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KYUSHU UNIVERSITY

UQ-KU Project

九州大学 研究教育交流拠点 UQ-KU Project Newsletter December 2021

THE UNIVERSITY OF QUEENSLAND – KYUSHU UNIVERSITY OCEANIA PROJECT

The Second Covid-19 Edition of the UQ-KU Project Newsletter

Agility, Adaptation and Resilience

Another challenging year for staff and students at Kyushu University and the University of Queensland is ending. At this time all of us should reflect on how well we have dealt with the ongoing challenges of providing our students with the best possible learning experiences, that will provide a pathway to successful careers.

This Newsletter serves as a testament to the agility, adaptability, and resilience of all involved with the UQ-KU Project, as 2021 has been another successful year, and the many achievements of the UQ-KU Project are outlined herein.



Professor Syo Matsumura

Investigator of an Australian Research Council Discovery Grant. Additionally, as part of this new role, Professor Matsumura will also cosupervise a PhD student from the University of Queensland, deliver a lecture to the School of Mechanical and Mining Engineering and will host the UQ-JPIE (MECH4950) in 2022 (we remain optimistic that travel between Japan and Australia will resume in 2022).

Those at the University of Queensland would like to congratulate Professor Matsumura and we look forward to working more closely with him and benefitting from his considerable knowledge and expertise.

Covid-19 Edition

Japanese-English Translator Engagement 2021

Students from the University of Queensland's Master of Arts in Japanese Interpreting and Translation (MAJIT) were engaged to do translations from English to Japanese of UQ-KU Project Document, for the Internet Landing pages of the UQ-KU project and of this Newsletter from English to Japanese.

The following Masters' students were engaged in 2021:



Mr Brendan Tran (L) and Ms Mariko Kishi-Debski



Mr Naoko Iwata (L) and Ms Narumi Kameda

The UQ-KU Project thanks these students for their service, and we hope that the students'

Professor Syo Matsumura appointed as Honorary Professor at UQ

Distinguished Professor Syo Matsumura has been appointed as an Honorary Professor in the School of Mechanical and Mining Engineering, at the University of Queensland. Professor Matsumura has co-managed the UQ-KU Project, since its inception. Professor Matsumura has also had a long history of collaboration with many researchers from the University of Queensland and is the Partner experience was enjoyable, and it was of value for what is to become their profession.

The University of Queensland & Kyushu University guest lecture series

The guest lecture series by the University of Queensland and Kyushu University staff members has continued in 2021 albeit by online delivery.

Professor Kazuhiro Nogita delivered a lecture series entitled "Systems for large scale hydrogen storage and delivery." in English to a cohort of engineering Master course students at Kyushu University. This was part of the at Kyushu University lecture series "Advanced Engineering 2: Sustainable energy for a better future" held on 19th January 2021,

Mr Jonathan Read also delivered a 13 lecture series on Engineering Ethics to the Kyushu University's 3rd year cohort of international engineering and applied chemistry students.



Associate Professor Stephen Lyth

Kyushu University Research Fellow, Associate Professor Stephen Lyth deliver a lecture in April to a cohort of the University of Queensland Masters' Students. The UQ students were enrolled in MATE7016, Materials for Energy Conversion and Storage, and Associate Professor Lyth delivered to the UQ students a lecture on hydrogen storage.



Kyushu University students participating in Professor Kazuhiro Nogita's lecture on "Systems for large scale hydrogen storage and delivery."

Kyushu U 3MT Competition

An initiative by the UQ-KU Project, Kyushu University held its inaugural 3-minute thesis competition, where PhD students must describe their research in no more than three minutes. This competition has been held UQ for many years and all students have found it a challenge to condense the reasons for, and scope of, their research into a three-minute time frame. The Kyushu University students rose to the challenge of this format and delivered some inspired lectures.



Kyushu U 3MT Promotional Flyer

Thanks to all personnel involved in this initiative and a special thank you to UQ's Professor Lydia Kavanagh being one of the judges and to Professor Kazuhiro Nogita for being the MC of this event.

UQ-JPIE and Q²PEC Engineering Lecture Sessions

Another initiative of the UQ-KU Project was to hold a joint engineering lecture series between the University of Queensland and Kyushu University.

This lecture series ran from 6th to 17^{th} of September, with 10 lectures in total from UQ and KU. In addition, the Q²PEC students also attended English courses run through TAFE College Queensland, and these students were then challenged with making a small presentation at the end of their Q²PEC online immersion studies, on 24^{th} September of 2021. The programme and reflective essays by Q²PEC students, Sophie Kimura and Takaharu Kuraki are included at the end of this Newsletter.

UQ Japan Day

The University of Queensland held the inaugural UQ Japan Day on the 10th of November 2021. This event was opened by His Excellency Mr Shingo Yamagami, Ambassador of Japan to Australia, and Professor Deborah Terry, President and Vice Chancellor of the University of Queensland.

