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BIOGRAPHICAL DATA

Birth date	June 29, 1989
Place of Birth	Quezon City, Philippines
Citizenship	Filipino

EDUCATION

Aug. 2017-Dec. 2019	Master of Science in Chemical Engineering University of the Philippines Diliman Member- *Fuels, Energy and Thermal Systems Laboratory*
Nov. 2014- March 2015	Master of Science in Applied Mathematics (9 units only) University of Science and Technology of Southern Philippines
June 2014- Oct. 2014	Professional Education (18 units) Xavier University- Ateneo de Cagayan
June 2006-March 2011	Bachelor of Science in Chemical Engineering (Cum Laude) Xavier University- Ateneo de Cagayan

AWARDS, CERTIFICATIONS and GRANTS

Aug. 5, 2022	Certified Lean Six Sigma Yellow Belt, Phoenix Petroleum Philippines, Inc.
Aug. 2017-July 2019	Engineering Research and Development for Technology (ERDT) Scholar, University of the Philippines Diliman
March 2015	Passed the Licensure Exam for Teachers (Top 8), Cagayan de Oro City; PRC License #: 1384713
March 2014	Completed the Manufacturing Cadetship Program of Universal Robina Corporation
November 2011	Passed the Licensure Exam for Chemical Engineers, Cebu City PRC License #: 0028165
June 2009-March 2011	Junior Level Science Scholar, Department of Science and Technology- Region 10
June 2006-March 2011	Entrance Exam Scholar, Xavier University

PROFESSIONAL EXPERIENCE

July 2021-present   Production Supervisor, Coconut Methyl Ester (CME) Plant
                               Phoenix Petroleum Philippines, Inc., Villanueva, Misamis Oriental

- Ensures completion of production targets for coconut oil refinery and for CME processing section
- Schedules and supervises production operators in attaining standard RBD oil and CME throughput
- Updates plant manager of production shift activities; inventory of raw materials, products and by-products; fuel consumption; and key observations of equipment and machines
- Initiated documentation of procedures through written work instructions
- Initiated accomplishing production startup checklist to check/ assess plant facilities readiness to production plan
- Introduced log sheets for boiler operation, crude glycerin production, and washwater acidulation
- Written justification and computed savings (using production data and history) of proposed CAPEX projects for FY 2022 (replacement of heat exchangers and rehabilitation of distillation column)
- Co-lead productivity improvement project on reduction of CME processing times by addressing recurring delays and equipment downtime (won 3rd place in Continuous Improvement Awards-Green Belt Category last Dec. 2022)
- Analyze production data and propose corrective actions to maximize RBD oil and CME yields and to improve production output.
- During plant shutdown, monitor maintenance activities (plan vs actual)
- Maintains safe and clean work environment by educating and directing personnel on the use of all control points, equipment, and resources
- Coaches and motivates production operators to achieve plant targets
- Coordinates with other departments issues, challenges, and key activities (tank cleaning, reprocessing, loading and unloading activities, etc.)

Feb. 2020-present   Quality Assurance Supervisor
                               Limketkai Manufacturing Corporation- Puntod, Cagayan de Oro City

- Ensures that products from corn mill, oil extraction plant, oil refinery, shortening/margarine plant, and oil filling lines meet company standards and customer specifications
- Facilitates implementation of good manufacturing practices, HACCP compliance and food safety management system (FSSC 22000) at Puntod and PHIVIDEC plants
- Supervises laboratory analysts and quality control inspectors in testing and inspecting quality parameters for raw material, packaging material, in-process and finished products
- Monitors plant performance by collecting relevant information and preparing statistical reports.
- Handles customer complaints and product deviations
- Responsible for proper utilization, maintenance and calibration of laboratory equipment
- Performs technical research and development activities (fats reformulation, oil blending sensory study, new ingredient supplier evaluation, etc.)
- Implement regular equipment inspection and internal proficiency testing as part of good laboratory practice program.

