

# Rickson C. Albez

City of San Fernando, Pampanga, PH | +639265446074 | ricksonalbez@gmail.com | linkedin.com/in/rcalbez

## EDUCATION

### University of the Philippines Los Baños

*cum laude*, BS Agricultural Chemistry, Specializing in Entomology  
(Insect Physiology and Biochemistry)

Los Baños, Laguna, Philippines

January 2024

- Studied and trained for the application of various chemistry theories & techniques to address technical challenges in the fields of agriculture & food science and specialized in being proficient with entomological & bioanalytical techniques

### University of the Assumption

With High Honors, Science, Technology, Engineering, and Mathematics (STEM) Track

City of San Fernando, Pampanga, Philippines

April 2018

### Christ In You Faith Christian Academy

Class Valedictorian

City of San Fernando, Pampanga, Philippines

April 2016

## COMPETENCIES, SKILLS, and TECHNIQUES

### Agriculture

- Crop Protection & Soil Science
- Pest Biology & Ecology
- Plant & Animal Physiology & Pathology
- Crop & Animal Science
- Crop & Livestock Management
- Plant & Animal Biochemistry
- Agricultural Extension
- Food Chemistry & Science

### Chemistry

- Agricultural Chemistry
- Pesticide Chemistry
- Environmental Chemistry
- Bioanalytical Chemistry
- Computational Chemistry (Homology Modeling & Molecular Docking)
- Environmental Chemistry
- Forensic Chemistry & Toxicology

### Entomology

- Insect Physiology & Biochemistry
- Insect Rearing
- Insect Taxonomy & Preservation
- Insect Ecology
- Insect Collection & Observations
- Insect Behavior
- Insect Histology & Staining
- Insect Growth & Development
- Insect Reproduction
- Insect Feeding
- Insect Natural History

### Soft Skills

- Technical Writing & Reporting
- Microsoft Office (Excel, Word, Powerpoint)
- GOffice (Docs, Sheets, Slides, Forms, Drive)
- Project Management
- Design Thinking
- Calibration & Instrumentation
- Quality Assurance & Control
- Detail-oriented
- Collaborative & Agile

## RESEARCH and WORK EXPERIENCE

### Undergraduate Researcher

University of the Philippines Los Baños

### Recuenco Research Group

Jan 2023 - Jan 2024

*Protein structure modeling of a novel antimicrobial peptide in the insect vector *Peregrinus maidis* Ashmead (Hemiptera:Delphacidae) and its in silico interaction with the spike protein of maize mosaic virus and comparison of its expression in the insects feeding on corn treated with various fertilizer amendments*

- Conducted independent research in computational biochemistry and agricultural biotechnology, utilizing various *in-silico* proteomic online web servers and software (AlphaFold, SWISS-MODEL, GalaxyWEB GalaxyRefine, UniProtKB, ExPASy, pyDockWEB, and BIOVIA) to investigate *in-silico* protein-peptide interactions
- Developed and authored a two-part thesis focused on identifying the specific amino acid residue interactions of a putative receptor of the corn planthopper with the maize mosaic virus glycoprotein for provision of novel target sites in controlling virus acquisition
- Collaborated with a team of specialists to analyze and validate computational results, contributing to the overall understanding of putative receptors of Hemipteran pests with the family of rhabdoviruses

### Undergraduate Researcher

University of the Philippines Los Baños

### Insect Virology and Plant Pathology Laboratory

Jan 2023 - Jan 2024

*Protein structure modeling of a novel antimicrobial peptide in the insect vector *Peregrinus maidis* Ashmead (Hemiptera:Delphacidae) and its in silico interaction with the spike protein of maize mosaic virus and comparison of its expression in the insects feeding on corn treated with various fertilizer amendments*

