

### World Biomaterials Congress 2024

The 12th World Biomaterials Congress (WBC) was a six-day, worldwide gathering of biomaterials scientists in Daegu, Republic of Korea. Featuring over 4000 delegates, from 62 countries and regions, the conference will certainly be a highlight of my PhD. The event covered a wide scope of topics, including fundamental scientific research, the implementation of artificial intelligence (AI) within biomaterials, and even the latest clinical outcomes from implanted medical devices. All the talks were very interesting, although a personal highlight for me was the two talks discussing the latest advances in 4D printing. 4D printing uses the technology and techniques of 3D printing to create objects that change in response to external stimuli. The potential applications within biomedical research are enormous, from self-expanding stents to drug-delivery devices. The presented talks were fascinating, discussing the underlying science as well as the potential biomedical applications being explored.

However, alongside the wide range of talks, there were several panel discussions. A particular highlight was the series of panel discussions titled 'Young Scientist Forum'. These lunchtime seminars brought together academics at various stages of their careers to discuss their academic pathways and offer advice to young researchers such as myself. At a conference the size and academic standing of WBC, you can often feel overwhelmed and intimidated by the research being presented, especially as someone who is at the very beginning of their scientific career. It was therefore refreshing to learn of the highly relatable academic struggles and difficulties many top academics have faced throughout their career. Throughout the sessions, the academics offered specific advice, on everything from applying to post-doctoral positions to dealing with rejection.

Whilst at the conference it was a huge honour to present parts of my PhD research. I gave a talk titled *"Can we accelerate degradation in poly-lactic acid and expect to obtain the same results?"*. The opportunity to present at a conference on the size and scale of WBC was certainly daunting. However, it was a fantastic learning experience, creating a self-contained talk pitched at the right level that could engage researchers across a range of backgrounds. I was happy to



answer several questions both immediately after my talk and at the end of the session. The entire process of constructing and presenting the talk will be helpful for the remainder of my PhD and beyond. The questions I was asked will help me consider future discussion points that might arise during my viva. Similarly, the skills practised in presenting will be useful throughout my chosen career.

Conferences provide a fantastic opportunity to catch up with fellow researchers. Being in the final year of my PhD, it's been a pleasure getting to know PhD students from around the UK and Europe. However, as WBC was a worldwide event, it was great to meet so many new researchers from outside of Europe. The field of biomaterials is very friendly, and many top academics were more than happy to answer questions over coffee. It was also great to meet many young researchers from around the world, share advice and discuss common problems faced throughout the PhD journey. The friendships made at WBC will last a lifetime.

In addition to visiting Daegu, the conference provided a good opportunity to explore the Republic of Korea. Along with several members of my lab group, I took time both before and after the conference to travel. Together we visited the cities of Seoul and Busan and took the boat to Jeju Island. The opportunity to explore this part of the world does not come around regularly. It was amazing, getting to experience the culture and learn about the country's history whilst exploring a completely different place. I was acutely aware of the environmental impact that my long-haul flight to the Republic of Korea had, and I was therefore keen to minimise my carbon emissions for the remainder of the trip. To avoid taking a short-haul flight, I took an overnight ferry to and from Jeju Island. Similarly, I took an overnight boat across to Japan. Although the trip to Japan was not part of the conference, I tried to use the opportunity to travel to this part of the world to its fullest potential. The whole trip was incredible and has certainly made me keen to continue travelling if the opportunity arises. Attending this conference has made me excited to explore the possibility of working abroad. As a young researcher, it's important to explore and embrace new challenges and ways of working as much as possible. The conference has very much made me excited to continue my research journey in a new location.

Attending a conference on the size, and in the location of WBC, would not have been possible without the generous financial support of the IET. I am incredibly grateful to them for their assistance. The conference has reaffirmed my decision to remain in science following my PhD and has made me excited to move to a new location if possible. I am truly grateful to both WBC for the opportunity to present my work and the IET for enabling that opportunity. Thank you!

