



Research in one sentence

Resource from waste

What is your uniqueness in your research?

I work in the department of civil engineering and the department of climate change. Coming to my research, I work on the application of nanoparticles in water and wastewater treatment. This includes different advanced treatment techniques like membranes, photocatalysis, electrochemical methods, reactive sorption, and redox catalysis. It includes both in-situ remediation and ex-situ treatment options.

Background of joint research with Japanese Co-PI

My Co-PI is Prof. Naoki Yoshikawa from the University of Shiga Prefecture, and our topic of joint research is Application and Life Cycle Analysis of Waste-based Biochar for Water Treatment. How to find Co-PI was pretty simple. I had seen researchers' profiles in the Google Scholar and the websites. And I had made a list. After that I just wrote email to all of them and figure out who I'm going to work with.

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

Discussion is one of the topmost tips. Through discussion, we can make it clear that what is our

expectation on another. That helps move things forward.

What are benefits from collaboration with Japanese Co-PI?

For students, it is great opportunities to know the process reaching a consensus, and how project is going.

I believe I would be very much entrusted to sending my students the Co-PI if someone comes from there to my lab.



Prospects regarding India-Japan collaboration

Along with water and wastewater treatment, our group works on the conversion of liquid or solid or industrial waste into useful products, or recovering useful materials, and harvesting energy from them. Industries are interested in this kind of work, so we will explore more collaboration including industrial collaboration.

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



Yes, I am glad to. Also, I encourage the other faculties to apply for future JICA research grant. It is so beneficial as it provides an opportunity to work with a Japanese Co-PI.

Furthermore, Japandesk at IITH helps in each level of this process and makes the overall journey a memorable one.