

NACE member Dr. Luz Marina

Calle worked as a college chemistry professor until she received what would be life-changing news. Her application to a NASA research program for college professors had been accepted. NASA invited Calle to conduct research at the Kennedy Space Center in Cape Canaveral, Florida, to solve the corrosion issues on the space shuttle's launch pad. Calle went on to create NASA's Corrosion Technology Laboratory, which she still leads today.

Q: Can you tell us about some of what you're working on for NASA?

A: I am very interested in learning how corrosion happens and how to stop it. What I have been working on during the past few years is developing "smart" coatings for detecting and controlling corrosion.

Q: What are "smart" coatings?

A: One of the ways of protecting assets from corrosion is by applying a coating or a paint. Most of the coatings that we use are barrier coatings—they sit on top of the metal and protect the metal from the environment. We have technology that allows that coating to be "smart." This coating "knows," or it can detect, when corrosion starts, and it will deploy a repair function to the coating.

Q: What kind of people work at the Corrosion Technology Lab?

A: With my background as a college professor and as a researcher, I run the Corrosion Technology Lab similar to the way a professor runs a graduate



DR. LUZ MARINA CALLE, FNACE

Career: Lead Scientist, NASA Corrosion Technology Laboratory

NACE Honors: NACE Fellow

Quote: "I am very interested in learning how corrosion happens and how to stop it."

student program. When I started the lab, the first thing I wanted was to have postdoctoral researchers in the laboratory. I introduced that idea to the Kennedy Space Center, and NASA now has a post doctorate program, and with that program I have been able to grow the lab. The post docs coming through that program typically stay at NASA, either as NASA employees or as contractors. Most of the people in my lab are former post docs, and I also have corrosion engineers and technicians because not only do we do technology development and research, but we also do a lot of testing for NASA, for other government agencies, and for industry.

Q: How did you get involved in NACE?

A: I became a NACE member the first year I started working in corrosion, which was in 1999. I have been a NACE member ever since and have attended and presented in most of the conferences. What I enjoy most about the NACE CORROSION conference is learning about what other research groups are doing. It's an excellent opportunity to do networking and see people face-to-face, and just take a break from the normal, everyday work and concentrate on corrosion for one week.

To view Dr. Calle's video interview, photo slideshow, and full Q&A, visit www.nace.org/i-am-nace.

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