

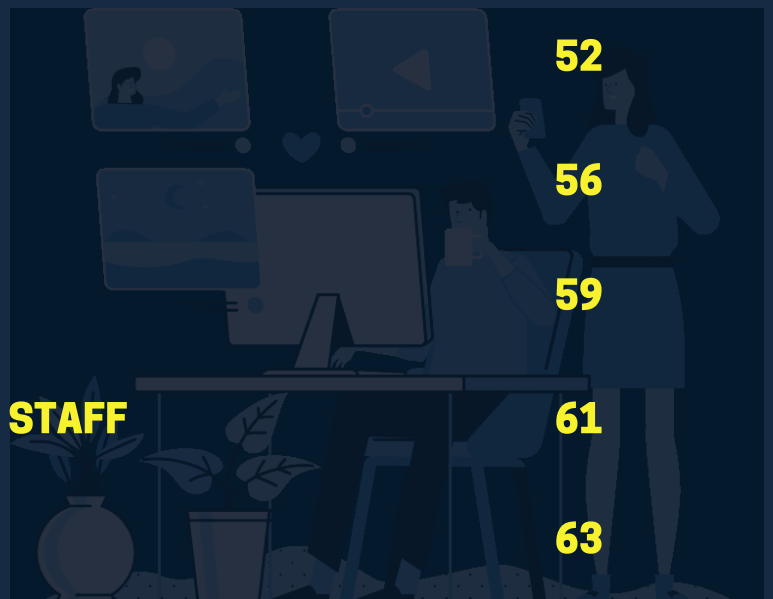
# FSG TRAILBLAZING IN 2020



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# FOREWORD BY THE DEAN



**PROF DR HAJAH FARIDA ZURAINA MOHD YUSOF**  
**DEAN**

Assalamualaikum wrt wbt and good day to all.

This latest FSG e-newsletter issue is a testimony of great achievements by FSG in 2020. Last year has been the most surreal and challenging start to an academic year that any of us have ever experienced. The Covid-19 pandemic has created some extraordinary trials for FSG. While the pandemic caused us to move to remote learning and working, FSG continued with its effort to create a meaningful strategic plan for the next decade. Our strategic plan will guide us in our decision-making and hold ourselves accountable towards a thriving and sustainable learning and research development faculty. Through our research and curriculum, we will ensure that our students are prepared to lead in a rapidly evolving global marketplace. We will use this direction to elevate our commitment to excellence, access, and opportunities, as well as our passion for engaging and enriching the communities that we serve.

Our faculty have been extraordinary, quickly transitioning our courses to online formats. Almost overnight, our staff adapted, providing knowledge and education support remotely, and surrounding our students with all of the guidance and counsel that they need. FSG made a shift to online teaching and learning, putting the health and safety of our students, staff, and faculty first. Through it all, we persisted, centered now more than ever on using applied sciences for a better world.

I invite you to read through this e-newsletter and see for yourself what we have achieved so far as a celebration of excellence. To succeed, we need to strive towards excellence and be trailblazers to reach that goal. FSG is growing not only in numbers but we are also developing in stature and distinction. It shows how FSG has worked together with the industry in addressing some of the greatest challenges we face in the research and development sectors. We have the capacity to create and share knowledge, to serve as allies and advocates for causes that will make the greatest impact in the applied sciences world. And it also shows that when we come together and work as a team, we are most effective and affluent.

I hope you feel inspired and I am confident that we will emerge from this time in our history as a stronger faculty, and as better people and leaders. Stay safe and thank you for your continuous support.



# ACADEMIC ACHIEVEMENTS AND INITIATIVES





# ACADEMIC ACHIEVEMENTS

## 2018-2020 QS WORLD UNIVERSITY RANKING BY SUBJECT (UiTM)

In 2019, 9 subjects at UiTM were listed in the top 500 group in the world by QS WUR by subject 2019 in which 2 of the 9 subjects were Chemistry and Materials Science. Materials Science was first listed and managed to rank 350th best in the world. Both subjects were ranked 6th best in Malaysia after Research University (RU).

SUBJECT	2018	2019	2020
CHEMISTRY	425	487	539
MATERIALS SCIENCE	-	350	386





# OPEN AND DISTANCE LEARNING (ODL) ACTIVITIES

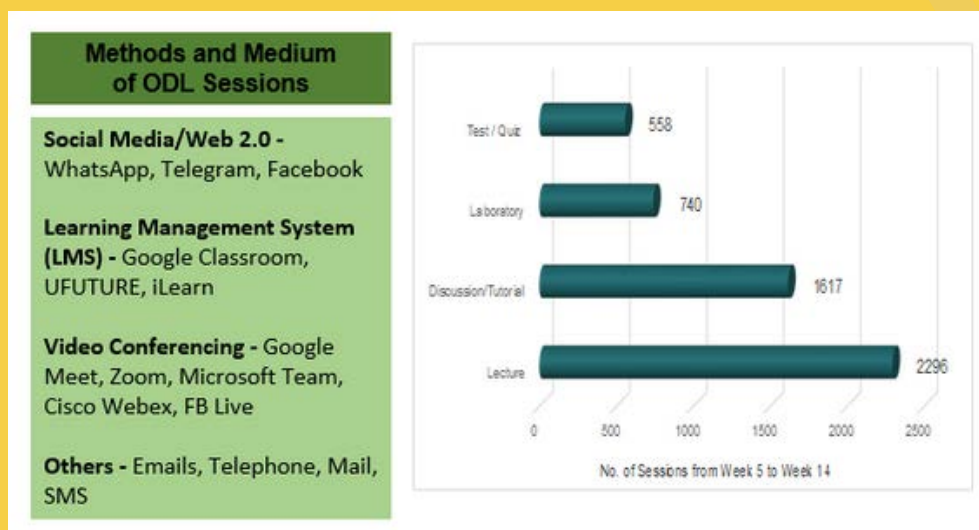
## ONLINE & DISTANCE LEARNING EXPERIENCE FOR SEMESTER MAC - JUL 2020

The Open & Distance Learning (ODL) sessions for FSG faced some difficulties with the major issue of limited internet coverage faced by many of the students. However, with strong perseverance, determination as well as encouragement by FSG lecturers, most of the issues have been resolved and minimised with some changes in the way the sessions were conducted.

It was a new learning experiences for both students and lecturers. In these unprecedented events, unprecedented measures, solutions, and actions are needed as life must go on. With ODL, lecture sessions are no longer confined to closed spaces in the class or lecture theatres but can be conducted anywhere where internet access is available.

It can be said that the COVID19 pandemic is a blessing in disguise for us lecturers as we are forced to jump into the art of flexible delivery of Teaching & Learning practices much faster than we anticipated and wake us from our comfort zone.

Indeed, we have learnt many new things, systems, applications, and practices in the way we teach, conduct tutorials and laboratories.



### TRAINING SERIES AND WEBINARS ON OPEN & DISTANCE LEARNING FACULTY OF APPLIED SCIENCES 2020

The year 2020 is the year where all staff and students need to adapt to the dynamic Teaching & Learning strategies and skills of Open & Distance Learning or ODL. The faculty had taken several initial initiatives just before the first phase of the Movement Control Order (MCO) began at the end of March 2020 with a series of trainings for academic staff. This was done to provide initial preparation and exposure to all staff especially academic staff.

During the MCO, additional series of trainings and webinars were organised on the sharing of experiences and best practices. As a result from these initiatives, an academic staff, Shamsul Bahrin Gulam Ali, received the ODL UiTM 2020 Award during the University Academic Awards 2019.



# OPEN AND DISTANCE LEARNING (ODL) ACTIVITIES

## TRAINING SERIES AND WEBINARS ON OPEN & DISTANCE LEARNING FACULTY OF APPLIED SCIENCES 2020

NO.	TOPIC	INVITED SPEAKER	DATE/TIME
1	RECORDING YOUR LECTURE WITH LOOM	DR SHAHRUL NIZAM AHMAD, LECTURER, FSG	14 APRIL 2020 (TUESDAY) 3.00PM
2	RECORDING YOUR LECTURE WITH SCREENCAST - EASY AND SIMPLE APP	ASSOC PROF TS DR MOHAMAD FAIZUL YAHYA, LECTURER, FSG	13 APRIL 2020 (MONDAY) 3.00PM
3	LECTURING MADE EASY WITH 'SCREEN SHARE' VIA FACEBOOK LIVE	DR MOHD LOKMAN IBRAHIM, LECTURER, FSG	10 APRIL 2020 (FRIDAY) 3.00PM
4	CARA MUDAH RAKAMAN KULIAH MENGGUNAKAN POWERPOINT	ASSOC PROF DR ZAINIARYATI MOHD ZAIN, LECTURER, FSG	14 APRIL 2020 (TUESDAY) 3.00PM
5	USING SCREENCASTOMATIC AND PANAPTO FOR RECORDING YOUR LECTURE	ASSOC PROF TS DR MOHAMAD FAIZUL YAHYA, LECTURER, FSG	14 APRIL 2020 (TUESDAY) 3.00PM
6	LECTURING MADE EASY WITH 'SCREEN SHARE' VIA FACEBOOK LIVE	DR MOHD LOKMAN IBRAHIM, LECTURER, FSG	16 MAC 2020 (MONDAY) 10.00AM
7	USING GOOGLE MEET FOR YOUR LECTURES	DR YONG SOON KONG, LECTURER, FSG	16 MAC 2020 (MONDAY) 4.00PM
8	DEVELOPING ANIMATED DIGITAL CONTENT USING IPAD FOR ONLINE LEARNING MATERIALS SESSION 1: DESIGNING CONTENT`	ASSOC PROF DR AZMA PUTRA, APPLE PROFESSIONAL LEARNING CONSULTANT, FAKULTI KEJURUTERAAN MEKANIKAL, UNIVERSITI TEKNIKAL MALAYSIA MELAKA (UTEM),	14 SEPT.2020 (MONDAY) 9.30AM - 11.00AM
9	DEVELOPING ANIMATED DIGITAL CONTENT USING IPAD FOR ONLINE LEARNING MATERIALS, SESSION 2: CONTENT - CREATING ANIMATED CONTENTS	PN ASMAWATI AHMAD, APPLE PROFESSIONAL LEARNING CONSULTANT, SANDS CONSULTING SDN BHD	14 SEPT.2020 (MONDAY) 3.00PM - 4.30PM
10	DEVELOPING ANIMATED DIGITAL CONTENT USING IPAD FOR ONLINE LEARNING MATERIALS, SESSION 3: DEVELOPING BACKGROUND MUSIC, SOUNDS & AUDIO RECORDING	DR. HARWATI HASHIM, APPLE PROFESSIONAL LEARNING CONSULTANT, PUSAT KAJIAN INOVASI PEMBELAJARAN & PENGAJARAN, FAKULTI PENDIDIKAN, UKM	15 SEPT. 2020 (TUESDAY) 9.30AM - 11.00AM
11	DEVELOPING ANIMATED DIGITAL CONTENT USING IPAD FOR ONLINE LEARNING MATERIALS, SESSION 4: COMPILING, EDITING & PUBLISHING THE LEARNING CONTENT	PN NORHAYATI MASKAT, APPLE PROFESSIONAL LEARNING CONSULTANT, SCHOOL OF EDUCATION, TAYLOR'S UNIVERSITY	15 SEPT. 2020 (TUESDAY) 9.30AM - 11.00AM
12	ONLINE TEACHING: THE EXPERIENCES AND PERSPECTIVES FROM A PRIVATE UNIVERSITY	PN NADIAH SUKI, SENIOR LECTURER, APU DIGITAL CHAMPION, ASIA PACIFIC UNIVERSITY OF TECHNOLOGY & INNOVATION, MALAYSIA	22 SEPTEMBER 2020 (TUESDAY) 10.00AM - 11.30AM
13	FSG FORUM - GETTING THE BEST FROM TECHNOLOGY AND YOUR STUDENTS	EN SHAMSUL BAHRIN GULAM ALI (FSG SHAH ALAM), RECIPIENT OF ANUGERAH ODL UITM 2020, ANUGERAH AKADEMIK UNIVERSITI 2019 TS. DR TUAN SHEIKH AHMAD IZADDIN SHEIKH MOHD GHAZALI (FSG KUALA PILAH), RECIPIENT OF ANUGERAH ODL UITM 2020, ANUGERAH AKADEMIK UNIVERSITI 2019 TS. DR EDDIE TAN TI TJIH (FSG KUALA PILAH), RECIPIENT OF ANUGERAH PENGAJARAN UITM 2020 (KELOMPOK SAINS), ANUGERAH AKADEMIK UNIVERSITI 2019	23 SEPTEMBER 2020 (WEDNESDAY) 2.30PM - 4.30PM
14	ALTERNATIVE ASSESSMENTS: THE CHOICE IS YOURS	PN NADIAH SUKI, SENIOR LECTURER, APU DIGITAL CHAMPION, ASIA PACIFIC UNIVERSITY OF TECHNOLOGY & INNOVATION, MALAYSIA	25 SEPTEMBER 2020 (FRIDAY) 10.00AM - 11.30AM
15	MICROSOFT TEAMS: GETTING STARTED WITH TEAMS FOR ODL	TS. DR RATNA ZUARNI RAMLI, SENIOR LECTURER, FSKM, KUALA PILAH	1 OCTOBER 2020 (THURSDAY) 10.00AM-12.00 NOON



# RECOGNITION AND ACCREDITATION OF FSG PROGRAMMES FROM MALAYSIA BOARD OF TECHNOLOGISTS (MBOT)

Several Diploma and Bachelor programmes have received temporary transitional recognition and accreditation by MBOT in the fourth quarter of 2020. This recognition means that the curriculum of the programme has been identified and recognised as appropriate, and follows the standard criteria as outlined by MBOT.

Among the MBOT criteria such as having a minimum amount of credit for the technology component as well as the percentage of theory and practical components required. For the Diploma programme, the technology component must be at least 60 credits as well as at least 60% of practical component. For the Bachelor's programme, the technology component must be at least 80 credits and 40% of practical component.

