

# SUSTAINABLE DEVELOPMENT GOALS



SUNWAY UNIVERSITY  
SUSTAINABLE DEVELOPMENT GOALS  
2020/2021 REPORT



A CLASS ABOVE



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# INTRODUCTION

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It is with immense pleasure that I present the Sunway University Sustainable Development Goal Report 2020-2021. Sunway University was an early adopter of the Millennium Goals and the United Nation's 17 Sustainable Development Goals (SDGs).

In 2016, we launched the Jeffrey Sachs Centre on Sustainable Development which now hosts the Asian regional hub of the Sustainable Development Solutions Network.

In 2021, we established the Sunway Centre for Planetary Health and we have introduced Planetary Health and community service as well as Sustainable Development in two of our four General Studies programs for all students. We are committed to the SDGs and Planetary Health as the guiding principles for our leadership, work practices and policies, our teaching, learning and research, and our collaborations with other stakeholders.

Sunway University is unique by having launched its own #CampusWithaConscience campaign, which promotes the underlying principles and embraces everything students and staff will experience during their time at the Sunway University Campus. The 17 SDGs serve as a concrete point of reference for the University to address planetary health and sustainable development.

This report provides a snapshot of Sunway University's achievements in all 17 SDGs for the year 2020/2021.

*Professor Sibrandes Poppema*  
*President*





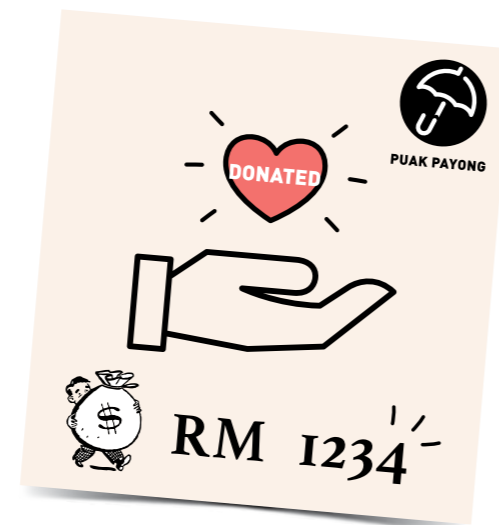
End poverty in all its forms everywhere



## LEADERSHIP

### Jeffrey Cheah Foundation

Sunway University is owned and governed by the Jeffrey Cheah Foundation, which is Malaysia's largest education-focused social enterprise. The foundation has hitherto distributed more than RM570 million in grants and scholarships, enabling access to quality education. The University believes that education offers the best route out of poverty.



## EDUCATION

### Charity Drives

*Bite the Sour 2020, Bake Sales for Rumah Juara 2020, Jom Loka for Children 2020, Anonymous Hope Project 2021, and Great Heart Charity 2021* were charity drives initiated by the school of Hospitality and Service Management. Funds were channelled to NGOs and institutions providing supplies to families and supporting children development programme for the underprivileged community circle.

### Another Tomorrow

*Another Tomorrow* is a fundraising campaign established by our Diploma in Culinary Arts students at the School of Hospitality and Service Management to help up to four (4) Malaysian families facing financial instability during the COVID-19 pandemic.



## RESEARCH

### Tourism, Economic Development and Poverty Alleviation

Following South-East Asia's incredible growth in the international tourism forefront since the 1960s and its influence on the economic growth, the School of Hospitality and Service Management organised a public seminar to address *Tourism, Economic Development and Poverty Alleviation*. It will explore the relationship between tourism and economic development, the main phases of tourism development in South-East Asia and whether tourism-led growth could become more inclusive for host communities and poverty reduction were key topics of discussion.

### GoVegan: Exploring Motives and Opinions from Tweets

*GoVegan: Exploring Motives and Opinions from Tweets*, a project by the School of Engineering and Technology that explores the public perception on adopting a vegan lifestyle.



## ENGAGEMENT

### Project Give & Take

*Project Give & Take* promotes the act of giving away preloved items to individuals in need of them. This project was initiated by our Sunway University Business School on Facebook.





**End hunger, achieve food security and improved nutrition and promote sustainable agriculture**



## EDUCATION

### Community Service

In the midst of the COVID-19 crisis in Malaysia, our students had developed a donation drive to feed the hungry by collaborating with The Fire Grill. Proceeds were channelled to MERCY Malaysia and ilabs PPE for frontliners. This initiative was undertaken as part of the final project for the MU4 1313 Community Service module in April 2020.

### Feed the Hungry

Our Diploma in Culinary Arts students showcased their culinary talent and skills at the Feed the Hungry event. The event not only helped the underprivileged at the Great Heart Community Centre but also signified our students' initiative to support the community to combat food insecurity.

## RESEARCH

### Classifying Cannabis Sativa Flowers, Stems and Leaves using Statistical Machine Learning with Near-Infrared Hyperspectral Reflectance Imaging

The School of Engineering and Technology is part of a RM141,000 (equivalent to NZD48,000) international research project on *Classifying Cannabis Sativa Flowers, Stems and Leaves using Statistical Machine Learning with Near-Infrared Hyperspectral Reflectance Imaging* to investigate the use of hyperspectral near-infrared imaging to identify the *Cannabis sativa* plant components such as flowers, stems and leaves on the crop. It is the first step towards developing a real-time monitoring system that would support decision-making on the optimal daily growing conditions to improve crop yield and profitability. This research was supported by the Rua Bioscience Ltd., Transdisciplinary Incubator Fund, Unitec Institute of Technology and Wayne Holmes.

### Smart Vertical Farming Technology for Temperate Vegetable Cultivation In Sabah: Practicing Smart Automation System Using IR and AI Technology in Agriculture 4.0

The school of Engineering and Technology is part of a RM80,000 research project for *Smart Vertical Farming Technology For Temperate Vegetable Cultivation In Sabah: Practicing Smart Automation*

*System Using IR and AI Technology in Agriculture 4.0* research project. This research project is funded by the Office of the Vice Chancellor of Research and Innovation at University Malaysia Sabah.

This project explores the use of aquaponics, hydroponics, and smart fertigation. Eco-agriculture will be practiced to conserve major ecological services and restore natural resources. What differentiates this solution from others is a combination of enablers, namely leadership and management of farm operations, research and development in plant science, value chain management, and a competitive advantage for each product line. These are the four pillars that enable an enterprise to skew towards the uncontested market. This prototype will be able to demonstrate the use of smart farming, engineering, and agriculture 4.0 in addressing Sabah's pressing agenda towards reducing food imports and improving food security levels.

### Holistic Approach to Food Fraud Vulnerability

Our Sunway University Business School is also part of the research team behind an upcoming journal article by Rezazade, F. et al. (2022), entitled *A holistic approach to food fraud vulnerability assessment*. The increase in fraudulent incidents has resulted in a change of focus in theory related to investigating food fraud from risk mitigation to vulnerability reduction. This paper

developed a holistic approach to analyse food fraud vulnerability factors using a Bayesian Network (BN) approach based on the Decernis food fraud database incidents. The model discussed in this paper will help authorities in border protection, policymakers, and quality assurance agencies assess fraud vulnerability in a range of food products for incoming (imported) food products, mainly if they know the country of origin and type of food products.

