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(23 years old)  
Brazil

**I understand you are here at AIT on a long-term internship programme, who are your associated professors?**

My supervising professor is Dr. Ram Bhujel. A Few years ago, there was a link programme with my university in Portugal, partnered with AIT, and associated with Wageningen University in the Netherlands. Now the programme is over but there is still some cooperation with my professor and Dr. Bhujel in AARM.

**Can you tell me your associated institutes?**

In Portugal, my department is the department of biology in the Universidade de Aveiro and here its AARM with Dr. Ram Bhujel.

**Who are your funding bodies, is there an organisation that provides from your funds here in AIT?**

I have a scholarship from the Foundation of Science and Technology in Portugal (FCT - Fundação para a Ciência ea Tecnologia). This scholarship covers some benefits such as undertaking internships in other countries. The scholarship covers my expenses, such as travel, during my internship here.

**So, you mentioned your Brazilian and you studied in Portugal, what was you previous degree?**

In Brazil my first degree was in biology, in the Universidade de Brasilia, the capital, it was a good course. I choose to do environmental monitoring and study environmental pollution and after my degree in Brazil, I achieved my masters in Portugal. My area of study is tropical environmental studies, so I am here for one year, six months now and six months next year, and then maybe I'll return to Brazil...

**So just to get a background on your interest, is there any specific area of biology your interested in, you mention you're a tropical biologist, but what specifically?**

The field that I am most interested in is environmental pollution. There are several subjects to choose from, but I've chosen to study the environmental impacts of aquaculture in rivers, and other freshwater ecosystems.

So the issues that I'm working with now are: toxicology and the affects of chemicals in model organism. This was my work in Portugal where I studied enzymatic activity and physiology of organism exposed to certain chemicals. Here in AIT, it is more field orientated, where I can take samples from the rivers and places that have been contaminated and see the effect on standard organisms as well. In Portugal I had a good laboratory where I can do experiments and in AIT I can observe the effects in real life scenarios.

**That very important work and there is a lot of interest in that field these days. So lets discuss why you chose AIT. Who introduced you to AIT?**

AIT is an old partner from the Universidade de Aveiro. My supervisor came here for his PhD five years ago, and I believe there was another PhD student at that time here. During that time several students from Portugal came for internship.

Yes, I think this relationship is solid and constant between AIT and the Universidade de Aveiro. When deciding which filed I would focus on for my PhD, I knew was interested in aquaculture and it's environmental impacts because its a real problem here. In Europe, there are a lot of issues to study there as well, but here in Thailand you have real pressing problems. Here we can see environmental contamination happening with large shrimp productions, so there are large problems here and we can try to help solve that.

**So you didn't have any doubts in choosing AIT then?**

No. I think it was the right decision.

**You were confident that you developing something related to your field?**

Yes. In Portugal, when you get a PhD scholarship you must already have a clear plan. In my case after one year of lectures I had to choose my field and I looked for options in toxicology where most of it involved lab work for 4 years and I didn't want this.

They had several options with aquaculture in Europe, but in Europe there are a lot of regulations, a lot of tools and techniques already developed; why would I want to work with that? When I saw the opportunity in tropical ecosystems in Asia, I jumped on it and being from Brazil there are similar problems where I can conjugate them to Brazil. I've been here for a month and I think it was a good choice

**So you say the advantage of freely conducting your work was a positive to choose Thailand and AIT?**

Yes

**What was the final persuasive point to making your choice to come to AIT?**

The field of study and the questions. I have three years to work on my thesis; I don't want to stay in boring labs and offices for three years and aquaculture in Asia is a good field, I think this was it. Obviously, the relation with my professor and AIT helped me decided to come here.

**Overall, are you happy with your choice of coming here?**

Yes

**What were your first impressions of the actual institute?**

This was interesting. I've come from Portugal and I noticed some similarities. But there are a lot of similarities to Brazil. I am quite easy going and my first impression was that this is a familiar place.

