Oct— Dec, 2020 1

# IE Insight

#### **FOREWORD**



Mr Lim Kok Shien Dep. Director (I&E) Head (EV/USC)

Welcome to the October-December 2020 newsletter issue of the Office of Assistant Vice Chancellor (Innovation & Enterprise).

I am proud to the present the office's activities, efforts, and accomplishments to achieve our vision to be a university of innovation and enterprise. The Office of Assistant Vice Chancellor (Innovation and Enterprise) continues to engage with local and international stakeholders as part of the initiative to channel collaboration and support between the university and the nation's industry players. The university believes that by connecting the university with the industry, it can open to more opportunities for research that can be of high impact in solving national and global issues such as unemployment, global climate change and renewable energy source.

In early November 2020, Office of Assistant Vice Chancellor (Innovation and Enterprise) and BIBD had an engagement meeting in looking at the possibility of

digital, community and research collaboration.

Whilst in mid-December 2020, BSP and Eigen Energy started an engagement program with UBD's students and staffs in sharing their knowledge, findings, and actions in responding to global climate change. It is hoped that the program gave a new and wider perspective to UBD's research community in the industry's effort to help the country's mission in developing sustainable energy.

Brunei's entrepreneurship ecosystem has been constantly growing especially in the education side to develop the right mindset for youth. This has been one of the most effective way to penetrate the culture of becoming more entrepreneurial. In extending the support of entrepreneurship education to UBD students, BSP LiveWIRE facilitated a Masterclass workshop on Design Thinking to the student startups under Entrepreneurship Village (EV) that are in their 3rd year for Discovery Year Incubation.

Worth noting a memorable December for a signing ceremony which marks the second licensing agreement UBD has entered with industries, was held at the Office of Assistant Vice Chancellor (Innovation and Enterprise), Universiti Brunei Darussalam, for a Licensing Agreement between Universiti Brunei Darussalam (UBD) and Pahaytc Sdn Bhd. With the Office of Assistant Vice Chancellor (Innovation and Enterprise) continuously promoting and encouraging industry dialogue and tri-helix partnerships in different areas of collaborations, the signing represents an important milestone as UBD pushes for more industry collaborations.

2020 has been a challenge for everyone however it has created new norms and opportunities for the UBD community to be more versatile in pursuing their goals. In this chance, I would also like to share the upcoming events for 2021 on a parallel event between Spectrum 2021: ANEW and Entrepreneurship Village (EV) in early April to May 2021. In aligned to become an entrepreneurial university, UBD wishes to provide the environment for students to give commercial value to their skills and talents. It is hoped that this platform can give them the opportunity to showcase their startup to the public.



#### IN THIS ISSUE Foreword

Industry Engagement Meeting with BIBD 2
Lunch and Learn Program with BSP 2
Industry Engagement Meeting with Brunei Energy Services and Trading Sdn Bhd and Petroleum Authority Brunei Darussalam . 3
BSP presentation to UBD Researchers on potential collaboration
Industry Engagement Meeting with Total Brunei
Industry Engagement Meeting with Huawei Brunei
Licensing Agreement between UBD and Pahayte Sdn. Bhd. – 2nd Licensing Agreement of UBD
IP Education: Copyright5
Granted Patent Applications 6
LiveWIPE Mastereless for Discovery Voor

#### OFFICE OF ASSISTANT VICE CHANCELLOR INNOVATION AND ENTERPRISE

The Office of Assistant Vice-Chancellor Innovation and Enterprise (OAVCIE) was formed in 2017; to assist in UBD's transformation into a university of innovation and enterprise.

The office's functions include Education on Intellectual Property (IP), Entrepreneurship, Patent Management, Marketing Licensing, Business development assistance for Start-ups as well as Industry Outreach. OAVCIE also oversees UBD Innovation Wharf and Prototype Development Unit, and is responsible for nsultancies and services within UBD as the UBD's focal point of contact with industries



https://innovation.ubd.edu.bn



Incubation ..



# INDUSTRY ENGAGEMENT MEETING WITH BANK ISLAM BRUNEI DARUSSALAM (BIBD)

On the 9th November 2020, the Office of Assistant Vice Chancellor (Innovation & Enterprise) led by Prof. Dr. Mohd Ayub Sadiq @ Lin Naing, Assistant Vice Chancellor (Innovation & Enterprise) had an engagement meeting at BIBD's Headquarters in Bandar Seri Begawan. Representing on BIBD's side was BIBD's Chief Information Officer (CIO), Mr. Adi Shamsul Hj Sabli and his team. Among the key potential collaboration discussed between the two entities are in the areas of Cashless Initiatives, Corporate Social Responsibilities and Research Collaboration.

