

BATTELLE RESEARCH SCIENTIST

Highlights

Microsoft Office, ChemDraw Ultra 12.0, IGOR 6.03A2, LabVIEW Signal Express3.0, WinSpec/32. *Experienced in handling chemical waste and maintaining laboratory safety regulations

Accomplishments

- Specialized on-site course: MassHunter Data Analysis & Reporting (Agilent) Center for Disease Control and Prevention/National Center for Environmental Health/Division of Laboratory Sciences in the Tobacco and Volatiles Branch/Tobacco Analysis Group ORISE Chemist, July 2012 - present (supervisor Dr.
- Rayman Stanelle) Performed analysis of constituents in cigarette tobacco products and mainstream tobacco smoke for use in the World Health Organization (WHO), Tobacco Laboratory Network (TobLabNet) using instrumentation like GC/MS and GC/FID.
- Validated and implemented World Health Organization methods for the area of Tobacco Products on the determination of: Benzo[a]pyrene (B[a]P) in mainstream cigarette smoke using SPE and GC/MS Humectant additives in the tobacco blend using GC/MS and GC/FID Ammonia in the tobacco blend (validation in progress) using ion chromatography (IC) Proficient in operating the Cerulean 20-port smoking machines used to generate mainstream smoke samples for analysis of tar, nicotine, carbon dioxide (TNCO) and B[a]P Provided technical review for the World Health Organization Report on TNCO Recorded and reported data/results to the World Health Organization Analyzed data sets using the statistical analysis method ISO 5725 Experience working in a laboratory environment following ISO regulations Currently developing a fast, high through put and more economically inclined detection method for analyzing humectants using GC-MS-FID technology Monitored supply inventories and expendables assuring sufficient stock at all times Shipped samples needed for the worldwide validation of the World Health Organization methods to all the countries enrolled in the validation process.
- Specialized on-site course: Customized 6890 Gas Chromatography and ChemStation Operation (Agilent) Department of Health and Environmental Control, Bureau of Laboratory, Columbia, SC (Level 1 Laboratory, active part of CDC - Public Health Emergency Preparedness Cooperative) Chemist II, June 2011 - May 2012 (Supervisor, Jim Sexton) Analyzed a variety of biological specimens for CDC defined chemical warfare agents (blistering agents, cyanide, heavy metals, nerve agents, sulfur mustards, nitrogen mustards, etc.) using instrumentation like LC/MS/MS, GC/MS and ICP/MS Conducted validation of CDC chemical toxic agents methods for the area of Biomonitoring Documented and delivered data/results, maintaining quality assurance and quality control procedures and analytical instrumentation Experience working in a clinical laboratory environment following CLIA, OSHA and HIPAA regulations Developed a rapid screening method for perchlorates using cutting edge chip-based electrospray ionization technology Solid experience in general wet laboratory procedures, specifically analytical and organic chemistry Specialized short course: "Understanding and Optimization of LC/MS/MS to Develop Successful Methods for Identification and Quantitation in Complex Matrices" presented by Robert D.
- Voyksner, PhD - MSACL 2012.

Experience

Battelle Research Scientist 08/2013 - Current

- Center for Disease Control and Prevention/National Center for Environmental Health/Division of Laboratory Sciences in the Tobacco and Volatiles Branch/Tobacco Analysis Group.

Deputy Quality Manager 08/2013 - 03/2015

- Develop and update the internal audit program to ensure a full cycle of audits is performed at a minimum two year interval.
- Schedule and perform internal audits as required by the internal audit program.
- Record non-conformances observed during internal audits or other work activities.
- Initiate and/or implement corrective action in response to non-conformances, when relevant to duties.
- Facilitate and monitor corrective actions and maintain corrective action records.
- Record preventive action and improvement opportunities observed during internal audits or other work activities.
- Initiate and/or implement preventive action and improvement opportunities, when relevant to duties.
- Facilitate and monitor preventive actions and improvement opportunities and maintain records.
- Ensure that technical and quality records supporting laboratory accreditation are stored and maintained in an organized and readily accessible manner.
- Create and update procedures and associated documentation, as needed, to ensure continuous improvement in the effectiveness of the quality management system.
- Support and participate in monthly accreditation and annual management meetings.
- Identify and participate in training needs and opportunities to support improvement in the effectiveness of the quality management system.
- Identify and attend training opportunities to maintain and develop skills and abilities related to the quality management system.
- part of the Target Analytes Response Team.
- Provide overflow capacity to different research groups within the Tobacco and Volatiles Branch including training on different projects, assisting with method development and validation as well as running samples for FDA projects to get data out in a timely fashion.
- Analyzed tobacco samples for minor tobacco alkaloids (nicotine, myosmine, anabasine, anatabine and isonicotine) for the projects listed below: 1) Spectrum Cigarettes 2) International Snus 3) Little Cigars/Cigarillos Data analysis was also performed for all the samples ran.