The following are the FSG programmes that have been temporarily accredited by MBOT in 2020:

NO.	CODE	PROGRAMME NAME	LOCATION (CAMPUS)
1	AS113	DIPLOMA TEKNOLOGI POLIMER	ARAU
2	AS115	DIPLOMA KIMIA PERINDUSTRIAN	ARAU & SAMARAHAN
3	AS116	DIPLOMA TEKNOLOGI MAKANAN	KUALA PILAH & SAMARAHAN
4	AS117	DIPLOMA TEKNOLOGI PERKAYUAN	JENGA
5	AS118	DIPLOMA TEKNOLOGI TEKSTIL	KUALA PILAH
6	AS229	SARJANA MUDA SAINS (KEPUJIAN) TEKNOLOGI PERSEKITARAN	SHAH ALAM
7	AS240	SARJANA MUDA SAINS (KEPUJIAN) SAINS BAHAN DAN TEKNOLOGI	SHAH ALAM
8	AS243	SARJANA MUDA SAINS (KEPUJIAN) TEKNOLOGI POLIMER	SHAH ALAM & ARAU
9	AS245	SARJANA MUDA SAINS (KEPUJIAN) KIMIA GUNAAN	SHAH ALAM & ARAU
10	AS246	SARJANA MUDA SAINS (KEPUJIAN) SAINS & TEKNOLOGI MAKANAN	SHAH ALAM & KUALA PILAH
11	AS247	SARJANA MUDA (KEPUJIAN) TEKNOLOGI PERABOT	JENGA
12	AS250	SARJANA MUDA SAINS (KEPUJIAN) SAINS TEKSTIL & TEKNOLOGI FESYEN	SHAH ALAM
13	AS253	SARJANA MUDA SAINS (KEPUJIAN) KIMIA (ANALISIS FORENSIK)	SHAH ALAM
14	AS254	SARJANA MUDA (KEPUJIAN) TEKNOLOGI MARIN	ARAU



## VISITING PROFESSOR

**UiTM** *di hatiaku* DEKAN & WARGA FAKULTI SAINS GUNAAAN

**UiTM** UNIVERSITI TEKNOLOGI MARA

**Faculty of Applied Sciences (FASO), UTM Shah Alam**

**Instagram:** fsg\_uitm

**Facebook:** FASO\_UTM

**LinkedIn:** Faculty of Applied Sciences (FASO) Fakulti Sains Gunaan UTM Shah Alam

**Hashtags:** #fsgpadu #fsgkusayang

## AWARDS

**UiTM** *di hatiaku* DEKAN & WARGA FAKULTI SAINS GUNAAAN

**UiTM** UNIVERSITI TEKNOLOGI MARA

**Faculty of Applied Sciences (FASO), UTM Shah Alam**

**Instagram:** fsg\_uitm

**Facebook:** FASO\_UTM

**LinkedIn:** Faculty of Applied Sciences (FASO) Fakulti Sains Gunaan UTM Shah Alam

**Hashtags:** #fsgpadu #fsgkusayang





# AWARDS

**Congratulations!**

**SILVER**

Ts. Dr. Judith Gisip  
Azrena Abdul Karim  
Dr. Imelda Albert Gisip

**Technology Entrepreneurship Teaching Toolkit**

International VIRTUAL  
Educational Innovation, Innovation and Design Competition  
I-EDII@2020  
17-20 Nov 2020

UITM *ai hatiku* <https://fsg.uitm.edu.my> fsg\_uitm Fakulti Sains Gunaan UITM Shah Alam  
Faculty of Applied Sciences, UITM Shah Alam FSG\_UITM Faculty of Applied Sciences (FSG)

**Congratulations!**

**The Virtual National e-Content Development Competition 2020**

Award	Participants	Title
<b>Gold Award</b>	Mrs Ernie Eileen Rizlan Ross	MOOC - Microbiology
<b>Gold Award</b>	PM Dr Aishah Bujang, Dr Suzalra Bakar	MOOC - Food Packaging Technology
<b>Silver Award</b>	Ts Dr Norazura Binti Ibrahim, Mrs Hairani Tahir, Mrs Mona Rita Othman, PM Dr Siti Zaleha Saad, Dr Ahmad Faiza Mohd, Ts Dr Raja Roslan Raja Mohamed	MOOC - Elastomeric Materials
<b>Silver Award</b>	Dr Kavitha Rajagopal	MOOC - Forensic Biology
<b>Silver Award</b>	Dr Zitty Sarah Ismail, Dr Mohd Nazarudin Zakaria, Mrs Mazatulikhma Mat Zain, Mrs Yuswanie Md Yusof, Mrs Noradila Mohamed, Mrs Fazni Susila Abdul Ghani, Ts Dr Nor Suhaila Mohamad Hanapi	MOOC - Are You Protected?
<b>Silver Award</b>	Dr Hainul Amani Binti Abdul Hamid, PM Dr Noralini Hamzah, Dr Mohd Azizi Nawawi, Dr Mohd Sufril Mastuli, Dr Sharil Fadli Mohamad Zamri	Physical Chemistry Is Fun
<b>Bronze Award</b>	Mrs Fazni Susila Abdul Ghani, Mrs Ernie Eileen Rizlan Ross, Dr Zitty Sarah Ismail, Mrs Noraishah Abdullah Noraishah Abdullah, Dr Syahrul Imran Abu Bakar, Dr Hamidah Md Rasid, Dr Najmah P.S. Hassan, Ir Normadyzah Ahmad, Dr Nabilah Akemal Muhd Zailani, Ts Dr Nor Suhaila Mohamad Hanapi	MOOC - Introduction To Organic Chemistry CHM412 And CHM413
<b>Bronze Award</b>	Ts Dr Nor Suhaila Mohamad Hanapi, PM Dr Rozita Osman Ts Dr Wan Nazihah Wan Ibrahim, Dr Nursyamsyilla Mat Hadzir Mrs Fazni Susila Abdul Ghani, Dr Zitty Sarah Ismail	MOOC - CHM561: Achieving Quality & Excellent
<b>Bronze Award</b>	PM Dr Sabiha Hanim Saleh, PM Dr Zuraida Khusaimi, Mrs Ruhani Ibrahim, Mrs Sabarina Md. Yunus	MOOC - Introduction To Analytical Chemistry

UITM *ai hatiku* <https://fsg.uitm.edu.my> fsg\_uitm Fakulti Sains Gunaan UITM Shah Alam  
Faculty of Applied Sciences, UITM Shah Alam FSG\_UITM Faculty of Applied Sciences (FSG)



# APPOINTMENTS


 Pejabat  
Timbuan Naib Canselor  
(Penyelidikan dan Inovasi)
 

## Congratulations

**PROFESSOR DR NOR HADIANI ISMAIL**  
*Atta-ur-Rahman Institute for Natural Product  
Discovery (AuRIns) / Faculty of Applied Sciences*

on the appointment as  
**PRESIDENT**  
*Malaysian Natural Product Society (MNPS)*  
 2020-2022

from  
 Office of Deputy Vice-Chancellor  
 (Research & Innovation) UiTM


 Unleashing Potentials  
Shaping the Future

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  trncpi\_uitm
  trncpi\_uitm
  TNCPi UiTM | #bevisible


 Pejabat  
Timbuan Naib Canselor

## Congratulations

**Prof Ts ChM Dr Chan Chin Han**  
 on the appointment as  
**Fellow**  
**Akademi Profesor Malaysia**  
 Effective 20 June 2020


 Dekan & Warga  
Fakulti Sains  
Gunaan

 Faculty of Applied Sciences,  
UiTM Shah Alam  
<https://fsg.uitm.edu.my/malaj/>
 fsg\_uitm
  Faculty of Applied Sciences (FSG)
  FSG\_UiTM
  Fakulti Sains Gunaan UiTM Shah Alam
  #fsgpadu
  #fsgkussayang



## PROFESSOR ON DEMAND

Professor on Demand is a programme initiated by the Office of Academic Affairs, FSG where FSG professors and associate professors are given slots to teach foundation students at UiTM Dengkil. The program is designed to expose Asasi students with professional experience through listening to lectures by top faculty members.



PROF. CHM. DR. HADIANI ISMAIL



PROF. TS. DR. HJ MOHAMAD KAMAL HAJI HARUN



PROF. CHM. DR. NORIZAN AHMAT



PROF. DR. HJH. FARIDA ZURAINA MOHD YUSOF



PROF. DR. HJ. MOHAMAD FAIZ FOONG ABDULLAH



ASSOC. PROF. DR. NORRIZAH JAAFAR SIDIK



ASSOC. PROF. DR. NOORAIN HASHIM



ASSOC. PROF. DR. NOOR HANA HUSSAIN

## MENTOR-MENTEE PROGRAMME

The mentor-mentee programme between FSG Professors and Lecturers has been implemented since 2019. For 2021, there will be some changes in terms of the number of Professors in the FSG (due to the retirement of Professors and the addition of new Professors), as well as the addition and reduction of the number of lecturers serving under 20 years.

Mentor means a trusted friend, counselor or teacher. In the context of a faculty, a mentor is usually addressed to a person who is knowledgeable and has experience in a specialized field, namely a Professor.

Currently, FSG Shah Alam has a total of 18 Professors of which 16 of them are serving at the Shah Alam Campus while 2 more Professors are serving at a branch campus and Foundation Center. As such, only 16 Professors were involved as Mentors this year. In addition, a total of three senior lecturers with the rank of Associate Professor were also appointed as Mentors.

Mentee, on the other hand, means the individual who is guided and who is led. In this context, lecturers under less than 20 years of service are considered Mentees. The number of lecturers in this category in 2021 is 145 people.

The main focus of this programme is in the professional development of a Mentee especially in the aspects of teaching, research, and involvement with the industry and society.

The focus of the system can also be given to the psycho-social aspects of the Mentee such as latest knowledge and skills, new abilities, positive attitudes and current needs so that they are able to improve their competitiveness, manage opportunities and problems prudently, and respond to various challenges.





# **STUDENTS' ACHIEVEMENTS AND ACTIVITIES**



# STUDENTS' ACHIEVEMENTS AND ACTIVITIES

## FSG STUDENTS ACTIVELY PARTICIPATED IN ACTIVITIES DURING COVID-19 PANDEMIC

Our country has been affected by the COVID-19 pandemic which has also impacted the whole world. The communities including university students were forced to embrace the new norms in their daily lives. Teaching and learning (T&L) methods at higher education institutions (HEI) underwent a drastic change. The new norms had forced the higher education community to immediately move to teaching and learning online.

The change from face-to-face to virtual learning had caused problems among students mentally and physically. Thus, the Student Affairs Division of Faculty of Applied Sciences, FSG, took the initiative to curb these problems by encouraging students' societies to continue with academic and non-academic activities. This could help reduce anxiety and stress amongst students. The efforts received full support from the top management of the faculty in ensuring that the students remain calm and able to focus on their studies.

Throughout 2020, a total of 65 student activities were approved and conducted online. Despite the COVID-19 pandemic, strong cooperation from the Sekretariat Mahasiswa Fakulti (SMF) and 14 students' societies led by Majlis Perwakilan Pelajar (MPP) had successfully organized activities at faculty, university, national and international levels. Prior to the first Movement Control Order (MCO) was announced, the faculty's MPP and SMF had already taken the initiative to produce sanitizer for students and staff use.

Several best achievements by FSG students in 2020:

- Naib Johan Debat Nuklear Antara Varsiti 2020
- Gold Special Award in the 4th World Invention Academic Conference 2020
- First Runner-Up for E-Malaysian Speaking Minds Competition 2020
- Top 10 Best Posters International e-Conference on Chemicals & Materials for Emergent Technologies





# STUDENTS' ACHIEVEMENTS AND ACTIVITIES

## FSG STUDENTS ACTIVELY PARTICIPATED IN ACTIVITIES DURING COVID-19 PANDEMIC

FSG students remained committed in organizing activities throughout 2020 despite being fully occupied with online teaching and learning amid the COVID-19 pandemic. Various activities took place such as webinars, usrah, career and counseling sessions, competitions, e-sport, and so on. Alumni and industry players also participated in support of the students' efforts.

And for the first time ever, FSG students conducted a virtual pre-graduation event to celebrate final semester students. An online orientation called FSG "Get-To-Know" Day was also held which aimed to introduce the faculty to incoming students. It was a great effort in ensuring that all new students would still be able to get acquainted with the faculty even without being physically present.

The year 2020 had been a great memorable experience for FSG students as they won the coveted UiTM Overall Champion in the first edition of the Sukan Antara Fakulti Virtual Edition (SAFVE 2020). This was a grand success as FSG students were able to prove themselves that they are not only great in academics but also excel in sports. All these great achievements were obtained during the COVID-19 pandemic which made it all the more memorable.

The following figures illustrate several activities which were carried out throughout 2020.







## STUDENTS' ACHIEVEMENTS AND ACTIVITIES

### FSG STUDENTS ACTIVELY PARTICIPATED IN ACTIVITIES DURING COVID-19 PANDEMIC

As the year 2020 came to an end, the spirit of “FSGku Sayang” and “FSG padu” remained high in the heart of FSG students. It was evident in the huge percentage of students who voted during the campus election, Pilihan Raya Kampus (PRK) of UiTM on 12 and 13 January 2021. The 89.86% of FSG students who voted exceeded the university’s target of 85%.

This shows that the students took the voting responsibility seriously and fulfilled what is required of them as university students. FSG students continue to expand their horizons and seek on several opportunities to organise and collaborate in activities that add values as well as improve skills.

Congratulations to Mr. Muhammad Syaabani Mohd Rafie dan Miss Nur Nabilah Syafiqah Hafizuddin who were voted to represent FSG as MPP for 2020/2021 term.





