



Ana Paula Bortoleto holds a PhD in Urban Environmental Engineering by the University of Tokyo. She was awarded a Green Talent in 2011. A former Marie Curie Fellow and Humboldt Fellow, she is currently an Assistant Professor at the Department of Sanitation and Environment of the University Campinas, Brazil.



UNICAMP

Interview with Ana Paula Bortoleto, researcher at the University of Campinas and former MSCA Fellow

Your scientific career has led you to various countries and continents before taking you back to your home country, Brazil. How does it feel to be back? Why did you decide to return to Brazil?

I decided to return to Brazil mainly to pursue a career in which I would be able not only to share my knowledge, but also make a difference in other people's lives. I see in some Brazilian universities, particularly at the University of Campinas, a great potential in academic science for the near future. And I think I have a lot to contribute to develop a better research environment here, especially for women. In addition to all the challenges of doing research in Brazil, what I miss the most is the details that used to make my daily life so much easier, and quite efficient, in Europe or in Japan.

Do you feel that your experience abroad might have helped you gaining some valuable assets in terms of "soft skills"? If so, how do you feel that these could be shared or passed on, perhaps benefitting your students and the Brazilian institution – UNICAMP - where you are currently based?

Yes, for sure soft skills have been helping me over the years. Adaptability is one of them. I got used to travelling and moving around and therefore to adapt quickly to new environments. Differences are not huge obstacles for me as before. I have been growing as a professor and researcher by being open to unexpected challenges. This is helping me not only to better understand my responsibilities in a broad sense, but also to communicate better with my students through their differences. And my research is also progressing with a strong interdisciplinary approach because of that.

How does one feel as an expert on Waste Management in our current world – especially after the two largest sports events in the world – the FIFA World Cup and the Rio Olympics, attracting large numbers of people, have been hosted in your home country? In a nutshell, what waste management solutions would you have brought in, if it depended only on you?

Waste management is a huge challenge in Brazil, as it is in most developing countries. We still have not addressed properly the many environmental issues related to it. Improper disposal, soil and underground contamination are still problematic in most of the cities. The infrastructure implemented for both events have not guaranteed a long term solution to these problems. My research area mainly involves waste prevention. It means that waste should be strictly avoided in all stages of the supply chain. Differently from recycling, waste prevention deals with a new concept of consumption, towards a sustainable society. So, despite all the challenges that Brazil is still facing in waste management, there



would not be a better time to discuss waste prevention initiatives than now, when major regulations and policies are being revamped and discussed in Brazil.

Do you think there is a special need to encourage women to enter in science?

A girl cannot aspire to be a scientist if she cannot look at successful women in science. Today, women are not represented accurately in science or in published works. As a woman, I know how difficult it is to strive in science. We urgently need to promote these successful and determined women scientists as role models to our children, teenagers and young adults. It is important to show science as a worthy path to pursue for any woman as it would be for any man. However, all these efforts will go to waste if women are subsequently still disproportionately disadvantaged in scientific careers, compared to men. Hiring procedures, grant-allocating processes and publishing routines must be changed. There is no single and easy solution. It should be a continuous effort of our and future generations to ensure equality between women and men in science. To recognise the problem is surely an important first step.

What would be your dream, if you had some kind of super power to instantly turn all your research experience into the application of a project for Brazil, or even for the whole world?

One of reasons that I decided to be an environmental scientist is related to the damage that we can inflict on other species with our activities. These impacts are changing drastically not only the planet's climate but how we cohabit with nature. Most of my research involves the concept of environmental costs. Today it is cheap to cut a tree because we basically do not pay a fee to the environment for taking away the existence of that tree.. It would be interesting to see our governments considering the cost of damaging the environment as the main factor in the decision making process... And be willing to pay for it. A preserved and protected environment unquestionably secures better public health, education and a future sustainable society.