■コース生（第５期生）の活動報告

Khan MD Rauf UL Karim

総合理工学府
量子プロセス理工学
一貫制博士１年（修士１年）

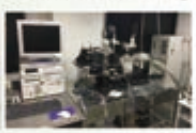
I am Md Rauf Ul Karim Khan from Bangladesh. I completed my bachelor degree from American International University-Bangladesh on 2012 and my major was Electrical and Electronic Engineering. I always want to learn more on my subjects. So, I have done some training apart from academic lessons. I have completed Microcontroller and PLC base industrial training from IEB, Bangladesh. I have participated a training on Bio-medical instrumentation which are based on electronic device from KARL STORZ, Germany. I worked RAHIMAFROOZ Group for three years which helped me to learn more about electronic device and industrial automation.

I have been pursuing my master's degree belongs to Advanced Graduate Program in Global Strategy for Green Asia (GA Program), Kyushu University Since October, 2016. My major is Applied Science for Electronics and Materials (ASEM). I feel blessed to get an opportunity to do research in Hattori laboratory under supervision of Prof. Reiji HATTORI. In my laboratory, our research group is working on Thin Film Transistor and Display Technology.

I am doing my research which is on thermal conductivity measurement of IGZO thin film with Three Omega (3ω) method for characterizing transport properties. The three omega method is one popular technique for electro-thermal characterization of materials. Recently I have measured the Thermal conductivity of IGZO film. Now I am measuring the surface resistivity and Hall mobility with Van Der Pauw method. After that it is possible to measure the carrier concentration. On the other hand, I am also preparing IGZO thin film for the measurement of field effect mobility. I would like to do XRD (X-Ray Diffraction) analysis for phase identification of IGZO film. I hope this research will keep very good impact in display technology.

Under Green Asia curriculum, there are many opportunities to learn and do. Green Asia has helped me to learn not only on my specialized subjects but also Philosophy, economic, social and environmental issues. I hope I can involve myself and do better work in future. I believe, this learning will help me to serve the best to my society.





Eslam Naeim Hussien Abubakr

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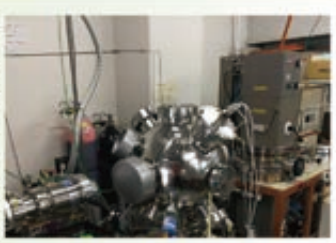
My name is Eslam Naeim Hussien Abubakr, I was graduated from Aswan University in Egypt, and since my graduation I was interested in Semiconductor device in general and Solar Cells application. As well as the solid state physics behind it and how to connect between the material science principles and its electronic application. Green Asia (GA) Program gave me that chance to join a strong research environment at Interdisciplinary Graduate School of Engineering Sciences, Kyushu University in the department of Applied Science for Electronics and Materials. My current research is on materials for optoelectronics, in particular, photovoltaics comprising ecologically friendly materials. The research is mainly experimentally conducted and the experiment covers the growth of new materials in thin film by physical vapor depositions as well as pulsed laser deposition, the structural and optoelectrical evaluations of films, and the fabrication of optoelectrical devices on the basis of the film preparation. Our laboratory has discussed an alternative method for phosphorus doping, and decided to employ the laser-induced doping for singlecrystalline diamond and ultrananocrystalline diamond films by liquid immersion excimer laser irradiation using phosphoric acid as a dopant source. The laser-induced doping is applied to diamond for the first time and is extremely beneficial results is expected. by doping phosphorus using Pulsed laser deposition technique we will be able to benefit from it's amazing electrical, thermal and optical properties for semiconductor applications. After graduation from GA and getting my PHD degree I'm planning to go back to my home country and transfer everything I learned to new students besides that since we are at a sunny country I want to make a large solar cell power plant system and do farther investigation to enhance system efficiency, knowledge has no limits and one can spend all his life learning.



Mahmoud Mohamed Mahmoud Nasef

総合理工学府
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一貫制博士１年（修士１年）

I am currently pursuing my post graduate studies as a second year master's student at the Advanced Graduate Program in Global Strategy for Green Asia in Kyushu University. I am doing my research under the department of Applied Science for Electronics and Materials ASEM which is part of IGSES. It has been a year since I came here and started my studies and research life. It has been an interesting and enjoyable journey up until now. I have learned a lot and experienced many new and unforgettable things. So far, I like the overall Japanese culture and work ethics, as I have gained some experience studying in a Japanese institute and working in a Japanese based company before. My research theme here in Kyushu University is about Optoelectronic Communication Systems, MMI and AWG Technologies. Currently, I am working on new designs for multiplexing and de-multiplexing AWG systems for optical fiber communication. I find this research field very fascinating and interesting to work in and to add to its discoveries and continuous technological improvements. One year has passed and I am still pursuing and maintaining my objectives here in the GA program so far. My main aim in joining the Green Asia Program is that it provides the stepping stones for my future career as a researcher in the field of electronics and materials and at the same time building a sustainable and green environment to live in. The wide range of courses provided by the GA program helped me and will still help improve my technical, social and soft skills. I am looking forward to that and to accomplish great things while I am here. Finally, I hope to complete my studies and graduate from Kyushu University as a PhD student. My plans after graduating from Kyushu University, to pursue further studies in my field of research here in Japan or hopefully to work and gain a couple of years of working experience in a Japanese company and to start a new journey ahead.