## UKM-NIPPON FOUNDATION ENDOWMENT FUND

The Institute of Malaysian and International Studies (IKMAS)-Nippon Foundation

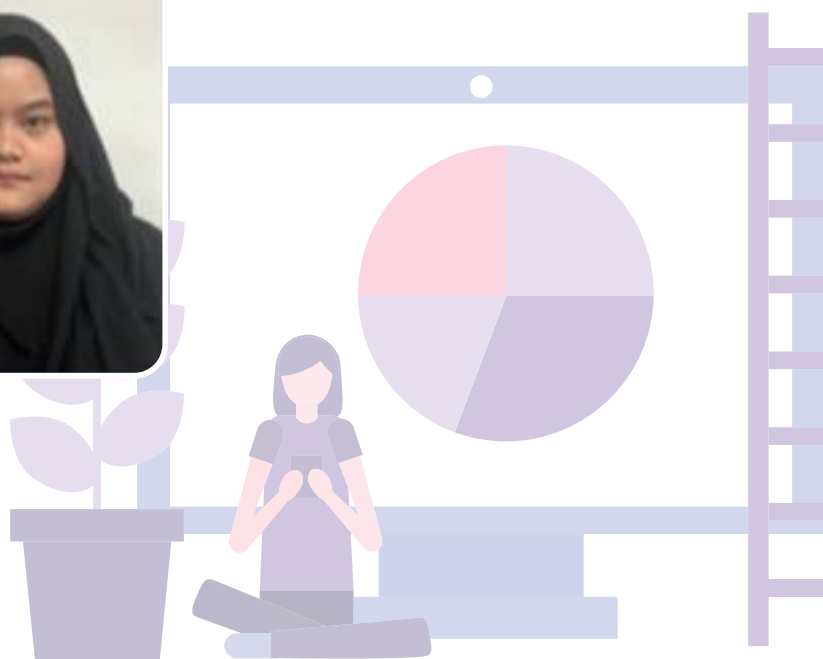
### Young Scholar Fellowship Programme

Miss Izzah Nur Zulaikha Muharram Rachman Masjhur, a postgraduate student from FSG was one of the five selected participants in the IKMAS-Nippon Foundation Young Fellowship programme for 2020 session.

The programme was first introduced in October 2017 with the objective to provide young scholars from CLMV/ASEAN Countries with an opportunity to interact with Fellows from the Institute of Malaysian and International Studies (IKMAS) and academic staffs of National University of Malaysia (UKM) on research areas of their interest. The chosen topics must be related to ASEAN Integration.

For the 2020 term, which ran from 7 to 18 September 2020, the participants were introduced to the IKMAS community and took part in online classes during the first week. The classes covered topics on ASEAN ranging from political security, economic community, economic diplomacy and socio cultural. During the second week, the participants performed research work and went to a field trip to Terengganu to explore the culture and history of the beautiful state.

At the end of the programme, the students submitted their articles on their research work for publication. Izzah who was supervised by Prof. Dr. Sufian Jusoh had successfully produced an article on “The Needs of an Accredited Non-destructive Testing Training Centre for ASEAN Countries”.





# ACHIEVEMENTS IN RESEARCH AND INNOVATIONS



# GRANTS RECIPIENTS

## ERASMUS+ PROGRAM GRANT WORTH RM656,500.00

Researchers from the Textile Research Group had successfully obtained an ERASMUS+ grant from European Union in January 2020. Their project is entitled “Smart Textiles-Modernization of the Curriculum of Textile Engineering and Textile Technology in Indonesia, Malaysia, and Pakistan”. The duration of this project is for 3 years starting from 15 January 2020 until 14 January 2023 with a total grant of RM 627,940.00 (EUR 135,670.00).

The UiTM team is led by Associate Prof. Ts. Dr. Mohd Rozi Ahmad. Other team members are Associate Prof. Dr. Mohamad Faizul Yahya, Ts. Dr. Nor Dalila Nor Affandi, Dr. Atiyyah Musa and Ts. Dr. Wan Syazehan Ruznan.

The project includes collaborative initiatives between European and Asian universities as follows:

1. University of West Attica, Athens, Greece (Project leader)
2. University of Ghent, Belgium
3. Universitat Politècnica de Valencia, Spain
4. University of Engineering and Technology, Karachi, Pakistan
5. Bahauddin Zakariya University, Punjab, Pakistan
6. Bandung Institute of Technology, Indonesia
7. Polytechnic of Textile Technology, Indonesia;
8. Universiti Tun Hussein Onn, Johor, Malaysia

A consulting company based in Piraeus, Greece; IDEC S.A. is also involved in the project that provides high-tech training to universities. Collaborative efforts include the development of a new curriculum on smart textiles and staff exchanges between Asian and European universities, as well as mobility programmes for staff and students in the European textile industry. The program is expected to generate about 20 MoUs between UiTM and textile-related industries in Asian and European countries.





## GRANTS RECIPIENTS

### NEWTON FUND GRANT WORTH RM357,182.00

Another recent international grant recipient is Dr. Zakiah Mohamed who received the prestigious Newton Fund worth RM357,182.00 from the Department of Higher Education, Malaysia and the Science and Technology Facilities Council, UK for a research on evolution of crystal and magnetic structures in materials.

Through such funding, her research team will gain access to international facilities at ISIS Neutron and Muon Source in the UK for studying materials at the atomic level. Neutron data can give a very accurate value of the position of the atoms in the crystal structure.

*Sekalung Tahniah*

**DR ZAKIAH MOHAMED**  
penerima

**NEWTON FUND:**  
Use of ISIS Neutron and Muon Source

**Tajuk Projek:**  
Crystal and Magnetic Structure Evolution in Solid Solution  
 $\text{Sr}_{1-x}\text{Mn}_x\text{Co}_x\text{RuO}_6$  Double Perovskites

**RM 357,182.00**

**Newton Fund**

UTM  
Dekan  
dan Warga Falsafah Sains Gemilang

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<https://ig.utm.edu.my>

#iggrants





# GRANTS RECIPIENTS

**UNIVERSITI TEKNOLOGI MARA** | **Fakulti Sains Gunaan**

## Congratulations

**Dr Nurul Nadiah Mohd Firdaus Hum**  
 for securing international collaboration research grant fully-funded by Universitas Airlangga (UNAIR), Indonesia

**Amount: 100,000,000 rupiah (~USD 7000/ RM 30,000)**  
**Duration: 1 year**

**Project Title:**  
 Enhancing Aquaponic Performances Using Microbial System for Sustainable and Eco-friendly Aquaculture



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**UNIVERSITI TEKNOLOGI MARA** | **Fakulti Sains Gunaan**

## Congratulations

**Ts Dr Tay Chia Chay**  
**Dr Wan Nurhayati Wan Hanafi**  
 for securing international collaboration research grant fully-funded by Universitas Airlangga (UNAIR), Indonesia

**Amount: Rp 100,000,000 (RM 30,000)**

**Project Title:**  
 The analysis of microbial community and isolation of Ciprofloxacin-degrading bacteria from hospital wastewater treatment plants in Indonesia and Malaysia.




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## Sekalung Tahniah




kepada penerima

**DEMAND-DRIVEN INNOVATION PROJECT UNDER THE PUBLIC-PRIVATE RESEARCH NETWORK (PPRN)**

**Dr Ahmad Faiza Mohd** (RM150,000)  
 "Modernization of the Injection Dyes Technology on the Traditional Natural Fibres Batik Printing Quality"

**Prof. Madya Dr Khalilah Abdul Khalil** (RM 44,000)  
 "Optimization of Effective Microbes (EM) Formula For Fresh Water Lobster (LAT) Growth Improvement"

**Puan Rohana Mat Nor** (RM32,000)  
 "Optimization of Biotech-Azolla Based PRLLRTS for the Grow-out Phase of Freshwater Tilapia, Oreochromis sp."

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# GRANTS RECIPIENTS

 **Fakulti Sains Gunaan**

*Congratulations*

**Dr Mohd Shafiq Aazmi**

for being appointed as Project Leader for a research grant funded by Universiti Putra Malaysia (UPM)

**Amount: RM 13,800**  
**Duration: 1 year**  
**Project Title:**  
**Influenza Disease Burden and Cost Estimates in Malaysia (FLU 97)**



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 **Fakulti Sains Gunaan**

*Congratulations*

**Dr Faezah Pardi**

for being appointed as Project Leader for a research grant funded by Geran Kursi Perubahan Iklim Universiti Kebangsaan Malaysia (UKM) - Yayasan Sime Darby

**Amount: RM 25,000**  
**Duration: 1 June 2020 - 31 Mei 2022**  
**Project Title:**  
**Understanding the Ecological Consequences of Climate Change to Forest Growth Pattern in Peninsular Malaysia**



 **Dekan & Warga Fakulti Sains Gunaan**

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 **Fakulti Sains Gunaan**

*Congratulations*

**Dr Nursyamsyila Mat Hadzir**

for securing Lestari Covid Grant

**Amount: RM 20,000**  
**Project Title:**  
**Development of N Protein Targeted Aptamer Based Electrochemical Biosensor Potentially as SARS CoV 2 Testing Test**



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# GRANTS RECIPIENTS



Pejabat  
Timbalan Naib Canselor  
(Penyelidikan dan Inovasi)



## Congratulations



**ASSOCIATE PROFESSOR DR ALI H. JAWAD**  
Faculty of Applied Sciences

on securing a funding  
**INTERNATIONAL RESEARCH GRANT  
KING SAUD UNIVERSITY**

for a project entitled  
**Hydrothermal Carbonization of Food Waste as  
a Source of Potential Solid Biofuel**

Total amount received:  
**SAR 10,000.00 (RM 10,644.00)**



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Pejabat  
Timbalan Naib Canselor  
(Penyelidikan dan Inovasi)

## Congratulations



**ASSOC. PROF. DR ZAINIHARYATI MOHD ZAIN**  
Faculty of Applied Sciences, UiTM (Project Leader)

**ASSOC. PROF. DR YUSAIRIE MOHD** Faculty of Applied Sciences, UiTM  
**DR MOHD SHIHABUDDIN AHMAD NOORDEN** Faculty of Pharmacy, UiTM  
**DR MOHD FAIRULNIZAL MD NOH &  
DR ROZAINANEE MOHD ZAIN** Institute for Medical Research (IMR)

on securing a funding from  
**Collaborative Research in Engineering, Science  
and Technology (CREST)**

for a project entitled  
**Rapid Detection of COVID19 Virus (Sars-CoV-2) in  
Human Nasopharyngeal Swab Specimens using  
Aptamers based Impedimetric RNA/DNA Biosensor**

Total amount received:  
**RM 100,000.00**



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# INNOVATIONS & AWARDS

**6** Utility Innovations

**10** Patents

<p><b>Lead Inventor:</b> Mohd Zafian Mohd Zaini Faculty of Information Management, UiTM Shah Alam Approved Storage LI 20181702120 / Utility Innovation / MF 174832-4</p>	<p><b>Lead Inventor:</b> Dr. To' Sheik Anwar Faculty of Electrical Engineering, UiTM Sarawak A Wireless Controlling System for Power Switching of Air Air Conditioner PI 201900071 / Patent / MF 174833-4</p>
<p><b>Lead Inventor:</b> Pusline Joo Faculty of Office Management and Technology, UiTM Seremban An Apparatus for Fastening Sheets of Materials PI 20181001032 / Patent / MF 174836-4</p>	<p><b>Lead Inventor:</b> Prof. Dr. Ku Halim Ku Hamid Faculty of Electrical Engineering, UiTM Shah Alam A Method of Regenerating Spent Bleaching Earth PI 201800306 / Patent / MF 172864-4</p>
<p><b>Lead Inventor:</b> Dr. Lim Ying Pui Faculty of Chemical Engineering, UiTM Shah Alam A Method for Treating Wastewater and A Composition to be Used Thereof PI 20091182 / Patent / MF 172865-4</p>	<p><b>Lead Inventor:</b> Assoc. Prof. Dr. Jamir Hussain Faculty of Medicine, UiTM Sungai Buloh A Polymerase Chain Reaction Kit for Detecting Bacteriophages LI 201703030 / Utility Innovation / MF 178403-4</p>
<p><b>Lead Inventor:</b> Assoc. Prof. Dr. Saad Shah Asyraf Ibrahim Faculty of Chemical Engineering, UiTM Shah Alam A Gasification Apparatus PI 20181701023 / Patent / MF 178404-4</p>	<p><b>Lead Inventors:</b> Mahyudin Prof. Dr. Mohd Samsul, Dr. Hajar Anwar Faculty of Electrical Engineering, UiTM Terengganu Monopole Plasma Antenna PI 20181001014 / Patent / Clear Substantive Examination / MF 172866-4</p>
<p><b>Lead Inventor:</b> Assoc. Prof. Dr. Ruzmah Mohamed Faculty of Applied Sciences, UiTM Shah Alam A Method of Producing a Thermoset Composites PI 201800008 / Patent / MF 172867-4</p>	<p><b>Lead Inventor:</b> Assoc. Prof. Dr. Mahamed Hussain Ismail Faculty of Mechanical Engineering, UiTM Shah Alam A Web Based Wavelet Client Server Viewing Tool System for Remote Display PI 201703037 / Utility Innovation / MF 172868-4</p>
<p><b>Lead Inventor:</b> Dr. Salimah Mohd Nor Faculty of Applied Sciences, UiTM Shah Alam A Process for Durable Press Finish PI 20060324 / Patent / MF 172869-4</p>	<p><b>Lead Inventor:</b> Prof. Dr. Lim Yook Khuan Faculty of Electrical Engineering, UiTM Shah Alam A Web Based Wavelet Client Server Viewing Tool System for Remote Display PI 201703036 / Patent / MF 172870-4</p>
<p><b>Lead Inventor:</b> Prof. Dr. Harizah Abd. Rahman Faculty of Chemical Engineering, UiTM Shah Alam A Method of Treating Automotive Waste LI 20181701162 / Utility Innovation / MF 172871-4</p>	<p><b>Lead Inventor:</b> Assoc. Prof. Dr. Mohd Fadzil Anisah Faculty of Civil Engineering, UiTM Shah Alam Stiffness Stabilizer Binder Composition LI 201702024 / Utility Innovation / Clear Substantive Examination / MF 172872-4</p>
<p><b>Lead Inventor:</b> Dr. Rusli Hassan Faculty of Mechanical Engineering, UiTM Shah Alam An Inhibitor System for Used Paper LI 2017010504 / Utility Innovation / MF 172873-4</p>	<p><b>Lead Inventor:</b> Assoc. Prof. Dr. Hasmah Mahidin Faculty of Plantation and Agroforestry, UiTM Sarawak An Apparatus for Squeezing and Sieving PI 2018000504 / Patent / MF 179142-4</p>

Clear Substantive Examination / MF 172874-4

Unleashing Potentials, Shaping the Future

**SILVER**

**Assoc. Prof. Dr. Zainiharyati Mohd Zain & Team**

**Rapid Detection of COVID-19 Virus (SARS-CoV-2) in Human Nasopharyngeal Swab Specimens Using Aptamers based Impedimetric DNA Biosensor**

**MTE 2020** Special Edition  
MALAYSIA TECHNOLOGY EXPO (MTE) 2020  
COVID-19 International Innovation Awards  
2 Nov 2020