- Performed independent research in molecular biology and biotechnology, utilizing various laboratory equipment (i.e., micro refrigerated centrifuge, thermocycler, gel electrophoresis, gel documentation system) for nucleic acid quantification of an insect pest
- Developed and authored a two-part thesis and collaborated with a team of experts to analyze and validate wet laboratory results, demonstrating the potential effect of organic agriculture on plant defenses against an insect pest of corn through its performance based on gene expression

## LEADERSHIP EXPERIENCE

### Organizational Vice President and Membership Committee Head

### UP League of Agricultural Chemistry Students

University of the Philippines Los Baños

June 2023 - Jan 2024

- Formulated the criteria and qualifications for accepting new members subject to the approval of the General Assembly to promote continuous expansion of the organization
- Streamlined planning and initiation of various intrasocial, intracultural, and recreational activities to ensure the value of camaraderie in each resident member
- Developed mechanisms in maintaining an affinity with the alumni members of the league to give a pulse on careers, industry, and opportunities to all its constituents and affiliates

### Auditor and Property Custodian

### UP Entomological Society

University of the Philippines Los Baños

Dec 2022 - Aug 2023

- Maintained a well-organized record of its examination and inventory of the organization's properties
- Facilitated the evaluation of the organization's events and activities, including the performance of the organization and its members
- Tracked and reviewed budget proposals for every activity of the Society
- Cultivated strong relationships with external stakeholders, including media outlets, industry partners, and alumni, to enhance the organization's reputation and support its goals

### Institute of Chemistry Representative

### UPLB CAS Freshman Council

University of the Philippines Los Baños

Aug 2018- Aug 2019

- Led and managed the concerns of 100+ students, overseeing committee work and ensuring the successful execution of initiatives and events
- Organized the UPLB Feb Fair 2019, assigning responsibilities and empowering members to contribute to the organization's goals
- Spearheaded multiple petitions of chemistry-related courses, effectively preventing the delays of the studentry in terms of their entire course work in their undergraduate years

## PROFESSIONAL ASSOCIATIONS

UP League of Agricultural Chemistry Students

UP Entomological Society

Philippine Association of Entomologists, Inc.

## ACCREDITATIONS AND LICENSES

Board of Chemistry, Professional Regulation Commission

Board Certificate and License, Chemical Technician (RChT), 2024

## CONFERENCE PRESENTATIONS

### Pest Management Council of the Philippines, Inc.

### Research Poster Presentation

Davao City, Davao Del Sur, Philippines

11 -14 July 2023

**Albez, R. C.,** Abutan, Z. O. B., Cacanando, P. M. D., Diaz, S. D., Genterola, S. K. S., Molina, A. G. M., Quijano, H. G., Naval, N. C., Sagadraca, T. J. T., Yap, S. A. Comparative Study of the Larval Length and of the Common Cutworm, *Spodoptera litura* (Fabricius) on Six Different Diets.

### Student-Faculty Research Conference

### Oral Presentation

Los Baños, Laguna, Philippines

04 December 2023

**Albez, R. C.,** Castrosanto, M.A., Recuenco, M.C., Alviar, K. B. Homology Modeling, Structure Validation and Refinement of an Antimicrobial Peptide of the Insect Vector, *Peregrinus maidis* Ashmead (Hemiptera:Delphacidae) and the Spike Protein of Maize Mosaic Virus It Transmits.

## CHARACTER REFERENCES

### Mariam C. Recuenco, R.Ch., Ph.D.

Associate Professor, Institute of Chemistry  
University of the Philippines Los Baños  
mcrecuenco@up.edu.ph

### Karen B. Alviar, R.Ch., Ph.D.

Assistant Professor, Institute of Weed Science,  
Entomology, and Plant Pathology  
kbalviar@up.edu.ph

### Melvin A. Castrosanto, M.Sc., Ph.D.

Assistant Professor, Institute of Chemistry  
University of the Philippines Los Baños  
macastrosanto@up.edu.ph

### Sheryl A. Yap, Ph.D.

Former Director, Institute of Weed Science,  
Entomology, and Plant Pathology  
sayap3@up.edu.ph