## ENGAGEMENT

### Inter-University Collaboration

Sunway University was invited by the Institute of Public Relations Student Chapter (IPRMSA) of UTAR Kampar Campus to co-organise a webinar on the topic of *Food Wastage during COVID-19* by Mr. N V Subbarow Narayanan, the Consumer Education and Research Officer of Consumers Association of Penang (CAP).

### Community Projects with NGOs

The School of Hospitality and Service Management collaborated with NGOs on several fundraising initiatives to distribute food and essential items to the needy. Participating NGOs include SESO Malaysia, Volunteers Unite Rawang, Need to Feed The Need, Global Peace Foundation, and Uncle Kentang.

### Chef Social Responsibility Initiative: Bubur Lambuk Project

Our Young Chefs Club embarked on the *Chef Social Responsibility (CSR) Initiative: Bubur Lambuk Project* to supply their self-prepared *Bubur Lambuk*, which is a traditional cuisine to the needy in conjunction with the Ramadhan month. The Club engaged with the Food Aid Foundation, Scouts Association of Malaysia, Adab Youth Garage, Masjid Section 3 Shah Alam, Sunway University Islamic Association, and Sunway Sahabat Society for the food distribution. This CSR initiative was supported by the Professional Culinaire Association (PCA) and World Chefs Without Borders (WCWB).

**186**  
STUDENTS  
ATTENDED

**1,500**  
SERVINGS OF  
BUBUR LAMBUK  
WERE PREPARED





**Ensure healthy lives and promote well-being for all at all ages**



## LEADERSHIP

### Public Screening: Blood Pressure

A blood pressure (BP) screening campaign was initiated by Prof Yook-Chin Chia from the School of Medical and Life Sciences together with members of her BP research team for the public in June 2021. 150 retail pharmacies throughout the country were recruited to do the screening. This activity was supported by an unrestricted grant from Viatrix and also supported by Omron. This campaign is also held in conjunction with the International Society of Hypertension May Measurement Month 2021.

### Co-teaching Workload Framework

The School of Hospitality and Service Management started with the co-teaching workload framework in 2019 which allowed multiple academics to share the teaching load of a unit. Through this initiative, the rate of class cancellations due to the unavailability of the lecturer had significantly reduced. Furthermore, this method also enabled a co-learning environment for the academic staff to further strengthen the education community.

### For Better Health

Sunway University is a strong advocate of both physical and mental health and well-being among our staff, students as well as the greater community. In 2020, the

University spent almost RM69,000 on staff health screenings alone.

## EDUCATION

### Enhanced Learning Experience

At the School of Medical and Life Sciences, the education structure gives our students the exposure, guidance and resources to enhance their learning.

For example, "Wellbeing" is a trending buzzword these days. One recent research by our Master degree student was on "Factors predicting well-being among emerging and middle-aged adults". The objective of the study was to (1) compare self-efficacy, emotional intelligence, self-compassion and mental well-being between emerging and middle-aged adults; (2) determine whether self-efficacy, emotional intelligence and self-compassion predict mental well-being; (3) investigate if self-compassion mediates the relationship between self-efficacy and mental well-being and between emotional intelligence and mental wellbeing in both age groups. The outcome of this study can provide insights to understanding the mediating role of self-compassion of emotional intelligence towards mental wellbeing.

Another study looked into the benefits of exercising for the working adult's personal and work-related outcomes. The title of the study was "Exercise and Work Performance: Physical Health, Workplace Communication Competency, and Perceived Team Cohesion as Mediators". This study aimed to examine the relationship between different types of exercise (i.e., team exercise, individual exercise, and no exercise) and work performance by introducing three potential mediators: physical health, workplace communication competency and perceived team cohesion. The student was also given the opportunity to present this study at the International Conference on Student-led Research and Innovation in Arts, Humanities & Social Sciences (ICRI-HASS). ICRI-HASS is an annual international conference led by forward-looking and ambitious postgraduate students from three partner universities: Lancaster University (UK), Sunway University (Malaysia) and National University of Malaysia.

## RESEARCH

### 7th Asian Cognitive Behaviour Therapy (CBT) Conference

The School of Medical and Life Sciences hosted a 3-day virtual conference on behalf of the Malaysian Society of Clinical Psychology and in collaboration with the Asian Cognitive Behavioural Therapy Association as well as the World Congress of Cognitive and Behavioural Therapies. The purpose of this conference was to provide an accessible platform for Asian as well as international enthusiasts of cognitive behavioural therapy to learn from international clinicians and researchers on updates regarding CBT and various clinical techniques for improving personal practices in mental health services.

### Leadership in Medicine

In collaboration with the Harvard Medical Center, the School of Medical and Life Sciences

organised the Leadership in Medicine: South-East Asia which is a one-year certificate programme consisting of three, four-day residential workshops (in Bandar Sunway, Selangor, Malaysia and Boston, Massachusetts, USA), pre-recorded lectures and interactive webinars focused on relevant and complementary topics. The programme is designed for senior and executive-level hospital, primary care, recuperative care, community and other health care facility administrators, chiefs of staff, hospital board members, chief nursing officers, department directors and other health care professionals with supervisory, management or executive-level responsibilities.

### Identification of immunodominant CD4+ and CD8+ T-cell epitopes of dengue virus in Malaysian individuals infected with dengue for construction of a dengue multi-epitope peptide-based vaccine

The School of Medical and Life Sciences is a proud recipient of the Fundamental Research Grant Scheme by the Ministry of Education Malaysia for a study involving the dengue virus vaccine. In this study, we sought to identify the CD4+ and CD8+ T-cell epitopes of the dengue virus that is recognised by PBMCs isolated from the infected dengue patients in Malaysia.

## ENGAGEMENT

### Managing Mental Health Issues during COVID-19 Crisis

Our Head of Department of Psychology was featured in an interview by the Association of Malaysian Spas (AMSPA) on managing mental health issues during COVID-19 crisis and methods to overcome the challenges dealing with mental health issues.



**Professor Alvin Ng Lai Oon**, Head of Department of Psychology, School of Engineering and Technology, Sunway University

### Malaysian Allergy Day 2021

The Malaysian Allergy Day 2021 is an event by the Malaysian Society of Allergy and Immunology to promote public awareness on different aspects of allergies. This year, the theme that is selected is *Anaphylaxis* (or severe allergic reaction). Topics addressed by our panel of expert allergists and scientists include *Managing severe allergies effectively*, and *COVID-19 vaccines and allergic reactions*.

THE EVENT RECORDED  
**7,472**  
REGISTERED PARTICIPANTS FROM  
80 COUNTRIES





**Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**



## LEADERSHIP

### For Better Governance

The School of Hospitality and Service Management have been forming several committees with the intention to strengthen the institutional transparency and School accountability. These committees include the Programme Leaders Meeting, Administrative Team Meeting, as well as Occupational Safety and Health Administration (OSHA).

### Town Hall Sessions with Students

The School of Hospitality and Service Management has introduced the Town Hall Sessions, which is held at each semester to provide an opportunity for all students to meet with the Dean. This encourages the 'student voice' and again emphasises the importance of institutional accountability and student empowerment, especially as student issues and concerns are raised, and such items of are addressed accordingly. Furthermore, these Town Hall sessions encourage an opportunity to reflect on educational quality matters.

