

In June 2022 I was awarded the IET National Travel Award to attend the 44th IEEE International Engineering in Medicine and Biology Conference in Glasgow from 11th to 15th July 2022. This conference is the flagship event of the IEEE Engineering in Medicine and Biology Society and, arguably, the most important biomedical engineering conference in the world. Furthermore, this was the first time in its history that the event was being held in the UK.

The overarching theme of the conference was “*Biomedical Engineering transforming the provision of healthcare: promoting wellness through personalized and predictable provision at the point of care*”. As a biomedical engineer whose work focusses on the early diagnosis of dementia with advanced signal processing and machine/deep learning, and being extremely passionate about the public healthcare system and the welfare state, the main theme of the event strongly resonated with my personal interests. The conference themes included Biomedical Signal Processing, Biomedical Imaging and Image Processing, Micro/Nano-bioengineering Cellular/Tissue Engineering & Biomaterials, Computational Systems, Modelling and Simulation in Medicine, Multiscale Modelling & Synthetic Biology, Cardiovascular and Respiratory Systems Engineering, Neural and Rehabilitation Engineering, Biomedical Sensors and Wearable Systems, Biorobotics and Biomechanics, Therapeutic & Diagnostic Systems and Technologies, Biomedical & Health Informatics, Biomedical Engineering Education and Society, and Translational Engineering at the Point of Care, showing the breadth and depth of the event.

In addition to the usual oral and poster sessions that one can usually find in these events, the comprehensive conference programme included mini-symposia, workshops, invited sessions, and ample opportunities to network with academics, clinicians, scientists, and entrepreneurs in the field of biomedical engineering in the very welcoming and great city of Glasgow.

On 11th July, I left the beautiful town of Guildford in the middle of a sweltering heatwave for the long train journey to Glasgow, where I was greeted by a much more comfortable temperature when I arrived in the evening.

Having been unable to attend any face-to-face meetings since 2019 due to the global coronavirus pandemic, over the following days we had the opportunity to present our recent work on deep learning applied to the diagnosis of Alzheimer’s disease and mild cognitive impairment, co-chair an oral session on *Machine Learning and Deep Learning for Electrophysiological Data Analysis* and discuss potential research collaborations with colleagues. Furthermore, it also gave me an invaluable opportunity to learn about the recent developments in topics of my interest that were being presented by world-leaders in the field.

One of the main challenges posed by attending an event this big (nearly 2000 delegates!) was selecting which talks or presentations to attend, minimising clashes. With more than 10 different tracks running in parallel at certain times, this proved to be even more challenging than choosing which band to see at music festivals and involved a certain amount of running between sessions! Thankfully, the excellent venue chosen for the conference, the Scottish Event Campus (SEC) centre, made things easier, with five interconnected exhibition and meeting spaces. Moreover, the conference provided an app that made identifying the sessions



of interest beforehand quite easy. The keynote talks were of great quality and took place at the neighbouring SEC Armadillo, an iconic world-class venue. I particularly enjoyed one on neurorehabilitation technology by Professor Natalie Mrachacz-Kersting. I also liked the arrangements made for the poster sessions, with e-posters being presented in a massive hall, which made navigating between the different poster pods very easy and facilitated discussions with the authors and other researchers.

On my return to Guildford on 15th July, I had the opportunity to reflect on the invaluable opportunities provided by my attendance to this face-to-face event, from presenting our recent work to networking with leading researchers in biomedical engineering.

I am extremely grateful to the IET for partially funding my attendance to this conference, a unique opportunity for UK researchers. Without the IET's support I would have struggled to be able to attend the meeting because of the effect the pandemic has had on other funding sources for research trips in the UK. I would also like to highlight the fantastic work done by the local Organizing Committee. That, together with the exquisite and welcoming Scottish hospitality, made the conference even better, and definitely one to remember!

Last, but not least, I would like to dedicate this short report to the memory of Professor Bill Sandham, Industry Liaison Chair of the Conference Organizing Committee, who sadly passed away on 25th August 2022. Bill spent many years working relentlessly to attract the conference to Glasgow and I have very fond memories of the time spent with him working as committee members of the IET Healthcare Technologies Network. I am glad I had the opportunity to catch up with him at the event in Glasgow before his untimely passing. He will be sorely missed.

