelgidae) and two introduced predator species in the laboratory" *Journal of Economic Entomology* **103**(4), 1222-1234 (2010).
31. A.F. Lagalante, C.S. Shedden, and P.W. Greenbacker "Levels of Polybrominated Diphenyl Ethers (PBDEs) in Dust from Personal Automobiles in Conjunction with Studies on the Photochemical Degradation of Decabromodiphenyl Ether (BDE-209)" *Environment International* **37**(5), 899-906 (2011).
32. C.A. Kelly, A.J. Norbutus, A.F. Lagalante and V.K. Iyengar "Male courtship pheromones are indicators of genetic quality in an arctiid moth (*Utetheisa ornatrix*)" *Behavioral Ecology* **23**(5), 1009-1014 (2012).

33. R.C. Wolbers, A. Norbutus and A. Lagalante "Cleaning of Acrylic Emulsion Paints: Preliminary Extractive Studies with Two Commercial Paint Systems", *New Insights into the Cleaning of Paintings: Proceedings from the Cleaning 2010 International Conference*, Universidad Politécnic de Valencia and Museum Conservation Institute, Eds. Marion F. Mecklenburg, A. Elena Charola, and Robert J. Koestler, *Smithsonian Contributions to Museum Conservation*, no. 3 (2013).
34. K. Cannon, L. Mascavage, J. Tierney, K. Kistler, H. Yennawar, A. Lagalante and P. Sonnett "An Experimental and Theoretical Conformational Study of a Series of Substituted 3-cyclohexyl-2-phenyl-1,3-thiazolidin-4-ones" *International Journal of Chemistry* 5(3), 1-11 (2013).
35. L.J. Silverberg, E.R. Bear, K.N. Foose, K.A. Kirkland, R.R. McElvaney, K. Cannon, J. Tierney, S. Lascio, K. Mesfin, D. Mitchell, S. Sharkey, L. So, J. Treichel, M. Waxman, A.F. Lagalante "Verifying the predictability of the ¹³C chemical shifts for a series of substituted-2-(4-chlorophenyl)-3-phenyl-1,3-thiazolidin-4-ones" *International Journal of Chemistry* 5(4), 120-127 (2013).
36. C.E. Dillon, A.F. Lagalante and R.C. Wolbers "Aqueous cleaning of acrylic emulsion paint films. The effect of solution pH, conductivity and ionic strength on film swelling and surfactant removal" *Studies in Conservation* 57(1), 52-62 (2014).
37. B.M. Eisenback, S.M. Salom, L.T. Kok and A.F. Lagalante "Impacts of Trunk and Soil Injections of Low Rates of Imidacloprid on Hemlock Woolly Adelgid (Hemiptera: Adelgidae) and Eastern Hemlock (Pinales: Pinaceae) Health" *Journal of Economic Entomology* 107(1), 250-258 (2014).
38. T.P. Umile, P.J. McLaughlin, K.R. Johnson, S. Honarvar, A.L. Blackman, E.A. Burnynski, R.W. Davis, T.L. Teotonia, G.W. Hearn, C.A. Hughey, A.F. Lagalante, and K.P.C. Minbiole "Nonlethal Amphibian Skin Swabbing of Cutaneous Natural Products for HPLC Fingerprinting" *Analytical Methods* 6, 3277-3284 (2014).
39. D. McGarity, J. Tierney and A. Lagalante "An Anomalous Hammett Correlation for a Series of Substituted 3-Benzyl-2-phenyl-1,3-thiazolidin-4-ones" *International Journal of Chemistry* 6(4), 1-7 (2014).
40. R.S. Cowles, A. Lagalante and K. Lombard "Imidacloprid contamination of maple sap following Asian longhorned beetle quarantine treatment" *Maple Syrup Digest* 26A(3), 22-27 (2014).
41. M. Rotella, A. Briegel, J. Hull, A. Lagalante and R. Giuliano "Synthesis and antibacterial activity of antibiotic-functionalized graphite nanofibers" *Journal of Nanomaterials* 2015, 1-10 (2015).
42. K. Cannon, D. Gandla, S. Lauro, L. Mascavage, L. Silverberg, J. Tierney and A. Lagalante "Selective Synthesis of Ortho-substituted 3-Cyclohexyl-2-phenyl-1,3-thiazolidin-4-one Sulfoxides and Sulfones by S-Oxidation with Oxone" *International Journal of Chemistry* 7(2), 73-84 (2015).
