

The Future of STEM

By Gloria Romano-Barrera

With a bright future in the Science, Technology, Engineering and Math (STEM) world, Latinas are leveraging their differences to succeed. Whether it's implementing environmental plans, specializing in diesel engine integration, or managing new products, the Latinas profiled here are visionaries and inspiring the future in technology.



Carina in her most recent field assignment in the Plurinational State of Bolivia, October 2018.

Carina López

Environmental Engineer – Due Diligence
Integrated Gas – Commercial/NBD
Shell Exploration and Production Company

Born and raised in the island of Puerto Rico by Dominican parents, Carina López developed a passion for environmental protection at a young age. "When I was debating between careers, I remember a teacher once said: 'As an engineer, you will have more influence to protect the environment and people will listen to you'. My dad is also an engineer so I decided to enroll in the only college that offered a degree in environmental engineering at the Polytechnic University of Puerto Rico. The rest is history."

Today, López is the environment engineer for Shell Exploration and Production Company. She identifies and manages Health, Safety, Security and Environmental risks within commercial mergers, acquisitions and divestments.

"I add value to Shell by conducting environmental due diligence as part of the commercial negotiation process," she shares. "I also make sure it is sustainable for the long term by making sure accountability is clear and protection to human health and environment is covered in commercial transactions."

Her career at Shell started when she was a technical poster finalist at the SHPE Conference in 2010, where she landed an internship with the Wind Energy business, then for the Appalachia basin. Upon completion of the Assessed Internship process, she was offered a full-time position with Shell where she was responsible for environmental and regulatory compliance for operations in the Permian Basin.

"My greatest accomplishment working in this industry has been hands-on contribution to environment protection through an international assignment in South America last year," she shares. "I was able to directly work in exploration drilling by developing and implementing environmental management plans in clear support of our Shell Policy and Commitment with the environment and our communities."

Since starting her Shell career, she has been entrusted with increasing responsibilities on the environmental and regulatory team, including the training and development of new staff, prior to transitioning to a broadening commercial role with the New Business Development for the Americas. She supported a series of acquisitions and divestitures through due diligence for sensitive commercial opportunities within North and South America. In her most recent role, she set up environmental management plans in support of exploration drilling in Sub-Andean well development in Bolivia.

López is also driven to increase the participation of Latinas in leadership by giving back to the Houston Latino community through the Society of Hispanic Professional Engineers (SHPE) and Shell Diversity & Inclusion events since she graduated in 2013. She is also part of the Greater Houston Hispanic Chamber of Commerce Emerging Leaders Class of 2017, where she supports the strategic advocacy efforts in support of the Hispanic community in Houston.

She has launched a Lean-In Circle at Shell, is an active participant within the Shell Hispanic Employee Resource Group's targeting STEM workforce development



Carina López.

and serves in organizations such as SHPE Houston Chapter, contributed to the start of SHPEtina (Society of Hispanic Professional Engineers, Latina-focused program) at Texas A&M University and supports the University of Houston's Student Chapter efforts. She also serves on the board for Power on Heels Fund, Inc.

"To my amazing Latina STEM students: please reach out for help in reviewing your essays, applying for scholarships, and make a commitment to finishing your degree," she shares. "There are Latinas that have done it before – a great starting point is to get involved in the Society of Hispanic Professional Engineers. It is also key that you get involved in either research or corporate experience early on. Get it done, we are waiting for you on the industry side."