UQ-KU PROJECT NEWSLETTER Issue 05



# **UQ-KU Project**

## 九州大学 研究教育交流拠点

UQ-KU Project Newsletter

April 2017

THE UNIVERSITY OF QUEENSLAND – KYUSHU UNIVERSITY OCEANIA PROJECT

## **April Newsletter**

### KU Faculty of Economics' Delegation visit to UQ

The University of Queensland was very pleased to host an esteemed delegation from Kyushu University's Faculty of Economics. The delegation was headed by Professor Johei Oshita; accompanying him were Professor Taro Takimoto and Dr Meifen Chu. The members of the Faculty of Economics delegation have expert knowledge in the fields of cost and management accounting;

economic systems and applied econometrics; mathematical modelling of complex financial systems.

The KU Faculty of Economics Delegation met with members of the UQ School of Economics to explore opportunities for collaborative research as well as academic and student exchange.

In addition, the KU Delegation met with staff from the Institute of Continuing and TESOL Education (ICTE-UQ) to investigate how a tailored intensive English language programme may benefit students from KU's Faculty of Economics.

Also visiting the University of Queensland in March was Professor Syo Matsumura, Manager of the Ultramicroscopy Research Centre at Kyushu University.

Professor Matsumura delivered a seminar to members of the UQ Engineering Faculty, entitled 'Drift Compensated HAADF-STEM Imaging of Gold Nanorods with Picometer Order Precision'. In addition to his presentation, Professor Matsumura met with the Professor Roger Wepf, the Director of UQ's Centre for Microscopy and Microanalysis (CMM); and the Professor Ross McAree, the Head of the School of Mechanical and Mining Engineering.

Professor Matsumura is also the Kyushu University Manager of the UQ-KU Oceania Project and his visit enabled him to meet with the University of Queensland Director of the UQ-KU Project, Associate Professor Kazuhiro Nogita. Professor Matsumura and Associate Professor Nogita discussed progress of the UQ-KU Project, the new and ongoing collaborations between research groups and how best to continue the expanding scope of the UQ-KU Project.

UQ staff welcomes the delegation from Kyushu University's School of Economics. From Clockwise from the left: Professor Taro Takimoto (KU), Dr Meifen Chu (KU), Professor Johei Oshita (KU), Mr Jonathan Read (UQ), Associate Professor Kazuhiro Nogita (UQ), Dr Shino Takayama (UQ), Dr Marco Faravelli (UQ) and Ms Rumi Goto (International Liaison Officer Faculty of Business, Economics and Law, UQ)

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Professor Syo Matsumura delivers his presentation on Drift Compensated HAADF-STEM Imaging of Gold Nanorods with Picometer Order Precision

### Research Opportunities for UQ Students

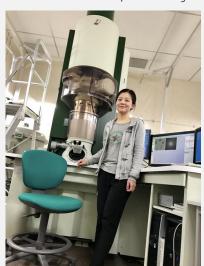
As mentioned in the January Newsletter, UQ PHD students Chen Zhou and Flora Somidin were guests at Kyushu University during November and December of 2016. They have kindly written of their experiences at Kyushu University and Fukuoka for this edition of the UQ-Ku Newsletter.

#### INSPIRED BY THE DIFFERENCE

Supported by the UQ-KU project, I had a chance to visit the Ultramicroscopy Research Centre (URC) at Kyushu University for two months (24/10/2016 to 22/12/2016), hosted by Prof. Syo Matsumura. I was excited when I know the URC is equipped with several high-end facilities, particularly the atomic resolution transmission electron microscopes and ultrahigh voltage transmission electron microscope. Accessing these world-leading facilities for researchers in Materials Engineering is like a big cake in front of the sweet lover, non-stop.

