

Partner Interview



Guilia Fede & Guilia Collina



Tell us a bit about yourself and your role in H2GLASS?

Guilia Fede

I am a PhD student from Italy at the Norwegian University of Science and Technology in Trondheim, Norway. I have been part of the H2GLASS project since September 2023. My research is centered around investigating the advantages and challenges of developing Digital Twin technologies to support the transition to hydrogen in glass manufacturing. More specifically, I aim to explore how they can improve the integration between maintenance and production decisions to enhance process performance within this context.





Tell us a bit about yourself and your role in H2GLASS?

I am a Ph.D. Student in the Department of Mechanical and Industrial Engineering at NTNU in Trondheim, even if my background is in Chemical Engineering. I studied at the University of Bologna, and I moved to Norway a year and a half ago for my master's thesis. Last March, I started this journey with the H2GLASS project. I am involved in two research tasks about Risk Management and Safety. The objective is to guarantee the safe operability of hydrogen systems by developing a risk-based maintenance model. In fact, the title of my Ph.D. is "Loss Prevention and Maintenance Modelling for Hydrogen-Based Industry".

Guilia Collina





How has being part of H2GLASS impacted your academic and professional growth?

Guilia Fede

Being part of the H2GLASS is a great opportunity for my academic and professional development. I get to connect with different people from research institutes and industries, each with a distinct role in the project and unique backgrounds and experiences. Interacting with all the project partners is a valuable source of knowledge, even extending beyond the project's scope. But most of all, engaging with such a multidisciplinary and international team brings distinct perspectives that will surely contribute to my personal growth and shape my understanding and way of navigating diverse situations.



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How has being part of H2GLASS impacted your academic and professional growth?

Since the beginning of my Ph.D., I have been excited to join H2GLASS, which aims to decarbonize energy-intensive sectors like glass and aluminium manufacturing. Thanks to this project, during the last year, I had the opportunity to travel and attend two conferences showing the results of my research, impacting my academic growth. A couple of days ago, I participated in the annual project meeting; getting in touch with the consortium allowed me to learn about different perspectives, particularly the industrial one. I strongly believe that interacting with people with different backgrounds and experiences is extremely valuable for my professional and personal development.