This was an initiative of UQ's Global Engagement Team, with strong support from the UQ-KU Project, with Professor Syo Matsumura and Professor Kazuhiro Nogita hosting a breakout session entitled "Advanced materials characterisation opportunities between UQ and Japan".

Acta Student Awards

Dr Flora Somidin, an alumnus of the University of Queensland, received one of the prestigious Acta Students Awards for 2020 (announced in July 2021). Dr Somidin, was one of only 15 recipients globally (for student first authors) and it was for her publication:

F. Somidin, H. Maeno, T. Toriyama, S. D. McDonald, W. Yang, S. Matsumura, K. Nogita, "Direct observation of the Ni stabilising effect in interfacial (Cu,Ni) $_6$ Sn₅ intermetallic compounds", Materialia, 9 (2019) 100530.

Dr Somidin's received strong support from the UQ-KU Project and Kyushu University's Progress 100 Project, which enabled her to travel to Kyushu University to access the most advanced transmission electron microscopes.

The UQ-KU Project in 2022

As another challenging year draws to a close, we can still take pride in the learning outcomes and diverse experiences that we have provided our students at KU and UQ.

The pandemic is still presenting challenges, but hopefully we will meet these with the same strength and resilience that we have shown in the past two years. The future is definitely much brighter!

A Happy New Year to Everyone!

Program

Advanced materials characterisation opportunities between UQ and Japan

This workshop brings together researchers from Kyushu University and The University of Queensland to introduce the cutting-edge facilities for materials analysis, including Electron Microscopy, to both researchers and students. Looking at case studies of successful collaborations between the two universities, the session aims to inspire staff and students to avail themselves of opportunities these networks provide for collaborative research.

Time	tps://uqz.zoom.us/i/87527074580 Details Welcome Professor Kazuhiro Nogita, School of Mechanical and Mining Engineering, Faculty of Engineering, Architecture and Information Technology, UQ			
11.15 - 11.20am AEST 10.15 - 10.20am JST				
11.20 - 11.35am AEST 10.20 - 10.35am JST	Introduction of UQ-CMM and Australian Nano-tech organisations Professor Roger Wepf, Director, Centre for Microscopy and Microanalysis, UQ			
11.35 - 11.55am AEST 10.35 - 10.55am JST	Overview of the Kyushu-Ultramicroscopy centre and Japanese Nano-tech support pro <u>Professor Syo Matsumura</u> , Department of Applied Quantum Physics and Nuclear Engineering, Kyu University			
11.55am - 12.10pm AEST 10.55 - 11.10am JST	Case studies of research outcomes involving collaborative UQ and Kyushu University relationships <u>Professor Kazuhiro Nogita</u> , School of Mechanical and Mining Engineering, Faculty of Engineering, Architecture and Information Technology, UQ <u>Emeritus Professor Jin Zou</u> , School of Mechanical and Mining Engineering, Faculty of Engineering, Arc tecture and Information Technology, UQ			
12.10 - 12.15pm AEST 11.10 - 11.15am JST	Conclusion <u>Professor Kazuhlro Nogita</u> , School of Mechanical and Mining Engineering, Faculty of Engineering, Architecture and Information Technology, UQ			

UQ Japan Day: Breakout Session 3 Programme

MEMORABLE EXPERIENCES IN Q2PEC

Hello, I'm Takaharu Kuraki. I'm a sophomore student at department of Civil and Structural Engineering in KU. I had many unforgettable experiences through this program.

There are many personal changes to happened to me through this program.

For example, before I participated in Q²PEC, I was very shy and I was afraid of asking questions, but after Q²PEC, I found that asking someone questions or talking with someone in English is very enjoyable. In the Q²PEC program, we



enjoyed not only the UQ-KU Engineering Sessions, but also the English classes at TAFE Queensland. I was in the General English course at TAFE and although the classes were offered online this year, I enjoyed interacting with the many students from foreign countries and I found it fantastic to talk with people in foreign countries by using English! I was also very happy when I asked questions to some of the professors in the UQ-KU Engineering Sessions.

Also, I came to enjoy increasing my English vocabulary. I checked the meanings of some words in advance before the lectures of the UQ-KU Engineering Sessions In addition, the "Video Dictionary Project" in TAFE, where students introduce an English word and explain the meanings, synonyms, and example sentences of the word by using their own gestures or PowerPoint slides was helpful. I introduced a difficult English word, which I checked through the preparation for the UQ-KU Engineering Sessions and thanks to this flow, I found learning new words (especially technical words) very enjoyable!

I want to make the most of those memorable experiences through internships, another shot term English program ELEP, studies in abroad, and so on.

Thank you so much!

Takaharu Kuraki Department of Civil and Structural Engineering Department of Earth Resources Marine and Civil Engineering School of Engineering Kyushu University

UQ-KU ENGINEERING SESSIONS 2021

The University of Queensland - Kyushu University (UQ-KU) Engineering Sessions 2021: Mon 6th Sept to Fri 17th Sept 2021.