April 2015-July 2017   Assistant Instructor IV, Chemical Engineering Department
                               Xavier University-Ateneo de Cagayan

- Teach chemical engineering and general engineering subjects such as: Process Dynamics and Control, Chemical Engineering Calculations, Process Equipment Design, Particle Technology, Computer-Aided Drafting, Differential Equations, etc.
- Teach Disaster Risk Reduction and Management to Grade11 STEM students
- Licensure Exam for Teachers (LET) Reviewer on Chemistry and General Education subjects
- Create course syllabi, learning materials, and course modules
- Utilize Elearn™ learning site for supplementary learning resource
- Adviser to final year project studies:

- - Domestic Wastewater Treatment using Modified Nutrient-Film Technique Hydroponic System Planted with Water Spinach (Ipomoea Aquatica)
  - Carica Papaya L. Peelings for Bioplastic Production
  - Sodium Caseinate Film Production from Scrap Milk Powder
- Committee Chairman, Engineering Week 2017 Lecture Series: Experience Engineering Excellence, February 7-9, 2017
- Committee Chairman, Final Year Project Study Parallel Sessions: Engineering Solutions with the Community, February 16, 2016

Jun 2015 – Nov. 2015   Research Assistant- Feedstock Preparation and Characterization
- Assisted in Phase 1 of the project: Fast oxidative pyrolysis of Napier grass in a fluidized bed reactor funded by United States Aid for International Development- Collaborative Applied Research with Industry (USAID- CARWIN)
- Develop protocols for the laboratory testing of Napier grass biomass (proximate analysis, moisture determination, bulk density, and calorific value)
- Prepare material safety data sheet, work instructions, and preparation checklist for the drying and size reduction of Napier grass biomass

June 2014-March 2015   Instructor VI, General Education Department
                              AMA Computer College- Cagayan de Oro
- Teach mathematics and general engineering subjects such as Differential and Integral Calculus, Analytic Geometry, Algebra, Trigonometry, Engineering Economy, Engineering Management, Probability and Statistics, etc.
- Use Oracle™ Peoplesoft Software in performing grade encoding and calculation
- Coach, 23rd Philippine Statistics Quiz Provincial Elimination

Mar. 2013-May. 2014   Production Supervisor- Snacks and Confectionery Lines
                              Universal Robina Corporation, El Salvador, Misamis Oriental
- Supervise production activities of snacks lines (corn chips, fabricated potato and multigrain lines) and confectionery lines (hard-boiled and deposited candies)
- Monitor and evaluate line performance indicators, raw materials inventory, manpower schedule
- Prepare necessary documents such as supervisor's summary shift reports, daily line output reports, machine condition report, weekly performance review, manpower schedule, maintenance job order, etc.
- Address line issues through root-cause analysis and team problem-solving
- Ensure adherence of production tasks to current good manufacturing practices (cGMP) and quality management systems (QMS)
- Create process flow diagrams, reference materials and training plans of three snacks lines
- Spearheaded productivity improvement and food-safety projects such as:
  - Coordinate activities for the increase in FPL fryer capacity from 360 to 390 kgs/ hr and aligned maintenance activities for increase in FW7700 packaging machine speed from 45-47 pack/ min resulting in 8% increase in line efficiency
  - Rehabilitation for Speed-up of Packmate PM 420N-2 machines from 25 to 45 pack/min and for increase in machine uptime from 13 to 18 hours per day.
  - Employee Engagement to Increase Line Efficiency and reduce RM/PM variance from 6% to within 3%
  - Reducing process downtimes at multigrain line through replacement of iris diaphragm valves with butterfly valves

- Reducing startup time for fabricated potato line (FPL) from 5 hours to 3 hours by implementing revised close-up and start-up cleaning guidelines

Jan. 2012- Feb. 2013   Manufacturing Cadet Engineer
                             Universal Robina Corporation, El Salvador, Misamis Oriental
- Immersed in functional rotations at production, maintenance, supply chain and quality assurance departments
- Perform functional tasks of production operator and production controller:
  - Able to operate and perform maintenance/cleaning activities on entire fabricated potato line from process to packaging
  - Prepare staging area inventory, daily production report, FG reporting in SAP, and stock position report
  - Assist in daily, month-end, and year-end cycle inventory of snacks production stocks.
  - Conduct time-and-motion studies with plant industrial engineer

