



# Get to know the corrosion fighters

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

↘ **AGATA SOTNICZUK**

**Winner of PSK 3M Competition**

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

I am Materials Engineer who started adventure with corrosion during my Bachelor studies from analyzing the corrosion resistance of bulk nanostructured biomaterials. After completing my Master degree I decided to continue my work at the Warsaw University of Technology within the PhD studies. I am the person who likes meeting new people and trying to find new collaborations.



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

In my studies I am focused mainly on understanding the degradation processes of titanium-based biomaterials devoted for long-lasting biomedical applications such as orthopedic or dental implants. I hope that gaining this knowledge someday will allow me to propose new solution that can be really applicate in the biomedical industry. To study degradation processes, I am using mainly electrochemical techniques or ion-release measurements that are further supplemented by microscopic and spectroscopic surface characterization.

## **What is its relation with nuclear corrosion?**

I am working in the Nomaten Centre of Excellence which is placed in the National Centre for Nuclear Research in Poland. I am participating in setting up the new electrochemical lab which will be primary devoted to analysis of the corrosion aspects in the magnetic field.

**What do you like the most about nuclear corrosion?**

I am beginning my adventure with nuclear corrosion but I am surprised how many issues are still unexplored in this field even for the standard, commonly used materials. I think that what interesting me the most is the complexity of the conditions in the nuclear field which makes a great challenge to reflect them in the lab.

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

As I mentioned, I am beginner in this field so to the date I don't see such things.

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

I had the luck to have a support from both researchers from the material science (Prof. Halina Garbacz) and corrosion field (Dr. Andrzej Królikowski). This cooperation allowed me to design multi-aspect experiments in the area of healthcare materials. I discovered the area of nuclear corrosion during the NUCOSS workshop, which I believe gave me a background to start finding my place in this area.

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

It's a tough question. I don't know. Maybe first accepted paper?

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

I think I would like to be the microbiologist or a pharmacist who is working in the lab and trying to find new medicines.

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

I would like to be focused on something which will have a real impact on our society.

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

Yes, I think that nowadays networking is essential to understand what is important and to propose new solutions to the problems.

**Do you think the nuclear corrosion field needs more visibility?**

In Poland definitely yes. I don't know how it looks like in the other countries.

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

In my opinion, above all, researcher should be curious of the surrounding world.

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

Try to learn from the best teams and don't be afraid of initiating new research cooperation.

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

I believe that the necessity to save the resources and materials will make corrosion scientist and their initiatives more and more important and visible to the large community.

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

Definitively made.

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

- **A color:** Black
- **A number:** 8
- **A song:** Difficult to select one
- **A hobby:** Collecting city maps
- **A city:** Warsaw