

I went to work with Prof. Shinji Yamashita at the Research Center for Advanced Science and Technology (RCAST) of the University of Tokyo under the JSPS Invitation Fellowship program for 3 weeks. My research program was to develop a 2 $\mu$ m mode-locked fiber laser using Tm<sup>3+</sup>-doped fiber as an active medium while carbon nanotube (CNT)/graphene based saturable absorber to assist the mode-locking process. I successfully build a mode-locked fiber laser using a CNT producing ~2ps optical pulses at a repetition frequency of 15MHz. I have also learned the techniques involved in the preparation of CNT and graphene solutions for them to deposit on an optical surface and trialled them in mode-locked fiber lasers.

I thoroughly enjoyed my research experience as well as the interactions with the students and staff alike. I found both the staffs and research students to be extremely helpful and this may be the primary reason for me to accomplish my research objective in such a short span time. I had the opportunity to work in a very well equipped laboratory with ample ancillary active and passive optical components to undertake state of the art research in photonics.

I managed to use my spare time for socialization and visiting various attractions in and around Tokyo. Although people generally are helpful but most of them have very limited knowledge in English and therefore struggle to communicate in any language other than Japanese. As a result I had to rely mostly on google maps to go from point A to point B. I therefore encourage everyone planning to visit Japan under the JSPS program to learn a bit of Japanese before heading there. This will not only help the person to communicate effectively but avoid silly mistakes like ordering wrong items in a restaurant or getting on a wrong train and so on and so forth.