Guilia Collina



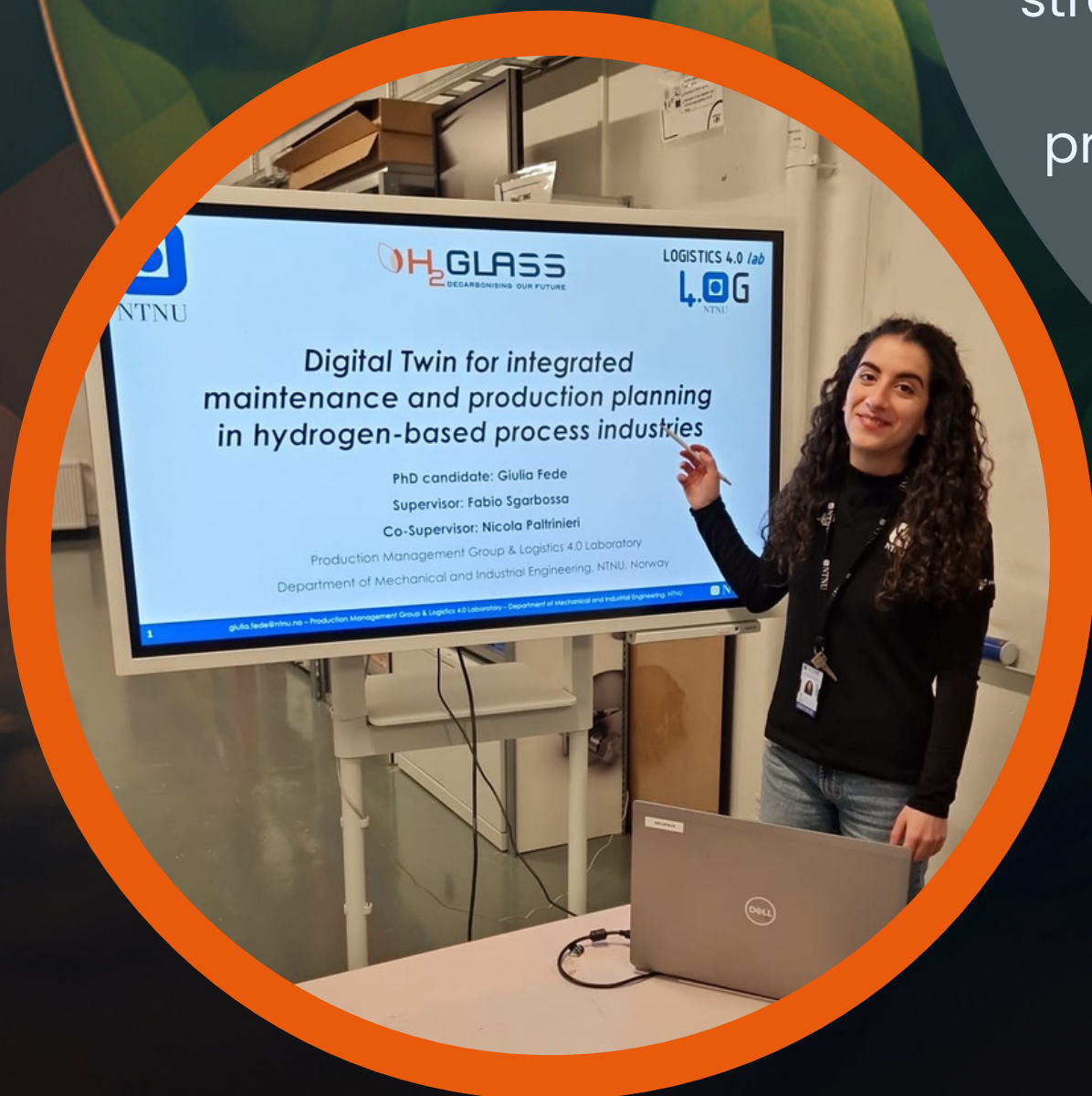
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What challenges do you think women face in the STEM field, and how can we address them?

Giulia Fede

It is difficult to generalize, but gender biases persist in the STEM field, in some countries more than others. Despite progress, certain stereotypes remain both within and beyond these disciplines.

I think promoting inclusion and implementing gender equality strategies in academic and industrial settings is essential, especially where disparities strongly persist. However, I believe it is all about educating individuals and promoting a culture that values respect and diversity in every aspect of life.



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What challenges do you think women face in the STEM field, and how can we address them?

It is hard to give a short and general answer. I think these challenges are different depending on the country you are living in. The most common is dealing with unconscious gender bias. I believe that this problem lies in the early stage of education. We should be educated not to have this bias from an early age. Unfortunately, I do not have a more practical answer. I am not competent to say how a successful action plan should be. However, I believe focusing on normalizing women's presence in these fields is essential rather than making them exceptional.