## EDUCATION

### The Fun Mathematics Camp

The School of Mathematical Sciences had initiated The Fun Mathematics Camp which was a two-month programme. Participants were engaged in daily online classes in preparation for the competition at the end of Camp. Every participant was given the opportunity to take learning into their own hands as they explored obstacles, brainstormed ideas, and creatively resolved mathematics-related problems. Participants aged from 11 to 15 learnt real-life application of mathematics, with the expectation of elevating their interest in mathematics and moving their problem-solving skills up a notch.

### Continuing Nursing Education

The School of Medical and Life Sciences organised a series of Continuing Nursing Education sessions for the academic staff. Sessions were conducted online by clinical instructors. The objective was to provide the latest information on topics such as AV Fistula, Post-operative Care, Immunisation Schedule, Extra Corporeal Membrane Oxygenation, Insulin Therapy, and Cardiac Rehabilitation Programme.

## RESEARCH

### An integration of Task-Technology Fit (TTF) and Unified Theory of Acceptance and Use of Technology (UTAUT) in Malaysian Higher Education

This research project integrates two Information Systems (IS) models i.e., the Task-Technology Fit (TTF) and Unified Theory of Acceptance and Use of Technology (UTAUT). This integration will enable the investigation of key aspects of online delivery in the Malaysian educational programmes; specifically addressing the online delivery of higher education programmes that became imperative during the COVID-19 outbreak. This is a research collaboration between Centre of Higher Education, School of Arts and Sunway College. It also received a funding of RM75,000 under the Fundamental Research Grant Scheme.

### Virtual & Augmented Reality Research Network

The Virtual & Augmented Reality Research Network (VARRN) is housed with the Centre for Research-Creation in Digital Media (CRCDM) at Sunway University, Kuala Lumpur, Malaysia. VARRN empowers a collaborative transdisciplinary team of ASEAN region researchers who will focus on leading-edge applications of technologies for the betterment of the human condition in these challenging times and beyond. VARRN seeks to motivate a new generation of students and researchers in the domain of virtual-augmented reality – merging the arts, sciences, humanities, media, and technology.

The VARRN project is supported by a RM50,000 research grant by Sunway University.

### Enhancing Intra-ASEAN Student Mobility

Sunway University's Centre for Higher Education Research (CHER) completed the report for the British Council-funded project (€178,000), a *Study on Enhancing Intra-ASEAN Student Mobility*.

Higher education plays an important role in ASEAN's economic, political and socio-cultural development agenda. As a region it has nearly 20 million higher education students and over 7,000 universities. Supporting the mobility of these students in the region is an important aspect of ASEAN's work on the internationalisation of higher education, consistent with the ASEAN Work Plan on Education 2016-2020 and the Master Plan on ASEAN Connectivity (MPAC) 2025.

This Study looked at three factors crucial to enhancing intra-ASEAN mobility for university students which is understanding the data available on international students, the role of visa provision and ASEAN single-branded scholarship.

## ENGAGEMENT

### Participation at the Edu Summit 2020

Our Head of Department of Psychology delivered a lecture on the use of behavioural fluency and precision teaching as an adjunct method for improving academic performance at all levels of education in the Edu Summit 2020. This conference was organised by the Troffee Education and National Union of Teaching Profession (NUTP) and involved the participation of numerous speakers in education for educators of various levels of education.

### Star't Pitching 2021

Star't Pitching Sunway Business Competition is an intervarsity-scaled business pitching competition organised by Sunway Business School Student Concilium in collaboration with CPA Australia. Students from a total of 12 universities within Malaysia have participated in the competition.





*Achieve gender equality and empower all women and girls*



## LEADERSHIP

### Women in Power

Sunway University ensures all female employees have equal opportunities to strive for leadership positions and pay. In 2020, the proportion of female members in University Strategic Management Committee (USMC) was 36%. The University believes these are the key elements to supporting academic progression of women as well as drive forward gender equality in the community. The current proportion of female members in the academic senate are 21%.

## EDUCATION

### Final Year Student Projects

At the School of Arts, multiple projects, which includes the topic of gender equality, have been produced by our final year students.



## RESEARCH

### Cultural Studies

The School of Arts is part of a research project that studies the preservation of local cultural heritage, with a focus on the Kelantanese shadow play. It produced a DIY Craft Kit prototype in collaboration with The Asian Cultural Heritage Centre.

## ENGAGEMENT

### Women2Win: Global Asian Leaders Network 2021

*Women2Win* aims to prepare women candidates to run for office in their countries next election by creating a pool of competitive women candidates in every participating country. This programme aspires to rebrand leadership practiced across Asia into a more inclusive, feminine leadership to face modern challenges. It provides participants with a 6-month fellowship.





*Ensure availability and sustainable management of water and sanitation for all*



## LEADERSHIP

### Water Conservation Programme

Sunway University has installed alternative pipes that are connected to Sun-Water from the South Quay Lake Water Plant. This state-of-the-art water treatment facility has a targeted portable water capacity of 10 million litres per day. In case of a water disruption, the University will be able to have its own water supply from this plant.

### Rainwater Harvesting

Rainwater Harvesting was implemented in 2017 to reduce constraints on the limited clean water for human consumption. The rainwater is used to water the foliage on the campus grounds.

In 2020, the University saved a total of 817m<sup>3</sup> of water through rainwater harvesting. The total amount of rainwater stored is used for landscape maintenance and cleaning outdoor areas.

## EDUCATION

### Water Conservation as a Social Dilemma for Urban Domestic Households in Selangor, Kuala Lumpur and Putrajaya

Our Department of Psychology, Jeffrey Sachs Center on Sustainable Development has recorded a research thesis entitled *Water*

*Conservation as a Social Dilemma for Urban Domestic Households in Selangor, Kuala Lumpur and Putrajaya* in its collection of research projects facilitated by the centre. This paper contextualised water conservation from the perspective of social dilemma theory and identified factors that drive individual decision-making and dilemma awareness. The results of the study offer several implications, firstly that social dilemma theory is applicable for water conservation in the study area. Secondly, environmental values are the primary driver for individual dilemma awareness on water conservation issues, not water tariff. Thirdly, longer term conservation measures through identifying appropriate water tariffs through pricing conservations is necessary. Lastly, conservation campaigns as alternative measures could be more effective when designed to include more emphasis on environmental messages.

### Book Editing

In the education aspect, our academic member from the School of Engineering and Technology has recently been part of the editing of the book entitled *Advanced Oxidation Processes for Micropollutant Remediation*.



## RESEARCH

### Productivity Enhancement of Solar Still with Thermoelectric Modules from Groundwater to Produce Potable Water: A Review

The School of Engineering and Technology has been involved in the review of productivity enhancement of solar still with thermoelectric modules from groundwater to produce potable water. Groundwater is recognised as a principal source of water for the drinking, irrigation and many other purposes. Researchers have also used groundwater in the solar distillation to convert it to drinkable water by use of solar energy. Researchers even used thermoelectric modules with solar operated devices like flat plate collector, evacuated tubes collector, compound parabolic concentrator, etc. The main aim of the review was to examine different researchers work on groundwater into the solar still with thermoelectric modules. The research concludes that the thermoelectric modules with solar still is a potential application to produce potable water from groundwater along with the generation of electricity.