Science Teacher 01/2004 - 01/2007 Garfield School District Re-2 Rifle, CO

- Supervisor: Principal Sherril P.
- Ray) Taught, motivated and directed 10 - 12th grade students while maintaining high interest and achievement Served as curriculum advisor

for Sumter School District 2 (Summer 2006, 2007) Supervise student judges at science fair Leadership role of assisting and coaching other teachers Trained advanced students for science competitions and won 1st place - 2007 South Carolina Junior Science and Humanities Symposium, at Clemson University.

Assistant Manager 01/2002 - 01/2004 Supercuts Brimfield

- Supervisor: Economic Director, Georgeta Ichim) Management of sales and marketing team for national pharmaceutical distribution business unit Supervised and coordinated a team of ten people in advertising and selling company's products.
- Provided all the necessary authorizations for opening a branch of a pharmaceutical national distribution company Maintained a well-run and profitable distribution unit for pharmaceuticals within the established company guidelines and in compliance with all state regulations.
- Strong organizational, interpersonal skills and attention to details.

Education

2010 Master of Science : University of South Carolina - Analytical Chemistry State , Columbia Analytical Chemistry Investigation of Resonant Enhanced Multi-photon Ionization of Solid State High Explosives with Laser Ablation Designed, assembled, and tested custom spectroscopic instrumentation for the development of remote detection of explosive residues using lasers with wavelength range between UV and IR Implemented various laser components as well as microwave/RADAR detector systems into advanced instrumentation setups for remote chemical sensing techniques Responsible for troubleshooting products and recommending new instruments/techniques to improve quality and yield of results; calibration, general maintenance, and repair of all analytical instrumentation Technical consultant on a variety of different projects, which utilized spectroscopy techniques such as Raman and UV/Visible Spectroscopy analyses to determine both quantitative and qualitative data Separation Methods in Analytical Chemistry, Mass spectrometry/NMR, Spectrochemical Analysis, Structural/Mechanisms of Organic Chemistry, Special Topics in Organic Chemistry. :

2002 Bachelor of Science : Alexandru Ioan Cuza University - Chemistry City , Romania Chemistry

Publications

Christina Vaughan Watson, Liza Valentin-Blasini, Maria Damian, Clifford H. Watson 2015. Method for the determination of ammonium in cigarette tobacco using ion chromatography. Regulatory Toxicology and Pharmacology Volume 72, Issue 2, July 2015 pages 266-270. Patricia Richter, R Steven Pappas (corresp), Roberto Bravo, Joseph Lisko, Maria Damian, Nathalie Gonzalez-Jimenez, Naudia Gray, Lisa Keong, Jacob Kinbrell, Peter Kuklenyik, Tameka Lawler, Grace Lee, Magaly Mendez, Jose Perez, Shakia Smith, Hang Tran, Robert Tyx, Clifford Watson Characterization of SPECTRUM Variable Nicotine Research Cigarettes. Submitted to Tobacco Regulatory Science. Presentations Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy-Chicago, IL February 2009 Poster Title: Remote REMPI Measurements of High Explosives Using Microwave Radar. Maria Augustina Damian, Ardis M. Copenhaver, Christine Paulson, Chance Carter, S. Michael Angel. University of South Carolina, Columbia, SC, * Lawrence Livermore National Laboratory, Livermore, CA Federation of Analytical Chemistry and Spectroscopy Societies Conference on Analytical Chemistry and Applied Spectroscopy-Rayleigh, NC October 2010 Poster Title: Standoff Resonance Enhanced Multiphoton Ionization (REMPI) for detection of hazardous materials. Maria Augustina Damian, Janna K. Register, S. Michael Angel. University of South Carolina, Columbia, SC

Additional Information

- Professional references are provided upon request.

Skills

advertising, calibration, Chemistry, coaching, interpersonal skills, consultant, continuous improvement, Data analysis, documentation, Environmental Health, fashion, internal audits, internal audit, LabVIEW, Laser, Leadership, Director, marketing, meetings, Microsoft Office, microwave, RADAR, NMR, organizational, quality, quality management, Express3.0, maintain records, research, safety, selling, sales, Supervisor, Symposium, troubleshooting, UV, validation