**So no culture shocks then?**

No No No

**So lets move on to the most important point. Can you please explain your work and what you do here?**

I've been here for a month now. Picking up ideas on what I can do here, what kind of work I can develop and look for potential partners. I would like to go to the fish or shrimp farms, take some samples and look for good scenarios.

I cannot choose a farm with outer influence. I would like a farm where the effluent exits directly from the farm into the river and to investigate this is difficult, I need a farm that is isolated from industry. Now, I've visited 5 or 6 different farms and need to choose one but my work here is basically 2 things:

- 1) Observe the contamination in aquaculture systems. Take samples and perform a chemical analysis and with this analysis we can see which chemicals are the most important contaminants in freshwater ecosystems in Thailand

After that...

- 2) I will take these samples and will determine if these contaminants will or will not have affect on the aquatic organism.

So the process is in two steps and the first step I hope I'll start around the beginning of November then start a short monitoring programme.

For this month I would like to do a similar study that I did in Portugal. I have some ideas of the chemicals used in the farms here and there is a list of the chemicals used, which I will investigate.

I would like to test these chemicals in lab conditions with indigenous fish species in Thailand. I've been to several ornamental fish farm and taken 15 fish and exposed them to different contaminates and investigated the LD-50 values. However, these contaminates I studied in Portugal cannot be applied to Thailand because of the different conditions such as ambient temperatures, chemical properties, and the different target species. I want to verify if the response of the organisms here is similar to the ones I investigated in Portugal.

**It seems like you have a lot of work ahead of you but more importantly are you enjoying it?**

Yeah, sure.

**...and you are enjoying the first hand experiences of going to see the different farms?**

Yeah, it's all very interesting, not just because I enjoy the work. If I stayed in Portugal buried with articles and books and didn't have these contacts with the farms and these real problems, it doesn't make much sense.

For example, when I first arrived in Thailand, there were numerous chemical compounds, which I tested in Portugal but now I am certain that more than half of these compounds are not used in modern Asian aquaculture today. They were used in the past but much less often these days and I think this is due to the organic matter input, but if I wasn't physically here then I cannot see and understand that.

**So would you say the best aspect about your work in AIT is going out to see the farms, physically being there and observing how see how things can be used to develop your thesis?**

Yeah for sure.

**Now Dr. Bhujel and Mrs. Lucia are your main connections to the farms. Have you found their inputs to be useful? Any comments on the staff and the faculty at AIT?**

Lucia is the most helpful person in the world! She helps me with the farm contacts and is always pleasant. Here it is like in Brazil everybody is smiling and saying 'Sawasdee khaa'. It's very nice. Just positive consideration and very time I ask Dr. Bhujel something by mail, he is always good to reply with useful comments.

**So it's a very good environment then?**

Yeah, and this is very important. If you have a good environment then everything else will be fine.

**Then you work will be good as a result of that! So over all are you finding your time to be satisfactory academically, and socially?**

Yes

**On that note, would you recommend to AIT to your peers back in Portugal or Brazil?**

Yeah sure, especially for my field of study

**What is you future plan? How will you apply your experiences here in AIT?**

I came to AIT with some expectations. Like I said before, I am interested freshwater toxicology and back in Portugal I've had several opportunities to do a lot of lab work in toxicology and biological pathways.

Here, I am looking for real contact with real life field scenarios and real contamination situations. So I hope these six month will result in articles and further results in the chemical analysis of environmental contaminations. After that, I'm planning to perhaps comeback in 2012 to carry out a solid monitoring programme. Because monitoring for 4 months is not so relevant and useful and we need time to confirm this data. This is usually the case for PhD projects...

**Mr. Rahul Oliviera, It seems like you have a lot on your hands and we wont take up anymore of your time. We wish you all the best and we hope the experiments yield good and interesting results. I know that Thailand could defiantly use this kind of expertise. Thank you very much**

**Interviewed by:**

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