### Adsorption of Heavy Metals from Industrial Wastewater onto Low-cost Malaysian Kaolin Clay-based Adsorbent

The School of Engineering and Technology was part of a study on

adsorption of heavy metals from industrial wastewater onto low-cost Malaysian kaolin clay-based adsorbent. Adsorption capacity and percentage removal efficiency of Cu(II) and Ni(II) ions were studied and compared between raw kaolinite and acid-activated kaolinite. Acid-activated kaolin was prepared by refluxing raw kaolinite with concentrated sulphuric acid followed by calcination to enhance its surface properties and adsorption ability. The results showed that acid-activated kaolinite adsorbent is a better option as a favourable and feasible commercial low-cost adsorbent for wastewater treatment.

## ENGAGEMENT

### Knowledge Sharing

The School of Engineering and Technology participated in several avenues that promoted discussions and networking in the area of Clean Water and Sanitisation. A few notable participations include:

- Participant at the Plenary talk at the 4th International Symposium on Analytical Chemistry for Sustainable Development-ACSD2021.
- Speaker at the Commercialisation Webinar Series organised by University of Malaya.





Ensure access to affordable, reliable, sustainable and modern energy for all



## LEADERSHIP

### Clean Energy

Sunway University believes energy consumed needs to be clean for development to be sustainable. As such, the University promotes and supports the usage of clean energy through research as well and encourages staff to be more mindful about our own behaviour and energy usage. In 2020 renewable energy sources and its capacity (in kilowatt hour) increased to 404, 484 from 0 in 2018 and with that, electricity usage per year (in kilowatt hour) reduced from 9.8 million in 2018 to 7.45 million in 2020.

### ASEAN Green Future

Sunway University, SDSN and University Kebangsaan Malaysia (UKM), are involved in the ASEAN Green Future Project, which has mobilised 7 out of 10 of the ASEAN country teams.

This initiative aims to accelerate action for decarbonisation to achieve net zero by 2050 for the ASEAN region and ASEAN member states. It involves technical simulation and modelling of net zero carbon outcomes along with associated economic and social consequences of such undertaking.

## RESEARCH

### Contribution Towards Innovation

The School of Engineering and Technology is part of several research projects for affordable and clean energy. Some notable research includes:

- **Development of Graphene Based Inorganic Nanostructured Electrode Materials for High Energy Density Air Battery -** This project has received a funding of RM150,000. The final device will bear high energy density with good specific capacity.

- **The Groundwater for Sustainable Development -** This research aims to review the current status of renewable energy in Malaysia as well as the initiatives taken before the pandemic to promote solar photovoltaic (PV) technology to meet the energy demands through the low-carbon pathway.
- **Environmental Research -** This is a comprehensive research of biodiesel synthesis and assesses the latest breakthroughs involved in the use of catalysts derived from waste biomass. Furthermore, an amalgam of experimental data obtained from similar literature has been thoroughly reviewed to provide a better framework to produce

biodiesel. Apart from that, this study aims to alleviate problems associated with heterogeneous catalyst separation and enhance the economic viability of the industry, thus, sustaining the environment while meeting energy demands.

## ENGAGEMENT

### Win-Win Partnership

The University installed solar panels back in 2018 to harvest solar power to power up older buildings that were consuming more electricity. Through the success of the solar panel project, the University realised it was able to harvest access energy compared to utilisation and so in 2020, the excess energy harvested was sold to TNB (Tenaga Nasional Berhad) also known as the National Electricity Board grid via SEDA (Sustainable Energy Development Authority) / NEM (Net Energy Metering) arrangements. These sales amount has seen a further reduction in electricity bills by 71% since 2019.



*Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all*



**LEADERSHIP**

**Equal Opportunity**

Sunway University continues to ensure equal opportunity in the workplace and encourages employee diversity based on the basic employment principle of performance pay and equal pay regardless of gender. The University also aims to create a culture that respects and values each other's differences, promotes equality and diversity, and encourages individuals to grow and develop in order to realise their full potential. Diversity and inclusion are closely tied to our core values of integrity, humility and excellence, which are embedded into every facet of our goals and day-to-day operations.



**EDUCATION**

**Final Year Research Projects**

The programme structure at the School of Mathematical Sciences encourages final year students to embark on projects addressing the Decent Work and Economic Growth sustainable development goal. An example of a research project is economic and economic-statistical designs of the side sensitive synthetic chart for the coefficient of variation.

**The Local Carnival**

*The Local Carnival* (TLC) Talk by the School of Hospitality and Service Management is a relaxing session on Facebook Live where we have invited inspirational guests to share some of their life experiences, the ups and downs and also some tips and tricks on how to sustain your business during this pandemic. A recent session saw 3 sessions of TLC Talk with 3 inspiring special guests: -

- Session 1: Coach Heidi – CEO of IMT Holdings Sdn Bhd & Captain of Malaysia Dodgeball National Team
- Session 2: Nigel Sparks – Founder of Negative Clothing and The Cap City
- Session 3: Webnatics – Digital Marketing Agency, Google Premium Partner and Facebook Partner”

**RESEARCH**

**Road to Recovery from COVID-19: The Tourism and Hospitality Experience**

The Tourism and Hospitality Industries around the globe have been severely impacted by the COVID-19 pandemic. Besides taking measures to survive, the industry is also shifting to develop recovery adaptation strategies to build a stronger and more resilient industry. This *Road to Recovery from COVID-19: The Tourism and Hospitality experience* webinar by the School of Hospitality and Service Management brings together experts and global perspectives from both the industry and academia to share and discuss issues and challenges in relation to managing the re-opening of the Tourism and Hospitality Industries.

**The Labour Market under Consideration of the Technical Change**

The School of Engineering and Technology has embarked on a study to explore the influence of artificial intelligence on human behaviour and employment with participants from the UK and Germany.

**Empowerment and social change in tourism**

This talk was presented at a research seminar by the School of Hospitality and Service Management. This seminar debates issues of marginalisation, disempowerment and social inequalities in two very distinct locations – Bali and London. In Bali, Cognitive Behavioural Therapy creates hopes for villagers' self-organisation and autonomy, while realities on the ground are characterised by inequalities and foreign influence. In London, where some of those affected by homelessness turn into tour guides, tourism creates not only new livelihoods for marginalised members of society but also the chance for alternative discourses.





## LEADERSHIP

### Industry, innovation and infrastructure

Through forming strategic partnerships with industry, Sunway University strives to enhance creativity and innovation in young minds. The University believes that developing sustainable solutions for the future can be achieved by empowering communities through innovation. As such Sunway was represented in the Singapore Week of Innovation and Technology Conference (SWITCH) in 2020 focusing on South-East Asia and how innovation can unlock growth opportunities in the region.

## EDUCATION

### Let's Talk Coffee & Entrepreneurship 2020

Let's Talk Coffee & Entrepreneurship invited the School of Hospitality and Service Management alumnus Shaun Liew (Malaysia Brewers Cup - Champion) to a sharing session to inspire career journey as a Specialty Barista and an Entrepreneur in the F&B industry.

### 30-Minute Talk on Sustainable Tourism 2020

At the 30-Minute Talk on Sustainable Tourism 2020 which was organised by the School of Hospitality and Service Management, the topic *Gastronomic Destination:*

*Challenges and future* was featured. The session covered areas such as fine dining in a time of crisis and fear, and provide insights to luxury food consumption.

