STEVEN SHIVAN BISSOONDATH



OBJECTIVE

To refine my theoretical knowledge though practical experience in which I can further understand the industry and its various processes. Due to my major interest in sustainability this career can aid me in optimizing processes and equipment towards a green future which would reduce energy consumption and wastage.



EXPERIENCE

Process Engineering Internship | PROMAN MX Division, M5 & M2 Plant JUNE – AUGUST 2023

As a Process Engineer intern the following were my major responsibilities on the M5 and M2 plant:

- Plant Monitoring This role involves the responsibility of daily chemical consumption of cooling water, demineralization plant and steam treatment as compared to budget.
 Throughput and differential pressures on the ion vessels of the demineralization plant as well as nitrogen plant production capacity.
- Equipment Evaluation As a process engineer I was assigned to conduct a routine evaluation on two equipment which are the Heat transfer efficiency of 15 cooling water heat exchangers and flue gas differential pressure of the air preheater to determine the rate of fouling.
- **Process Hazard Analysis** I was assigned to determine the feasibility of the current and proposed safety equipment and procedures of a malfunctioning valve and provide recommendations to improve the system.
- Soft Skills Workshop As an engineer we are responsible for our actions which encompasses ethical, environmental and economical thought process thus some key soft skills training provided were emotional intelligence, time management, teamwork and budgeting.



EDUCATION

Bachelor in Chemical and Process Engineering | UWI St. Augustine GPA (3.64) 2021 – 2024

Currently a graduate from UWI. St. Augustine Campus with a current GPA of 3.64 (First Class Honours) and graduated in 2024. My completed academic projects thus far are as follows:

Projects

Final Year Design Project: Production of Bioethanol from Biomass (Sugarcane)

Final Year Research Project: Optimization of a Methanol Refining Column (Company Project)

Other: Efficiency of A Heat Exchanger on the AUM plant

Production of Biodiesel (Methanol) from Micro-Algae

YEAR 1 SEMESTER 1

Subject Course Code	Title	Grade
CHNG 1000	Introduction to Chemical and Process Engineering	Α-
CHNG 1001	Applied Chemistry I	А
CHNG 1003	Science of Materials	А
CHNG 1008	Communication/Ethics	B+
ENGR 1001	Information Technology for Engineers	A+
ENGR 1180	Engineering Mathematics I	А
YEAR 1 SEMESTER 2		
Subject Course Code	Title	Grade
CHNG 1002	Applied Chemistry II	B+
CHNG 1004	Chemical Process Principles I	B+
CHNG 1006	Transport Phenomena I	B+
CHNG 1007	Chemical Engineering Lab I	А
ENGR 1007	Electrical Engineering Technology	Α-
MENG 1001	Engineering Thermodynamics	С
YEAR 2 SEMESTER 1		
Subject Course Code	Title	Grade
CHNG 2000	Transport Phenomena II	C+
CHNG 2001	Process Design and Economics I	B-
CHNG 2002	Chemical Process Principles II	B-
CHNG 2004	Separation Process I	C+
CHNG 2009	Chemical Engineering Lab II	Α-
MATH 2230	Engineering Mathematics II	Α-
YEAR 2 SEMESTER 2		
Subject Course Code	Title	Grade
CHNG 2003	Computer Aided Engineering	А
CHNG 2006	Process Dynamic and Control I	Α-
CHNG 2007	Particle Technology	B-
CHNG 2008	Chemical Engineering Practice	А
CHNG 2010	Chemical Engineer Lab III	А
MATH 2240	Engineering Statistics	А
YEAR 3 SEMESTER 1		
Subject Course Code	Title	Grade
CHNG 3001	Transport Phenomena III	А
CHNG 3004	Chemical Reaction Engineering I	B-
CHNG 3006	Process Design and Economics II	А
CHNG 3007	Separation Processes II	A+
ENGR 3002	Engineering Internship	А
MENG 3000	Engineering Management	В
YEAR 3 SEMESTER 2		
Subject Course Code	Title	Grade
CHNG 3002	Biochemical Engineering	B+
CHNG 3012	Chemical Engineering Design Project	А
CHNG 3013	Chemical Engineering Research Project	А
CHNG 3014	Loss Prevention in Process Industries	A+

Caribbean Secondary Education Certificate (CSEC) | St. Stephen's College 2014 – 2019

From attending St. Stephen's College, I received 8 Subjects with 7 grade 1's in Additional Mathematics, Biology, Chemistry, English A, Geography, Mathematics and Physics, and a grade 2 in English Literature.

Caribbean Advance Proficiency Exam Diploma (CAPE) | St. Stephen's College 2019 – 2021

From attending St. Stephen's College, I received 8 Subjects with 6 grade 1's in Chemistry, Physics and Pure Mathematics and 2 grade 2's in Caribbean Studies and Communication Studies.

EXTRA-CURRICULAR ACTIVITES

- ➤ Vice president of the Interact Club of St. Stephen's College
- > Student Council member of St. Stephen's College
- ➤ Internship at UWI St. Augustine Seismic Research Centre
- > Archery and Badminton

SKILLS

- Related Program skills: Aspen HYSYS, Mathlab
- Computer Literate: Microsoft Words, Excel
- Easy ability to adapt to new technology
- Strong critical-thinking and problemsolving skills
- Excellent Communicating, Teamwork and Leadership abilities

PERSONAL SUMMARY

Organized, self-motivated person with great time management and ability to adapt and solve problems at a consistent pace. Able to work in both independent and team based projects/objects. I also have an agenda for sustainability as technologies improve and products/by-products have a great impact on the surroundings and residing living organisms.

- REFERENCES

Thérèse Lee Chan, PhD Lecturer, Department of Chemical Engineering Faculty of Engineering The University of the West Indies St. Augustine

Email: <u>Therese.Lee@sta.uwi.edu</u> Phone: (868) 662 2002 Ext: 84442 (868) 701 7864