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Department: Noise Analysis

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I spent 6 months in the Railway Technical Research Institute (RTRI) located at Tokyo. The main reason for my placement in RTRI was to carry out wind tunnel tests on the aerodynamic noise radiated by a high-speed train bogie. RTRI has a world class anechoic wind tunnel in Maibara, which provides the optimum conditions to carry out aeroacoustic tests. The results from the experiments are to be used to calibrate and validate a semi-empirical prediction model for the aerodynamic noise radiated by high-speed train bogies. Apart from carrying out my research, I was involved in many of the activities that the Noise Analysis group carried out, which were very useful to learn different things and to get a broader perspective of cutting edge research in railway noise and vibration.

I found the RTRI a really nice place to make a placement. They have many world class facilities to carry out research related to railway engineering and expertise in many fields. In terms of social activities, there are many associations inside the institute that you can join freely. I was part of the soccer club, rugby club, tennis club and the PKO club (they gather once per month to speak English, eat pizza and drink some beers). They held periodic seminars in different topics, where I was always invited to join.

Tokyo is a vibrant city where you can find from really crowded commercial areas and places of entertainment to quiet neighbourhoods where you can get lost and find trendy local stores, restaurants and cafes. The RTRI is placed at Kunitachi, a lovely area that is quiet but also offers many places to eat and to drink. Because the Hitotsubashi University is there many student are living in this neighbourhood. It is well communicated with the city centre (35 minutes to Shinjuku by train). RTRI provided me an accommodation just beside the research centre for a low price, which was very convenient.

I really recommend trying to get in touch with Japanese people the most you can. Even the communication can be difficult sometimes they are really kind, friendly and open to help you. I think it is worth it to learn some Japanese expressions. It seems a huge task to learn Japanese but I think it is attainable to learn some basic conversational sentences and Japanese people will really appreciate it.

Finally, I want to thanks JSPS for giving me this opportunity to have such a nice professional and personal experience in Japan.



Top. RTRI's rugby club farewell "nomikai". **Bottom.** General view of the experimental set-up used during the wind tunnel tests at Maibara (one of the technicians is circled just to give a reference to have the right perspective of the size of the wind-tunnel).