

**SUNWAY
UNIVERSITY**



Jeffrey Cheah
Foundation
Nurturing the Seeds of Wisdom

SEMINAR ON EMERGING TECHNOLOGIES FOR CO₂ CAPTURE AND UTILIZATION

7-8

JULY
2021

TIME:
9AM-5:30PM
(MYT GMT +8)

LIVE ON



9 CPD
hours
from
BEM



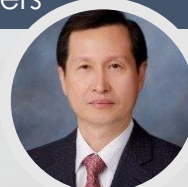
Speakers



Assoc. Prof. Betar M. Galant
Massachusetts Institute of
Technology (MIT), USA



Assoc. Prof. Demitrios
Tsiplakides
Aristotle University of
Thessaloniki, Greece



Prof. Sang-Eon Park
Inha University, Korea



Prof. Sibudjing Kawi
National University of
Singapore, Singapore



Prof. Mohamed
Kheireddine Aroua
Sunway University, Malaysia



Prof. Saidur Rahman
Sunway University,
Malaysia



Prof. Sulaiman Al-Zuhair
United Arab Emirates
University, UAE



Dr. Binoy Sarkar
Lancaster University,
UK



Assoc. Prof. Ir. Dr. Umi Fazara
Universiti Malaysia Perlis,
Malaysia



Dr. Munawar Khalil
University of
Indonesia



Dr. Shaukat Mazari
Dawood University of
Engineering and
Technology, Pakistan



Dr. Arifuzzaman Rahat
Sunway University,
Malaysia

About the Seminar

Climate change is a real threat to life on earth to which carbon dioxide is recognized as the major contributor. This makes reduction in CO₂ emissions a worldwide emergency and priority. To combat climate change as a result of anthropogenic CO₂ emissions, efforts have already been put forth to capture and sequester CO₂ from large point sources, especially power plants; however, the utilization of CO₂ as a feedstock to produce chemicals, materials, and fuels is a judicious strategy as it provides a more economical and sustainable solution than sequestration. Currently tremendous research worldwide is being carried out to tackle the challenge of integrating CO₂ capture with its utilization. As a result, new scientific discoveries and innovative technologies are emerging to mitigate carbon dioxide emissions. Recognising the importance of them, the Centre for Carbon Dioxide Capture and Utilization of Sunway University (member of the EuroAsia Carbon Dioxide Capture and Utilization Network) is initiating a 2-day seminar on "Emerging Technologies for CO₂ Capture and Utilization". It is organized within the framework of the Sunway University International Research Network Grant Scheme. International speakers from USA, UK, Greece, Singapore, Korea, UAE, Pakistan, Indonesia along with speakers from Malaysia will be presenting and discussing the most recent innovations, trends, techno-economic aspects and concerns in particularly challenges encountered and solutions adopted in the field of Carbon Dioxide Capture and Utilization. This seminar demonstrates the commitment to support the United Nations (UN) Sustainable Development Goal (SDG), particularly SDG13 on climate action, SDG9 on industry innovation and infrastructure and SDG7 ensure access to affordable and clean energy.

Tentative Programme

Time	Programme
Day 1	Wednesday, 7th July 2021
9:30 – 9:45 am	Sunway University Video
9:45 – 10:15 am	Welcoming and Opening remarks
10:15 – 11:00 am	CO ₂ Activation as Oxygen Source for Basic Chemicals <i>by Prof. Sang-Eon Park</i>
11:00 – 11:45 am	Crystal facet engineering: A new strategy for enhancing photoactivity of semiconductors in solar fuel production from CO ₂ <i>by Dr. Munawar Khalil</i>
2:30 – 3:15 pm	Emerging Nanomaterials for CO ₂ Capture <i>by Prof. Saidur Rahman</i>
3:15 – 4:00 pm	Electrochemical Routes for CO ₂ Utilization <i>by Associate Prof. Demitrios Tsiplakides</i>
4:00 – 4:45 pm	Enhanced rock weathering for gigaton scale carbon dioxide removal and food security <i>by Dr. Binoy Sarkar</i>
4:45 – 5:30 pm	CO ₂ Capture with Direct Electrochemical Conversion <i>by Associate Prof. Dr. Betar Gallant</i>
Day 2	Thursday, 8th July 2021
9:00 – 9:45 am	Innovating Sustainable Catalyst and Membrane Systems for CO ₂ Capture and Utilization <i>by Prof. Sibudjing Kawi</i>
9:45 – 10:30 am	How artificial intelligence can help in developing sustainable CO ₂ capture processes? <i>by Dr. Shaukat Mazari</i>
10:30 – 11:15 am	Electrode Materials for the Electrochemical Reduction of CO ₂ <i>by Dr. Arifuzzaman Rahat</i>
2:00 – 2:45 pm	Enzyme Technologies for CO ₂ Capture and Utilization <i>by Prof. Sulaiman Al-Zuhair</i>
2:45 – 3:30 pm	Biomass derived porous carbon for CO ₂ Capture <i>by Assoc. Prof. Ir. Dr. Umi Fazara Md Ali</i>
3:30 – 4:15 pm	Green Solvents from Renewable Resources for CO ₂ Capture <i>by Prof. Mohamed Kheireddine Aroua</i>
4:15 – 4:45 pm	Closing Remarks
4:45 – 5:00 pm	Live Virtual Tour of CCDCU Lab

Registration Information

- Registration is compulsory
- Free registration
- Payment RM 300 for those wishing to claim 9 CPD hours

Registration link: <https://bit.ly/3gynyLr>

QR Code:



Registration enquiry

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Organized by:
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Payment Method

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