- Perform functional tasks of spareparts controller, maintenance and utilities technician:
  - Create shopping carts of maintenance parts in coordination with end-user
  - Conduct leak inspection of water, steam and air lines in the production area
  - Assist maintenance technician in performing line troubleshooting and repair
  - Gather data and conducted studies for capital expenditure project proposals
  - Establish minimum caustic soda concentration and dosing rate at wastewater treatment plant resulting in reduction of usage from 2,700 to 1,200 kgs/month

- Perform functional tasks of supply chain clerk and warehouse assistant
  - Do transfer posting and goods receipt transaction in SAP-ERP
  - Implement Back-to-Basic Warehousing (B2B) principles and good warehousing practices (GWP) at CDO Distribution Center
  - Processed documents such as sales invoices, credit invoices, trucker's discrepancy report, and trade return document

- Perform functional tasks of quality assurance analyst and line inspector
  - Test packaging materials for different parameters such as roll width, roll repeat, thickness, visual inspection, etc.
  - Perform different laboratory analyses of quality parameters such as moisture content, % free fatty acids, pH, Brix, titratable acidity, etc.
  - Conduct in-line inspection of process parameters of snacks, confectionery and beverage lines

April to May 2010   On-the-Job-Trainee, Utilities Operations
                          Asia Brewery Inc., El Salvador, Misamis Oriental
- Performed manual operation of the water softening units and hourly monitoring of operation of the air compressors.
- Control steam generation process of coal-fired boilers: Operation and parameters monitoring
- Create process flow for water demineralization (ion-exchange) plant
- Analyzing different water samples for specific parameters such as pH, conductivity, iron, alkalinity, sulfite, chloride, total chlorine, calcium hardness and total hardness.

AFFILIATIONS

November 2011- present	Member, Philippine Institute of Chemical Engineers (PIChE)
	- Cagayan de Oro Chapter
June 2009-March 2011	Participants' Formation Head/ Press Relations Officer
	STREAMS- Xavier University Pathways to Higher Education

AUTHOR

de Guzman, D., & de Leon, R (2021). Preliminary Optimization and Kinetics of $SnCl_2$-HCl Catalyzed Hydrothermal Conversion of Microcrystalline Cellulose to Levulinic Acid. *Journal of Renewable Materials.*

SEMINARS and TRAININGS ATTENDED

September 12-14, 2022	Basic Life Support Adult-CPR for Lay Rescuers & Occupational First Aid Training Course, Cagayan de Oro Red Cross
August 23-26, 2022	Kepner-Tregoe Problem Solving and Decision Making by Vince Concio, Manila Execon Group
June 20, 2022 & Jul 1, 8, 15, 2022	Lean Six Sigma Green Belt Bootcamp 2022 by Geric Sumatra, Continuous Improvement Team of Phoenix Petroleum Philippines, Inc.
April 4, 6,& 8, 2022	Lean Six Sigma Yellow Belt Bootcamp 2022 by Amor Navarra, Continuous Improvement Team of Phoenix Petroleum Philippines, Inc.
July 2021- Dec. 2022	Bite-sized Learning Modules based on Linkedin Learning (Learning Mindset, Leadership Mindset, Customer Experience, Culture Building, Presentation Skills, Achieving Professional Goals, Business Communication Skills, Advanced Communication Skills, Crafting Questions to Make Better Decisions, Process Mapping, Personal Development, Strategic Thinking, and Collaborative Leadership) by Learning and Development of Phoenix Petroleum Philippines, Inc.
July 2021	8-hour Mandatory Occupational Safety and Health Training (Overview and Understanding OSH, OSH Programs- Permit to Work System and Incident Reporting, OSH Safe Work Practices- Gas Testing, Excavation Safety, Office Safety and Ergonomics and Hazard Communication, Workplace Emergency Preparedness, Administrative OSH Requirements, Corrective and Preventive Action) by Corporate HSE Group of Phoenix Petroleum Philippines, Inc.
March 4-5, 2021	Hazard Analysis and Critical Control Point Seminar
March 30-31, 2021	Internal Auditing Course Based on ISO 19001:2018
March 11-12, 2021	FSSC 22000 ver 5.1 Food Defense and Food Fraud Seminar
March 19, 2021	HALAL Management Orientation- by Charlie Labrador Quicksolve System Network, Limketkai Manufacturing Corporation
November 17, 2020	Human Centered Design and Process Optimization (Arsenals to be More Competitive in the New Normal)- by Jeff Mejia Operations Conference 2020 Webinar Limketkai Manufacturing Corporation, Cagayan de Oro City

