At the occasion of my participation at the ceremony this June, I have tried to recall what was said at my own PhD graduation ceremony, and then I have realized that I had missed it!

So I was especially glad to be invited to celebrate the new Doctors because if there is something I remember well, it is that it was a challenging time: working on the research, supporting the didactic activities, working on projects, conferences... So my personal congratulations to all the new Doctors!

But... I am afraid that the workload is not going to change. At least according to my personal experience, which is the one I would like to share with you, with particular emphasis on the role of my PhD.

**From Industrial Design to Astronaut Training**

I am an instructor at the European Astronaut Centre of the European Space Agency in Germany since 2007.

As a member of the Columbus Payload Team, I prepare the astronauts to perform the experiments that will be executed on board of the International Space Station.

The astronauts have different backgrounds and they cannot be expert in all of the different area of the experiments they are assigned to, so they need training. To be able to deliver this specific type of training, I need every time to learn the experiment myself.

There is a first phase of study of the documentation, followed by a second phase of interactions with the scientists that have proposed the experiment, the company that has built the flight hardware and with all the ground personnel involved.

My “product” is a set of lessons that integrate the inputs from all those specialists, to explain the scientific objectives of the experiments and how to perform it, giving the crew the chance to perform the experiment sequence on ground, thanks to simulators and training models that we have at the centre, replica of the ones they will find on orbit.

Thanks to this job I had the chance to make unique experiences. I have worked with most of the astronauts who have flown to the ISS; I have experienced myself the unbelievable feeling of microgravity during parabolic flights and I was supporting the launch campaign of Samantha Cristoforetti in Kazakhstan.

**But what does all this have to do with Industrial Design?**

We already have few but significant examples of architects and industrial designers involved on improving the life comfort in microgravity: one of those examples comes from the Faculty of Design Professors Trabucco and Dominoni have designed a clothing system for intra-vehicular activities that flown on the ISS in 2005.

In the same years they have also activated a course on Design for Microgravity that triggered my passion for this unusual field of design.
With my research however we tried to go beyond the low Earth orbit of the ISS.

The objective of my PhD was to formalize the role of the Industrial Designer in the frame of the human and robotic exploration.

I have therefore activated many stages and collaborations in Italy and abroad, with universities and industries in the space sector, in order to be involved in the design of complex architectures like habitat and rovers.

At the end I have defined different ways the industrial designer could contribute in the space sector: Astronaut instructor was not one of them, but if it would have not been for the experience made with this PhD, probably I would not have been an instructor today.

**How my PhD helped me in my job**

As instructor I have learned a lot on the job, thanks to the courses (that are mandatory steps in the certification path of an instructor) and from my colleagues instructors, but the PhD has influenced my way of approaching topics, how to face a new topic of research, how to find information and how to be more structured.

All the collaboration activated during those years and the constant attendance to conferences, allowed me to build a network of valuable contact.

I had the opportunity of working in multidisciplinary and multicultural teams, and to be in contact with different technical languages, including the first familiarization with the distinctive world of the acronyms.

Thanks to this mix of practical and theoretical experiences, I had the chance of seeing closely some of the design processes and methodologies used in the space sector, distinguished by complexity and multidisciplinary.

The PhD also allowed me to do mistakes. This doesn’t mean that I haven’t done any more mistakes but at least I have not repeated the most obvious ones.

After working 8 years as an astronaut instructor I don’t know if I can consider myself an industrial designer anymore, I am not up to date and I tend to forget a lot, but I am still a Doctor, in the way I think.

I wish to all of you to have the same feeling in some years from now, wherever your career will bring you.

*Manuela Aguzzi PhD in Disegno Industriale e Comunicazione Multimedial*