43. L.J. Silverberg, C.N. Pacheco, A. Lagalante, K.C. Cannon, J.T. Bachert, Y. Xie, L. Baker and J.A. Bayliff "Synthesis and Spectroscopic Properties of 2,3-Diphenyl-1,3-thiaza-4-one Heterocycles" *International Journal of Chemistry* 7(2), 150-162 (2015).
44. E.P. Benton, J.F. Grant, R.J. Webster, R.J. Nichols, R.S. Cowles, A.F. Lagalante and C.I. Coots "Assessment of Imidacloprid and Its Metabolites in Foliage of Eastern Hemlock Multiple Years Following Treatment for Hemlock Woolly Adelgid, *Adelges tsugae*, in Forested Conditions" *Journal of Economic Entomology* 108(6), 2672-2682 (2015).
45. L.J. Silverberg, K.A. Kistler, K.A. Brobst, H. Yennawar, A.F. Lagalante, G. He, K. Ali, A. Blatt, S.B. Foster, D.B. Grossman, S. Hegel, M.J. Minehan, D. M. Valinsky and J.G. Yeasted "Reactions of the halonium ions of carenes and pinenes: an experimental and theoretical study" *European Journal of Chemistry* 6(4), 430-443 (2015).
46. I. Ziraldo, K. Watts, A. Luk, A.F. Lagalante and R.C. Wolbers "The influence of temperature and humidity on swelling and surfactant migration in acrylic emulsion paint films" *Studies in Conservation* 61(4), 209-221 (2016).
47. A.F. Lagalante and R.C. Wolbers, "The Cleaning of Acrylic Paintings. New Particle-Based Water-in-Oil Emulsifiers" in *Dall'olio all'acrilico, dall'impressionismo all'arte contemporanea. Studi, ricerche, indagini scientifiche ed interventi conservativi*. Proceedings of VII Congresso Internazionale Colore e Conservazione (CESMAR7), il prato Publishing, Milan (2016) p. 163-176.
48. E.P. Benton, J.F. Grant, R.S. Cowles, R.J. Webster, R.J. Nichols, A.F. Lagalante and C.I. Coots "Assessing relationships between tree diameter and long-term persistence of imidacloprid and olefin to optimize imidacloprid treatments on eastern hemlock" *Forest Ecology and Management* 370, 12-23, (2016).
49. E.P. Benton, J.F. Grant, R.J. Webster, R.S. Cowles, R.J. Nichols, A.F. Lagalante, and C.I. Coots "Hemlock Woolly Adelgid and Hemlock Canopy Health Numerous Years after Imidacloprid Basal Drench Treatments: Implications for Management Programs" *Journal of Economic Entomology* 109(5), 2125-2136 (2016).
50. C. Mannikarottu, J. Tierney, K. Cannon, L. Mascavage and A. Lagalante "A Study of ¹³C Chemical Shifts for a Series of 2-(4-methoxyphenyl)-substituted-3-phenyl-1,3-thiazolidin-4-ones" *International Journal of Chemistry* 8(2), 43-50 (2016).
51. L.J. Silverberg, C. Pacheco, A. Lagalante, J. Tierney, J.T. Bachert, J.A. Bayliff, R.V. Bendinsky, A.S. Cali, L. Chen, A.D. Cooper, M.J. Minehan, C.R. Mroz, D.J. Noble, A.K. Weisbeck, Y. Xie and Z. Yanga "Synthesis and spectroscopic properties of a series of novel 2-aryl-3-phenyl-2,3-dihydro-4H-1,3-benzothiazin-4-ones" *ARKIVOC* 6, 122-143 (2016).
52. R. Turcotte, A. Lagalante, J. Jones, T. Elliot, A. Billings and Y. Park "Spatial and Temporal Distribution of Imidacloprid within the Crown of Eastern Hemlock" *Journal of Insect Science* 17(1), 1-7 (2017).
53. A.F. Lagalante and R.C. Wolbers, "Particle-Based Silicone Cleaning Emulsions. Studies in Model Paint Systems for the Cleaning of Water Sensitive Artworks" in *Gels in the Conservation of Art*, Eds. Lora Angelova, Bronwyn Ormsby, Joyce Townsend and Richard Wolbers, Archetype Publications: London, 193-199 (2017).