BIBD is Brunei's largest Islamic bank and financial institution which has been internationally recognized and is governed by an experienced management team. BIBD is one of Brunei's top banks and serving over a quarter of the Bruneian population across all segments within the retail banking market; with strong focus on Innovation and Excellence. Through their transformative journey, BIBD has made great strides in the development of its capabilities; from upgrades in its overall service delivery through solutions such as internet and mobile banking.

With the constant industry engagement from the OAVC (Innovation and Enterprise), it is hoped there would be realization of different collaborations in the near future.



Group photo with Representative from Bank Islam Brunei Darussalam (BIBD).

#### LUNCH AND LEARN PROGRAM WITH BSP

16 December 2020 – As part of their education program to raise awareness regarding the global climate change, Brunei Shell Petroleum (BSP), together with Eigen Energy (sub-contractor for BSP's solar farm project) conducted an engagement program with Universiti Brunei Darussalam. To help achieve the Brunei National Climate Change Policy's initiative of transitioning to 30 percent national consumption on renewable energy by 2035, BSP introduced a 3 MWp solar energy plant consisting of 7000 solar panels which can generate energy for 600 houses.

Speaking during the event was Shirley Sikun, Head of Transition of Shell Brunei. She remarked that Brunei has a worrying energy usage, the highest in ASEAN, despite it being a small nation. She added that Brunei also has the highest carbon footprint per person in ASEAN. As such, it is important that transition to renewable energy resources is made, so as to be less dependent on oil and gas. Also speaking during the event was Kevin Sim, founder of Eigen Energy. Eigen Energy built the ground-mounted solar photovoltaic (PV) park in Seria. BSP hopes that with initiatives such as the solar park, they are able to spark conversations and drive research gearing towards renewable energy resources.



Learn program session with Brunei Shell Petroleum (BSP) and Eigen Energy.

# INDUSTRY ENGAGEMENT MEETING WITH BRUNEI ENERGY SERVICES AND TRADING SDN BHD AND PETROLEUM AUTHORITY BRUNEI DARUSSALAM



Group photo with Representative from the Brunei Energy Services Sdn Bhd and Petroleum Authority of Brunei Darussalam.

On the 11th November 2020, the Office of Assistant Vice Chancellor (Innovation & Enterprise) led by Prof. Dr. Mohd Ayub Sadiq @ Lin Naing, Assistant Vice Chancellor (Innovation & Enterprise) met representatives from the Brunei Energy Services and Trading Sdn Bhd (previously known as Petroleum Brunei) and the newly established Petroleum Authority Brunei Darussalam, at Brunei Energy Services and Trading Sdn Bhd headquarters in Bandar Seri Begawan. Representing the Brunei Energy Services and Trading side are its Chief Executive Officer (CEO), Mr. Haydn Ian Furlonge and from Petroleum Authority Brunei Darussalam, Mr. Adimas Hj Md Salleh. Among the key potential collaboration discussed between the two entities are in the areas of joint Teaching and programme, Corporate Social Responsibility and promotion of technology.

Brunei Energy Services and Trading Sdn Bhd aims to realize and enhance the value of hydrocarbons of designated petroleum blocks to the country, while the Petroleum Authority of Brunei Darussalam is a statutory body tasked by the Ministry of Energy to undertake regulation and monitoring of operations and infrastructure in the upstream, midstream and downstream oil and gas sector, and act as custodian of petroleum data in Brunei.

With this initial engagement with the two entities, it is hoped that UBD may able to further collaborate in the oil and gas sector which in the main economic driver of Brunei Darussalam.

# BRUNEI SHELL PETROLEUM PRESENTATION TO UBD RESEARCHERS ON POTENTIAL COLLABORATION

On the 15th October, officers from Brunei Shell Petroleum (BSP); specifically from the restoration team, presented potential research collaboration relating to rehabilitation of river banks to UBD's researchers. The presentation provided an insight especially in the field of biodiversity, river management and rehabilitation on BSP's current and proposed projects.

The Office of Assistant Vice Chancelloe (Innovation and Enterprise) has been actively engaging industries such as BSP to connect UBD and the Industries; to align UBD's research to the needs of Brunei and the local industries.



BSP's presentation on potential research collaboration with UBD's Researchers.

#### INDUSTRY ENGAGEMENT MEETING WITH TOTAL BRUNEI



Group photo with Representative from Total Brunei.

On the 20th October, , the Office of Assistant Vice Chancellor (Innovation and Enterprise) visited Total for an initial Industry Engagement Meeting. The meeting was attended by Prof. Dr Mohd Ayub Sadiq @ Lin Naing, Assistant Vice Chancellor (Innovation and Enterprise), Pg Dr Emeroylariffion Abas, Director of Innovation and Enterprise, and Harris Ar Rafi Mohd Zaini, Assistant Registrar, at the Office of Assistant Vice Chancellor (Innovation and Enterprise), UBD. Representing Total was Mr Rasimoon Adinin, Head of Communications and Corporate Social Responsibility. The two parties discussed a number of potential collaboration especially in the area of Corporate Social Responsibility (CSR) such as community and local business development, as to meet the needs of the industry and the community.