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**Congratulations**

**FSG Researchers**

for winning medals

**MALAYSIA TECHNOLOGY EXPO (MTE), 2020**

20-22 February 2020  
Putra World Trade Centre

**Prof Chan Chin Han**  
Gold Award  
Best Award Category  
A Quick Way to fingerprint your Products!

**Dr Mohd Muzamir Mahat**  
Bronze Award  
Bioelectronic Smart Textiles

**Dr Zakiah Mohamed**  
2 Silver Awards

- 1) Magnetic Nanosensor Synthesized by *Azadirachta Indica*
- 2) New Solid State Magnetic Sensors based Electron-Spin Perovskites Manganites

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**Congratulations**

**PROF Ts DR HAJI MOHAMAD KAMAL HAJI HARUN**  
**PROF ChM Ts DR CHAN CHIN HAN**

on the development of IMM Standards on fingerprinting of paints, raw materials and dried coatings based on FTIR technology for oil and gas industry

**IMM**  
Institute of Materials, Malaysia

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**Congratulations**

**FSG Researchers**

for winning medals

**MALAYSIA TECHNOLOGY EXPO (MTE), 2020**

20-22 February 2020  
Putra World Trade Centre

**Prof Chan Chin Han**  
Gold Award  
Best Award Category  
A Quick Way to fingerprint your Products!

**Dr Mohd Muzamir Mahat**  
Bronze Award  
Bioelectronic Smart Textiles

**Dr Zakiah Mohamed**  
2 Silver Awards

- 1) Magnetic Nanosensor Synthesized by *Azadirachta Indica*
- 2) New Solid State Magnetic Sensors based Electron-Spin Perovskites Manganites

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# INNOVATIONS & AWARDS

**Congratulations**  
**Dr Kavitha Rajagopal**  
Best Poster Presenter  
Virtual International Conference  
on Science Technology Research and  
Innovation  
17 June 2020

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#fsg\_utm #FSG\_UTM Fakulti Sains Gunaan UTM Shah Alam #fgskasyang

**Congratulations**  
**Prof Madya Dr Zety Sharizat Hamidi**  
Best Presenter Award  
2nd International Conference on Space  
Weather and Satellite Application  
(ICeSSAT 2020)  
7 July 2020

UTM **Dekan & Warga  
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#fsg\_utm #FSG\_UTM Fakulti Sains Gunaan UTM Shah Alam #fgskasyang

**Congratulations**  
**Mrs. Zafirah Zainal Abidin  
Dr Siti Nur Liyana Mamaud  
Dr Siti Salina Sarkawi**  
**GOLD-SPECIAL AWARD**  
THE 4TH WORLD INVENTION ACADEMIC CONFERENCE  
(WIAC2020), SEOUL, KOREA  
TITLE:  
TRANSFORMING RECLAIMED RUBBER INTO SUSTAINABLE AND ENVIRONMENTAL  
FRIENDLY SHOE SOLES WITH BUTYL RECLAIMED RUBBER / CARBOXYLATED  
NITRILE BUTADIENE RUBBER (BRRI/NBR) BLENDS  
15 NOV 2020

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Fakulti Sains  
Gunaan** <https://fag.utm.edu.my> #fg\_utm Fakulti Sains Gunaan UTM Shah Alam  
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**Congratulations**  
**Mrs Roslinda binti Fauzi (Leader)  
Mrs Zainathul Akhmar Salim binti Abdul Salim  
Dr Siti Nurbaya binti Supardan**  
**GOLD-SPECIAL AWARD**  
THE 4TH WORLD INVENTION ACADEMIC CONFERENCE  
(WIAC2020), SEOUL, KOREA  
TITLE:  
INNOVATIVE STUDY ON SYNTHESIS OF PALM OIL-BASED POLYOL TO REPLACE  
CONVENTIONAL POLYOL IN POLYURETHANE INDUSTRY  
9 NOV 2020

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**Congratulations**  
**Mrs Zainathul Akhmar Salim binti Abdul Salim  
(Leader)  
Mrs Roslinda binti Fauzi  
Dr Nik Noor Idayu Nik Ibrahim**  
**GOLD-SPECIAL AWARD**  
THE 4TH WORLD INVENTION ACADEMIC CONFERENCE  
(WIAC2020), SEOUL, KOREA  
TITLE:  
PURIFIED RICE HUSK SILICA FROM SOLVENT-THERMAL TREATMENT METHOD - A  
POTENTIAL FILLER FOR RUBBER COMPOSITES  
11 NOV 2020

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# INNOVATIONS & AWARDS

**TAHNIAH PEMENANG PINGAT KATEGORI TERBUKA**

**EMAS**  
  
**Prof Madya Ts Dr Noor Najmi Bonnia**  
 Polypropylene Fabric Filled Graphene Oxide from Recycle Carbon as Virus Filter Sheet

**PERAK**  
  
**Prof Madya CHM Dr Sabiha Hanim Saleh**  
 Hemicellulose Biobased Film

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**TAHNIAH PEMENANG PINGAT YOUNG INVENTOR POSTGRADUATE**

**EMAS**  
  
**NORSYAZLIN BINTI ABD RASHID**  
 FINGERPRINTING FOR QUALITY WITH MY FINGERPRINT BUDDY!

**EMAS**  
  
**AHMAD FIRDAUS BIN CHE OMAR**  
 FLEXIBLE ENERGY HARVESTER BATIO3/GRAPHENE NANOGENERATOR

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 Faculty of Applied Sciences, UTM Shah Alam | FSG, UTM | Faculty of Applied Sciences (FSG)

**TAHNIAH PEMENANG PINGAT YOUNG INVENTOR POSTGRADUATE**

**PERAK**  
  
**FATHINUL NAZIR BIN AHMAD SKAD**  
 REGIONAL CHLOROPHYLL-A OVER TELUK LIPAT UTILIZING LANDSAT DATASET

**PERAK**  
  
**IZZAIDAH BINTI RIMAN**  
 PREPARATION AND CHARACTERIZATION OF MOLYBDENUM OXIDE BIOCHAR CATALYST FOR EFFICIENT OXIDATIVE-EXTRACTIVE DESULFURIZATION PROCESS

**PERAK**  
  
**NUR MIZA ATIKAH BINTI ZULKAPLI**  
 FABRICATION OF FLEXIBLE LEAD-FREE Bi1-xGaxFeO3/pdms NANOCOMPOSITES FOR ENERGY BASED APPLICATIONS

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 Faculty of Applied Sciences, UTM Shah Alam | FSG, UTM | Faculty of Applied Sciences (FSG)

**TAHNIAH PEMENANG PINGAT YOUNG INVENTOR UNDERGRADUATE**

**EMAS**  
  
**MUHAMMAD SYADDAD BIN NORIZAL**  
 A FAST, SIMPLE, COST EFFECTIVE AND ECO-FRIENDLY TECHNIQUE FOR QUALITY CONTROL OF DICLOFENAC IN TABLETS

**PERAK**  
  
**SITI NURFARHANA BINTI MURSAHZANI**  
 THE SMART HEIGHT MEASUREMENT SYSTEM WITH INTERNET OF THING (IoT)

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**TAHNIAH KONTINJEN FSG 1 EMAS, 8 PERAK DAN 1 GANGSA**

**PERAK**  
  
**Ts Dr Nor Dalila**

**PERAK**  
  
**Dr Rosdyana**

**EMAS**  
  
**Ts Dr Aida Firdaus**

**PERAK**  
  
**Ts Dr Nurul Izriq**

**PERAK**  
  
**Dr Kavitha**

**PERAK**  
  
**Dr Farizan**

**PERAK**  
  
**CHM Dr Hairul Amiani**

**PERAK**  
  
**Dr Khairul Aizfa**

**PERAK**  
  
**Dr Nur Aimi Jahn**

**GANGSA**  
  
**PM Dr Rahmah**

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 Faculty of Applied Sciences, UTM Shah Alam | FSG, UTM | Faculty of Applied Sciences (FSG)

# CONSULTANCY

**Congratulations**

FSG STAFF  
*for securing a consultative project*

TITLE:  
 ADVISORY AND CONSULTANCY FOR MODIFICATION OF COAL BOTTOM ASH (CBA) AS REINFORCEMENT MATERIAL IN THE DEVELOPMENT OF GREEN POLYMER- MATRIX COMPOSITES (PMC)

Client: TNBR  
 Amount: RM 183257.69  
 Duration: 10 months

PROF MADYA DR FAMIZA ABD LATIF  
 DR SHARIL FADLI MOHAMAD ZAMRI  
 PUAN ASIAH MOHD NOR  
 En. MUHAMMAD ZULHAIRY RADZI  
 DR NABILAH AKEMAL MUHD ZAILANI (UTM Kuala Pilah)

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# APPOINTMENTS

**Congratulations**

**Ts Dr Ismaniza Ismail**

on the appointment as  
**Collaborative Research Partner in UM Living Lab (UM Green Procurement for Food Premises)**

Effective 19 June 2020

UTM | Dekan & Warga Fakulti Sains Gunung | Faculty of Applied Sciences, UTM Shah Alam | No.utm | Faculty of Applied Sciences (FASG) | #gpedu | #gkustayang

**TAHNIAH**

Profesor Madya Ts. Dr. Noor Najmi Bonnia

atas pelantikan sebagai  
**Ketua Penyunting (Chief Editor)**  
**Scientific Research Journal (SRJ)**

1 September 2020 - 1 September 2022

UTM | DEKAN & WARGA FAKULTI SAINS GUNUNG | Faculty of Applied Sciences (FASG), UTM Shah Alam | No.utm | FASG | Faculty of Applied Sciences (FASG) | #gpedu | #gkustayang

**Tahniah**

**Dr. Faezah Pardi**

atas pelantikan sebagai  
**Ketua Sustainable Biodiversity & Environment Institute for Biodiversity & Sustainable Development (IBSD)**

Berkuatkuasa 15 Julai 2020

UTM | Dekan & Warga Fakulti Sains Gunung | Faculty of Applied Sciences, UTM Shah Alam | No.utm | Faculty of Applied Sciences (FASG) | #gpedu | #gkustayang

**Tahniah**

**Prof Madya Ts Dr Aishah Bujang**

atas pelantikan sebagai  
**Ketua (Rantaian Bekalan Halal) di Institut Pengangkutan Malaysia (MITRANS)**

Berkuatkuasa 1 Julai 2020

UTM | Dekan & Warga Fakulti Sains Gunung | Faculty of Applied Sciences, UTM Shah Alam | No.utm | Faculty of Applied Sciences (FASG) | #gpedu | #gkustayang

**Tahniah**

**Prof Dr Sulaiman Shaari**

atas pelantikan sebagai  
**Panel Penasihat untuk Semakan Program Institut Penyelidikan Tenaga Surya (SER) Universiti Kebangsaan Malaysia (UKM)**

Berkuatkuasa 1 Julai 2020

UTM | Dekan & Warga Fakulti Sains Gunung | Faculty of Applied Sciences, UTM Shah Alam | No.utm | Faculty of Applied Sciences (FASG) | #gpedu | #gkustayang

**Tahniah**

**DR YONG SOON KONG**

atas pelantikan sebagai  
**KETUA UNIT ETIKA DAN PENERBITAN, RMC**

Tarikh Berkuatkuasa : 1 MAC 2020

daripada  
Pejabat Timbalan Naib Canselor (Penyelidikan dan Inovasi), UiTM

**Tahniah**

**DR MOHD LOKMAN IBRAHIM**

atas pelantikan sebagai  
**KOORDINATOR UNIT PEROLEHAN GERAN PUSAT PENGURUSAN PENYELIDIKAN (RMC)**

berkuatkuasa 15 Julai 2020

daripada  
Pejabat Timbalan Naib Canselor (Penyelidikan & Inovasi), UiTM

Menyerlahkan Potensi Membentuk Masa Hadapan

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**Tahniah**

**YBHG. PROF. DR. HADARIAH BAHRON**

atas pelantikan sebagai  
**PENOLONG NAIB CANSELO (Pengantarabangsaan)**

berkuat kuasa  
1 Januari 2021

daripada  
Naib Canselor, Pengurusan Eksekutif dan Warga UiTM

Menyerlahkan Potensi Membentuk Masa Hadapan



## MOU/MOA IN 2020

	ORGANISATION	COUNTRY
UNIVERSITY AND INTERNATIONAL INSTITUTION	TOKYO UNIVERSITY OF AGRICULTURE AND TECHNOLOGY	JAPAN
	CALIFORNIA STATE UNIVERSITY, SAN MARCOS	USA
	ABDULLAH GULL TURKEY	TURKEY
	CHIANG MAI RAJABHAT UNIVERSITY	THAILAND
	CENTRAL PHILIPPINE UNIVERSITY	PHILIPPINES
	HO CHI MINH UNIVERSITY	VIETNAM
	NARESUAN UNIVERSITY	THAILAND
	NATIONAL UNIVERSITY OF LAOS	LAOS
	ROYAL UNIVERSITY OF PHNOM PENH (RUPP)	CAMBODIA
	TECHNOLOGICAL UNIVERSITY HMAWBI	MYANMAR
	UNIVERSITAS INDONESIA	INDONESIA
	KHON KAEN UNIVERSITY	THAILAND
	RAJAMANGALA UNIVERSITY OF TECHNOLOGY PHRA NAKHON	THAILAND
	INSTITUT PERTANIAN BOGOR	INDONESIA
	UNIVERSITAT HAMBURG	GERMANY
	INDONESIAN COFFEE AND COCOA RESEARCH INSTITUTE	INDONESIA
NATIONAL CHIAO TUNG UNIVERSITY	TAIWAN	
UNIVERSITY OF QUEENSLAND	AUSTRALIA	
	ORGANISATION	COUNTRY
LOCAL INDUSTRY	CONTINENTAL TYRE SDN BHD MALAYSIA	MALAYSIA
	INSTITUTE OF MATERIALS MALAYSIA (IMM)	MALAYSIA
	INSTITUT KIMIA MALAYSIA (IKM)	MALAYSIA
	LIVECUBE SDN BHD MALAYSIA	MALAYSIA
	NIOSH BERHAD	MALAYSIA
	BALUNG TAPIOCA SDN BHD	MALAYSIA
	FITECH ASIA PLT	MALAYSIA
	MAJLIS DAERAH KUALA LANGAT	MALAYSIA
	BERKSHIRE GLOBAL SOLUTIONS	MALAYSIA
	ORGANISATION	COUNTRY
INTERNATIONAL INDUSTRY	ASEAN SMART GRID CONGRESS THAILAND	ASEAN

