



**Dr Nurfadzilah Ahmad**, Head of Strategic and Corporate at Solar Research Institute (SRI) Universiti Teknologi MARA (UiTM).

Dr Nurfadzilah is involved in nanomaterial and solar technology and she is working closely with Universiti Malaya (UM) and Edinburgh Napier University Scotland for the Dye Sensitized Solar Cell (DSSC) and Graphene Anti-Reflective Coating Solar Cell for the 50MW Large Scale Solar (LSS) located in Gambang, Pahang.

She is actively involved in projects involving the renewable energy and the climate change, and one of it was the grant from UNESCO (SKUM) awarded for an e-Wire training: Empowering women in Renewable Energy. She led the Climate Smart and Disaster Resilient ASEAN (CSDRA) International Conference and ASEAN Science Diplomats Assembly (SDA) hosted for the first time in Malaysia under the SRI that brought together leading academic scientists, researchers, scholars, government agencies, non-government organizations, and other stakeholders to share their experiences and research results on aspects of climate change and disaster risks in Southeast Asia. ASEAN Science Diplomats Assembly (SDA) is to strengthen the integration of science and diplomacy for the benefit of the climate smart and disaster resilient strategic capacities, policy goals, and the development of solutions for societal challenges. The event is presented in collaboration with ASEAN Secretariat, ASEAN Foundation, USAID and Malaysia Ministry of Science, Technology, and Innovation (MOSTI). She is keenly doing the Engineering Education with the IEEE Education Society and she headed the IEEE International Conference on Engineering Education (ICEED) and IEEE International Conference on Electrical, Electronics and System Engineering (ICEESE).

She works closely with Petronas Sdn Bhd to develop the First Prototype of Virtual Power Plant with Intelligent Energy Management System (EnMS) for Accelerating Energy Transition in Malaysia. Amidst the various intersecting crises of 2020 – especially the total lockdown experienced worldwide due to Covid-19, the National Bureau of ASIAN Research (NBR) in collaboration with Universiti Teknologi MARA (UiTM) through Solar Research Institute (SRI) have brought upon the key side of the climate change issues through the 2022 Pacific Energy Summit (PES) under the theme of “Understanding Southeast Asia’s Vision for Energy and Climate-Secure Indo-Pacific” that was held from 31st October 2022 to 1st November 2022. The objective of the Summit was to engage the high-level stakeholders from government, business, and research in crafting innovative solutions to the Indo-Pacific’s challenge of meeting rising demand for energy while shifting toward a cleaner mix, all in the context of an increasingly complex and competitive regional strategic environment.

The British Academy’s Just Transition to Decarbonization in the Asia-Pacific Program 2021 was approved on 25th Oct 2021 and successfully carried out the just transition assessment. She also contributed in the MBSA Low Carbon City Action Plan 2035 for the Strategy for Building, Water and Clean Energy. She led the [Universiti Teknologi MARA Solar Research Institute- SRI](#) and National Energy Technology Center, Thailand sealed a new collaborative

project on Energy Resilience Assessment in ASIA.

Author and co-author of 50 research articles, one book chapter published by Elsevier and 1 policy papers.

Research interests: Nanotechnology Solar Cell, Renewable Energy, Energy Efficiency, Power System Engineering



**Dr Lethy Krishnan Jagadamma** is a UKRI-Future Leaders Fellow and leads the Energy Harvesting Research Group at the School of Physics and Astronomy, University of St Andrews

Her research is focussed on developing scalable and efficient ambient energy harvesters using facile processable materials. Her research background is on structure-property-function correlation studies of metal oxides, organic/inorganic semiconductors and hybrid organic- inorganic materials. For 'Sustainable Energy Harvesting', specifically, her team investigates the indoor photovoltaics (PVs), device physics of indoor PV, and piezoelectric properties of solution-processable semiconductors.



**Ms Marzia Alam**, Heriot-Watt University

Ms Marzia Alam has finished her PhD from Heriot-Watt University in January 2023. Her research focused on 'Energy Yield Enhancement of Bifacial Photovoltaic Modules' using different ground albedo. She developed a view factor computation model, a key parameter in determining ground reflected irradiance received by bifacial PV. Marzia served as a senior lecturer in the Department of Electrical and Electronic Engineering at BRAC University, Dhaka, Bangladesh. She has over 9 years of experience as an academic and researcher. Marzia is a Commonwealth scholar, and she was awarded scholarship from the UK Government in 2017 to pursue her 2<sup>nd</sup> Masters in Sustainable Energy Systems in the University of Edinburgh.

Published articles:

<https://doi.org/10.1016/j.ref.2023.01.005>

<https://doi.org/10.1016/j.egy.2021.11.206>

<https://doi.org/10.3390/en12203826>



**Pablo Jean Sola**, Edinburgh Napier University

Dr Pablo Jaen Sola is a Lecturer in Mechanical Engineering in the School of Computing, Engineering and the Built Environment at Edinburgh Napier University, UK. Pablo graduated from UCC (National University of Ireland) with a MEngSc in Mechanical Engineering and holds a PhD from the UK EPSRC Wind Energy Systems Doctoral Training Centre at the University of Strathclyde. He has more than 10 years of research experience and his investigation is focused on the development and use of different techniques for efficiently design and optimize powertrain mechanical components of renewable energy devices.



**Dr Sheikh Islam** is an Academic Strategic Lead (Head of Mechanical Engineering Discipline) at the School of Engineering of the Robert Gordon University.

His research interests include PEM fuel cell as an energy storage device, CFD modelling of multi-phase flows, CFD modelling and design optimisation of turbines & heat transfer from fluidized bed heat exchanger for industrial application. Dr Islam is involved in applying computational modelling techniques and optimization to solve some of the most challenging and interesting problems related to emerging energy sources such as fuel cell, process heaters and wind/ tidal turbines.



**Dr Kamyab Givaki** is an Offshore wind HVDC Engineer, SSE Renewable

He is leading HVDC packages of multiple offshore wind farms within SSE Renewable. He previously worked at SSEN Transmission as HVDC Engineer for Shetland HVDC Project. He was a lecturer in Electrical Engineering within Edinburgh Napier University between 2018-2021.



**Rafael Dawid**, Sennen

Rafael Dawid graduated from University of Strathclyde with MEng degree in Aero-Mechanical Engineering. He completed a PhD, also at Strathclyde, focused on developing algorithms for offshore wind farm O&M optimisation. For the past 5 years, Rafael has been working for Sennen, specialising in development of workflows and software to streamline day-to-day wind farm operations.



**Dr Charles Ho**, Photonicity

Dr. Charles Ho received his PhD in Photonics at NTU, Singapore. His academic research career involved optoelectronic and nanoelectronic devices spanning institutions across Canada, Boston and Singapore. Most notably his work on high-efficiency photovoltaic devices at Temasek Laboratories@NTU paved the way for his entrepreneurial pursuits which resulted in the establishment of Photonicity in 2021. Since then, he has received a number of recognitions for the work of Photonicity by the Founder Institute, ActInSpace, Starburst (BLAST), InnoSpace, Catalyst Accelerator and ESA.