



## ■GA 新任教員 研究等紹介



グリーンアジア国際リーダー教育センター  
准教授

**Kyaw Thu**

### Profile of Dr. Kyaw Thu, the New Addition to the GA Faculty

Kyaw Thu was born in the historic city of Taungoo, Myanmar, where the largest empire in the history of South-East Asia was rooted. Drawing inspiration from his generation and Uncle, he opted to pursue Engineering profession, despite being top 125 students in the University Entrance Exam for the whole Country in 1996. He received his Bachelor of Engineering in Mechanical from Yangon Technological University (YTU) in 2003 as a top-three student. He was awarded the Scholarship by Singapore to pursue further studies at the National University of Singapore (NUS) and completed his Ph.D. under the supervision of Prof. Kim Choon Ng in 2010. His specialisation in the Ph.D. course is Adsorption cycles for desalination and cooling. During his Ph.D. course, he won the INSTITUTIONS OF ENGINEERS SINGAPORE (IES) PRESTIGIOUS ENGINEERING ACHIEVEMENT AWARDS 2009. After graduating, he joined NUS as a Research Fellow for a short time. To advance his career in the field of desalination, he joined the Water Desalination and Reuse Center (WDRC) of the King Abdullah University of Science and Technology (KAUST), Saudi Arabia and worked as a Research Scientist. Due to personal prioritisation, he moved back to Singapore and work in the Mechanical Engineering Department of NUS as a Senior Research Fellow before joining the Green Asia Program as an Associate Professor in April 2016.

Since his undergraduate days, he has a strong interest and excelled in Thermodynamics. Thus, it is quite natural for him to mingle in the field of thermodynamics later in his life. His research areas include various thermodynamic cycles for several scientific and engineering applications such as cogeneration, HVAC, desalination, dehumidification, energy harvesting and storage spanning from waste heat recovery to renewable energy. Yet, adsorption science and efficiency audit using the Second Law of Thermodynamics remain his main research interest. Dr. Kyaw Thu has a special talent in

engineering design and modelling of engineering systems. He has designed several adsorption desalination cum cooling plants still operating in the Middle East, Europe and Asia.

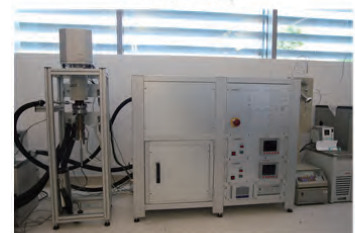
Dr. Kyaw Thu was again awarded the INSTITUTIONS OF ENGINEERS SINGAPORE (IES) PRESTIGIOUS ENGINEERING ACHIEVEMENT AWARDS 2015 and the ASEAN Outstanding Engineering Achievement Award 2015 joining the historic elite Club of Double-Awardee of the IES PRESTIGIOUS ENGINEERING ACHIEVEMENT AWARDS.

Presently, Dr. Kyaw Thu holds seven international patents on adsorption systems for cooling, desalination and dehumidification processes. He has participated and executed more than 10 international research projects (Grants). He is prolific in publication and, to date, he has published more than 70 peer-reviewed international journal papers and almost 100 conference papers winning several best paper awards including one in the International Symposium on Innovative Materials for Processes in Energy Systems 2013 (Fukuoka, Japan).

In his leisure time, Dr. Kyaw Thu enjoys reading World Military History, the rise and fall of the societies.



Discussion on AD pant with his mentor  
Dr. H. Yanagi



Thermogravimetric analyzer



Water vapor sorption analyzer



Surface characteristics analyzer