



# Get to know the corrosion fighters

**They have told us their story, how will yours be?**



**ANA CAROLINA  
SANTA CHALARCA**

**Winner of Eurocorr Travel Grant**

## **Could you give us a little presentation of yours?**

My name is Ana Carolina Santa Chalarca. I am Colombian, hailing from the beautiful town of Santa Barbara in the department of Antioquia. I hold a degree in Materials Engineering and have had the opportunity to work in polymer property analysis. My professional journey began in the field of corrosion, initially focusing on coatings and currently delving into atmospheric corrosion for my doctoral research. I consider myself a highly responsible, amiable, and research-driven individual. Nature fascinates me, and I enjoy exploring new places.



## **What do your studies consist of?**

My doctoral thesis revolves around elucidating the mechanisms and models of atmospheric corrosion for carbon steel, galvanized steel, and aluminum in the atmosphere of the Valle de Aburrá. This region, situated in Colombia, features a humid tropical atmosphere, making such studies particularly relevant and scarce.

## **How did you get there? What motivated you to do this?**

I was introduced to the field of corrosion by one of my undergraduate professors. He presented a unique doctoral opportunity that involved both laboratory and fieldwork. My motivation stemmed from a profound desire to contribute to research and develop work that would significantly benefit my country.

## **What do you like the most about your activities?**

I appreciate the independence my work allows the daily challenges that continually showcase my capabilities, and the opportunity to meet diverse individuals and explore new places. Additionally, the flexibility in laboratory activity scheduling is a notable aspect.

**Is there something you don't like?**

Yes, at times the workload can be overwhelming, and the nature of experimental work can be frustrating, especially when tests yield inconclusive results. Exposure to environmental elements can also pose challenges, such as wind or human interference. Furthermore, the economic aspect becomes complex, given the high costs of doctoral programs in my country and the limited opportunities available.

**How did you get here? How did you discover this world?**

During my university years, I actively sought participation in research groups and workshops that introduced me to the realm of corrosion. Since then, I have been drawn to all aspects of research. Additionally, encountering highly skilled individuals along the way has been a significant motivator for me to pursue the path of corrosion studies.

**If you didn't dedicate yourself to this field, what would you have liked to be?**

I would have aspired to be a pilot or an air traffic controller.

**Have you ever had access to a scholarship? What requirements are most valued to access it?**

Yes, I recently received two scholarships. The first was the Eurocorr Travel Grant for attendance at the Eurocorr 2023 conference. The second was from Sapiencia in Medellin, Colombia, facilitating my current stay in Madrid, Spain. These scholarships primarily value research outputs, such as publications and books. Additionally, a compelling letter of interest, showcasing passion and enthusiasm for the work, is often a crucial requirement.

**Where do you see yourself in the future?**

In the future, I envision myself as a researcher in a recognized research center, delving into corrosion-related topics. Simultaneously, I see myself contributing as a lecturer at a university.

**Do you think networking will be important to get there?**

Networking is incredibly important in my perspective. Collaboration and connecting with individuals in your field can open doors to numerous opportunities. Exchanging contact information during these interactions can potentially lead to significant possibilities. I've heard of many instances where fruitful opportunities arose through collaborative networks, so I do believe it will be crucial for me.

### **Do you think your field of studies needs more visibility?**

I believe that research, in general, requires more visibility, especially in Latin American countries where investment is limited. Regarding corrosion, addressing this issue is crucial for continuously developing more effective solutions and identifying problems in emerging technologies.

### **In your opinion, what is the single most valuable attribute is researcher should have?**

Humility. In my view, a wise and successful researcher who maintains humility becomes a well-rounded individual, acknowledging the importance of collaboration and recognizing that everyone is equal.

### **What advice would you give to students in an early stage of their careers?**

Encourage them not to limit themselves to classroom learning. Go beyond, improve language skills, develop soft skills, and acquire expertise relevant to the current era, such as programming or agile methodologies.

### **Could you say how you see the future of engineers/corrosion scientists?**

I see a broad spectrum of possibilities, especially in coatings and new materials. Corrosion, from my perspective, will always be a challenge, providing ample opportunities for scientists. Through collaboration with experienced professionals, we can achieve groundbreaking research.

### **Corrosionist... is it born or made?**

It's innate. Corrosion is not a standalone career; it is a facet taught in various disciplines. Those truly destined for this field will eagerly embark on the journey and discover the fascinating world of corrosion.

### **TO END... COULD YOU TELL US...**

- **A color:** Violet
- **A number:** 7
- **A song:** Para tu amor de Juanese
- **A hobby:** Attending football matches at the stadium
- **A city:** Cartagena, Colombia