54. K.C. Cannon, A. Alkurdi, H. Himel, I. Kurochka, S. Liu, M. Costa, B. Sundberg and A.F. Lagalante "Selective Synthesis of Ortho-substituted 2-Aryl-3-phenyl-1,3-thiazolidin-4-one Sulfoxides and Sulfones by S-Oxidation with Oxone" *International Journal of Chemistry* **9**(4), 87-97 (2017).
55. K.C. Cannon, M. Costa, M. Pepper, J. Toovy, R.S. Selinsky and A.F. Lagalante "Selective Synthesis of 3-Aryl-2-phenyl-1,3-thiazolidin-4-one Sulfoxides and Sulfones by S-Oxidation with Oxone" *International Journal of Chemistry* **9**(4), 1-11 (2017).
56. H.J. Eichman, B.J. Eck and A.F. Lagalante "A Comparison of ESI, APCI, and APPI Ionization for the LC-MS/MS Analysis of Bisphenols. Application to Bisphenols in Thermal Paper Receipts and U.S. Currency Notes" *Rapid Communications in Mass Spectrometry* **31**, 1773-1778 (2017).
57. B.N. Sundberg and A.F. Lagalante "Coaxial Electrospray Ionization for the Study of Rapid In-Source Reactions" *Journal of the American Association for Mass Spectrometry*, in revision (2018).
58. J.A. Tasca, C.R. Smith, E.A. Burzynski, B.N. Sundberg, A.F. Lagalante, T. Livshultz and K.P.C. Minbiole "LC-MS detection of pyrrolizidine alkaloids and their N-oxides in herbarium specimens dating back to the 1850s" *Applications in Plant Sciences*, accepted (2018).

PATENTS WO 2000008117 A1 "Process for the Removal of Carbonyl Sulfide from Liquefied Petroleum Gas" T.J. Bruno, A.F. Lagalante (January 1, 2002).

WO 2014143705 A1, CA 2906617 A1 "Protective water reversible clear coating for substrates" R.C. Wolbers, A.F. Lagalante (March 14, 2014).



781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

Certificate of Analysis

Bala Environmental Testing
 150 Monument Rd.
 Bala Cynwyd, PA 19004

File #: 75874
 Report Date: 11/17/25
 Submitted: 10/31/25
 PLS Report No.: 2510341

Attn: Mimi McCarthy Phone: (323)927-7007 FAX:

Project: Analytical Testing

Sample ID: Ceramic Food Canister (31384468) -wipe fruit underneath black writing on side Solid (2510341-04) Sampled: 10/29/25
 00:00 Received: 10/31/25

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Area Wiped	45.0	ANC	1	cm ²		NIOSH 9100	11/13/25	11/13/25	jks	BKS1411
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Lead	200	ANC	4	ug/Wipe	4.00	NIOSH 9100 ICP-MS E6020	11/13/25	11/14/25	jks	BKS1701

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BKS1701 - NIOSH 9100										
Blank	Prepared: 11/13/25 Analyzed: 11/14/25									
Lead	ND	1.00	ug/Wipe							ANC
LCS	Prepared: 11/13/25 Analyzed: 11/14/25									
Lead	10.0	1.00	ug/Wipe	10.0		100	80-120			ANC
LCS Dup	Prepared: 11/13/25 Analyzed: 11/14/25									
Lead	10.1	1.00	ug/Wipe	10.0		101	80-120	0.633	25	ANC

Notes and Definitions

- ANC Analyte not Certifiable by CAL ELAP.
- NA Not Applicable
- ND Analyte NOT DETECTED at or above the reported limit(s)
- NR Not Reported
- MDL Method Detection Limit
- PQL Practical Quantitation Limit

Paul Owen Parker

 Authorized Signature(s)