

ALFREDO L. VILLAZON CASTELLANOS

MICROBIOLOGIST

CONTACT

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SKILLS

- Proficient in safe handling techniques of microorganisms and analysis of samples.
- Identification of microorganisms and assessment of pathogens through staining, molecular microbiology, and bacterial culture.
- Expertise in techniques such as PCR and DNA sequencing.
- Microscopic examination of microorganisms at the cellular level, demonstrating proficiency in microscopy techniques.
- Working with cell cultures for microbiological studies.
- Utilization of statistics for the analysis of experimental data.
- Knowledge of safety regulations in handling microorganisms in the laboratory. Effective presentation of scientific findings, both in writing and orally.

ADDITIONAL TRAINING

- IMPLEMENTATION OF HACCP BASED FOOD SAFETY MANAGEMENT PROGRAMS IN POULTRY PROCESSING PLANTS, INTERNATIONAL CENTER FOR FOOD INDUSTRY EXCELLENCE AT TEXAS TECH UNIVERSITY, FEBRUARY 2021
- INTERNAL AUDITOR FOR INTEGRATED HSEQ SYSTEMS, FUTURE BUILDERS INSPECTION AND CERTIFICATION, MAY 2020
- PREVENTIVE CONTROLS FOR HUMAN FOOD, FOOD SAFETY PREVENTIVE CONTROLS ALLIANCE, MARCH 2018

LANGUAGES

- Spanish
- English

PROFILE

I'm a Microbiologist with a specialization in Project Management, with 9+ years of hands-on experience in the field of food microbiology, soil microbiology, environmental microbiology (air, soil, potable water, and wastewater), food safety, and environmental regulations. I excel in designing sampling plans, conducting microbiological analyses, and developing and implementing food safety plans in compliance with the requirements of the Food Safety Modernization Act (FSMA). I possess the ability to perform microbiological analyses using various laboratory techniques, including cultures, PCR tests, staining techniques; and competence in conducting detection and quantification analyses of microorganisms in food, makes me an asset to any team. I'm also fully proficient and experienced with Windows Office and statistical analysis software.

EDUCATION

PROJECT MANAGEMENT SPECIALIST

UNIVERSIDAD SERGIO ARBOLEDA

2018-2019

Implementation of the Hazard Analysis and Critical Control Points (HACCP) System and Good Manufacturing Practices at a Private Company.

BACHELOR OF MICROBIOLOGY

UNIVERSIDAD POPULAR DEL CESAR

2008-2014

Isolation and identification of actinomycetes from partially degraded low-density polyethylene waste at the landfill "Los Corazones" in the city of Valledupar.

WORK EXPERIENCE

BIOSECURITY AND MICROBIOLOGY SPECIALIST

March 16, 2023 – December 15, 2024

- Responsible for overseeing biosecurity programs, developing and supervising strategies to protect bird health, and prevent the spread of diseases. Conduct analyses on various samples to detect the presence of pathogens and assess the microbiota on the farm.
- Isolation and detection of *Salmonella* spp.
- Rapid and specific identification of *Salmonella* spp. in biological samples.
- Isolation and detection of *Campylobacter* spp.
- Detection of total coliforms and *E. coli* in water and environmental samples.
- Identification of *E. coli* in food samples used in poultry nutrition.
- Evaluation of water quality through the detection of coliforms, including *E. coli*, as indicators of contamination.
- Study of the intestinal microbiota using anaerobic cultivation techniques to assess the intestinal health of birds.
- Assessment of the susceptibility of microorganisms to antibiotics to determine antimicrobial resistance.
- Collection and analysis of samples from environments, equipment, and utensils to assess the presence of contaminating microorganisms.
- Validation of sterilization processes to ensure equipment is free from microorganisms.
- Specific tests for the detection of pathogens such as *Salmonella* spp. and *Campylobacter* spp. in poultry products.

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WORK EXPERIENCE

QUALITY AND PROJECTS DIRECTOR

COOPERATIVA DE PRODUCCIÓN Y TRABAJO VENCEDOR “POLLOS VENCEDOR”

January 30, 2020 – March 15, 2023

- Ensure rigorous compliance with requirements, procedures, and standards to guarantee the microbiological quality and safety of the produced foods. Conduct inductions in Good Manufacturing Practices (GMP) and Hazard Analysis and Critical Control Points (HACCP) for new personnel, systematically supervising their performance, with a particular emphasis on preventing microbiological risks.
- Identification and detection of *Salmonella* spp., *Campylobacter* sp, and *E. coli*, which are of significance in poultry production.
- Microbiological evaluation of chicken meat and meat products to ensure they are free from bacterial contamination: *Salmonella* spp., *Campylobacter* sp., *E. coli*, and coagulase-positive *S. aureus*. Microbiological analysis of water used in poultry facilities; Total coliforms, aerobic mesophiles, and *E. coli*, using membrane filtration, colilert, among other methods.
- Microbiological analysis of surface water (Total coliforms and *E. coli*) using the most probable number method. Conducting studies to understand the prevalence and distribution of pathogens in poultry farms, aiding in the implementation of preventive measures. Assessment of the effectiveness of disinfection procedures used in poultry facilities to prevent disease spread.
- Microbiological analysis of environments (mesophiles, molds, and yeasts), surfaces of equipment and utensils in direct contact with food (Total coliforms, aerobic mesophiles, and *E. coli*), and food handlers (Total coliforms, *S. aureus*, and *E. coli*).

