



MARK LESTER C. REAL, AMIChemE, CPE I

Education	Chemical Engineering
University	Colegio San Agustin-Bacolod
University Location	Benigno S. Aquino Drive Bacolod City, Philippines P.O. BOX 120, 6100
Data CPE 1 Awarded	June 13, 2020

Career Summary

Process engineer with 5 years of working experience in process engineering. Determined team-player and able to carry-out basic process and general engineering deliverables. Excellent interpersonal communication skills and experienced in working with multi-disciplinary and multi-cultural team.

Certifications/Professional Licenses

- Associate Member (AMIChemE), Institution of Chemical Engineers, UK
- Certified Practicing Engineer Level 1 (CPE I), International Association of Certified Practicing Engineers, USA
- Registered Chemical Engineer, Philippine Professional Regulation Commission, Philippines, (10th Placer, November 2015 Licensure Exams)
- Registered Chemical Technician, Philippine Professional Regulation Commission, (October 2019 Licensure Exams)

Skill Summary

Competent in process simulation software such as Aspen HYSYS, Aspen Plus, Honeywell Unisim Design Suite, SimSci PRO/II, DWSim, AFT Fathom, AFT Arrow, Korf Hydraulics, BioWin and WAVE

- Proficient in CAD software such as AutoCAD, AutoCAD Plant 3D (P&ID) and Intergraph SmartPlant P&ID
- Proficient in MS Office Suite (Excel -VBA, Word, Visio and PowerPoint)
- Proficient in Minitab Statistical Software Package
- Knowledge on PFD and P&ID development
- Knowledge in line sizing, pump hydraulics calculation, PSV & PRV sizing, storage tank sizing and vessel sizing (two- and three- phase)
- Access to Engineering Standards/Practices: AWWA, API Standards, ASME Standards, Philippine Mechanical Code, Shell Design Engineering Practices, ExxonMobil Design Practices, Kolmetz Process Equipment Design Guidelines and Process Engineering Standards/Practices
- Self-starter, resourceful, team player and can work independently
- Languages: Bisaya, English, Filipino and Hiligaynon

Work Experience

1. PROCESS ENGINEER, Watermatic Philippines Corporation (Engineering, Procurement and Construction), Mandaue City, Cebu, Philippines 6014, March 02, 2020 – Present.
 - Major contributor in the preparation of feasibility study of 20MLD Desalinated Water Supply Pipeline from a Desalination Plant located at Cebu South Coastal Road -South Bound Access Road to Natalio B. Bacalso Avenue Pump Injection Station
 - Reviewed tender documents, bid bulletins and terms of reference for the design and construction of 10MLD Modular Treatment Plant at Anabu Dam, 380 CMD SM CHEER Residences Sewage Treatment Plant, and East Bay Phase 1 Design and Construction (Pakil Site)
 - Developed line sizing and pump hydraulics with capex and opex and API 650 Storage Tank Sizing calculation sheet using excel VBA spreadsheet
 - Conducted process simulations using WAVE, AFT Fathom and BioWin
 - FEED for Cordova Project SWRO 10MLD
 - Updating line lists, instrument lists, valve lists and equipment lists
 - Currently working from home due to lockdown

2. PROCESS ENGINEER, Treasure Island Industrial Corporation (Chemical Manufacturing Plant), Mandaue City, Cebu, Philippines 6014, July 22, 2016 – February 28, 2020.
 - Generated savings of around USD 68k annually by recovering raw materials
 - Conducted/presented a feasibility study on the transfer of manufacturing operations of some major product line to Cavite Plant cutting freight charges from Luzon to Cebu which can generated an annual net savings of around USD 110k

- Minimized underground storage tank reading variance from +/- 3000L to +/- 100L error by replacing dipstick measurement method with level gauges using buoys
 - Performed cost and benefit analysis for addition of equipment, equipment upgrade, plant expansion and man-power addition
 - Drafted CAD drawings of equipment layout, piping, mixing and storage tanks
 - Involved in a series of plant design reviews before the construction of TIIC Canduman Extension Plant
 - Special case studies as requested by management
3. JUNIOR ENGINEER, Hawaiian Philippine Company (Sugar Process Plant), Silay City, Negros Occidental, Philippines 6116, January 21, 2016-July 20, 2016.
- Steam trap and blower sizing
 - Involved during operation, trouble-shooting, start-up, shut-down and maintenance of boiler plant
 - Analyzed pilot size equipment of bagasse screener to determine set up which would give optimum performance

Education

- MASTER OF ENGINEERING IN CHEMICAL ENGINEERING, (August 2020 to Present), Cebu Institute of Technology -University, Cebu City, Cebu, Philippines 6000
 - BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING, (November 2011 to March 2015), Colegio San Agustin –Bacolod, Bacolod City, Negros Occidental, Philippines 6100
GPA: 91.60/100 (Very Good)
- Academic Achievement Awardee, Engineering Scholar Recipient, Outstanding Performance in Research 2013 and Best in Research 2015; consistent Champion (Team) for Provincial Philippines Institute of Chemical Engineers-Negros Occidental Chapter Quiz bowl from 2013 to 2015
- DIPLOMA IN MECHANICAL ENGINEERING TECHNOLOGY, (May 2008 to August 2011), Technological University of the Philippines –Visayas, Talisay City, Negros Occidental, Philippines 6115
GPA: 7.28/10 (Good)

Affiliations

- Associate Member, Institution of Chemical Engineers, UK
- Member, International Association of Certified Practicing Engineers, USA
- Member, International Association of Engineers, IAENG Society of Chemical Engineering
- Member, Philippine Institute of Chemical Engineers, Cebu Chapter
- Associate Member, Integrated Chemists of the Philippines, Cebu Chapter

- Past Junior Councilor, International Order of DeMolay, Serafin V. Aguilar Chapter

Professional Development

1. *IACPE Engineer-In-Training Program Level 2 (Chemical Engineering Track)*, International Association of Certified Practicing Engineers, June 15, 2020 – Present.
2. *IACPE Engineer-In-Training Program Level 1 (Chemical Engineering Track)*, International Association of Certified Practicing Engineers, May 21, 2020 – June 12, 2020 (Duration: 40 hours).
3. *Aspen Plus -Physical Properties*, Udemy, October 17, 2019 (Duration: 10.5 hours).
4. *BOOTCAMP -Aspen Plus with Case Studies*, Udemy, December 30, 2018 (Duration 9.5 hours).
5. *AutoCAD 2017 with Color Rendering*, Microcadd Institute Inc. –Cebu, April 24, 2017 to June 21, 2017 (Duration: 70 Hours)
6. *Advanced Microsoft Excel Application*, Treasure Island Industrial Corporation, April 08, 2017 (Duration: 8 hours)