### INDUSTRY ENGAGEMENT MEETING WITH HUAWEI BRUNEI



Group photo with Representative from Huawei

Brunei

On the 21st October, the Office of Assistant Vice Chancellor (Innovation and Enterprise) had an Industry Engagement Meeting with Huawei Brunei where UBD presented the five main areas of potential collaborations with industry: Research & Development, Joint Commercialisation of Intellectual Property Rights, Teaching & Learning, Corporate Social Responsibility, and other services, especially in the Information and Communication Technology. With the IT industry playing a large role in everyday life, Huawei has been one of the leading industry in this area and hopes to revolutionize Telco technologies, namely 5G. It is hoped that with this meeting, both parties may benefit in improving the development of IT for national development.

### LICENSING AGREEMENT BETWEEN UBD AND PAHAYTC SDN. BHD. – 2ND LICENSING AGREEMENT OF UBD

8th December 2020 - A signing ceremony for a Licensing Agreement between Universiti Brunei Darussalam (UBD) and Pahaytc Sdn Bhd was held at the Office of Assistant Vice Chancellor (Innovation and Enterprise), Universiti Brunei Darussalam.

The signing marked the second licensing agreement, UBD has entered with industries. Signing on behalf of UBD was Pg Dr Emeroylariffion Abas, Director of the Office of Innovation and Enterprise and signing on behalf of Pahaytc Sdn Bhd was Yong Teck Foo, Director of Pahaytc Sdn Bhd. Present to witness the signing were the Manager of Pahaytc Sdn Bhd, Anny Chieng, and UBD Assistant Vice Chancellor (Innovation and Enterprise), Prof. Dr. Mohd Ayub Sadiq @ Lin Naing, as well as officers from UBD and Pahaytc Sdn Bhd.

The Licensing Agreement was a culmination of years of research and collaboration between Pahaytc Sdn Bhd and researchers from UBD which started in 2018 on the characterisation of the local Aquilaria or 'Agarwood', or commonly referred to as 'Gaharu'. Particularly, the research focuses on the different species of gaharu tea leaves and its benefits.

The signing represents a major milestone as UBD pushes for more industry collaborations. In his opening remarks, Professor Dr Mohammad Ayub Sadiq emphasised that UBD has been working hard, and will continue to work hard, to work together with the public and industry interests. He added that he is confident that with active engagement with industries, government agencies, MSMEs and non-governmental organisations, UBD can fulfill its vision of becoming a university of innovation and enterprise.

The Office of Assistant Vice Chancellor (Innovation and Enterprise) continuously promotes and encourages industry dialogue and tri-helix partnerships in different areas of collaborations including joint research, technology transfer and commercialisation ventures such as licensing of UBD's research effort and technologies. More details on the office can be found at https://innovation.ubd.edu.bn/



Group photo with Representative from Pahaytc Sdn. Bhd.



Most of us are familiar with copyright symbols. You can find them at the bottom of music song discs, games discs, books, manuals, webpages or documents. They represent that the things you are listening, watching, playing, or reading are copyrighted.

#### What is copyright?

Copyright is one category of Intellectual properties. It is an exclusive rights given to the owner of the original works of authorship which include musical, dramatic, literary and artistic works such as such as novels, movies, songs, poetry, paintings, maps and house plans. Copyright laws give the owner the rights they deserve to protect their work and also help to promote creativity and learning.

#### What can be protected using copyright?

There are exhaustive lists of works that can be copyrighted. However, its protection extends only to expressions, and not to ideas. There is no requirement for the works to be the best works or awarded with merits. Instead, they must be 'ORIGINAL'.

#### What are the rights protected by copyright?

**Economic Rights** allow the owner of rights to derive financial reward from the use of works by others. For example, the rights owner can authorise or prohibit his book to be translated to other languages or adapted into a movie. These rights can be transferred to others for a sum of money or royalties.

Moral Rights allow the owner of rights, that is, the creator of a work to claim authorship of his work and to oppose changes to it that could harm his reputation. For example, the author can prohibit the use of his work in immoral activities. Unlike economic right, moral rights cannot be transferred.

### How to register copyright and how long does the protection last?

In most countries, copyright protection is obtained automatically where no registration or other formalities are needed. That is, registration is voluntary. However, you need to register if you wish to bring a lawsuit in case of infringement. In Brunei, registration can be made at the Brunei Intellectual Property Office (BruIPO).

The length of copyright depends on the type of the work and the country. The protection starts as soon as the work is created. In Brunei, copyright of a book will last 50 years after the author's death.