December 11-14, 2019	International Conference on Sustainable Energy and Green Technology "Optimization and Kinetics of $SnCl_2$-HCl Catalyzed Hydrothermal Conversion of Microcrystalline Cellulose to Levulinic Acid" Oral presenter at Millennium Hilton Hotel, Bangkok, Thailand
August- December 2018	Technopreneurship and Innovation Course under Dr. Luis Sison *Scrum Master of group who presented proposal of low-cost particulate matter monitoring device developed by UP IChem and EEEI*
September 27-28, 2018	15th ERDT Conference & 11th AUN/SEED-Net Regional Conference on Energy Engineering, Manila Hotel
July 13, 2018	7th ERDT Congress: The Human Engineer Philippine International Convention Center, Pasay City
August 22, 2017	Nuclear Energy Forum (NEF): Considerations and Essential Information, Novotel Manila Araneta Center, Quezon City
February 22-24, 2017	78th Philippines Institute of Chemical Engineers National Convention (member of the working committee) Limketkai Luxe Hotel, Cagayan de Oro City
October 22, 2016	Development of Supported Ionic Liquid Membranes for Pervaporative Separation of 1-Butanol from Fermentation Broth by Dr. Hercules Cascon, Grand Caprice Restaurant, CDOC
July 30, 2016	Modeling Aerosol Formation, Transport and Removal By Dr. Maria Theresa Cabaraban, Grand Caprice Restaurant, CDOC
May 16-18, 2016	3-Day Regional Disaster Risk Reduction and Management Plan Updating Workshop, Office of the Civil Defense Region 10 Blu Sands Resort, Initao, Misamis Oriental
April 15, 2016	Climate Change and Ozone Depleting Substances By Engr. Jocel Dimacutac, VIP Hotel, Cagayan de Oro City
November 18, 2015	Measurement Uncertainty Seminar by Dr. Heide Rabanes AVR-5 Xavier University- Ateneo de Cagayan
September 3, 2015	Best Teaching Practices Towards a Culture of Excellence by Dr. Jovelyn Delosa, Pearlmont Hotel, Cagayan de Oro City
July 30-31, 2015	Seminar Writeshop for PCIEERD-Funded Researches Department of Science and Technology Region 10 Central Mindanao University, Bukidnon
July 18, 2015	Syllabus Writeshop: A Guide for Improvement of Classroom Instruction and Evaluation by Dr. Kathleen Morales Pearlmont Hotel, Cagayan de Oro City
June 16, 2015	Innovation Workshop for Agribusinesses in Cagayan de Oro & Neighboring Regions by Dr. David Hall-USAID- STRIDE
June 1-5, 2015	In-Service Training for Teachers (National Competency-Based Teacher Standards, Professionalism in Teaching, Library Resources, and ELearn) Xavier University – Ateneo de Cagayan

February 25-27, 2014   Integrated Business Communications by Angelina Laviña
JG Institute for Leadership and Enterprise Development, Pasig City

January 16-17, 2014   Achieving Customer Service Excellence by Vanessa Macabunga
JG Institute for Leadership and Enterprise Development, Pasig City

December 3-5, 2013   Project Management Workshop by Jose Navarro
University of Asia and the Pacific School of Management