My research in Kyushu University was greatly supported by Prof. Matsumura's group and technicians from URC, so that I got

involved quite fast. I joined the group meeting and reading seminar every week, in which I was always inspired by the different ideas coming from different research area. Besides, thanks to lectures of Physical Principles of Electron Microscopy given by Prof. Matsumura, I gained the basic principles of electron microscopy. experiments were carried out in URC every week, handson, with kind help of



Yamamoto san and Toriyama san, who are very patient about any questions and always there for help. I would like to thank all of them, the research staff, technicians, students, particularly Prof. Matsumura, who was busy but still tracked my research progress and gave me suggestions.

Life in Fukuoka is similar with that in Australia, that people are very enthusiasm and ready to help; it is also different, particularly in food and culture. On my welcome party held by Prof. Matsumura's group, I had a chance to taste the traditional Japanese food, such as sushi and okonomiyaki, and make takoyaki by myself, and we ended the party by singing the Hakata song to express best wishes for each other. What an interesting experience! I spent all my weekends on exploring interesting places in Fukuoka, such as Nokonoshima Island, Canal City and Dazaifu Tenmangu shrine, and tasting Japanese food, such as Hakata Ramen and Udon. Life in Fukuoka is more interesting and low-cost, so I would recommend students in UQ to join the UQ-KU exchange program to experience life in the other side of the earth.

Ms Chen Zhou
Ph.D. student in School of Mechanical and Mining Engineering
The University of Queensland (UQ), Australia

#### MY KYUSHU UNIVERSITY EXPERIENCE

Last year, I was very fortunate to have my job training at Kyushu University (KU) Advanced Characterization under Nanotechnology Platform project, hosted by Prof. Matsumura, for about 2 months from 24<sup>th</sup> October to 23<sup>rd</sup> December 2016. It was a valuable and wonderful experience. I felt very honored to be given such a big opportunity, which it is very unlikely to happen for a first year Ph.D. student like me. I am also very grateful to my funding research body, Nihon Superior Company Ltd., Japan, for fully sponsored my flights and accommodations during my stays in KU. Initially, my training's objectives were



mainly related to transmission electron microscopy, and therefore I was assigned to have my training in Ito campus, Fukuoka, where the Ultramicroscopy Research Centre, KU, is located.

I was very overwhelmed by the kindness and helps I received from the academic staff, technicians and research students at the KU. As a beginner in TEM, it was very hard for me to catch-up the fundamental concepts of such cutting edge equipment at first. However, with the never ending supports and passionate teachings from the experts in KU, I managed to learn a lot and quickly in a very limited time despite the language barrier. I also had been given the privilege to learn and to do some experiments using the ultrahigh-voltage transmission electron microscopy (UHV-TEM) during my training. My experiments were successful with the generous help from Mr. Hiroshi Maeno, the expert, and very skillful microscopist. I was amazed by his skills in handling such a giant UHV-TEM. Because of his supports and skills, I even managed to get multiple great results from my in-situ heating/cooling experiment using the UHV-TEM. I am so privileged to have been given the chance to work with the world-renowned experts in transmission electron microscopists, such as Prof. Syo Matsumura and his group members.

For two months, I stayed in a dormitory near Kyudai-Gakkentoshi station, which is a little bit far from Ito campus (KU), but a perfect place for a first-time visitor like me. The dormitory provides breakfast and dinner too! A good place to start learning some basics but essential Japanese table manners and fully experience a cafeteria etiquette in Japan. My two months stays enabled me to truly explore and experience the beauty of Japanese cultures, cuisines, and architectures. I was truly impressed by the culture, which I believe almost everything was reasonably well organized and efficient. I also love the



autumn weather during my stays, it was a spectacular scenery. I also enjoyed the foods so much that I have even gained some weights, but its worth it. I also had the chance to visit a few interesting places during my free times, such as Nokonoshima island, Dazaifu Tenmangu shrine, etc. I had a great time here and I would strongly recommend that our fellow students visit KU on an exchange program. I'm looking forward to visiting Kyushu University again next time!

Ms Flora Somidin Ph.D. student in School of Mechanical and Mining Engineering The University of Queensland (UQ), Australia

FOR MORE INFORMATION VISIT

http://www.mechmining.uq.edu.au/uq-ku-project