## RESEARCH

### Scale-up of Graphene-based Lubricants for Automotive Application

Existing graphene-based engine oil formulations suffer from poor particle dispersion stability. Under the School of Engineering and Technology, the *Scale-up of Graphene Based Lubricants for Automotive Application* project aims to optimise synthesis method to produce super-hydrophobic graphene with enhanced stability (at least 2 years) in group-3 base stock (150 SUS) at a concentration of 0.01 wt %. Graphene and its hybrid will be developed as an additive package for engine oil formulations (semi and fully synthetic) meeting API SN grade. The optimised formulation will be tested according to the ASTM and API standards and will be used for scale-up studies. This project has received a funding of RM78,450.

### An Optimised Dragonfly Algorithm for Enhanced Effectiveness and Efficiency in Low Exploitation Problem

This project proposes an increase in terms of the effectiveness and efficiency of the dragonfly

algorithm (DA) by employing the hill-climbing technique as a local search, in particular, to improve the exploitation of the algorithm. A continuous DA-hill climbing technique will be designed and proposed for continuous optimisation problems. The algorithm will be applied to optimise the connection weights of an artificial neural network during the training process, thereby increasing the accuracy of the resultant neural network as compared to when the artificial neural network is trained using the original DA algorithm.

### Development of Graphene-based Coolant

This project aims to conduct a comparative study between water and graphene-based coolant (GCool) to verify the claims that GCool is more efficient than normal water as a coolant. In order to evaluate the efficiency of GCool, Sunway R&D is partnering with Daikin to conduct the chiller efficiency test.

## ENGAGEMENT

### Industrial engagement - Insafoam

The School of Mathematical Sciences has embarked on an industrial engagement project. The objective of this project is to commence a deep-dive into Insafoam's business processes through a series of observatory

studies, analyses of the various sources of company data, and interviews with the employees to understand Insafoam's organisational culture and behaviour. The initial project findings warranted the redefinition of business processes, and the solution recommended was to build predictive mathematical models, which would enable Insafoam to optimise their manufacturing capacity in terms of worker

assignments, resources utilisation, production line allocations and more.

### Knowledge Sharing: Social Media Monitoring

The School of Engineering and Technology has participated in the Understanding Sentiment Analysis, which is a knowledge-sharing session with students and symposium participants.

Discussions revolved around learning social media monitoring and understanding sentiment analysis that brings values to the industry and creates opportunities in promoting inclusivity and sustainable industrialisation.





# EQUALITY

IN

## RESEARCH

### Hyper-Connected Haptics Technology for the Visually Impaired in Human-Machine Collaboration (HUMAC)

HUMAC is a project by the School of Engineering and Technology that looks into enabling web accessibility for the visually impaired. Currently, the team is studying the prospects of HUMAC on a prototype online shopping website.

## ENGAGEMENT

### Learning and Developmental Disabilities: Assessment and Management

The School of Medical and Life Sciences has organised the *Learning and Developmental Disabilities: Assessment and Management* webinar, which targets mental health service providers, some of whom would be registered counsellors of the Malaysian Board of Counsellors. It aims to provide a basic understanding to what learning and developmental disabilities are and how they are assessed to contribute towards diagnosis as well as to share the steps for management and progress.

### The Psychology of Resiliency” and “Skills to Harness Our Inner Strength

The School of Medical and Life Sciences had collaborated with the Rotary Club of Bukit Kiara Sunrise to organise workshops on *The Psychology of Resiliency and Skills to Harness Our Inner Strength*. This was a train-the-trainer

workshop for individuals involved in mentoring marginalised youths under the Rotary Club District 3300 project. This initiative was aimed at providing continued sustainability to the project whilst promoting better resilience, well-being and leadership in underprivileged young people as they go through high school education.





*Make cities and human settlements inclusive, safe, resilient and sustainable*



■ LEADERSHIP

**Every City has a University, Only Sunway has a City**

Being part of the eco-friendly Sunway City, the University is at the heart of creating opportunities through the preservation of culture and dissemination of knowledge. We believe that sustainable cities and communities must have access to its history and culture in order to thrive.

■ EDUCATION

**Earth Warrior Project 2020**

The School of Hospitality students collaborated with the Great Heart Charity Association to participate in the Earth Warrior project. This project was in line with the University's vision of working towards a sustainable environment, promoting neighbourhood cleanliness in the selected area and boost a clean working and living environment. It is evident that taking baby steps can have a wider impact for the community.

■ RESEARCH

**Sust Hack - Synchronising Sustainable Development Actions Between Finland and Malaysia - the Hackathon Approach**

This project is a collaborative research between the School of Engineering and Technology and the Finnish National Agency. This project received a funding of €32,000 under the Finnish National Agency for Education EDUFI Asia

Programme grant. The objective of the project was to emphasise the sustainability perception in computing education. This was done by utilising co-creative hackathons with local sustainability challenges both in Finland and Malaysia. These cross-national hackathons will emphasise the possibilities of IT in sustainable development and increase the understanding of the sustainability in the computing field. Hackathons were chosen as the approach as they have been proven to be good collaborative events for various purposes.

**Cybersecurity Maturity Success Factor in Malaysia**

The School of Engineering and Technology is part of the research team looking into *Cybersecurity Maturity Success Factor in Malaysia* project. Cybersecurity has received much attention recently in both the academia and industry. This network project aims to explore and develop a cybersecurity analytics maturity (CSAM) model to provide a useful guideline for organisations that are planning or assessing their cybersecurity initiatives. The CSAM model not only help organisations to assess where it is in this evolutionary continuum of maturity, but also to identify existing problems and plan a systematic path to evolve to higher levels of cybersecurity maturity. The various research findings and outcomes extend current theories and allow organisations to identify, and focus their scarce resources, on those critical areas. They constitute an important development in knowledge about maturity aspects impacting cybersecurity while offering a practical analytics software tool for organisations to assess and manage their cybersecurity initiatives. This project secured a funding of RM45,000 from the International Research Networks Grant Scheme (IRNGS) 2021.

■ ENGAGEMENT

**Roundtable Discussion**

The Design For Good team by the School of Hospitality and Service Management conducted a roundtable discussion at the Sungai Lima research site, with the Sungai Lima authority stakeholders in the local economy (e.g., fishermen, homestay owner, local delicacy makers, tour guides), and Selangor state government representatives, to establish common ground for all stakeholders and to identify the challenges faced by each of them. The outcome of this roundtable discussion contributed to further engagement activities such as workshops and technical trainings to benefit the community.

**Staffs & Students Volunteer Programme**

The involvement of nursing staffs and nursing students in the volunteer programme at PPVs Sunway Convention Centre was part of the COVID-19 vaccination campaign. The objectives were to (1) develop engagement and empower nursing student's communication skills in between public; and (2) help the government in ensuring a smooth vaccination process towards achieving the herd immunity target.





Ensure sustainable consumption and production patterns



## LEADERSHIP

### Committed to Change

The University is committed on delivering the Sustainable Development Goals and is setting an example on being a responsible consumer by promoting resource and energy efficiency, promulgating sustainable infrastructure, and providing access to basic services for all.