October 2-4, 2013   Mechanical Elements and Drive Technology Rolando Bediones
Gokongwei Brothers' Foundation Training Center, Pasig City

March 11-13, 2013   Team Problem Solving Process by Gerry Antonio
Training by Corporate Industrial Engineering to URC- El Salvador

January 24-25, 2013   Coaching for Effectiveness by ChristinnaVictoriano
JG Institute for Leadership and Enterprise Development, Pasig City

July 30-Aug 2, 2012   Systems, Applications, and Products in Data Processing(SAP)
Production Planning and Maintenance Module by Dick Mejares
Information Systems Department, Britannia Building, Pasig City

June 21, 22 & 25, 2012   Programmable Logic Controllers by Manuel Mirabuenos
Gokongwei Brothers' Foundation Training Center, Pasig City

June 13- 19, 2012   Electropneumaticsand Sensors Technology by Orlando Echaluse
Gokongwei Brothers' Foundation Training Center, Pasig City

June 11-12, 2012   Pneumatics Technology by Manuel Mirabuenos
Gokongwei Brothers' Foundation Training Center, Pasig City

May 30-June 1, 2012   Basic Management Program by Valerie Cristobal
Developmental Dimensions International
Gokongwei Brothers' Foundation Training Center, Pasig City

March 13-16, 2012   Process Instrumentation, Calibration and Control by
Bernard Quitay, GBF Training Center, Pasig City

Jan. 17-Feb. 7, 2012   On-Boarding Training for Manufacturing Cadetship Program
Technology Center, Litton Mills, Pasig City
- Quality Concepts and Principles
- 5S Effective Workplace Organization
- New Product Development
- Good Warehousing Practices
- GMP & Cleaning and Sanitation/ Good Laboratory Practices
- ISO 9001-2008
- Basic Food Microbiology
- Raw Materials in Food Production- Functions and Control
- The Basic Process Flow and Principles of Product Making
- Process/ Product Design and Standard of Identity, Monitoring and Maintenance
- Basic Packaging Materials, Design and Testing
- Packaging Operations and Troubleshooting
- Applicable Regulations in Food Manufacturing

- Problem Solving Case Study Approach
- Hazards Analysis and Critical Control Points/ Food Safety Management System

PERSONAL SKILLS
COMPUTER SKILLS
Knowledgeable/ proficient in

- Visual Basic 2013, Python 3.6, RStudio 3.4, SPSS
- Systems, Applications and Products in Data Processing (SAP- ERP)
- Microsoft Office (Word, Powerpoint, Excel, and Visio)
- AutoCAD 2015
- Scilab Xcos, DWSIM, ChemSep and COCO (open-source process simulators)

TECHNICAL SKILLS

- Fundamental chemistry laboratory operations and related research
- Able to operate advanced analytical equipment such as UV-Vis Spectrophotometer and High Performance Liquid Chromatography (HPLC) Systems.
- Basic operation and maintenance of fabricated potato, multigrain, and corn chips lines, & hard-boiled candy line & vertical packaging machines
- Implementation of team problem solving process and productivity improvement projects
- Process documentation for Quality Management System (ISO 9001:2008)
- Facilitating teaching and learning activities in the higher education setting
- Support and oversee student and private-funded research projects
- Basic know-how and application of innovation and technopreneurship principles

SOCIAL COMPETENCIES
Motivated, flexible, and good at oral and written communication; able to lead people to achieve set goals

ORGANIZATIONAL COMPETENCIES
Result-oriented, cooperative, and team-leader, can manage the 4Ms (material, man, machine and method) in an industrial setting

OTHER INFORMATION
Graduate Record Examination (GRE) Results:
Verbal Reasoning Score: 151
Quantitative Reasoning Score: 165
Analytical Writing Score: 3.5

International English Language Testing System (IELTS) Academic Results:
Listening: 6.5   Reading: 7.5   Writing: 7.0   Speaking: 6.5
Overall Band Score: 7.0

PROFESSIONAL REFERENCES
Available upon request