



Research in one sentence

Sustainable design and Sustainable infrastructure

### What is your uniqueness in your research?

My research focuses on developing cost-effective solutions for the construction industry by utilizing high-strength steel reinforcing elements in concrete slabs. This approach not only enhances the load-bearing capacity and overall performance of the structures, but also reduces the amount of steel required, leading to cost savings for builders and contractors. My goal is to provide practical and affordable solutions for the industry, while also promoting sustainable design and construction practices.



### Background of joint research with Japanese Co-PI

As joint research with my Japanese Co-PI, Prof. Yuma KAWASAKI from Ritsumeikan University, our focus is on exploring the fracture behavior of high-strength steel reinforced concrete through experimental investigation. We utilize acoustic emission techniques to study the behavior of the material and analyze the data to better understand the performance of high-strength steel reinforced concrete systems.

I had the privilege of working with world-renowned researcher, Professor Yuma Kawasaki from Ritsumeikan University, during an internship opportunity in his lab. Our interactions on various research topics sparked a collaboration that has since continued to flourish. I am grateful for the opportunity to work with him and look forward to future opportunities to collaborate with him.



### What are the tips to have collaborated with Co-PI for so long?

Successful collaboration with a Co-PI requires active and regular communication, clear expectations, a shared goal, and a flexible and adaptive approach to problem-solving. By establishing open channels of communication, both parties can discuss the progress of the project, address any challenges that may arise, and work together effectively to find creative solutions. Investing time and effort into building a positive working relationship, having a shared vision, and focusing on a common goal are also crucial components of a long-lasting and productive collaboration.

### What are benefits from collaboration with Japanese Co-PI?

By exchanging students as interns, both sides can benefit from cultural exchange and broaden their perspectives. The students will have the opportunity to learn about infrastructure development in both

## Interview with PI of JICA Research Grant under FRIENDSHIP2.0 Project

Japan and India, which can help them develop skills that are valuable in a global context. By facing challenges together, both parties can work towards overcoming obstacles and finding solutions. Collaborating with a Japanese Co-PI can provide opportunities for networking and building relationships, which can be valuable for future collaboration and professional development.

### Prospects regarding India-Japan collaboration

The prospects for India-Japan collaboration are promising, with the potential for further expansion through additional funding opportunities. This partnership has already proven successful in addressing infrastructure issues and promoting sustainable and concrete solutions. The collaboration provides a solid foundation for continued progress in these areas.

### Do you recommend JICA Research Grant under FRIENDSHIP 2.0 to the other faculty members?



Yes, I would highly recommend the JICA Research Grant under the FRIENDSHIP 2.0 project to other faculty members. Collaborating with multiple teams has the potential to bring multiple benefits, including shared resources and a wider range of expertise and perspectives. The JICA Research Grant offers a great opportunity for further advancement in research and problem-solving.