

Get to know the corrosion fighters

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

ADAMANTINI LOUKODIMOU

Participation in the Doctoral School by the research group Electrochemical and Surface Engineering

Give us a little presentation of yours. What did you study?

My name is Adamantini Loukodimou. I graduated from the University of Patras, Greece with a Degree in Chemistry in 2016. After graduating, I undertook an MSc in Synthetic Chemistry and Advanced Polymeric and Nanostructured Materials, graduating in 2018. I was sponsored by Lloyd's Register Foundation (LRF) in 2018 to carry out a Ph.D. with the University of Leicester while being based at the National Structural Research Centre (NSIRC) at TWI Ltd.



This program is in collaboration with Engineering and Physical Sciences Research Council (EPSRC) Centre for Doctoral Training in Innovative Metal Processing (IMPaCT). My Ph.D. research with title "Development of novel coating systems for mitigating corrosion of offshore wind turbines" focuses on the development of novel self-healing coatings.

How did you get here? What motivated you to enrol in this?

A strong motivation for me was my sister, now Dr. Vasiliki Loukodimou, who at the time was carrying out her Ph.D. in the UK with Cranfield University and she was also based at NSIRC, as part of her industry-led Ph.D. The decision to leave Greece and move to the UK for at least four years came after great deliberation. My passion for research and the desire to put my studies into practice were the main motivations. The United Kingdom offers great opportunities to build a network, provides many job opportunities; hence, someone can develop and boost relatively easily his/her career. The idea of travelling and living abroad, in a multicultural city were also factors that influenced my decision to leave Greece. It was a decision that I am not regretting, even though a Ph.D. has many difficulties, which I experienced throughout the past three and half years. At this point, I would like to thank my academic supervisors Dr. David Weston, Dr. Dimitrios Statharas and my industrial ones, Prof. Alan Taylor and especially Dr. Shiladitya Paul for their help and support through these years. Dr. Shiladitya Paul was the one who encouraged me to attend the SURF Doctoral School, so I am thankful to him for one more reason next to many others. I am very lucky to have an LRF mentor, Heather Hughes, who is always ready to advise me. Lastly, my sister, Dr. Vasiliki Loukodimou as well as my older brother and my parents are always by my side encouraging me to follow my dreams.

What do you like most about what you do?... Is there something you don't like?

Chemistry is a beautiful science and is present in all aspects of life. It has a wide range of applications in various sectors. I am continuously developing my skills as a scientist throughout these years. Moreover, the fact that my research findings could have application in real life to tackle long-term problems gives me extra motivation to continue my research. By doing this Ph.D., I have been given the opportunity to work in an industrial environment and gain both academic and industrial experience.

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

My Ph.D. is fully sponsored by LRF and IMPaCT, which was offered to me after I was interviewed twice by specialized panel members. Additionally, I was awarded twice with a grant from EPSRC and Turing Scheme, in order to do two placements during my Ph.D. The first was for a three-month placement at the University of Sao Paulo in Brazil and the second is going to be for a two-month placement in Spain at Centro Tecnologico Componentes (CTC). I am grateful for all the opportunities that were offered to me. I think the requirements that are most valued to access a sponsorship are the candidate's scientific background and his/her determination, passion, and persistence to achieve a specific goal.

Are the expectations you had when studying this PhD/Master being fulfilled?

I arrived in the UK on the 14th September 2018. Looking at my personal development during these last three and a half years, I can say that my expectations have been fully fulfilled. Most importantly, I have developed my skills as a chemist and I have read many papers relevant to corrosion in order to develop the research methodology for my Ph.D. topic. I had the opportunity to attend courses in three prestigious universities in the UK, and to be trained to use various instrumentation. I gained expertise and expanded my knowledge in the field of corrosion by participating in conferences and online corrosion courses. Additionally, my communication skills, as well as my public speaking, have been improved. I have met many people from different backgrounds and have created a network that also includes women in STEM. These experiences made me a stronger person, which now knows a bit better how to face difficulties in life.

Is it serving you professionally or do you think it will serve you in a future?

In my opinion, a Ph.D. holder is a hard-working person. He/She has to be up to date with the state-ofthe-art for his/her research topic, have analytical and critical thinking, meet deadlines, be trained from others and be open to new knowledge, collaborate and communicate effectively with others, as well as work under other peoples' supervision. Moreover, he/she carries out experimental investigation in order to contribute with new scientific data to the research community. I consider these qualifications very useful in seeking a work position. For these reasons, I believe my Ph.D. will serve me professionally in the future.

How do you see the job market once you finish your studies? Have you had any recent work experience?

As mentioned before, I am undertaking my PhD in an industrial environment. This has given me the opportunity to gain experience in working with other professionals and technicians, health and safety staff etc. under a line manager and CEO of a company. I will also have the opportunity during April and May to gain experience in another work environment during my placement in Spain. From my experience, I have seen that the job market has many opportunities for corrosionists. Corrosion is an ongoing problem, which needs to be tackled as it can have devastating social, environmental and financial consequences.

Something curious that has happened to you within your career and that you remember with a smile?

The most curious thing that happened to me was during the first day at the University of Leicester. I asked a lady, where was the meeting room in which Engineering Ph.D. students would meet. She said, "Hi Adamantini! I am Charlotte, let's go together there". I was so panicked and stressed that day because everything was so new to me, that it took me some minutes to realise that she was the lady with whom we had been exchanging emails during the past month. I will always remember how kind and understanding Charlotte was, especially during that day.

What advice would you give to a person who wants to follow the same path as you?

I always keep in mind Nikos Kazantzakis's - Greek writer- words: "You have your brush, you have your colours, you paint the paradise, then in you go."

If a person would like to follow the same path as me, the only advice that I would give to him/her would be: "Dream big, believe in yourself, stay strong and always find reasons to smile."

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Could you say what it is and how you see the future of engineers/corrosion scientists?

Corrosion is an ongoing and complex problem with devastating economic, social and environmental impact. Moreover, corrosion can be present in many forms and in various environments. Corrosionists are essential in order to offer a deeper understanding and knowledge on corrosion mitigation and prevention. They are essential not only for science contribution, but also for society protection and development. Their contribution was, is and will be important for a long time.

Corrosionist... is it born or made?

I believe that a corrosionist is made. I strongly believe that clever, bright and gifted people are born. During childhood or young age, people find out their talents. Of course, family, school, and friends play an important role in that. Personally, I admire the people, who are not only talented but also hard workers that always try to develop their skills and offer to other people lives a better future through their scientific findings.

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- A color: Blue
- A number: 2
- A song: Synaylia by Haris Alexiou
- A hobby: Taking photos of nature