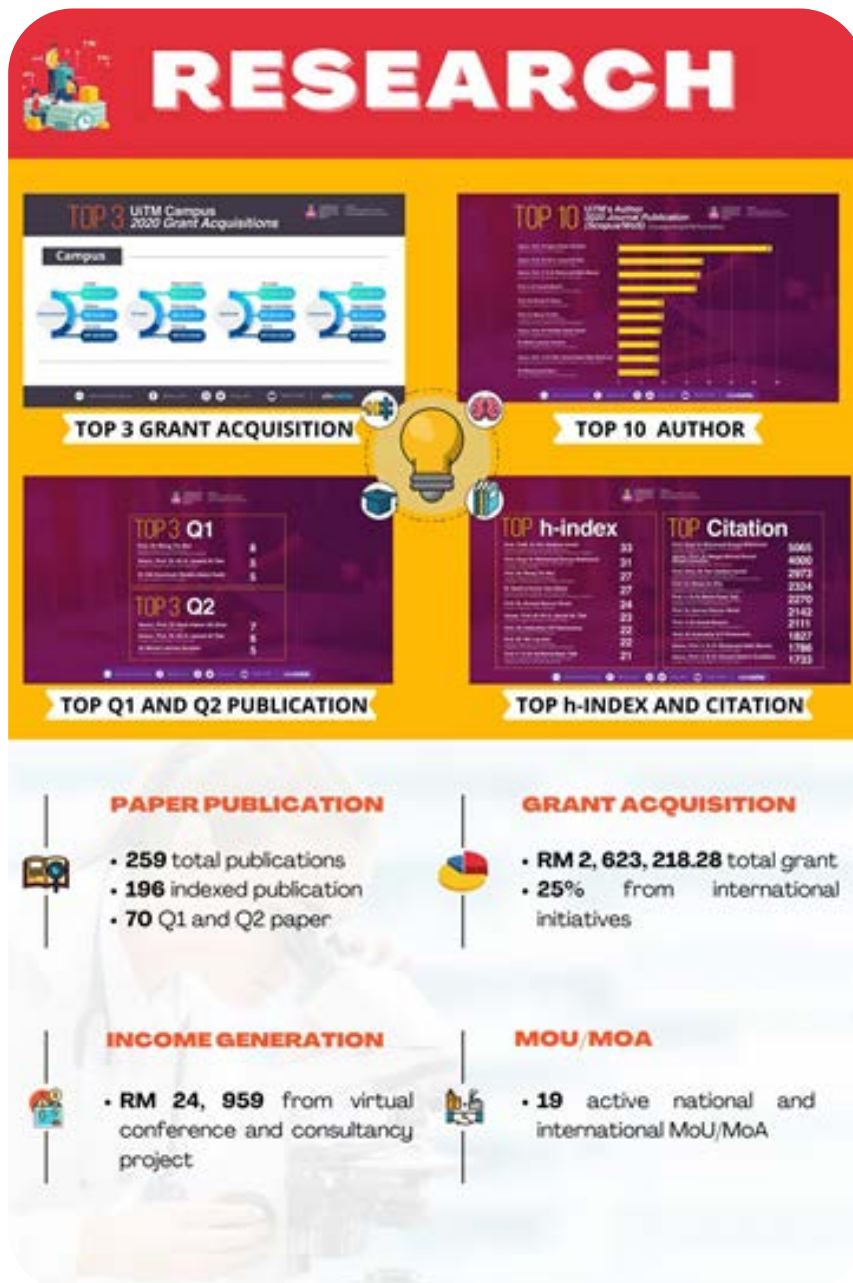




# OVERALL ACHIEVEMENTS IN 2020

FSG had successfully won research grants amounting to RM 2,623,218.28 of which 25% were from international initiatives. There was also a total of RM24,959 of income generated from asset leases, short courses and training programmes. A total of 259 publications in all categories were produced with 70 of them in the Q1/ Q2 category.

FSG is in the top position for 2020 in grant procurement and Q2 paper publications, and also leading for 10 h-index and citations at UiTM. There are 19 active MOUs and MOAs in 2020 which have increased the cooperation with local and international partners.





# **FACILITIES, SPACE AND INFRASTRUCTURES DEVELOPMENT**



## FACILITIES, SPACE AND INFRASTRUCTURES DEVELOPMENT

The FSG and IPSIS UiTM Research Laboratory Development Project was successfully completed on 2 October 2020. The RM21.4 million project was an effort by the faculty to replace a previous laboratory building which was destroyed in a fire in 2013. The new laboratories are located in Bangunan Sarjana and will be divided for use between FSG and IPSIS or Institute of Graduate Studies. The FSG research laboratories will be able to fulfill the students and staff research needs.

The laboratory can accommodate up to 15 people per laboratory and is equipped with WIFI, air-conditioning and a centralized sound system. In addition, it is also equipped with emergency aid equipment such as emergency shower, fire extinguisher, and fire alarm as well as a fume hood system that uses the latest technology. There is also a store on each level equipped with a chemical storage cabinet and exhaust fan system. Rooms are also available for discussions, seminars and meetings. Student discussion rooms are located on levels 1, 2 and 3 with a capacity of up to 12 people per room.





## **RECOGNITION AT NATIONAL AND INTERNATIONAL LEVELS**



## KEYNOTE AND INVITED SPEAKERS

FSG's academic staff continue to be recognised nationally and internationally for their contributions and expertise. As the border is still closed, most conferences and discussions at the international level are conducted online. FSG academic staff were involved as keynote and invited speakers at the following conferences held in 2020:

- Dr. Raseetha Vani Siva Manikam, keynote speaker, Food Supply Chain during Covid-19 Pandemic in Indonesia, Malaysia and Thailand, 18 May 2020
- Prof. Dr. Sulaiman Shaari, invited speaker, Global Solar Council Webinar, 23 April 2020
- Ts. Dr. Aida Azmi, invited speaker, Global Re-set in a Quarantine Economy, 13 May 2020

The participation by FSG staff serves as a recognition of their outstanding background which can enhance the visibility specifically for FSG and UiTM in general.



## BEST ORAL PRESENTER IN NANOTECHNOLOGY IN FORESTRY & NATURAL RESOURCES SEMINAR 2019 IN CONJUNCTION WITH NANO KEBANGSAAN 2019

Nanotechnology in Forestry & Natural Resources Seminar 2019 was organized by Forest Research Institute (FRIM) in conjunction with Nano Kebangsaan 2019 on 10 October 2019 in Cyberjaya, Malaysia. The conference was officiated by FRIM Director General, Dato' Dr. Abd Latif Mohmod. The theme of the conference was Green Technology: Sustainable Solutions for Global Challenge. About 60 presenters (oral and poster) presented their research findings during the seminar. FSG lecturer, Assoc. Prof. Dr. Siti Norasmah Hj. Surip was awarded as best oral presenter with her speech entitled Biodegradable Property of Poly Lactic Acid (PLA) / Kenaf Fibers Nano Composite.







## SHARING OF EXPERIENCE AS A VISITING SCHOLAR AT UNIVERSITAS INDONESIA

It was like a dream when I received an invitation from Universitas Indonesia (UI), the No. 1 ranked university in Indonesia as a visiting scholar. My responsibilities included delivering a series of lectures at the Department of Metallurgical and Materials Engineering and also as an invited speaker at the International Meeting on Advances in Materials (i-MAM) Seminar which was held from October 28 until November 1, 2019.

The fully-funded program was organized by DTMM Faculty of Engineering main campus in Depok, Jakarta. The International Meeting on Advanced Materials started with postgraduates colloquium which I and two other scholars from Australia and Singapore were appointed as panels. A total of 30 Ph.D. students from the department presented their work. The programme continued with a journal writing workshop for postgraduates. We also discussed future research collaborations between UiTM-UI to strengthen the relationship and expand the network as agreed in the signed MoU. As the main agenda of the i-MAM seminar, I delivered a talk on Enhancing National Economics Growth with Eco-Products followed by Q&A session with staff and students.

I was also given an opportunity to give lectures to undergraduate students for polymer composites and nano materials subjects. It was an honour for me to be able to share my knowledge and expertise, and at the same time promote FSG and UiTM at international level. - *Assoc. Prof. Dr. Siti Norasmah Hj. Surip*





# ASEAN SCIENCE LEADERSHIP PROGRAM GETS EXTENSIVE MEDIA COVERAGE IN VIETNAM

On 2-5 December 2019, selected scientists from ASEAN countries were invited to attend the ASEAN Science Leadership Program held in Hanoi, Vietnam. The programme was organized by the ASEAN Young Scientist Network which was attended by scientists from Malaysia, Indonesia, Myanmar, Thailand, Laos, the Philippines, Singapore and Vietnam.

Malaysian scientists were represented by Assoc. Prof. Dr. Siti Norasmah Hj. Surip (UiTM), Chm. Dr. Shahrul Nizam Ahmad (UiTM), Dr. Siti Hamimah Sheikh Abdul Kadir (UiTM), Assoc. Prof. Dr. Siti Sarah Othman (UPM), Dr. Mas Jaffri Masarudin (UPM), Dr. Thaigarajan Parumasivam (USM) and Assoc. Prof. Dr. Wan Iryani Wan Ismail (UMT).

The 4-day programme was filled with various activities to enhance research creativity in their respective fields, enhance collaboration networks between ASEAN scientists and attend the ASEAN Conference for Young Scientists at a newly opened university, Phenikaa University. The inaugural programme had received extensive coverage in the Vietnamese mass media and electronic media.

**THANH NIÊN**

## ASEAN đề xuất sáng kiến giải quyết các thách thức

13:01 - 02/12/2019 - THANH NIÊN ONLINE

Vũ Thơ  
Đánh giá tác giả: ★★★★★

Ngày 2.12, tại Hà Nội, T.Ư Đoàn phối hợp Bộ Khoa học và Công nghệ tổ chức Hội nghị các nhà khoa học trẻ ASEAN 2019 với chủ đề "Khoa học, công nghệ và đổi mới cho Cộng đồng ASEAN bền vững".



**Tiềnphong**

## GIỚI TRẺ

Nhịp sống Cộng đồng mạng Tài năng trẻ

02/12/2019 11:21

### Cơ hội nhà khoa học trẻ đề xuất giải pháp giải quyết thách thức

TPO - Ngày 2/12, tại Hà Nội, Bộ Khoa học và Công nghệ phối hợp với T.Ư Đoàn phối hợp tổ chức Hội nghị các nhà khoa học trẻ ASEAN 2019 với chủ đề "Khoa học, Công nghệ và Đổi mới cho Cộng đồng ASEAN bền vững". Hội nghị có sự tham dự của 140 Tiến sỹ, nhà khoa học trẻ Việt Nam và các nước ASEAN.





# SHORT-TERM OUTBOUND MOBILITY PROGRAMME TO RAJAMANGALA UNIVERSITY OF TECHNOLOGY, PHRA NAKHON (RMUTP) BANGKOK, THAILAND

On the 15-17th December 2019, 15 students of Textile Science and Fashion Technology Program (TSFT), UiTM Shah Alam had participated in the Short-term Outbound Mobility Programme at the Rajamangala University of Technology, Phra Nakhon (RMUTP) Bangkok, Thailand. The program was jointly organised by the TSFT Program of FSG, UiTM and RMUTP, Phra Nakhon, Thailand.

The UiTM delegates, led by Ts. Dr. Nur Ain Yusof, and accompanying lecturer, Miss Najua Tulos, were warmly welcomed by the President of RMUTP Phra Nakhon, Assoc. Prof. Supatra Kosaiyakanont, and the Dean of Faculty of Industrial Textiles and Fashion Design, Assoc. Prof. Dr. Rattanaphol Mongkhorrattanasit. The main objective of the program is to furnish the students with intercultural competence and distinctive skills and knowledge acquired by immersing in another international society.

The programme consisted of a mixture of discussion session, a 5-days training programme on Textile Products Design and Development, and cultural and academic visits to various place of interests around Bangkok. During the training, the students were exposed to the production of natural dyes from plants, and experienced hands-on dyeing and printing of different techniques, from raw material to end products (bags and scarfs). Prior to the training, the students had the opportunity to participate in a discussion with RMUTP researchers on research that are currently conducted in UiTM and RMUTP. The fruitful session also discussed the possible collaborations between the two universities on research related to the field of study.

The cultural and academic visits to The Grand Palace, Rattanakosin Exhibition Hall, Sala Chalermkrung Royal Theatre, and few other places provided unique Thai culture which focusing on traditional costumes and local fabrics. The program was concluded with a certificate giving ceremony to all participating students which was presented by Assoc. Prof. Dr. Rattanaphol Mongkhorrattanasit.





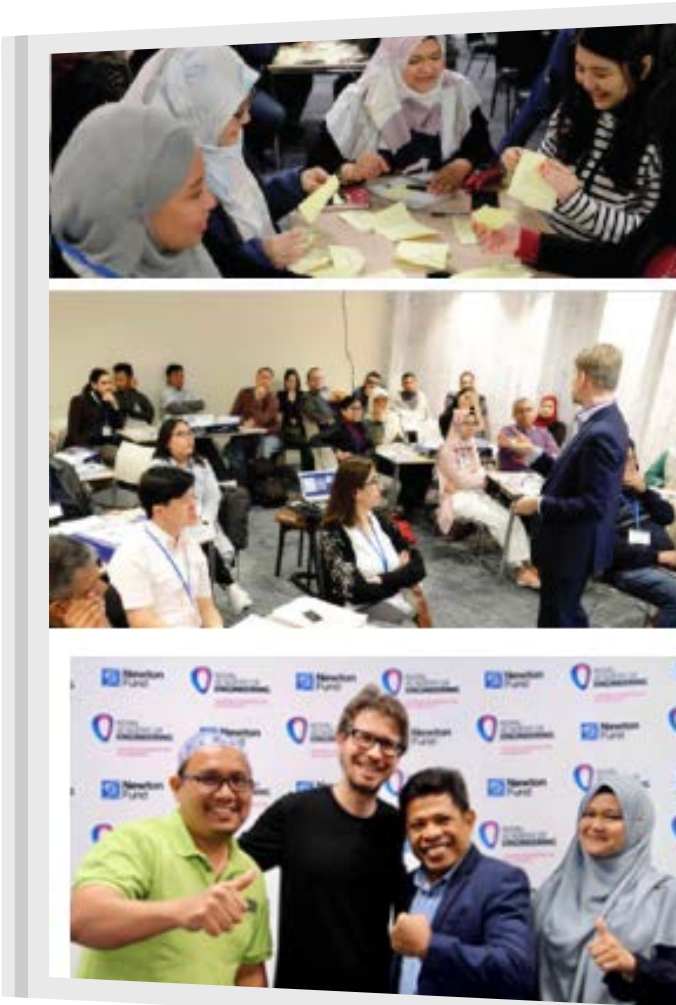


## TS. DR. AIDA FIRDAUS MUHAMMAD NURUL AZMI AS A RECIPIENT FOR LEADERSHIP IN INNOVATION FELLOWSHIPS (LIF) 2020, LONDON, UK

Ts. Dr. Aida Firdaus Muhammad Nurul Azmi was among 14 recipients from Malaysia who were selected for the Leadership in Innovation Fellowships (LIF) 2020. The LIF programme is organized by the Royal Academy of Engineering and funded by the Newton Fund/UK Government's Department of Business, Energy and Industrial Strategy. It brings 17 recipients from Newton Fund partner countries to undergo an intensive training course on innovation in London, UK.

