

**IGS Scholar's Name: ZHU DEXUAN**

**Research Centre: ERI@N**

**1. Your current employment details (Designation, name of company, country and scope of work)**

I am working for Panasonic Industrial Device Singapore (PIDSG), department Singapore Technology Development Centre (SGTC). I am a research engineer.

**2. What motivates or trigger you to pursue a doctorate?**

My supervisor, Prof. Wang. He is a very kind person and I have known him since I am an undergraduate student. He gives me many suggestions and I would like to learn more from him. Actually, he helps me a lot during the Ph.D. 4 years.

**3. Why or how did you decide to apply to IGS or the interdisciplinary route of research?**

Nowadays, research is not an individual work. IGS provide a platform to us, which we can collaborate with other area. In my research area, power electronics, the research is related with chemistry, finance, materials and even biological. I need an open environment to do my research.

**4. What is your thesis about?**

My thesis is about smart building microgrid. I design the new topology of overall power system. Then, since I define the subsystems in the overall system like building motor drive system, building PV system, I detail describe the individual sub system as well. The objective of this research is to improve the building energy efficiency.

**5. Why did you choose this topic and how does it benefit people or industries globally or internationally?**

Smart building is the key factor in eco society and sustainable earth. Moreover, the building is the largest factor of world energy usage. To improve the building energy efficiency is a promising method to achieve proper application of energy over the world and reduce the energy wasting.

**6. What kind of interaction did you have in IGS? How did that help you?**

I attended outbound activities @ 2012 and team building @ 2013.

I think it helped me to know how important the teamwork is. Teamwork is very important. When we do the research, it is not only myself issue. But also the whole team. We can discuss, collaborate, and share the ideas.

**7. What are the challenges you faced during the candidature and how did you overcome it?**

As most of the Ph.D. candidates, publication will always be the largest challenge. There is no shortcut to overcome it, the only thing you can do is keep trying. You can ask your seniors, your supervisor, and your friends to give you some suggestions. However, you still have to keep trying to submit your papers. Keep trying is the only method.

**8. What do you think are the attributes for PhD students to successfully go through the 4 years?**

I try to list the things below:

- Keep passion
- Communicate with your supervisor
- Share ideas with your college
- Know how to release stress
- Find a hobby to fulfil your life
- Keep passion again

**9. Please share 1 key motivational/ key take away message with your juniors?**

Continue the last question, I think keep passion is the key point. 4 years is not the short time. Many times I feel it is very hard to continue. So I must try something to make sure my passion is still there. So I can finish the Ph.D journey. Everyone may have different way to achieve it, but, please remember keep passion.

**10. How does it feel like when you received the scholarship offer?**

I think it is like the following 4 years is settle down. I remember the first thing I do is booking the flight ticket to come back home for a good vacation. Because I know the next your years will be much tough.

**11. What will you miss after graduating?**

IGS seminars and free food.

**12. What is your next adventure / challenge or any plans for the future?**

I start my work now. I will contribute to my work at the time. Maybe in the future, I want to do other countries to try different life.

**13. Is there anything you want to say to your family, supervisors, mentors, friends or anybody?**

Thanks from the bottom of my heart. To my supervisors, to my friends, to IGS team, thank you!