Guilia Collina

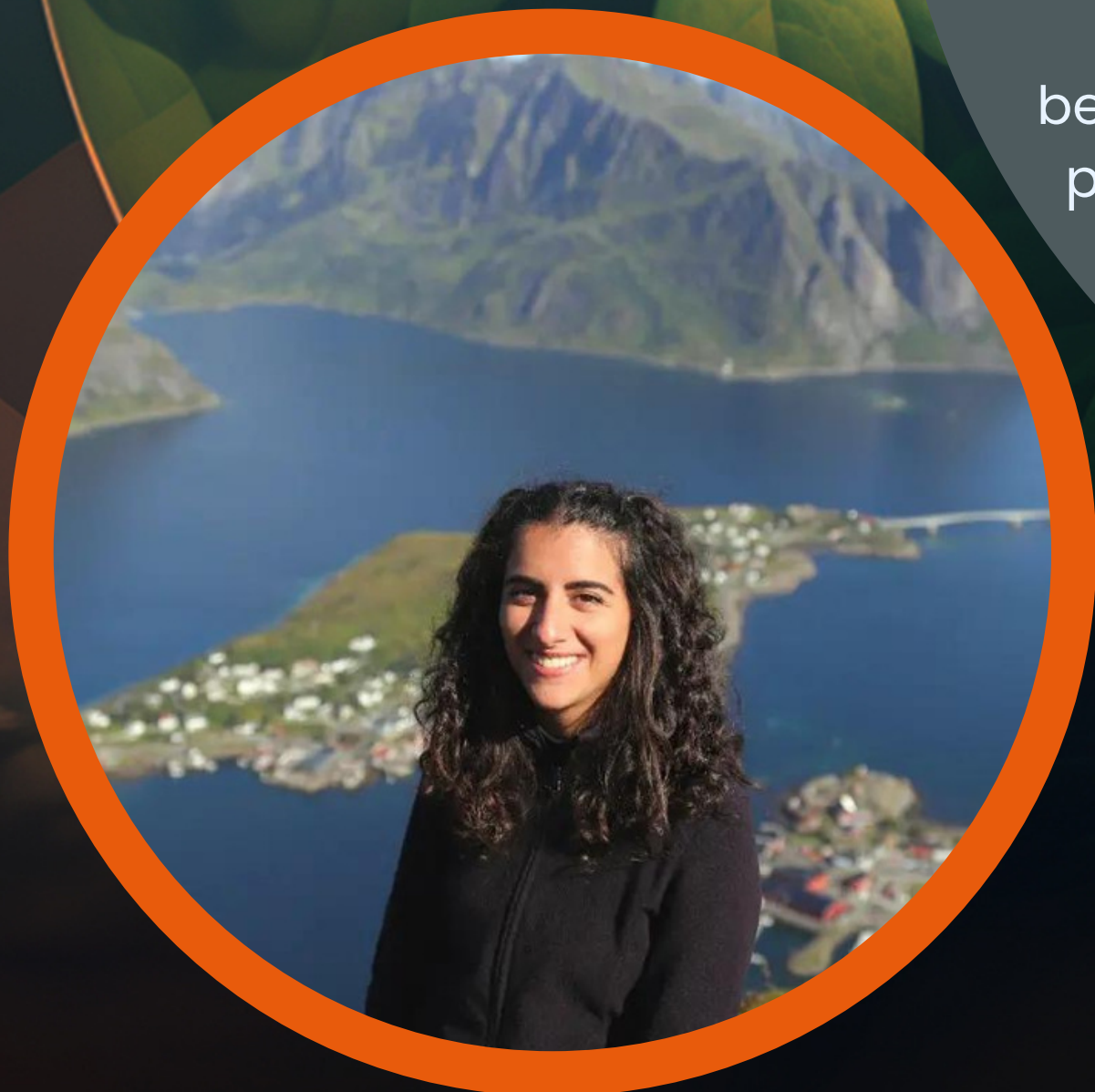




Are there any women in science who have inspired or mentored you? How have they impacted your journey?

Guilia Fede

I would say that there is not one specific person who particularly inspired my journey. My interest in science subjects has mainly guided me toward the STEM field. Nevertheless, along the way, especially in the academic context but also in personal relationships, I have been surrounded by many women (professors, peers, relatives, or friends) whose passion for these subjects has been a strong source of motivation and pushed me to keep following this path.



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Are there any women in science who have inspired or mentored you? How have they impacted your journey?

Honestly, I do not have any name in mind. Since my early years at school, I have been more interested in scientific subjects. I would say that my path has always been geared toward STEM disciplines. I have always tried to be inspired by people with more experience than me. I am very curious about different backgrounds and careers, but I rarely pay attention to their gender. This is my way of overcoming the bias I mentioned in the previous answer.

Guilia Collina