## EDUCATION

### Internship: Formulating Facial Masks Containing Clitoria Ternatea (Butterfly Pea Flower) Extracts

The School of Medical and Life Sciences is offering an internship to in the study of formulating facial masks containing Clitoria ternatea L. extracts. Clitoria ternatea L., is also known as butterfly pea flower and is well-known for its abundance in antioxidant compounds such as polyphenols and flavonoids, which are able to achieve anti-ageing effect when incorporated into skincare product. In this study, various concentrations of butterfly pea flower were formulated in an oil-in-water emulsion system.

### Coverage of Malaysia Media on the Negative Effects of Plastic Pollution During the COVID-19 Pandemic

Coverage of Malaysia media on the negative effects of plastic pollution during the COVID-19 pandemic is a final year student research at the School of Medical and Life Sciences.

This research aims to identify the gap between scientific publications and media by analysing the number of scientific publications in the Malaysian newspapers. A thorough comparison was performed to identify the key differences in terms of number of articles, framing theory and media slant.

### Strategic Internationalisation Programme: Microplastic Pollution in Malaysia

Through the Strategic Internationalisation Programme: Microplastic Pollution in Malaysia, the research team, under the umbrella of the School of Medical and Life Sciences, set out to determine microplastics contamination in Kuala Selangor, Malaysia. This is done by investigating the presence of microplastics and variant anthropogenic debris containing in Malaysian edible bivalves due to its filter-feeding role.

This project has secured a Fundamental Research Grant Scheme funding of RM130,784.

### Conversion of Glycerol to Value-added Products through Biocatalysis Reaction Using Microreactor

The project deals with the application of reactor technology in combination with enzyme catalysis to convert glycerol to value-added chemicals. In this study, the fundamental aspects of enzymatic reaction in lipase-catalysed acylation of glycerol using microreactor will be studied. The performance of the microreactor is evaluated by its efficiency to mediate a reaction involving synthesis of glyceryl oleate from oleic acid and glycerol. The School of Medical and Life Sciences is a collaborator in this project, which has received a funding of RM66,000 from the MyPAIR-Hubert Curien Partnership (PHC)-Hibiscus grant.

### The 3rd International Tourism Retail and Service Management Conference

The 3rd International Tourism Retail and Service Management Conference builds on previous conferences hosted by the Macao Institute for Tourism Studies in 2018 and Nankai University (China) in 2019. The conference is hosted by the School of Hospitality and Service Management in partnership with the Macao Institute for Tourism Studies (Macau, SAR-China), University of South Carolina

(USA) and Nankai University (China). The main theme of this conference is *Developing Sustainable Tourism Retailing*.



## RESEARCH

### Glycerol as a Sustainable Solvent in the Extraction of Bioactive Compounds from Thanaka Bark as Natural Sunscreens

Researchers at the School of Medical and Life Sciences are looking into the hypotheses - 'the use of glycerol as sustainable solvent could be more effective and safer than organic solvents in extraction of bioactive compounds'. Organic solvents are hazardous to the environment and harmful to human health. In the view of all shortcoming, it is necessary to develop a method using effective sustainable solvents that could perform green extraction, which will also give high extraction yield, high selectivity and high purity, as well as zero-waste biorefinery.





## LEADERSHIP

### Fostering a Sustainable Urban Space and Eco-Friendly Living

The University is fully committed to the United Nations Sustainable Development Goals and its "Campus with a Conscience" campaign has embraced many initiatives to reduce carbon footprint and eliminate single-use plastic. The University itself is strategically located at the heart of Sunway City, a model sustainable city built on former brownfield land. The township including the University is connected via canopy walkways that have been installed with LED Lights and solar panel roofs to harness the power of natural sunlight. Vehicles are only allowed on campus to drop off passengers. Over the last few years many roads on campus have been converted to pedestrian access only pathways. This has reduced carbon emissions considerably.

## EDUCATION

### Do Malaysian Policymakers' Acceptance of Climate Change Translate to Effective Climate Action?

A research project lead by students to investigate whether Malaysian policymakers and local governments are taking appropriate climate action in cities they are responsible for, and in their daily lives. In-depth interviews were conducted amongst selected

policymakers from the state of Penang. This study found that the participating policymakers, as a collective, lacked meaningful understanding of what city-wide policies are most effective to tackle climate change. There was also a lack of understanding as to the efficacy of their personal climate actions, and as to other more meaningful actions. Despite being responsible for framing city policies, the participants identified lack of awareness and apathy on the part of fellow policymakers and government officials as impediments to meaningful city-wide climate action.



### Education through Research

At the School of Engineering and Technology, final year students are given the exposure on Climate Action studies as early as in their first degree through the research project component. Some recent research topics that have resulted in this initiative include:

- Understanding thermodynamics and regeneration studies of CO2 adsorption: Effects of different type of adsorbents.
- Synthesis of activated carbon using various activating agents and their application to CO2 capture.
- Machine learning for predicting non-aqueous physical properties of CO2 absorbent.
- Synthesis of choline hydroxide-based deep eutectic with polyamines as solvents for CO2 capture.
- Synthesis of 2(methylamino) ethanol-based deep eutectic solvents for CO2 capture.

## RESEARCH

### Investigating Thermoelectric Energy Harvester Based on Hybrid Graphene/Bismuth Sulphide/Recycled Carbon Fibre Nanocomposite for Sub-watt IoT Applications

Internet of Things (IoT) in IR 4.0 is set to revolutionise the world through network of autonomous

nodes that are capable of collecting and transmitting data. In this study, electrical conductivity enhancement of material is investigated through two methods:

- Varying bismuth and sulphur precursor concentrations via facile hydrothermal method and
- Graphene oxide doping of Bi2S3. Owing to high electrical conductivity of graphene and high charge carrier mobility, this research will be the first to investigate the effect of graphene oxide doping on the electrical and thermoelectric properties of Bi2S3.

This research collaboration is led by our research team at the School of Engineering and Technology. This project has also secured a funding of RM167,120 under the Fundamental Research Grant Scheme.

### Developing a Sustainability Reporting Framework to Address Environmental and Climate Change Concerns

Sustainability Reporting (SR) has gained momentum in Malaysia since the launch of Bursa Malaysia's Sustainability Framework in October 2015. The study's objectives are:

- How CEOs and boards navigate the processes in aligning strategy, structure, performance measures and rewards to effectively manage the various drivers of social and economic performance,

- Examine factors influencing CEOs and boards to promote SR, and
- Develop an appropriate SR framework that reflects the board actions to address environmental and climate change concerns.

This research collaboration is led by our research team at the Sunway University Business School. This project has also secured a funding of RM69,000 under the Fundamental Research Grant Scheme.

### EuroAsia Carbon Dioxide Capture and Utilisation Network

The EuroAsia Carbon Dioxide Capture and Utilisation Network (EACO2CUNet) aims to bring together researchers from Asia and Europe working on CO2 research to establish links and partnership to tackle one of the grand challenges facing earth and humanity, namely climate change. The School of Engineering and Technology is part of this research collaboration, which has secured an internal grant amounting to RM50,000.

## ENGAGEMENT

### Time is Up!

The Sunway University Business School was represented at the Swiss German University Conference on COVID-19 and Sustainable Business where a member of the school had delivered a keynote speech. *Time is Up!* was the title of the talk, which

focused on redefinition of the 4P's concept and how the redefinition will help businesses find strong sustainability in consumption and growth.

