|  |  |
| --- | --- |
| **CARLA ABARCA, Ph.D.** | cpabarcas@gmail.com • +1 (289) 700-5676 <https://www.linkedin.com/in/abarcacp/> • Ancaster, ON  |
| CHEMICAL ENGINEER Ph.D. & COMMUNITY LEARNING ADVOCATEI am a community learning advocate and a proud McMaster international graduate with a background in Chemical Engineering and 12+ years of experience in higher education, mining, agriculture, and plastics manufacturing. I am looking to return to the University environment in order to pursue my passion in building successful student communities; focusing on projects that foster learning, equity, diversity and inclusion, and to help people be prosperous in their education and careers.  |
| PROFESSIONAL EXPERIENCE**Business Development Associate, Mineral Exploration**, Jan 2020 - Present*Activation Laboratories (Actlabs) - Ancaster, ON*Built relationships with new customers in the Mineral Exploration and Mining industry by applying technical knowledge and business development activities.* Provided technical and commercial support to customers in the areas of geochemistry, mineralogy, metallurgy and environmental analysis.
* Generated and managed more than 20 new opportunities ($3M USD) and built a database of over 150 companies with 300+ contacts, including junior exploration prospects, senior mining corporations, consulting companies, government and universities.

**Postdoctoral Researcher**, 2017 to 2019*McMaster University - Hamilton, ON*Applied technical expertise in managing a product development & screening project for the agrochemical industry.* Supervised and trained a team of 5 Ph.D. and undergraduates to analyze and accelerate testing of over 500 agricultural formulations.
* First point of contact with Suncor, an industrial partner in the project, serving as lead project manager in the planning and execution of research through producing relevant presentations, analytical protocols, databases and experimental work.

**Ph.D. Research Project Manager**, 2010 to 2017*McMaster University - Hamilton, ON, Canada*Built a high throughput screening process and analytical methods for the development of flotation additives for mineral processing of Nickel.* Presented monthly reports and actively participated at conferences and trade shows in the mineral processing and polymer industry areas that focussed project outcomes towards partner interests.
* Built a close relationship with Vale by conducting analyzes and pilot-scale tests at their R&D facilities.
* Reduced R&D costs by approximately 30% by designing and conducing parallel and automated experimental work of over 100 flotation additives.

*Additional Experience:***Teaching Assistant,** *McMaster University - Hamilton, ON, Canada, 2011 to 2016***Technical Sales Representative**, *BASF Chile S.A. - Santiago, Chile,* 2008 to 2010* **Internship and Bachelor of Science Thesis,** *BASF Chile S.A. - Santiago, Chile,* 2007 to 2008
* **Internship, Mineral Quality Control and Mineral Processing Laboratory***, Codelco Chile, El Teniente Mine - Rancagua, Chile,*Feb 2007
 |
| RELATED VOLUNTEER EXPERIENCECo-Founder, VP Finances, Board Member, 2014 to 2017*McMaster Engineering Graduate Society (EGS)** Established and ran the first Graduate Student Society in Engineering, where we successfully managed and coordinated activities to support the orientation and engagement of over 500 international graduate students in the Faculty of Engineering.
* Acted as a first point of contact for the specific needs of graduate students and negotiated with the Dean’s office to provide resources to support their academic, cultural and social success.
* Raised funds for more than $10,000 per year for supporting operations.

**Co-Founder, Executive Director, General Secretary, Board Member** 2012 to 2022*Consortium of Chilean Research Networks (Redes Chilenas de Investigación, ReCh) & Network of Chile – Canada Research (REDICEC) (not-for-profit organizations)** Provided assistance in crisis-management situations for Chilean researchers around the world.
* Coordinated and implemented activities to foster the networking and inclusion of Chilean and Latin American researchers in Canada.
* Worked collaboratively with various internal and external stakeholders from the Chilean government to build bridges internationally, focused on academic success and troubleshooting scholarships issues.

**Additional Related Volunteer Experience, 2005 - present*** McMaster University, Department of Chemical Engineering, Policy and Graduate Curriculum Council, student representative
* National Association of Graduate Researchers (ANIP), Communications Team and Gender and Minorities Team
* McMaster Organization of Latin American Students (OLAS), Communications Director
* Association of Chemists PUC (AQUC), VP and Communications Director
* Chemistry and Pharmacy Student Society (CEQUIF), VP Finances, Communications Director
* Habitat for Humanity in Brampton, Volunteer
 |
| EDUCATION**Doctor of Philosophy, Ph.D. in Chemical Engineering,** 2017*McMaster University - Hamilton, Ontario, Canada** Awarded the CONICYT Bicentennial Becas-Chile Scholarship to pursue Ph.D. studies
* Thesis: “High Throughput Screening of Nanoparticle Flotation Collectors”

Supervisor: Dr. Robert Pelton in partnership with Vale**Bachelor of Science, B.Sc. in Industrial Chemistry**, 2008*Pontificia Universidad Católica de Chile - Santiago, Chile** Awarded the “Best Industrial Chemist” and First-class Honours, Class of 2008

Thesis in partnership with BASF Chile |
| TECHNICAL SKILLS**Languages*** Fluent in English & Spanish

**Software**

|  |  |  |
| --- | --- | --- |
| * MS Office & 365 Suite
* Google Apps: Drive, Calendar, YouTube, etc.
* Mailchimp & Wordpress
 | * Photoshop & Illustrator
* R programming language
* ProSensus Multivariate
* Mathcad
 | * SAP
* ImageJ
* Origin 7.0
* MatLab
 |

**Certifications & Workshops*** Health & Safety and Fire Safety trainings
* WHMIS (Workplace Hazardous Materials Information System) training
* GMP (Good Manufacturing Practices) laboratory training
* Valid driver’s license G-full
* Mini MBA - Business and Administration (by Steven A. Silbiger), Hamilton, Canada, 2015
* ProSensus: Multivariate Methods for Process Analysis, Monitoring, and Quality Improvement, Burlington, Canada, 2012
* Mineral Processing Professional Development Workshop, McGill University, Canada, 2011
 |