All presentations will be delivered by ZOOM and recording.

Lecture time: 50 min + 10 min Q&A + 30min Spare time

MC: A/Prof. James Cannon (Kyushu University) and Prof. Kazuhiro Nogita (The University of Queensland)

WEEK 1 % Brisbane time

Monday 6 Sept	Tuesday 7 Sept	Wednesday 8 Sept	Thursday 9 Sept	Friday 10 Sept
2:00 - 3:30	2:00 - 3:30	2:00 - 3:30	2:00 - 3:30	2:00 - 3:30
Opening remarks				
	Engineering	Engineering	Engineering	Engineering
Engineering	Session 2	Session 3	Session 4	Session 5
Session 1	(Ultramicroscopy	(International Institute for	(Hypersonic)	(Center for Organic
(Casting & Additive	Research Center)	Carbon-Neutral Energy		Photonics and Electronics
Manufacturing)		Research, I ² CNER)	Prof. David Mee	Research, OPERA)
			Prof. Richard	
Prof. Kazuhiro Nogita	Prof. Syo Matsumura	A/Prof.	Morgan	Prof. Chihaya Adachi
Dr. Stuart McDonald	,	Stephen Matthew Lyth	Dr Chris James	,
(From The University of Queensland) (From Kyushu University)		(From Kyushu University)	(From The University of Queensland) (From Kyushu University)	
VEEK 2 ※Brisbane time				
Monday 13 Sept	Tuesday 14 Sept	Wednesday 15 Sept	Thursday 16 Sept	Friday 17 Sept
::00 – 3:30	2:00 - 3:30	2:00 - 3:30	2:00 - 3:30	2:00 - 3:30
Engineering	Engineering	Engineering	Engineering	Engineering
Session 6	Session 7	Session 8	Session 9	Session 10
(Chemical Engineering)	(Australian Institute for	(Nano Materials)	(Mining Engineering)	(H2 Storage)
	Bioengineering and	(, , , , , , , , , , , , , , , , , , ,	(3 3 3)	(UQ-KU project)
Prof. Lianzhou Wang	Nanotechnology - AIBN)	Prof. Jin Zou	Prof. Peter Knights	(
Dr Jung Ho Yun	3,,			Prof. Kazuhiro Nogita
	Prof. Yusuke Yamauchi			Dr Xin Fu Tan
	Dr Jongbeom Na			(From The University of Queenslan
	Dr MD Shahriar Hossain			
(From The University of Queensland)	(From The University of Queensland)	(From The University of Queensland)	(From The University of Queensland)	Closing remarks

Booking link: A ZOOM link will be provided via email prior to the presentation for those who have booked.

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THE ENTRANCE TO UQ

For many years, I've been taught in and out of school that in order to be an 'international person,' it is important to be able to communicate in English with people from different cultures and backgrounds. There is a need for 'international people' all over the world. Ironically, to me, the education system does not seem to have caught up with this policy. I did learn the language itself, but not how to "use" the language to communicate well, share ideas, discuss a matter, and tell my opinions with convincing facts.



This summer vacation was totally different from all the English education that I had

received so far, and it was filled with wonderful experiences that constantly stimulated my brain with TAFE IELTS class and UQ-KU Engineering Sessions.

As a general rule of thumb, when we are with people from the same country, we lean towards speaking our native language. Therefore, before this course started, I was concerned that the class I'd attend would make no difference from regular English class in Japan, if the class had many Japanese students in it. However, the IELTS class was completely different; we had 4 Japanese out of 11 students and the rest were literally from around the globe and from various age brackets. They came from every continent except for Africa, Australia, and Antarctica. What impressed me the most was how hungry they all were to improve their academic English skills, eager to learn more appropriate and powerful ways to express their thoughts. Their curiosity and perseverance could even give Darwin a run for his money. It also influenced me in a positive way and the four and a quarter hours felt very short.

In the Engineering Sessions, it was not so easy to understand the lectures, but at least I could grab the images of topics and ask questions that came up in my mind and where I didn't understand well. In Japan, students rarely ask questions in the lectures even when the teacher asks, "Do you have any questions?" So, honestly, this was the first time that I stopped feeling ashamed that I didn't understand or had many doubts, and had asked so many questions. But by asking several questions, it made me realize the benefit of questioning, and I truly felt that asking questions is very helpful to test and boost my total understanding; and this is very important since I would have kept misunderstanding which is more shameful than asking a stupid question. Also, Professor Nogita's advice 'Study hard and then



"forget" left a deep impression on me because I had never looked at it that way.

Therefore, I've learned a lot from this fruitful experience with TAFE IELTS class and Engineering Sessions. And I'm really tempted to utilize what I've learned, including new vocabularies, various useful expressions, effective strategies for persuasive writing and so on. So, I'll keep studying hard and try to take as many opportunities as possible to make use of them.

Sophie Kimura

Kyushu University

6

FOR MORE INFORMATION VISIT

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