#### OCT – DEC 2020 FILED/GRANTED PATENT APPLICATIONS

#### U52: INSTANT MESSAGING FOR MOBILE DEVICE WITH OFFLINE AND ONLINE

Applications: The present invention disclose a method and a system for unified instant messaging application/service that enables to concurrently send messages via online mode using the Internet and Offline or Airplane mode using WI-FI direct service/Bluetooth/WIFI.

Inventors: Sandhya Aneja; Nagender Aneja; Mohamad Iskandar

Granted | 10<sup>th</sup> Nov '20 Filed | 19<sup>th</sup> Mar '18

#### U47: ANTI-BACTERIAL AND ANTI-FUNGAL PHOTOCATALYTIC

Applications: A photocatalytic coating liquid consisting of Nafion as an indispensable binder resin is disclosed. In addition to this, the coating also generates strong oxidizing compounds by the decomposition of harmful organic compounds and also to protect the acidic environment by the decomposition of neutralizing chemicals from outside. The coating liquid adequately effective against mold and fungus.

Inventors: Toru Kitamura; Nur Fajrini Binti Matjalina; Haji Mohammad Redza Bin Haji Hussin Granted | 10th Nov '20 Filed | 8th Aug '17

### U39: DETERMINING INTERMITTENT RENEWABLE ENERGY PENETRATION LIMITS IN A GRID

Applications: When penetration of renewable sources is more than 10-15%, intermittency affects the reliability of the grid. To maintain the reliability of the grid, grid operators curtail such sources from the grid. In many occasions, such curtailments happen because of transmission bottleneck to transfer the extra energy generation from RE sources. To reduce such curtailment, it is essential to determine the optimal RE integration limit for any grid/micro-grid.

Inventors: Jagabondhu Hazra; Manikandan Padmanaban; Ashish Verma; Mohamad Iskandar Petra; Sathyajith Mathew

Granted | 10<sup>th</sup> Nov '20 Filed | 29<sup>th</sup> Oct '15

#### U36: SCHEDULING CROP TRANSPLANTATIONS

Applications: Determining the day to sow, plant or transplant a crop to maximize yield presents multiple challenges. The invention generates transplantation schedule for a given crop in a given geographic area based analysis of lifecycle constraints, cultivation conditions constraints, and weather forecast constraints.

Inventors: Sambuddha Roy; Subhrajit Bhattacharya; Yogish Sabharwal; Jayasuriya M. R. Sarath Bandara; Vanessa Teo-

Granted | 13<sup>th</sup> Oct '20 Filed | 15<sup>th</sup> May '15

### Entrepreneurship Village (EV)

#### LIVEWIRE MASTERCLASS FOR DISCOVERY YEAR INCUBATION

On the 3rd November 2020, the student of Discovery Year Incubation had the opportunity to partake a workshop by BSP LiveWIRE called Masterclass: Design Thinking at Bamboo Hall, UBD. The workshop aims to help participants to develop innovative ideas by using the design thinking approach.

LiveWIRE Masterclass is an entry level workshop for entrepreneurs that comprises of applied theories and practical activities to equip participants with the fundamentals of business skills from various industries. Design thinking is one of the seven focus masterclasses provided by LiveWIRE, where it adopts iterative process to redefine problems with innovative solutions. The activities in the workshop gave a great foundation for the participants to relate real case scenario with the methods taught.

It is hoped that with this workshop, the 31 students of DY Incubation are able to apply the knowledge to their journey as student entrepreneurs of UBD and further develop their exponential skills in creating innovative and creative ideas. The Masterclass was made possible with the collaboration between LiveWIRE and Entrepreneurship Village (EV) in the hopes of creating a continuity of the nation's entrepreneurship ecosystem.



Group photo with the student of Discovery Year Incubation.



### **Staff Members**

### **Assistant Vice Chancellor**

(Innovation and Enterprise)

Professor Mohammad Ayub Sadiq @ Lin Naing

ayub.sadiq@ubd.edu.bn

#### **Director (Innovation and Enterprise)**

Pg Dr Emeroylariffion Abas

emerovlariffion.abas@ubd.edu.bn

Deputy Director of Innovation and Enterprise, and Head of Entrepreneurship Village and UBD Startup Centre

Lim Kok Shien

kokshien.lim@ubd.edu.bn

#### **Assistant Project Officer**

Siti Nor Rahmah Md Haider Ali

rahmah.ali@ubd.edu.bn

#### **Senior Patent Manager**

Dr. Nagender Aneja

nagender.aneja@ubd.edu.bn

#### **Patent Officer**

Dyg Hasnah binti Awg Haji Hassan

hasnah.hassan@ubd.edu.bn

#### **Assistant Registrar**

Harris Ar-Rafi bin Mohd Zaini

harris.zaini@ubd.edu.bn

#### Clerk

Siti Fauziah binti Haji Kula

Fauziah.kula@ubd.edu.bn