My name is ChihHsuan Chang. I am currently a second-year master student in the Civil Engineering department of Tokyo Institute of Technology. It has been almost two years since I came to Japan on March 2015. Before I came to Japan, I was working as an engineer in a construction company who provide the customers with engineered and systems for post-tensioning. SUMITOMO ELECTRIC INDUSTRIES and SUMITOMO (SEI) STEEL WIRE are also our partners in Japan. By an opportunity, I got a chance to visit the construction site in Osaka, and I was impressive by the construction quality, management and the order. Since then, the thoughts of studying aboard in Japan has appeared in my mind.

Japan is a country with a strong economic strength, and has a leading position in many areas of the world. Of course there are also many famous universities in the world. And the reason why I chose Tokyo Institute of Technology is Tokyo Institute of Technology is a well-known university in the field of science and engineering. On the other hand, my Japanese ability is insufficient, and Tokyo Institute of Technology provide IGP programs for foreign students. Entering Tokyo Institute of Technology I faced new challenges like the brand new environment, different languages, and living alone. Fortunately, I got many friendly lab mates who helped me a lot not only the daily support, but also academic problems. In the class, there were also many international students come from different countries, getting along with them made me adapt quickly to the new environment. Living and studying here in Tokyo Institute of Technology has given me the opportunity to bond with people from all over the world.

I would also be happy to introduce my current research: “Shear Behavior of UFC-RC Hybrid Beam with PBO Fiber”. As we all know, concrete is the most widely used material in the construction. For the higher requirement and more demand of concrete, recently, ultra-high strength fiber reinforced concrete (UFC) has been developed. The UFC is a cementitious composites reinforced by fiber with excellent properties. And PBO has the highest tensile strength and elastic modulus among the organic fibers. My research combined these two materials and investigated the shear behavior of RC beams enhanced by UFC panels with PBO fiber. By conducting the loading test, I could investigate and compare the shear strength and behavior of the UFC-RC hybrid beams. It showed the good results that it had the potential of using PBO fiber in the UFC instead of steel fiber.

Though everyone in our laboratory has their own research topic, we cannot complete the experiment without other help. Team work is very important. Every

student helps each other to make the test specimens and do the loading test. Of course, we share the experience and learn from each other.

In our laboratory, there are a lot of chances to go to site visit and see different construction projects. After participated several times, I have seen many new and high level technology using in the practical projects, and I really have interests in it. I hope that I will have more opportunities to visit more construction sites and learn more knowledge. I used to dream of becoming an engineer in Japan, so after that, I am looking for a chance to work in Japan. Overall, my goals include improving my Japanese and getting used to Japanese society.

I was pleased and satisfied with the fruitful results of two years in the master's degree program. During that time, I was able to acquire both knowledge and experience while doing the experimental loading tests. I strongly believe that Tokyo Institute of Technology is a superior place to explore knowledge and technology in the field of civil engineering.

NIWA lab members

Site visit in Okegawa

During loading test

Farewell party