Interview

Project Interview: Yassir El Hadri

Helena Rapp-Wright (Imperial College London, h.rapp-wright@imperial.ac.uk)

Yassir completed his T-level studentship programme at Imperial College London in the Environmental Research Group (ERG) in 2024. T-level studentships describe two-year technical qualifications, which importantly combine work experience and practical work with academic study. As part of the RSC Sustainable Laboratories Grant awarded to Dr Helena Rapp-Wright and Amber Vaughan (L23-8109900824), he completed a project investigating the feasibility of reusing "singleuse" plastics in the laboratory. In this project, he learned the importance of sustainability as well as the fundamentals of analytical chemistry, including liquid chromatography and mass spectrometry (LC-MS) for trace analysis. The results of the project are currently being compiled, and the team will hope to publish these soon.

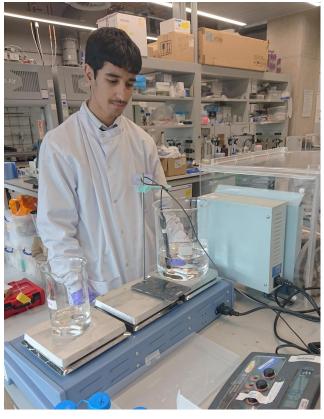
What inspired you to take a T-level in science?

T-level science opens pathways to various scientific careers, which has allowed me to explore and learn many ways a scientist can have a positive impact in the world. The combination of classroom learning, and hands-on industry placement appealed to me because I prefer practical, real-world experience over purely theoretical study.

How are you enjoying T-level science?

I am enjoying the course; it has really opened my eyes to new opportunities and pathways. I feel that the course has significantly contributed

to my personal and academic growth. Working alongside dedicated professionals has inspired me to look forward to the future. I also really enjoyed learning key skills but learning to work independently was the most challenging. This is because, for the first time in my life, my actions have been decisive for my future. "Time is what



we want most, but what we use worst": this quote from Willian Penn made me understand the importance of using your time wisely.

Could you describe your placement project within the ERG?

The project that I was part of involved finding the

most environmentally sustainable method for reusing plastics in the laboratory (pipette tips, Tritan bottles etc.). There were many steps to the project, including selecting solvents that are environmentally friendly, thus making the project greener. After selecting the solvents, we spent

a lot of time in the laboratory doing a lot of pipetting. Although this was not the most enjoyable part of the process, it definitely taught me that patience is necessary to be able to get results. I also had the chance to use a microscope to see the difference between the clean pipette and a used one.

"The skills and knowledge you will gain [through T-Level Science] will be incredibly rewarding..." I enjoyed learning about LC-MS and its functions; the technique gave us large data sets, which had to be processed so we could select the best solvents. After analysing all our data, I prepared a poster about the project, explaining what it is about, what we found and how this would be helpful for other laboratories.

What are some of the challenges you faced during your project?

Data analysis: this was very stressful because I had to stay focused with very large data sets. This was challenging because it was the first time that I was fully working with data, and it was very time-consuming, although it really enhanced my understanding of the Laboratory Information Management System (LIMS), for which I will forever be grateful. Another challenge was presenting the project; this was challenging because it was the first time that I had to present my findings to other professionals. I was very nervous but, thanks to my mentors helping me rehearse it, I was ready and very happy to let others know what the project was about.

What is the most rewarding aspect of your course and placement project so far?

During my placement at Imperial College London, I most enjoyed being part of the sustainability project, because it expanded my knowledge in many ways. It has also helped me gain new skills such as working in a team, analysing and presenting my findings, safe handling of equipment; and it had a massive impact on my communication skills. The most rewarding aspect of my course was definitely having a chance to get a taste of real-world experience. I also enjoyed doing practical work at the University, because it enhanced my understanding and knowledge of science.

What advice would you give to anyone considering T-Level Science?

My advice would be to fully embrace both the academic and practical components of the course. Engage actively in your industry placement, as it provides invaluable hands-on experience. Stay curious and open-minded, ask lots of questions, and take advantage of the opportunity to network with professionals in the field. Balancing the workload can be challenging, but the skills and knowledge you gain will be incredibly rewarding and beneficial for your future career.



What kind of career are you hoping to have in the future, and how would you like to achieve this?

I would like to work in the biomedical sector; biomedical science's capacity to comprehend the intricate human body and the diseases afflicting it has driven my pursuit of understanding its complexity. This ardour propels my ambition to contribute to advancements in medical research and healthcare. Upon achievement of this, I aspire to augment my knowledge by pursuing a career in microbiology, thereby broadening my career prospects.

And what do you do when you are not working?

In my free time, my extracurricular involvement in the University football team for two competitive seasons provided me with invaluable teamwork and leadership skills. Additionally, my engagement in weight training as a hobby instilled discipline and adherence to routine, whilst contributing to maintaining my physical health and fitness.