

## My experience in Japan

I have visited Shizuoka University, Hamamatsu campus Japan as a special graduate student and stayed for almost 6 months during my PhD work. This was a result of the collaboration between my supervisor Dr. Badarinath Karri at IITH and Prof. Toshiyuki Sanada at Shizuoka which started as part of the JICA Friendship project. With their support, I had written a proposal targeted at Overseas Visiting Doctoral fellowship and while that did not materialize, my supervisors decided to go ahead with the research problem through various funding support they could obtain. As a result, I visited and stayed at Shizuoka University over three trips, first in October 2018 for 1 month, then in Jan-Feb 2019 for one month again and finally for a 4-month period from April to July 2019. The entire stay in Japan over these trips was a wonderful learning experience both in terms of culture and also in research.

The problem I worked on during my stay in Japan was related to my PhD research on the interaction between two different sized bubbles. Parallely I was also working on another problem where using an experimental technique to create bubbles at Sanada laboratory, we attempted to measure the dynamic surface tension of a fluid. There were many aspects of a Japanese university and laboratory that impressed me and I learnt from. Firstly, Japanese students are very hands-on especially when it comes to building facilities. While I was there, I observed a complete dismantling of a lab space and re-assembling to create a different set-up in a large room. The entire task was done by my host Professor and his students. It was really an eye-opening experience. Another thing I appreciated was how helpful the students were. Even though there was some difficulty in communication because they hardly used English while I did not know Japanese, they went out of their way to help me with the initial set-ups. After that, I was

also given full freedom to work on my own in doing the experiments and analysing the results. I got to learn new experimental skills – learning a new technique to create bubbles, setting up all the instruments. A side-aspect was how in the laboratory, once we complete our experiment, we need to dismantle it and keep it ready for the next person to do their experiments in the shared lab space. The students at my sensei's (Professor's) laboratory were very eager to learn English since they do not get too many opportunities or the need to talk in English with anyone for so long. So while I learnt and absorbed Japanese culture, they used my stay to enhance their English communication skills. One laboratory culture I was truly impressed with is how within the laboratory and offices, there are no housekeeping staff who come to clean. It is the responsibility of the student and the Professor to keep their respective areas clean. Truly an eye-opening cultural experience for someone like me who is used to comforts in India.

During my stay in Japan our host Professor arranged for both research based and fun trips to different places in Japan for both me and my guide Dr. Badarinath Karri. I had the opportunity to visit Tokyo University of Agriculture and Technology (Prof. Yoshiyuki Tagawa laboratory), University of Tokyo (Prof. Shu Takagi's laboratory) and Hokkaido University (Prof. Masao Watanabe laboratory). The researchers are well known in my field and it was good to interact and see the facilities in their laboratory and research being carried out. During the free time in these trips to Tokyo and Hokkaido we utilized the opportunity to travel around in these cities for sightseeing. Apart from these cities, I have visited Osaka, Nara and Kyoto as well on a personal holiday trip during one of the weekends.

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Hamamatsu itself gave me a lot of memorable experiences such as seeing the Hanabi fireworks show at Hamana lake, chariot parade near the city centre which is very much like a mini-Republic Day parade of India with different cultural chariots, Nakatajima Sand dunes and kite festival and finally trekking on Mount Fuji. I also saw the Pacific Ocean for the first time. It was really a humbling experience to see the vast blue ocean stretching all the way that the eyes could see. A riverboat ride near Kyoto was also a very different experience.

My trip to Japan was filled with memorable experiences seeing the scenic beauty of Japan and the polite and friendly people who were very helpful even though we did not know the language. My two cents to people visiting Japan for study/research is that you should be open-minded to experience a different culture. Japanese people embrace technology and are very tech-savvy, this is something that researchers coming to Japan can experience and learn from and of course, you can learn a lot from the cultural aspects of a laboratory to a student is like one's home to be maintained by the students themselves.



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**One of the memorable moment with friends in Japan**