Dr. Aida was nominated for the programme based on her functional food products specifically on Biodegradable Energy Chewing Gum, which is currently in the prototype stage. The chewing gum is biodegradable, sugar-free, caffeine-free and also liquid-free. This incorporates natural active ingredients that substitute caffeine, which is normally used as the source of energy. She attended the course in London, UK from 16th to 28th February 2020.

The LIF programme is supported by the Malaysian Industry-Government Group for High Technology (MIGHT), a partner in Malaysia for UK Newton Fund. Through the partnership, emerging leaders in the global innovation community, with an interest in entrepreneurship and have an engineering-based innovation with potential to contribute to the social and economic development of their country. By participating in the programme, Dr. Aida had the opportunity to learn from professional entrepreneurial trainers and mentored by experienced business leaders.





## VISITING RESEARCH FELLOW AT ABU DHABI UNIVERSITY, UNITED ARAB EMIRATES

Dr. Abdel-Baset M. A. Ibrahim had successfully secured a position as a Visiting Research Fellow at the Department of Applied Sciences and Mathematics, College of Arts and Sciences, Abu Dhabi University (ADU). The program is initiated by ADU to enable their researchers to jointly work with international researchers to contribute to nationally and regionally relevant areas of research. The programme allows established researchers to join ADU as Visiting Fellows or Senior Visiting Fellows based on the needs of individual projects. Candidates are expected to be accomplished researchers publishing at the highest level in their fields. They should also have experience in supporting the development of less experienced researchers and working in teams. Joint publications and collaborative research programmes with ADU researchers are the key outcomes of this initiative. The collaboration aims to build productive teams comprising of international research experts and ADU researchers as well as cultivate fruitful transfer and sharing of knowledge to benefit both parties. Based on performance, the Fellowships may be extended.



Under this programme, Dr. Abdel-Baset M. A. Ibrahim has been working with Prof. Hichem Eleuch, head of the quantum optics group in a project entitled “Quantum properties of light propagating in a Kerr nonlinear coupler”. The first appointment started in September 2018 until August 2019 and the second appointment started in December 2019 until December 2020. Prof. Eleuch is also a member of Prof. M. O. Scully's research group at the Institute of Quantum Science and Engineering, Texas A&M University. Some fruitful results of this collaboration have been published in profound international journals such as the Journal of Modern Optics, Chinese Physics B, Journal of Electromagnetic Wave and Applications, Optical Review, and International Journal for Light and Electron Optics (OPTIK).



## **MEDIA APPEARANCES**



# MEDIA APPEARANCES OF FSG STAFF DURING COVID-19 PANDEMIC

FSG through its Corporate Communications Unit has provided a platform aimed at popularizing science, thus, bridging the gap between academia and the community through the involvement of academic, and administrative staff in the mass media particularly through electronic media.

Many opportunities have been provided as a result of collaboration with the local media. This can be seen through the publication of scholarly articles that address current issues in the local newspapers such as New Straits Times and Berita Harian. FSG staff had also shared their expertise through broadcast media such as Bernama and TV1 to help educate the community in embracing the new norms during the COVID-19 pandemic. As a result, a total of 24 articles were published in the mass media and a total of 27 staff were invited as panels to discuss issues related to the pandemic.







## **CSR PROJECTS**



## CSR PROJECTS

### THE FSG HAND SANITIZER PROJECT

The FSG Hand Sanitizer Project was successfully carried out by 12 laboratory staff, led by the Head of FSG Laboratory. The production of these hand sanitizers complies with the formulation as prescribed by the World Health Organization (WHO). A total of 220 bottles of 500ml hand sanitizers were distributed to other PTJs in UiTM Shah Alam and within the faculty for internal use. The hand sanitizers were also given to the visitors of the faculty as a souvenir, as well as a gift for participants registered for a webinar program.



### A COLLABORATION PROJECT WITH SERBA DINAMIK SDN BHD FOR THE PRODUCTION OF HAND SANITIZER

This hand sanitizer project was led by Prof. Dr. Chan Chin Han in collaboration with Serba Dinamik Sdn. Bhd. The project which was fully sponsored by the company was carried out at Biology Laboratory A 402 with the involvement of three FSG laboratory staff. They successfully produced a total of 1,200 bottles of 50ml hand sanitizers within a week. It was then distributed to the front liners throughout the period of the Movement Control Order.

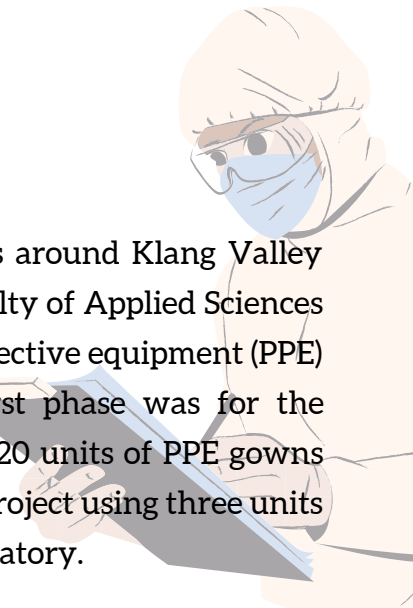




# CSR PROJECTS

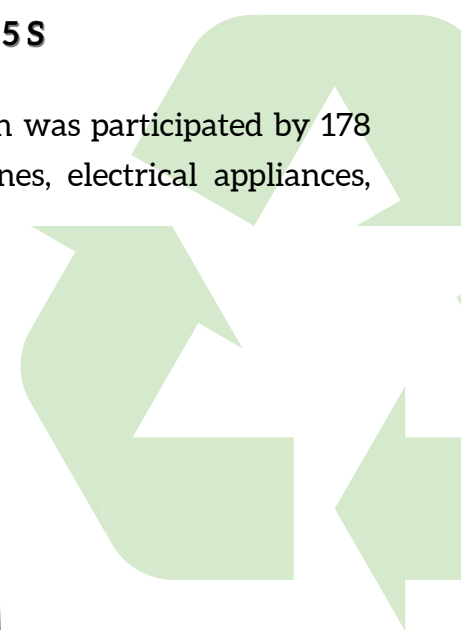
## PPE GOWN & HEAD COVER PROJECT

A total of 633 sets of personal protective clothing for hospital front liners around Klang Valley were successfully completed as a result of a joint venture between the Faculty of Applied Sciences and the Faculty of Art & Design, UiTM. The preparation of the personal protective equipment (PPE) took almost two months and it was conducted in two phases. The first phase was for the production of 513 units of head cover and in the second phase, a total of 120 units of PPE gowns were produced. A total of seven FSG laboratory staff were involved in this project using three units of industrial sewing machines which are located at the OM238 Textile Laboratory.



## RECYCLING PROGRAMME ORGANIZED BY FSG 5S COMMITTEE WITH ALAM FLORA MALAYSIA

On 2 October 2020, the FSG 5S committee held a recycling event which was participated by 178 staff. 2683 kg of goods were collected namely paper, books, magazines, electrical appliances, cooking oil, and glasses, amounting to RM 687.60.





## **OTHER ACHIEVEMENTS**



## OTHER ACHIEVEMENTS

### FSG'S ICOURSE4U WON AWARDS AT "PERTANDINGAN IDEA UNGGUL @ UiTM 2020"

"Pertandingan Idea Unggul @ UiTM 2020" was held on 5th of November 2020, with the theme "Kebiasaan Baharu, Jaminan Kelestarian UiTM". It was the first time it was held in conjunction with the Covid-19 pandemic, replacing the KIK Innovative and Creative Group Competition. Faculty of Applied Sciences, UiTM Shah Alam was represented by EPSILON group with a project entitled "iCOURSE4U".

EPSILON made it into the finals with 30 other groups. EPSILON won the Most Creative Idea Award and a Silver Medal Award. The idea was also presented at the International Conference University Administrators and won Best Poster and Gold Medal awards. iCOURSE4U was introduced to benefit and improve the skills and knowledge of laboratory staff in instrument handling. It is a project that features modular and continuous online course training. It is a long term project and has the potential to improve governance as well as the quality of teaching and learning at the Faculty of Applied Sciences in particular and UiTM in general.

The management of the Faculty of Applied Sciences gives full support to the development of iCOURSE4U. The cooperation from all parties, especially the staff involved has contributed to the project's success and it will be able to be used widely throughout the UiTM system. The invention of iCOURSE4U is timely in facing the challenges posed by the COVID-19 pandemic. It is hoped that it can continuously improve the skills and knowledge of laboratory staff to produce high quality service to the faculty and students.





## OTHER ACHIEVEMENTS

### FSG IQMS EXTERNAL ASSESSMENT CYCLE 5/2021 (11-13 JANUARY 2021)

A remarkable achievement for FSG in which for the first time, the faculty has successfully obtained a net audit during the FSG IQMS External Assessment Cycle 5/2021 (11-13 January 2021). This success is a result of a strong and cohesive cooperation as well as the excellent quality of work from all FSG staff.



### FSG ACHIEVED 94% i-SCORE UiTM BRAVO FSG!

For the year 2020, FSG achieved 94% in i-SCORE, with 6-star recognition, thus, placing FSG in first place in UiTM.

This tremendous achievement is the result of the faculty's leadership management and the competence of the faculty members in ensuring all activities and programmes carried out are in line with the aspiration and visions of UiTM.





## OTHER ACHIEVEMENTS

# GOLD AWARD AND BEST E-POSTER AT INTERNATIONAL CONFERENCE UNIVERSITY ADMINISTRATOR (ICUA2020)



## STAFF EXCELLENCE AWARD 2019





# EVENTS AND ACTIVITIES





# SHORT COURSE ON TECHNICAL EVALUATION OF SCHOOL UNIFORM FABRICS - TERAJU EKONOMI ASNAF SDN BHD



Over the years, the Textile Science and Fashion Technology Program (TSFT) UiTM has been actively conducting periodic training in the form of short courses/workshops to the government and private sectors. On the 9th-10th September 2020, a short course on Technical Evaluation of School Uniform Fabrics for participants from Teraju Ekonomi Asnaf Sdn. Bhd. (TERAS) was successfully organised by TSFT UiTM. The course is primarily aimed at providing theoretical knowledge and hands-on experience on the technical skills of handling fabric assessment needed for staff working in the related department. Participants were mostly executives from various departments of TERAS which include the Quality and Audit Unit, Asnaf Training Sector, and Procurement Sector.



During the training, participants were provided with the necessary skills and knowledge to conduct a technical evaluation on fabrics that are used to make school uniforms, as well as to gain the required knowledge to measure fabric quality and performance. The topics covered during the course were Textile Physical and Mechanical Test, and Garment Quality and Performance, while hands-on laboratory works were conducted on fabric physical test, colorfastness to washing, color coordination, drapability, fabric abrasion, and pilling properties. Discussion between instructors and participants during the 2-day course enabled the exchange of experiences and best practices among the participants, thus, a fruitful collaborating environment.

The program is hoped to increase the knowledge among participants on the aspect of quality and performance of textile material which may help to continuously improve their quality of work. More future collaborations are planned between TSFT UiTM and TERAS with the objective to strengthen the current and existing partnership between university and industry in the area of academia-industry, to develop and instill entrepreneurship among community and graduates, as well as generating income to the university.



# COMPUTER-AIDED MANUFACTURING TRAINING USING TUKATECH SOFTWARE

A Computer-Aided Manufacturing training using Tukatech Software was held at Apparel Lab in FSG. The training was organized by the Department of Textile Science & Fashion Technology on September 3rd until 9th 2020. The objectives of the training were to give exposure to the important features of Tukatech software and to demonstrate how to use its application in garment manufacturing.

CAM Implementation in the Apparel Industry Computer-Aided Manufacturing is an automation system that designs, regulates, and determines control of production operations. In the Apparel industry, CAM is associated with several machines and devices that help in the effectiveness of garment production. Several processes that can be integrated with computers and automation processes production in CAM include:

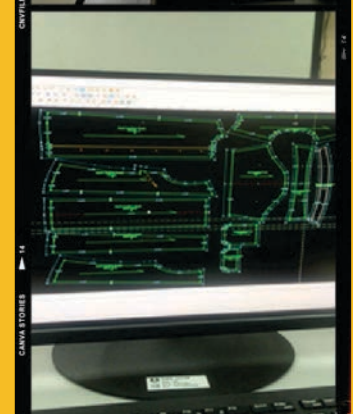
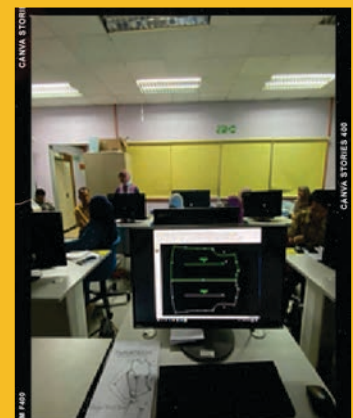
**PLOTTING** The new plotter system has replaced the traditional paper-heavy and difficult method controlled. The plotter system used now is connected to a computer and the internet, that is enabling better control and maintenance systems that minimise downtime.

**SPREADING** The current spreading system allows fabric arrangement with nesting automation to speed up processing times because it uses a smart and effective system, and is also connected to the machine automatic cutters thereby optimizing production effectiveness, saving time and costs.

