

VOICE NO.6

I want to contribute to the society by bridging research and market needs.

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Tong Bu



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Tong Bu started her career as a researcher after she earned her B.S. in Marine Biology at Ocean University of China. To deepen her expertise, she decided to study not only in China but also in Europe, and got her M.S. in Marine Biology and Nano-bio Technology. After that experience, she came to Japan and received a Ph.D. at the University of Tokyo with financial support from RIKEN. Deciding to use her knowledge for society, she entered Bosch Corporation in 2015.

Chance Dilemma Progress Future

Taking a step into a new area

I came to Japan after I received my M.S. in Europe, because I was convinced I could learn the secret of success from

Asia's top country for innovation, technology, industry, and economy. Fortunately, I could join Prof. Maeda's bioengineering laboratory, and began my study with financial support of RIKEN as an International Program Associate (IPA). Being an IPA also opened me the opportunity to take the entrance examination for the Uni-

versity of Tokyo. As I deepened my expertise I felt distant from society. Originally, I aspired to be a scientist. However, I gradually came to see that there was a gap between science and technology, and products. This gap fascinated me a lot. I came to think that I wanted to use my expertise helping to invent products that

customers really want. Therefore, after I earned my Ph.D. here in Japan, I decided to join industry to see how society works.

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Conflict of different cultures

It was not that easy to get a job in Japan. The differences between language, culture, and business manners became big obstacles. Fortunately, Bosch was recruiting researchers from academia and finally I could get a job as project engineer of the Corporate Research (CR) Department. It took me some time to get used to the atmosphere in the field of business after I joined Bosch, because the ways of thinking in academia and industry are different. In academia, we aim to announce the results of studies, but in industry, we have to think how to bring the results to the market. Compared to academia, we have more factors to consider, such as the market, customer needs, and company strategy. As a matter of fact, most ideas would not catch people's attention even if we came up with 100 wonderful ideas. Once, I launched a project to develop a device for beauty care, and I found cutting-edge technology for such a project. However, it was postponed after the market and competitor research was conducted. That's quite difficult for researchers in academia to accept at first.

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Overcoming severe obstacles

Overcoming the difference between academia and industry, I read a lot of books about innovations in industry, and I talked to senior researchers in Corporate Research at Bosch. It helped me that Bosch provides employees with a very supportive global education system. For example, Bosch teaches us how to promote a project, how to do project management, how to communicate with other departments such as marketing, sales,

etc. Therefore, I have gradually gained understanding how to bring my expertise to the company. So far, I have been satisfied with my career change to industry. Researchers work individually in academia, and it's very hard to bear up under the pressure. In industry, however, we work as a team on a project and support each other. In addition, working at Bosch I can maintain a work-life balance, so I can spend time with my family. That's the most pleasant change for me.

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Infinite possibilities to contribute to society

Currently, I have no concrete targets regarding career success. I want to be a bridge between "academia and industry", "technology and products", and also "Japan, China and the world". I wish to give back to society which supported me a lot. To mature in life, I think I have many choices to take. Now, I work in industry utilizing experiences I have gained in academia, but I guess it's still possible to aim to be a professor supplying knowledge to industry. What I want to say is "The sky is the limit" and "You'll never know unless you try."



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I would like Ph.D. holders to know that academia is not the only way to build their career.

There are, of course, some differences between academia and industry, but I think the biggest difference is the aim of research. The task of academia is to develop the knowledge of science and technology; on the other hand, industry focuses on developing production methods that can bring science and technology to the market. Even though the goal of research is different, the mindset of a researcher overlaps between science and technology, since both require "new inventions". In industry, we face more problems that we must solve to turn an idea into a commercial reality. But I know Ph.D. holders can deal with this, because they learned how to solve problems systematically and independently through Ph.D. programs. They can approach the right stakeholders, establish a network, and lead a project while taking care of junior fellows.

I know a lot of Ph.D. holders trying to pursue an academic career path, because I was one of them. It is quite difficult for researchers to know what industry can offer. I would like to recommend that these researchers not focus too much on academia, but instead be open-minded and look out for opportunities. Then they will realize that industry as well has a lot of interesting topics to work on. The "Flexibility", "Motivation" and "Self-Confidence" researcher enhanced through their Ph.Ds. are essential even in industry and will allow them to build their career in either academia or industry. Of course, it's not impossible to go back to academia from industry. If your dream is to be a professor, why don't you think "It might be useful to gain knowledge from industry"? Whichever career path you decide to follow, the important thing is to have the capability to change your mindset. Please don't hesitate to jump into the business field.