### Government Engagement: Terengganu Green Financing Task Force

A member of the School of Medical and Life Sciences was invited to be part of the Terengganu Green Financing Task Force. The task force was formed to explore green financing schemes in the Kenyir watershed.

### Jeffrey Sachs Center Develops Impact Assessment for Community Carbon Footprint Reduction

The Jeffrey Sachs Center on Sustainable Development (JSC) at Sunway University and the Rotary Club of Bukit Kiara Sunrise (RCBKS) designed and implemented a campaign to educate and empower Rotary Club members and their families to understand the link between personal consumption patterns and global environmental consequences. The programme lasted for six weeks and comprised four areas of change: Composting and Planting, Home Energy, Food Choices, and Food Storage and Shopping. The goal was to reduce carbon emissions from these four areas by 20% at the end of the six weeks.







## ■ EDUCATION

### Community Service

Community Service is part of the MU42323 module that the School of Arts students complete. Students work together with friends of Sungai Klang Mid Valley River 3 project to volunteer for on-site learning on the ecosystem and the environmental impact. They will then design a series of posters and communication deck for the organisation.

### Coral Propagation project 2021

Together with Ocean Quest, the Diploma in Events Management students from the School of Hospitality and Service Management participated in a Coral Propagation project in Pulau Redang. These students also carried out the project, Reef Rush, to raise awareness about the growing extinction of our coral reefs, as well as advocating for their rehabilitation.

## ■ RESEARCH

### Mining Public Opinion on Plastic Usage and Reduction from Tweets Using Sentiment Analysis & Sequential Mining Approach

This internal grant has a funding of RM9,000 to explore publication perceptions on motivation and topic discussions relating to the idea of plastic pollution. The intention is to understand society's view on going plastic-free. This project is conducted under the wing of the School of Engineering and Technology.

### Interactive Workshop on Plastic Waste at SMK Seri Hartamas

Jeffrey Sachs Center on Sustainable Development (JSC), in collaboration with the Rotary Club of Bukit Kiara Sunrise, SMK Seri Hartamas and the Sea Monkey Project, conducted an interactive session to impart key awareness and mobilisation skills to students of SMK Seri Hartamas on the issue of single-use plastic waste. The session was conducted in the school compound as part of a larger empowerment programme convened by the Rotary Club of Bukit Kiara Sunrise.



## ■ ENGAGEMENT

### Ocean Waste Clean-up

*The Ocean Waste Clean-up* was a community project at Sungai Lima led by a member of the School of Hospitality and Service Management. Participants include lecturers from Sunway University, radio programme producer, primary and secondary school students. This event also served as an avenue to educate the young as they had first-hand experience of what it feels to clean trash from the ocean.





**Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**



## EDUCATION

### Butter Up Our Nature!

The School of Hospitality and Service Management organised the *Butter Up Our Nature!* event in conjunction with the World Environment Day. This event saw our diploma students participating to raise awareness about the need for environmental conservation. One exciting activity was to bake a cupcake, decorate it with a 'nature' theme, and reuse any leftover ingredients.

### Biodiversity module

The Biodiversity module (BIO2144) is offered by the School of Medical and Life Science. The course objective is for students to gain an

understanding of different types of diversity and mechanisms influencing biodiversity patterns, contemporary threats facing biodiversity due to anthropogenic activities, and different research techniques and analytical skills that are being utilised in biodiversity management. References to Malaysian biodiversity and case studies will be made throughout the course.

### Student Projects

At the School of Medical and Life Science, several final year student projects are aligned with the Sustainable Development Goal: Life on Land. Examples of these research titles include 'Funding opportunities from non-government sources for tiger conservation in Malaysia: is there enough to go around?' and 'Prioritising limestone outcrops in Peninsular Malaysia for conservation: which warrant urgent attention?'

## RESEARCH

### Bear Essentials of Biodiversity: From Passion to Empowerment Virtual Forum

The Sunway University Press hosted the *Bear Essentials of Biodiversity: From Passion to Empowerment Virtual Forum*. The forum was followed by the launch of the book *Sloth Bear: The Barefoot Bear of Sri Lanka* co-authored by ecologist Dr Shyamala Ratnayeke and noted

wildlife photographer Luxshmanan Nadaraja. The book details the behaviour and life history of sloth bears, and the urgent conservation measures needed to improve the plight of this unique bear species.

### Community-based Research to Understand Illegal Trafficking of the Malayan Tiger

This research project focuses on the impact in-country Vietnamese communities has on wildlife trafficking, as part of Panthera's project, Building International Capacity and Transnational Networks to Counter Big Cat Trafficking. This project is led by the School of Medical and Life Sciences researcher and has secured a grant amounting to RM105,000.

### International Day of Forests

*International Day of Forests* themed webinar was organised by the School of Medical and Life Sciences.

Tropical forests cover 7% of global land surface and support over 60% of terrestrial biodiversity. They store an estimated 25% of the world's carbon and play a pivotal role in regulating the world's climate. The extent of deforestation in the tropics is higher than the rest of the world. Forest degradation and deforestation in tropical countries is a major environmental, social, and economic problem, and will continue to be so unless action is taken.

While efforts for tropical forest recovery have centred on forest restoration, efforts to protect existing natural forests and develop sustainable funding mechanisms are arguably vital as well. In this webinar, we showcased efforts around the world that support both tropical forest protection and restoration.

## ENGAGEMENT

### Preserving Tasik Chini

A member of the School of Arts participated in the Preserving Tasik Chini project brought together 80 local and international artists in one location to exchange knowledge and network and collaborate in the arts. Tasik Chini is located in Pahang i.e., one of 13 states in Malaysia. The purpose of this initiative was to promote and support the environmental conservation of Lake Chini. The exhibition showcased the artworks to allow audiences to understand the values, natural resources, and communities (Orang Asal) of this magical land.

### ASEAN Green Future

Sunway University, SDSN and University Kebangsaan Malaysia (UKM), are involved in the ASEAN Green Future Project, which has mobilised 7 out of 10 of the ASEAN country teams.

This initiative aims to accelerate action for decarbonisation to achieve net zero by 2050 for the ASEAN region and ASEAN member states and involves technical simulation and modelling of net zero carbon outcomes along with associated economic and social consequences of such undertaking.

### Industry Engagement: Invitation to Join Expert Panel as Biodiversity Expert

Our Associate Dean (Research) at the School of Medical and Life Sciences was invited to be part of the panel for a talk on biodiversity. Climate Governance Malaysia advocates for increased awareness of the top financial risks arising from the climate crisis, leading to improved climate governance by boards of directors, primarily non-executive directors. This movement is part of a global network of climate governance chapters in collaboration with the World Economic Forum. This talk saw a mix of biodiversity, climate and sustainability issues relevant to corporations.





*Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels*



## LEADERSHIP

### Anti-Bribery and Corruption Policy (ABC Policy)

Through the *Introduction to Psychology 1 (BSc (Hons) Psychology Module): Literature Review* assignment, our Department of Psychology students at the School of Medical and Life Sciences are able to articulate the factors related to intention of bribing (corruption) using available psychology research evidences.

Sunway University is committed to the practice of a zero-tolerance policy against all forms of bribery and corruption and is committed to conducting its business in accordance with all applicable laws, rules and regulations at the highest ethical standards.