**CUTTING** The cutting system is also connected to an integrated computer making it easier to cut with a high degree of accuracy.

**SEWING** The sewing machine that is integrated with the computer system also speeds up the sewing process, as well as several automation functions that vary according to their types and needs.

With increasingly dynamic demands in the apparel industry, advanced technology is also needed. CAM implementation is necessary to help optimize the process production with a smart and integrated computer system, then it can help reduce fabric waste during the production process because with CAM integration, accuracy and automation during pattern making, grading, plotting and cutting can be maintained. The integration of CAM also helps in minimizing errors that occur when processing production is done manually. Ultimately, production effectiveness can be achieved in terms of time, cost, and production results that can meet global standards.







# QUALITY AWARENESS CAMPAIGN BY FSG ISO COMMITTEE

The FSG ISO committee started a quality awareness campaign on 30 September 2020 by hosting a webcast@FSG Admin Siri 4.0: Kualiti Dekat di Hati. The webinar introduced each task force in the quality unit, as well as their mission which is to cultivate a quality culture at FSG. The campaign was extended until 29 December 2020 by disseminating quality information to FSG staff via 9 online posters.

**WEBCAST@FSG**  
ADMIN SERIES 4.0  
**SESI PERKONGSIAN: KUALITI DEKAT DI HATI**  
30 SEPTEMBER 2020  
RABU  
10.30 pagi - 12.00 tengahari  
Cisco Webex Link: <https://tinyurl.com/adminfour>

- Jam latihan disediakan
- 5 hadiah menarik akan diberikan kepada pemenang kuiz

**HOS**  
Dr. Maryam Husli

**HOS**  
Dr. Shadatul Hanom Rashid

**Speakers:**  
 - ChM. Dr. Hafid Amani Abdul Hamid (Ketua Unit Kualiti)  
 - ChM. P.M. Dr. Zakiyaharti Mohd Zain (Pengarah Kecemerlangan Operasi)  
 - Pn. Umama Othman Kaya (Pengarah Aik)  
 - Tn. Dr. Nor Juliana Mohd Yusoff (Pengerusi Asas Dalam)  
 - En. Azlan Zakaria (Mantan Ketua Unit Kualiti)  
 - Dr. Mohd Fakhruddin Zaman Raja Yahya (Pengarah Analisis Data)  
 - En. Huzifah Yusoff Harun (Pengarah IS)  
 - ChM. Ts. Dr. Nor Suhaila Mahamad Hanapi (Pengarah ANNC)  
 - ChM. Ts. Dr. Wan Nazihah Wan Ibrahim (Pengarah IQ)

**MODERATOR**  
Dr. Shadatul Hanom Rashid

**UTM** **DEKAN & WAKIL FAKULTI SAINS GUNAAN**

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>

Kempen Kesedaran Kualiti FSG  
30/9/2020

**DOKUMEN & REKOD YANG TERKAWAL ADALAH KUNCI KECEMERLANGAN AUDIT DAN ANALISIS DATA**

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>

Kempen Kesedaran Kualiti FSG  
31/8/2020

**MEREALISASIKAN VISI FSG**

"Menjadikan FSG sebagai fakulti unggul yang berprestasi kesempurnaan dan kecemerlangan akademik bagi menerajui dinamisme kepimpinan Bumiputera dalam bidang sains dan teknologi bertaraf dunia bagi melahirkan graduan yang berdaya saing di peringkat global dan beretika."

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>

Kempen Kesedaran Kualiti FSG  
31/7/2020

**JOM SEMAK PROSEDUR PEPERIKSAAN AKHIR FAKULTI SAINS GUNAAN**

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>

Kempen Kesedaran Kualiti FSG  
31/9/2020

**Prosedur Operasi Makmal FSG**

All the world is a laboratory to the inquiring mind  
-Martin K. Tupper, 1944-

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>

Kempen Kesedaran Kualiti FSG  
31/2/2020

**PANDUAN PENGURUSAN RISIKO**

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>

Kempen Kesedaran Kualiti FSG  
31/8/2020

**Pembentukan Program Pengajian Di FSG**

Prosedur Semakan kurikulum  
Prosedur Program Baharu  
Prosedur Perantaraan Akademia Luar

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>

Kempen Kesedaran Kualiti FSG  
31/1/2020

**JOM, TINGKATKAN KUALITI KERJA KITA**

Sabda Rasulullah SAW  
" sesungguhnya ALLAH SWT saka apabila seseorang itu melakukan sesuatu pekerjaan, ia akan melakukan dengan kecekapan (memperbaiki dan mempertingkatkan)." *-Hadis Sunan al-Bukhari-*

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>

Kempen Kesedaran Kualiti FSG  
31/4/2020

**Kawalan Produk Yang Tidak Memenuhi Spesifikasi**

Memastikan semua produk yang tidak memenuhi spesifikasi dikenal, diasing dan diperbetulkan di sepanjang pelaksanaan, pemantauan serta penambahbaikan Sistem Pengurusan Kualiti FSG.

**Tindakan Pemulihan**  
Memastikan tindakan pemulihan terhadap sebarang ketidakpatuhan atau kecacatan yang dikenalpasti di dalam sistem pengurusan kualiti FSG tidak berulang dan punca ketidakpatuhan dihindari sepenuhnya dengan berkesan.

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>

Kempen Kesedaran Kualiti FSG  
31/5/2020

**ELEMEN PENTING SISTEM PENGURUSAN KUALITI (SPK)**

Stat yang Berkaitan  
Pengukuran yang kompeten  
Kepuasan Pelanggan

<https://bg.utm.edu.my/index.php/about-fsg/office/unit-quality>





# WEBINARS

**WEBCAST @ FSG**

DATE: 26 JUNE 2020  
 TIME: 10.00 - 11.00 AM

**How To Win Merdeka Award Grant For International Attachment**

**SPEAKER:** CIM Dr Mahid Azri Abi Rani  
 Senior Lecturer  
 School of Chemistry and Environment  
 Faculty of Applied Sciences  
 Universiti Teknikal Malaysia Melaka

**Moderator:** Dr Hozet Shafiqi Azmi

Click Webex Link: <http://tiny.cc/webcastfsg>

**WEBCAST @ FSG**

DATE: 3 JULY 2020 (FRIDAY)  
 TIME: 10.00 - 11.00 AM

**LESTARI COVID-19 GRANT Q&A**

**Prof Madya Dr Anida Yusoff**  
 Head of Grant Administration Unit (GAGU)  
 National Biotechnology Centre (NBC)  
 Office of Research Management  
 (Research and Training)  
 Moderator: Dr Hozet Shafiqi Azmi

Click Webex: <http://tiny.cc/lestaricovid19>

**WEBCAST @ FSG**

WEDNESDAY  
 10 JULY 2020  
 10.00-11.00 AM

**DR. NORATIMAH MOHAMED YUNUS**

**IDENTIFICATION OF ESSENCE OILS FROM MALAYSIAN MARINE PLANKTON THROUGH MICROTREMOR ANALYSIS**

**Moderator:** DR NORDAN KAMBUK

Click Webex Link: <http://tiny.cc/10july2020>

**WEBCAST@FSG**

RESEARCH VISIBILITY SERIES

GEARING YOUR APPLICATION FOR THE INTERNATIONAL POLYURETHANE TECHNOLOGY FOUNDATION 2020

Grand Recipient International Polyurethane Technology Foundation 2018  
 \$1 Million USDF (RM 2,000,000)

**SPEAKER:** Assoc Prof Ts Dr Noor Nafiah Borna  
 School of Physics and Materials Studies  
 Faculty of Applied Sciences

Grand Recipient International Polyurethane Technology Foundation 2019  
 \$1 Million USDF (RM 2,000,000)

17 JULY 2020  
 FRIDAY  
 10.00-11.00 AM

Click Webex Link: <http://tiny.cc/PTFFoundation2020>

**Moderator:** Dr Susana Batin

**WEBCAST@FSG**

RESEARCH NETWORK OPPORTUNITY

14 JULY 2020  
 THURSDAY  
 3.00 - 4.30 PM

**SPEAKER:** Dr Azealia Ismail  
 University Teaching MAIA  
 Ph.D. in the Kingdom World of Algea

**SPEAKER:** Dr Sofia Khalid  
 Faculty of Applied Sciences  
 Universiti Teknikal Malaysia Melaka

**SPEAKER:** Prof. Dr. Mustaf Kaya  
 Faculty of Applied Sciences  
 Universiti Teknikal Malaysia Melaka

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/ResearchNetwork>

**WEBCAST@FSG**

ADMIN SERIES 3.0

SESI PERKONGSIAN: PENYEDIAAN SURAT RASMI

17 JULAI 2020  
 JUMAAT  
 3.00 - 4.00 PM

**PENERCAHAR:** Puan Shahrul Normawati Syed Ahmad  
 Setiausaha Pejabat

**Moderator:** Puan Noor Anisa Karami Karim

Click Webex Link: <http://tiny.cc/AdminSeries3>

**WEBCAST@FSG**

ACADEMIC SERIES

POSTGRADUATE STUDIES PROMOTION

28 JULY 2020  
 THURSDAY  
 2.30 P.M.

**SPEAKER:** Dr Fazel Baring  
 Research Program (Master & PhD)

**SPEAKER:** Dr Nur Ain Yusoff  
 MSc in Textiles

**SPEAKER:** PM Dr Nurul Aini Zakaria  
 MSc in Food Science

**SPEAKER:** Dr Nurul Aini Zakaria  
 MSc in Environmental Technology

**SPEAKER:** Dr Azza Saifi  
 MSc in Applied Biology

**SPEAKER:** Dr Adnan Abdulkarim  
 MSc in Applied Microbiology

Click Webex Link: <http://tiny.cc/PostgraduatePromotion>

**WEBCAST@FSG**

SCITED SERIES

FTIR AUTHENTICATION OF POLYMERIC PRODUCTS: THE JOURNEY FROM AN INDUSTRY-DRIVEN IDEA AND THE WORK IN AN ACADEMIC LAB TOWARDS KNOWLEDGE TRANSFER

5 AUGUST 2020  
 WEDNESDAY  
 10.00 AM

**SPEAKER:** Prof Ts Chih Dr Chien Chin Han  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** CIM Dr Shafiq Nizam Ahmad

Click Webex Link: <http://tiny.cc/FTIRAuthenticatio>

**WEBCAST@FSG**

SCITED SERIES 3.0

TIPS ON WRITING PUBLISHABLE MANUSCRIPTS

14 AUGUST 2020  
 FRIDAY  
 10.00 AM

**SPEAKER:** Assoc. Prof. Dr. Ali H. Javad  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** CIM Dr Shafiq Nizam Ahmad

Click Webex Link: <http://tiny.cc/14aug2020>

**WEBCAST@FSG**

SCITED SERIES

FTIR AUTHENTICATION OF POLYMERIC PRODUCTS: THE JOURNEY FROM AN INDUSTRY-DRIVEN IDEA AND THE WORK IN AN ACADEMIC LAB TOWARDS KNOWLEDGE TRANSFER

5 AUGUST 2020  
 WEDNESDAY  
 10.00 AM

**SPEAKER:** Prof Ts Chih Dr Chien Chin Han  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** CIM Dr Shafiq Nizam Ahmad

Click Webex Link: <https://tiny.cc/5aug2020>

**WEBCAST@FSG**

RESEARCH VISIBILITY SERIES 4.0

NEWTON FUNDING: UTILIZATION OF ISIS NEUTRON & MUON SOURCE (UK)

27 AUGUST 2020  
 THURSDAY  
 10.00-11.00 AM

**SPEAKER:** Dr Zakiah Mohamed  
 School of Physics and Materials Studies  
 Faculty of Applied Sciences

**Moderator:** Dr Shafiq Nizam Ahmad

Click Webex Link: <http://tiny.cc/NewtonFunding>

**WEBCAST@FSG**

IMPROVING ON NATURE'S SHORTCOMING: EVOLVING AN ENZYME BY DIRECTED EVOLUTION

17 SEPTEMBER 2020  
 THURSDAY  
 10.00-11.00 AM

**SPEAKER:** Dr. Nurul Aini Zakaria  
 Faculty of Applied Sciences  
 Universiti Teknikal Malaysia Melaka

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/ImprovingOnNature>

**WEBCAST@FSG**

22 September 2020  
 Tuesday  
 10.00-11.30 AM

Online Teaching: The Experiences and Perspectives from a Private University

**SPEAKER:** Puan Nurul Aini Zakaria  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/OnlineTeaching>

**WEBCAST@FSG**

FSG FORUM  
 Getting the Best from Technology and Your Students

23 SEPTEMBER 2020  
 WEDNESDAY  
 02.30-04.30 PM

**SPEAKER:** Puan Nurul Aini Zakaria  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/FSGForum>

**WEBCAST@FSG**

HOW DO I ENSURE MY RESEARCH WORK IS PUBLISHABLE IN HIGH IMPACT JOURNALS

24 SEPTEMBER 2020  
 THURSDAY  
 10.00-11.00 AM

**SPEAKER:** Dr. Muhammad Anwar  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/HowDoIEnsure>

**WEBCAST@FSG**

Alternative Assessment: The Choice to Track

25 September 2020  
 Friday  
 10.00-11.30 AM

**SPEAKER:** Puan Nurul Aini Zakaria  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/AlternativeAssessment>

**WEBCAST@FSG**

SESI PERKONGSIAN: KUALITI DEKAT DIHATI

18 SEPTEMBER 2020  
 10.30 am - 12.00 tengahari

**SPEAKER:** Dr. Nurul Aini Zakaria  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/SesiPerkongsian>

**WEBCAST@FSG**

Microsoft Teams: Getting Started with Teams for GOL

1 October 2020  
 Thursday  
 10.00 AM-12.00 PM

**SPEAKER:** Puan Nurul Aini Zakaria  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/MicrosoftTeams>

**WEBCAST@FSG**

MICROBIAL SAFETY IN AGRICULTURE PRODUCTS: TECHNOLOGY AND ITS BREAKTHROUGH

23 OCTOBER 2020  
 FRIDAY  
 2.00-4.00 PM

**SPEAKER:** Dr. So'bah Ahmad  
 Senior Lecturer  
 Faculty of Applied Sciences

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/MicrobialSafety>

**WEBCAST@FSG**

GLOBAL RESEARCH REPUTATION (GRR) & STRATEGIC RESEARCH PARTNERSHIP (SRP) GRANT

2 November 2020  
 MONDAY  
 02.30 - 03.30 PM

**SPEAKER:** Dr. Nurul Aini Zakaria  
 School of Chemistry and Environment  
 Faculty of Applied Sciences

**Moderator:** Dr. Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/GlobalResearchReputation>

**WEBCAST@FSG**

SCITED SERIES 7.0

EFFECTIVE POSTGRADUATE EXAMINATION/THESIS EVALUATION & VIVA-VOICE: A GUIDE FOR YOUNG ACADEMICS & POSTGRADS

18 NOVEMBER 2020  
 WEDNESDAY  
 12.00PM - 1.00 PM

**SPEAKER:** Prof. CIM, Dr. Hazrah Bahron  
 School of Chemistry & Environment  
 Faculty of Applied Sciences

**Moderator:** Assoc. Prof. Dr. Mohd Fadzil Saifan

Click Webex Link: <http://tiny.cc/EffectivePostgraduate>

**WEBCAST@FSG**

Current Trend and Perspective: DNA Biosensor As Diagnostic Device

25 November 2020  
 Wednesday  
 3.00 - 4.00 PM

**SPEAKER:** Assoc. Prof. Dr. Dzulkefly Wan Zulkifli  
 School of Chemistry and Environment  
 Faculty of Applied Sciences  
 UTM Skudai

