Dr Lee A. Burton began his two-year JSPS fellowship in November 2014. He spent the first five months of his fellowship at the University of Kyoto before moving with his professor to the Tokyo Institute of Technology for the remainder of his time in Japan.

During his fellowship Lee has published six papers, both with his Japanese host and independently, and attended eight international conferences to present his work. He reports that his proudest achievement is an international patent pending for the discovery of 11 new materials, based on work with his host Professor Fumiyasu Oba and collaborator Professor Hideo Hosono at Tokyo Tech.

"It's still too early to tell if these new materials are going to change the way we make things now, but there have been promising results. One of the eleven materials is found to emit red-light photoluminescence, and so could be useful for screens and displays in the future."

When asked to comment on what it's like to live in Japan, Lee had this to say:

"It has really been an amazing experience, I've worked in England, Australia and America, but nowhere compares to Japan. My advice to any new JSPS fellows, or anyone wanting to work in Japan, is just to keep an open mind and enjoy the richness of the culture."

As for the fellowship itself he said:

"I learned so much during my time in Japan, it was really of great benefit to me, personally. I also hope to continue working with my former colleagues there and hope I have found collaborators for life. My JSPS host was kind enough to invite my new supervisor and me back to Japan next year so there's strong opportunity to continue this exciting research"

Lee now works at the Université Catholique de Louvain in Belgium, and is awaiting the results of other fellowship funding applications. He can be reached at lee.burton@uclouvain.be.

Figure 1 One of the 11 newly discovered materials shows strong red luminescence

Figure 2 The research group of Fumiyasu Oba at Tokyo Institute of Technology (Professor Oba and Dr Burton in the centre)