SAFETY AND QUALITY DIRECTOR

PROCESUR FR S.A.S.

November 20, 2018 – November 30, 2019

- Ensuring excellence in quality and food safety. Developing and implementing policies and procedures to comply with national regulations, overseeing the entire production process meticulously, from the hanging of live chickens to processing.
- Leading the implementation of quality management systems, such as ISO 9001, and conducting internal and external audits to continuously assess and improve quality standards. Managing quality incidents by investigating issues and proposing corrective and preventive solutions.
- Ensuring continuous training for staff in food safety and quality practices, collaborating closely with suppliers to guarantee the quality of inputs, and establishing key performance indicators. Maintaining recognized quality certifications in the poultry industry and participating in research and development initiatives to enhance production practices.
- Upholding the highest standards of quality and food safety in chicken production, ensuring customer satisfaction and regulatory compliance.

QUALITY MANAGER

PAVOS DEL CAMPO S.A.S.

January 23, 2017 – November 6, 2018

- Ensuring excellence in quality and food safety.
- Developing and implementing policies and procedures to comply with national regulations, overseeing the entire production process meticulously, from the hanging of live chickens to processing.
- Leading the implementation of quality management systems, such as ISO 9001, and conducting internal and external audits to continuously assess and improve quality standards.
- Managing quality incidents by investigating issues and proposing corrective and preventive solutions.
- Ensuring continuous training for staff in food safety and quality practices, collaborating closely with suppliers to guarantee the quality of inputs, and establishing key performance indicators. Maintaining recognized quality certifications in the poultry industry and participating in research and development initiatives to enhance production practices.
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QUALITY MANAGEMENT ANALYST

GASEOSAS COLOMBIANAS S.A.S. - POSTOBÓN S.A.

March 02, 2015 – January 10, 2017

- Analyze, schedule, and execute the activities outlined in the manual and microbiological verification plans for the cleaning and sanitization process to achieve improvements in the evaluated processes, ensuring the production of safe products. Analyze, verify, and monitor the Master Cleaning and Sanitization Plan (MCSP) for equipment and facilities in the Workplace Center to ensure compliance with product and process specifications, guaranteeing their safety.
- Microbiological analysis of water, sugars, flavors, and additives to prevent the introduction of unwanted microorganisms in the initial phase of the process.
- Implementing microbiological monitoring programs during different stages of production to detect and control the presence of mesophilic aerobic bacteria, yeasts, fungi, and other microorganisms.
- Conducting microbiological tests on packaged sodas to ensure the absence of mesophilic aerobic bacteria, total coliforms, *E. coli*, *Staphylococcus aureus*, yeasts, fungi, and pathogens such as *Salmonella* spp.
- Performing analyses on the surfaces of packaging to detect contaminating microorganisms and ensure the microbiological integrity of packaged products.
- Evaluating the air and surfaces of the plant to prevent cross-contamination through analysis of mesophilic aerobic bacteria, yeasts, fungi, and other microorganisms.
- Verifying the effectiveness of cleaning and disinfection processes through analyses of equipment and utensil surfaces, identifying potential contaminants.
- Conducting continuous analyses on stored products to prevent the proliferation of microorganisms during storage and distribution stages.

MICROBIOLOGIST

ANTEK S.A.S. LABORATORIO DE ANÁLISIS AMBIENTAL Y GEOQUÍMICA

July 16, 2014 – February 27, 2015

- Detection of Total Coliforms and *E. coli* to assess fecal contamination and the potential presence of pathogens in drinking water.
- Detection of pathogenic microorganisms such as *Salmonella* spp., *Vibrio cholerae*.
- Assessment of the presence of *Clostridium perfringens* spores as an indicator of bacterial contamination and anaerobic conditions.
- Quantification of the total aerobic microorganism load to evaluate the overall quality of the water.
- Determination of Enterococci as an indicator of fecal contamination and assessment of the microbiological quality of the water.
- Analysis of drinking water to ensure compliance with microbiological quality standards established by health authorities.
- Evaluation of the microbiological quality of rivers, lakes, and other surface water sources.
- Assessment of the microbiological quality of wastewater to ensure compliance with environmental regulations before discharge.
- Verification of the effectiveness of disinfection processes, such as chlorination, and other treatments to eliminate or reduce the microbiological load.

REFERENCES

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CERTIFICATES

Courses, Seminars, and Conferences

- Science and Biotechnology Seminar
- Seminar on Scientific Application in Food Microbiology
- Microbiology and Biotechnology Symposium
- Microbiology and Biotechnology Seminar
- Conference on Application to Research in Biotechnology
- Seminar on Application to Research in Biomedical Sciences
- Food Protection and Conservation
- Infection Control in Hospital Settings (Disinfection)
- Theoretical-Practical Course on Environmental Mutagenesis in Waters in the Department of Cesar, Colombia
- INTERNATIONAL FOOD SAFETY STANDARDS UNDER FSSC 22000 V5
- POES and Its Verification in the Poultry Industry
- Poultry Animal Welfare in Processing Plants
- FOOD HANDLING TRAINING