**Moderator:** Assoc. Prof. Dr. Mohd Fadzil Saifan

Click Webex Link: <http://tiny.cc/CurrentTrend>

**WEBCAST@FSG**

ADMIN SERIES 1.1

Creating Great Design with Canva

9 Desember 2020  
 Rabu  
 10.00 AM - 12.00 PM

**SPEAKER:** Puan Intan Syazlina Mohd Ali  
 Penolong Pengerusi Sesi  
 Malaysia Angkatan Sains & Teknologi  
 (MAST) UTM Skudai

**Moderator:** Puan Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/CreatingGreatDesign>

**WEBCAST@FSG**

ADMIN SERIES 4.1

Going Beyond a Webinar with Streamyard

10 Desember 2020  
 Khamis  
 10.00 AM - 12.00 PM

**SPEAKER:** Mohd Alfarrabi Mohd Nasir  
 Penolong Pengerusi  
 Bahagian Kemudahan Digital  
 Pejabat Bahagian Teknologi  
 Pendidikan dan Penyelidikan UTM Skudai

**Moderator:** Puan Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/GoingBeyond>

**WEBCAST@FSG**

ADMIN SERIES 1.2

Perkongsian Tema: Kemudahan Untuk Staf UTM

16 Desember 2020  
 Rabu  
 2.30 PM - 3.30 PM

**SPEAKER:** Pn. Ainul Fadillah BI Hanan  
 Penolong Pengerusi  
 Bahagian Sains dan Penyelidikan

**Moderator:** Puan Nurul Aini Zakaria

Click Webex Link: <http://tiny.cc/PerkongsianTema>



# PROMOTION





# CONGRATULATIONS



**Tahniah**  
Dr Suzaira Bakar  
atas kenaikan pangkat ke  
**GREDDM52**  
(Pensyarah Kanan)  
Berkuatkuasa 13 Ogos 2020

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FSG, UTM  
Faculty of Applied Sciences (FSG)



**TAHNIAH**  
Puan Noor Amira Kasim  
atas kenaikan pangkat ke  
**GREDDN22**  
(Kerani Kanan)  
Berkuatkuasa 2 Oktober 2020

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**TAHNIAH**  
Puan Rafidah Wahab  
atas kenaikan pangkat ke  
**GREDDN22**  
(Kerani Kanan)  
Berkuatkuasa 19 November 2020

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**TAHNIAH**  
Prof Madya Dr Asmdia Ismail  
atas kenaikan pangkat ke  
**GREDDM54**  
(Profesor Madya)  
Berkuatkuasa 22 Oktober 2020

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**TAHNIAH**  
Encik Kamarudin Ramli  
atas kenaikan pangkat ke  
**GREDDN22**  
(Kerani Kanan)  
Berkuatkuasa 19 November 2020

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**Tahniah**  
En Muhammad Hishamudin Amasrek  
atas kenaikan pangkat ke  
**GREDC22**  
(Pembantu Makmal Kanan)  
Berkuatkuasa 13 Ogos 2020

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**TAHNIAH**  
En Muhammad Zulhairiy Radzi  
atas kenaikan pangkat ke  
**GREDC22**  
(Pembantu Makmal Kanan)  
Berkuatkuasa 19 November 2020

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Faculty of Applied Sciences (FSG)



**TAHNIAH**  
PROFESOR MADYA Ts. DR. TAY CHIA CHAY  
atas kenaikan pangkat ke jawatan  
**PROFESOR MADYA (DM54)**  
Berkuatkuasa 19 Oktober 2020

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Faculty of Applied Sciences (FSG)  
#fsgpaddy #fsgpenang





# CONGRATULATIONS

*Sekalung Tahniah*

Profesor Madya Dr Zety Sharizat Hamidi

atas kenaikan pangkat ke jawatan

**Profesor Madya (DM54)**

Berkuatkuasa 11 November 2019

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Depada Dekan dan Warga Fakulti Sains Gunung

<https://www.facebook.com/utm-hq>

<https://t.me/utm-edu-my>

#igpada

**TAHNNIAH**

Haji Ahmad Kambali Khalil

atas kenaikan pangkat ke

**GREd C32**  
(Penolong Pegawai Sains Kañan)

Berkuatkuasa 19 November 2020

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**TAHNNIAH**

Puan Noor Haida Kamalul Khudzri

atas kenaikan pangkat ke

**GREd C32**  
(Penolong Pegawai Sains Kañan)

Berkuatkuasa 19 November 2020

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**TAHNNIAH**

Puan Julia Kassim

atas kenaikan pangkat ke

**GREd C32**  
(Penolong Pegawai Sains Kañan)

Berkuatkuasa 19 November 2020

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*Sekalung Tahniah*

Profesor Madya Dr Normah Ismail

atas kenaikan pangkat ke jawatan

**Profesor Madya (DM54)**

Berkuatkuasa 16 Januari 2020

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**Tahniah**

Prof Madya YM Dr Raja Razuan Raja Deris

atas kenaikan pangkat ke jawatan

**Profesor Madya (DM54)**

Berkuatkuasa 16 Julai 2020

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**TAHNNIAH**  
DI ATAS KENAIKAN PANGKAT KE  
**GREd DM52**

<b>Puan Haliza Kassim</b> Pusat Pengajian Kimia & Persekitaran	<b>Puan Zarila Shariff</b> Pusat Pengajian Kimia & Persekitaran	<b>Puan Asiah Mohd Nor</b> Pusat Pengajian Fizik & Bahan	<b>Puan Faridahanim</b> Pusat Pengajian Kimia & Persekitaran

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# CONGRATULATIONS

**— Sekalung —  
Tahniah**

Profesor Madya Dr Shariff Che Ibrahim

atas kenaikan pangkat ke jawatan

**Profesor Madya (DM54)**

Berkuatkuasa 11 November 2019

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**— Sekalung —  
Tahniah**

Profesor Madya Dr Noraini Hamzah

atas kenaikan pangkat ke jawatan

**Profesor Madya (DM54)**

Berkuatkuasa 11 November 2019

UTM **Dekan & Warga  
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**Tahniah**

Prof Dr Haji Khudzir Haji Ismail

atas kenaikan pangkat ke

**Profesor Gred Khas A  
(VK5)**

Berkuatkuasa 18 Jun 2020

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UTM Shah Alam](https://www.facebook.com/utmsg) [ig\\_utm](https://www.instagram.com/utmsg) [Faculty of Applied Sciences \(FSG\)](https://www.linkedin.com/company/fsg-utm) [FSG\\_UTM](https://www.youtube.com/channel/UC...) [Fakulti Sains Gunaan UTM Shah Alam](https://www.facebook.com/utmsg) #sgpada #hijauyang

**TAHNIH  
KENAIKAN  
PANGKAT  
KE GRED  
DM53**

PROFESOR MADYA DR ALI H. JAWAD

BERKUATKUASA 26 MEI 2020

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Gunaan** [Faculty of Applied Sciences,  
UTM Shah Alam](https://www.facebook.com/utmsg) [ig\\_utm](https://www.instagram.com/utmsg) [Faculty of Applied Sciences \(FSG\)](https://www.linkedin.com/company/fsg-utm) [FSG\\_UTM](https://www.youtube.com/channel/UC...) [Fakulti Sains Gunaan UTM Shah Alam](https://www.facebook.com/utmsg) #sgpada #hijauyang

**TAHNIH  
KENAIKAN  
PANGKAT KE  
GRED DM54**

berkuatkuasa  
16 April 2020

PROFESOR MADYA  
DR ROSNAH ZAKARIA

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## **NEW DOCTORS**



# DOCTORS IN THE HOUSE

**Tahniah**  
**DR NUR VICKY BIHUD**  
 atas penganugerahan  
**Ijazah Doktor Falsafah**  
**Universiti Teknologi MARA**  
 berkuatkuasa 4 Jun 2020

**Tajuk:**  
 Stryrillactones and Bis-Stryrillactones from the  
 Stem bark of *Goniothalamus Lanceolatus* MIQ. and  
 Their Cytotoxicity Activity



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**Tahniah**  
**DR SITI NURBAYA SUPARDAN**  
 atas penganugerahan  
**Ijazah Doktor Falsafah**  
**University of Liverpool**  
 berkuatkuasa 1 Jun 2020

**Tajuk:**  
 Study of High-k Dielectrics and their Interfaces  
 on Semiconductors for Device Applications



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*Sekalung*  
**Tahniah**  
**Dr Nurul Nadiah bt Mohd Firdaus Hum**  
 Pusat Pengajian Kimia dan Persekitaran  
 atas penganugerahan  
**Ijazah Doktor Falsafah**  
 Bidang Teknologi Sumber Air  
**Universiti Teknologi MARA**  
 Berkuatkuasa 4 Disember 2019



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**Tahniah**  
**DR SABRINA M. YAHAYA**  
 atas penganugerahan  
**Ijazah Doktor Falsafah**  
**Universiti Teknologi MARA**  
 berkuatkuasa 4 Jun 2020

**Tajuk:**  
 Electrochemical Synthesized of Single and Bilayer  
 Composite Coatings of Polypyrrole, Polyaniline and  
 Poly(M-aminophenol) for Corrosion Protection  
 of Mild Steel



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**Tahniah**  
**ChM DR HAIRUL AMANI ABDUL HAMID**  
 atas penganugerahan  
**Ijazah Doktor Falsafah**  
**Universiti Malaya**  
 berkuatkuasa 30 April 2020

**Tajuk:**  
 Thermotropic and Lyotropic Phase Behaviours of  
 Spontaneously Self-Assembled Amphiphilic  
 Branched-Chain Glycosides with Various Chain Length



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**Tahniah**  
**DR NORAINI KASIM**  
 atas penganugerahan  
**Ijazah Doktor Falsafah**  
**Universiti Teknologi MARA**  
 berkuatkuasa 5 May 2020

**Tajuk:**  
 Discriminative Analysis of Ficus Deltoidea Jack Varieties  
 Using Multiplatform Metabolomics and Development of  
 Bioactivity Prediction Model



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**Tahniah**  
**DR NORASHIRENE MOHAMAD JAMIL**  
 atas penganugerahan  
**Ijazah Doktor Falsafah**  
 daripada University College London (UCL)  
 berkuatkuasa 28 Oktober 2020

**Tajuk:**  
 Investigation of the Molecular Basis for Transcriptional  
 Regulation of Tn916 and Macrolide Resistance  
 in *Bacillus subtilis*



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Gunaan

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# DOCTORS IN THE HOUSE

**Tahniah**  
**DR. FALAH BIN ABU**  
atas penganugerahan  
**Ijazah Doktor Falsafah**  
daripada Universiti Teknologi Malaysia  
berkuatkuasa 18 0505 2020

Tajuk:  
**Framework of Lean Manufacturing Implementation  
for Wood and Furniture Industry in Malaysia**

UTM *di hamba* DEKAN & WARGA  
FAKULTI SAINS  
GUNAAAN

#fsgpadu #fsguayang

**Tahniah**  
**DR SHADATUL HANOM RASYID**  
atas penganugerahan  
**Ijazah Doktor Falsafah**  
daripada University of Manchester  
berkuatkuasa 1 September 2020

Tajuk:  
**Synthesis, Characterisation and Corrosion Protection  
Performance of Hybrid NanoComposite Coatings**

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**Tahniah**  
**DR NUR AIMI JANI**  
atas penganugerahan  
**Ijazah Doktor Falsafah**  
Universiti Malaya

Tajuk:  
**Synthesis and Characterization of  
Integrated Ag Nanocrystals-TiO<sub>2</sub> Nanotubes  
as Photoelectrode for Photoelectrochemical  
Water Splitting**

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**Tahniah**  
**DR SUZAIRA BAKAR**  
atas penganugerahan  
**Ijazah Doktor Falsafah**  
University of Leeds  
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Tajuk:  
**Synthesis and Characterisation of Carboxymethyl  
Cellulose (CMC) from Wheat Bran and its Application as  
PE/PET/CMC Film**

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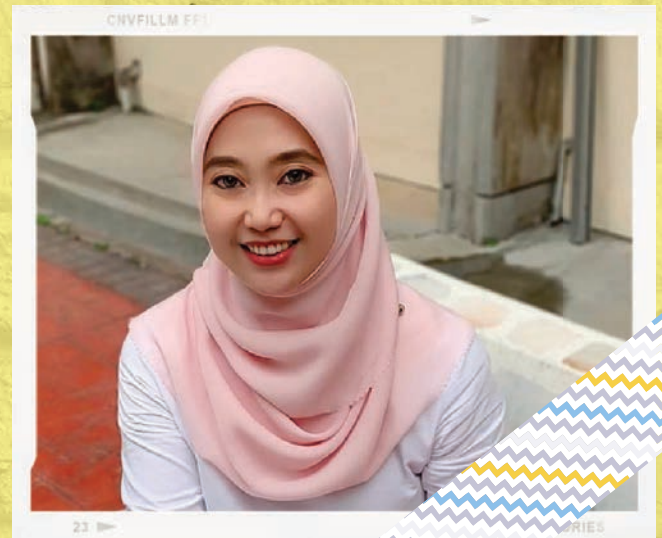


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