

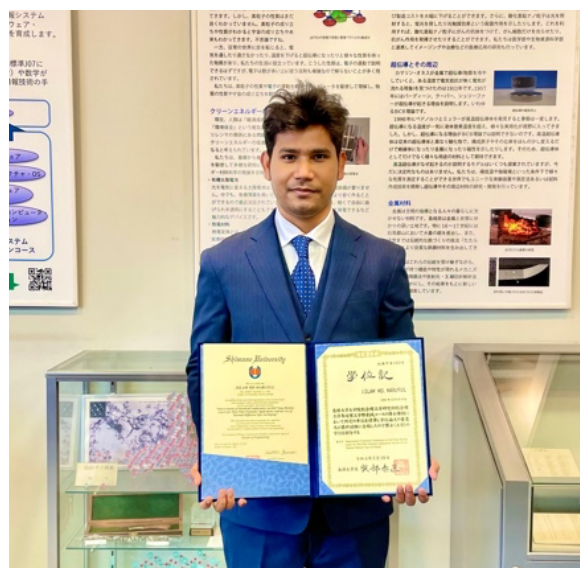
I am Islam Md Maruful, from Bangladesh. This year March 2022, I obtained Doctor of Philosophy in engineering from Interdisciplinary Faculty of Science and Engineering at Shimane University. Currently, I am working at ASM Japan as a Process Engineer (R&D). During my master's program, I realized that I enjoy conducting research and find this job path to be highly appealing. It was appealing to be able to devote several years to my research topic and look into potential answers to a particular research problem. I believed that I would have enough time to make real progress in that field of study. It was simultaneously really uplifting, motivational, and motivating me. That is the reason why I chose to pursue a PhD. I felt the need to actually look for solutions to the problems the semiconductor industry is currently having. That was my main motivation. At the beginning of my PhD, I didn't know that I would stay in academia, mostly because my background was in engineering and I like to do practical stuff as you might know. That's why I never thought I will be an associate professor or an editor. I just wanted to solve challenges and solve problems.

The content/theme of research is “ZnO Nanoparticle-based Thin Film Transistors (TFT)”. ZnO nanoparticles (NPs) based devices are innovative technologies to develop the new generation low-cost TFTs for its good properties and broaden selectivity. The technology for the NPs based TFTs is relatively simple, compared with traditional TFT fabrication. Thin-film transistors are the basis of the extraordinary development of flat screens that equip all present computers, TVs, smartphones, and generally all the current displays. the goal of the research is to fabricate TFTs with low cost and good properties by myself using n-type and p-type ZnO NP layers and to improve the TFT performance based on the understanding of the carrier conduction mechanism. To enhance the progress of TFT performance Ga doping and thermal annealing (at a higher temperature) carried out and successfully achieved low resistive ZnO NP layer.

In addition to my academic work, I like to volunteer and engage in recreational activities. I learned a lot about academics and Japanese culture at the University and from engaging with locals during my five years of education at Shimane University. I learned Japanese as much as I could in order to better comprehend Japanese culture and to utilize my knowledge in my future career.

I choose the semiconductor industry because I was attracted to the fact that it is the crystallization of human wisdom and that technology changes very quickly. A variety of technologies are used in semiconductor manufacturing equipment, and they are the crystallization of science, including mechanics, electricity, electronics, chemistry, and information. Before completion of my doctoral course, I planned to find a job at a prestigious research institute or world-famous semiconductor manufacturing company specializing in analysis and evaluation. The fields and themes I deal with were similar to what I have been doing until now, so I hope that I have the skills and insights to meet the customer's expectations. I hope that I will be able to play an active role as a person who can exercise one's strength and judgment. Until now, I have continued my research in Semiconductor industry, which has direct impact on society. I would like to make use of it and contribute to society.

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