

Belinda Borrello

Italian Citizenship 11-01-98 +96170659897 belinda.borrello@outlook.com Omar Daouk St., Bldg. 1015 Beirut, Lebanon



Profile

Interested in using engineering design to address humanitarian challenges, and generate social, environmental, and economical sustainable solutions that improve the lives of others.

Education

AMERICAN UNIVERSITY OF BEIRUT (AUB) BS. CHEMICAL ENGINEERING **2019, BEIRUT**

COLLEGE PROTESTANT FRANÇAIS FRENCH BACCALAUREATE - HONORS **2016, BEIRUT**

Licenses & Certifications

COURSERA OIL & GAS INDUSTRY OPERATIONS AND MARKETS - BY DUKE UNIVERSITY **2020, ONLINE**

Experience

INTERNSHIP IN THE FIELD OF R&D, MÜHLENCHÉMIE

JUL-OCT. 2019, AHRENSBURG

- Completed a training in the flour and rheology laboratory at Mühlenchemie, where I learned to analyze the flour and determine its characteristic data and rheological properties, with the latest generation of technical equipment.
- Participated in a one-week workshop, at the enzyme laboratory at Mühlenchemie, focused on the specific properties and functionalities of the different enzymes and enzyme systems for flour improvement.
- Worked on the development of a new process for wheat tempering, in collaboration with ELEA PEF, and performed pilot plant trials, independently, to advance the project.
- Conducted preliminary trials for a research project involving the application of a pulsed electric field (PEF) for the enzymatic treatment of green Robusta Coffee beans.

ACADEMIC RESEARCH, AUB

AUG-DEC. 2018, BEIRUT

- Initiated a research study on the medicinal benefits of cannabinoid extracts on cancer and diabetes simultaneously, preliminary stages focused on the literature review, the data collection, and determining the correlation between cancer and diabetes.
- Connected professors from several departments to take part in this research.

Projects

FINAL YEAR PROJECT, AUB

2019, BEIRUT

- Designed a process plant that produces biodiesel from waste cooking oil, collected from commercial and domestic sources in Beirut, using a homogeneous catalyst.
- Prepared the cost estimation and economic analysis.
- Modeled and simulated the process plant on Aspen HYSYS.
- Conducted the literature review and the process selection.
- Drafted the process flow diagram (PFD), a schematic and detailed illustration of the system.
- Ensured the accuracy of the HYSYS simulation by computing the mass and energy balances.
- Completed the design and sizing of the units, the hazard and operability study (HAZOP studies), and other considerations such as process utilities, plant layout and plant start up procedure.

Volunteer and Leadership

MEMBER AT LARGE, UNICEF STUDENT CLUB AT AUB

2018-2019, BEIRUT

- Team Leader during the Bekaa psychosocial support project.
- Organized and managed weekly trips to the Syrian refugee schools in Bekaa.

KNOWLEDGE IS POWER (KIP) CONFERENCE

2017, BEIRUT

- Covered the event live on the official KIP social media to both build engagement with the attendees and reach followers who aren't in attendance.

UNITE LEBANON YOUTH PROJECT (ULYP, NGO)

2015, SIDON

- Taught the basics of English to Syrian and Palestinian refugees, ages 4 to 6.

YALE UNIVERSITY (STUDENT)

2014, BEIRUT

- Attended a 6-week summer course program at Yale University.
- Courses: Creative Writing, Public Speaking, Investment & Portfolio Management.

Computer Skills

- HYSYS
- C++, Matlab, Simulink, Loop Pro
- LabVIEW, AutoCAD
- MS Office, Excel, Word, Powerpoint

Interests

- Baking Technology
- Enzymes for food applications
- Philosophy
- Horseback riding

Languages

- Proficient in English, French, and Arabic
- Intermediate level: Italian, Spanish