As a conscientious employer, all employees and associates of the University must not offer, promise or bribe anyone, and must not request, agree to accept or receive bribes from anyone. The purpose of this policy is to provide guidance to all the employees of the University and its associates concerning how to deal with bribery and corruption issues that may arise in the course of business.

The University is committed to take all necessary measures to ensure that all parts of the organisation does not participate in corrupt activities. It reiterates the University's commitment to full compliance by its employees and associates with the Malaysian Anti-Corruption Commission (MACC) Act 2009 and the MACC (Amendment) Act 2018 and any other local anti-bribery or anti-corruption laws that may be applicable.

## EDUCATION

### Introduction to Psychology 1 (BSc (Hons) Psychology Module): Literature Review

Through the *Introduction to Psychology 1 (BSc (Hons) Psychology Module): Literature Review* assignment, our Department of Psychology students at the School of Medical and Life Sciences are able thought to articulate the factors related to intention to bribe (corruption) using available psychology research evidences.

## RESEARCH

### Cyber Aid: Are Your Children Safe from Cyberbullying?

This project led by members of the School of Engineering and Technology looks into cyberbullying among the kids and how parents can ensure their kids, safety on social media. This study proposes a mechanism, that combines the best cyberbullying detection features to fill the gaps and limitations of existing applications. The results of the study have shown that the proposed mobile application records a higher accuracy in detecting cyberbully than other available applications.

### Sustainable and Social Marketing Guest Lecture: Opening Doors Through Documentary Story Telling

Part of Sustainable and Social Marketing MKT 3194 subject was to share knowledge on how human rights documentaries are made and what to look out for in storytelling. Our Sunway University Business School organised a guest lecture on the topic of *Opening Doors Through Documentary Story Telling* featuring Ms Mahi Ramakrishnan, founder of Beyond Borders Malaysia as the speaker.





*Strengthen the means of implementation and revitalise the global partnership for sustainable development*



## LEADERSHIP

### Next Big Question Forum: Envisioning a Post COVID-19 World!

The *Next Big Question Forum: Envisioning a Post COVID-19 World!* was organised as part of a larger initiative i.e., a competition to stimulate high school students to develop research questions and propose how their ideas can contribute towards planetary health. The idea of this forum was to inspire students in thinking how they would want to shape the world they want, teaching the them to know what they want to achieve and where to look.

## EDUCATION

### Community Service

At the Department of Psychology in the School of Medical and Life Sciences, Community Service is a compulsory module for psychology students. Organisations involved included elderly homes, orphanages, pet centres, and NGOs focusing on mental health and the environment. This activity provides students a real demonstration of impacting the community and an illustration on how they can contribute in the UN-Sustainable Development Goals, which includes quality education, reducing inequalities, sustainable cities and communities, and good health and well-being.

**IN JANUARY 2021, 150 STUDENTS TOOK PART IN A COMMUNITY SERVICE AND OVER RM31,500 WAS RAISED THROUGH THE INITIATIVE.**

## RESEARCH

### Advanced Nano Materials for Clean Energy & Water Technology

The School of Engineering and Technology is part of the Advanced Nano Materials for Clean Energy & Water Technology interdisciplinary project. This project has a networking grant of RM45,000 to create opportunities for academics, early career researchers, and students of participating institutions redundant. This programme fosters entrepreneurship and creativity, and supports the internationalisation of higher education. This project can ultimately impact solar, energy storage and water treatment industries through knowledge transfer, technology development, and innovation.

### Optimal Control, Control and Optimisation and Their Real-World Practical Applications

"*Optimal Control, Control and Optimisation and Their Real-World Practical Applications*" is a large scale collaboration between Shandong Technology University, School of Mathematical Sciences (Sunway University), Curtin University, Sichuan University, Dalian Maritime University, Dalian University of Technology, Zhejiang University, Hangzhou University, Guangdong University of Technology, Hefei University of Technology, Nanjing University of Finance and Economics, Tianjin University of Finance and Economics, Hunan

Normal University, Guangxi Normal University, Hunan University of Technology, China University of Geosciences, Harbin University of Science and Technology, Chongqing Technology and Business University, and Jiangxi University of Finance and Economics.

This project relates to the development of computational methods to solve various optimal control problems arising from practical real-world applications.

## ENGAGEMENT

### Manic Mondays Webinar Series

The School of Medical and Life Sciences hosted the *Manic Mondays Webinar Series*, which entailed having 4 different topics spread out across several weeks. Every topic covered how psychology is generally applied to changing attitudes and behaviours in any industry to solve its problems. Topics included:

- Psychology for Survival
- Behaviour Management Towards Sustainability
- Applied Psychology for Social Influence
- Is Psychology a Science?



# SUNWAY UNIVERSITY

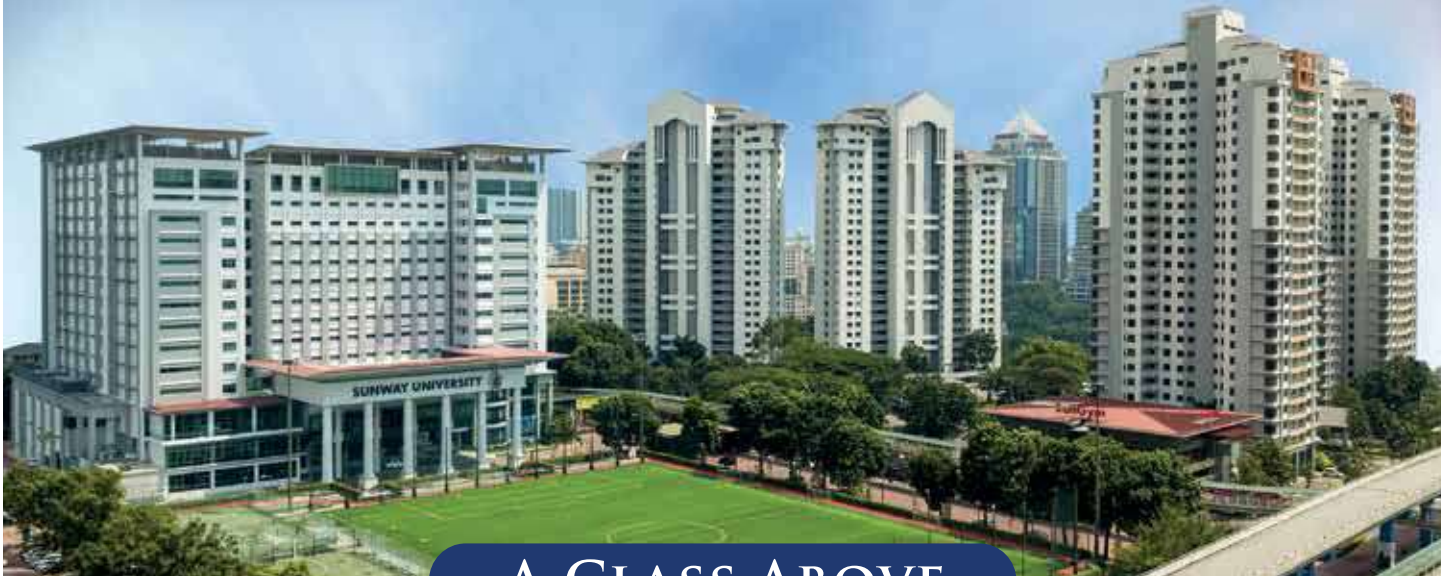
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