

31st Youth Science Conference (YSC)

RGS SMP Projects					
S/n	Name of Students	RGS Teacher Advisor	Category	Project Title	Achievement
1	AUDREY CHEE YAO RUI (S3-12) and TAN YI YIN ZOIE (S3-13)	Ms Carmen Hoo	Engineering	Surface modification of cellulose-based haemostatic sponge to improve surgical outcome.	Distinction
2	CAI YUHAN (S3-09), SONG XINTIAN (S3-09) and NUR MISCHA FILASTIN BINTE MOHAMMAD FAIZAL (S3-11)	Mr Shaun De Souza	Chemistry	Investigation of parameters for electrochemical carbon capture with spent calcium chloride dessicants.	Merit
3	TAN JIA YUN (S3-09), GUO YUMENG (S3-11) and SOPHIE WONG YING XUAN (S3-14)	Mr Shaun De Souza	Biology	The Usefulness of Physical Models in the Understanding of Concepts in Biological Sciences.	Merit
4	CHNG MIN XUAN ASHLYNN (S3-05), XU CHENCHEN (S3-10) and ZHENG JUNXIN (S3-11)	Ms Carmen Hoo	Engineering	Achieving self-sustaining urban farms via hydrogels.	Merit
5	KATELYN ANNE LIM JIA LI (S3-01) and LIM RUI EN ASHLEY (S3-09)	Mr Shaun De Souza	Engineering	Sequential phase modification of cellulose-based hemostatic sponge for Improved surgical safety and performance.	Participation
6	SARAH TAY (S3-10) and ELIZABETH LOW JUNHUI (S3-12)	Mr Shaun De Souza	Computer Science	Development of a minimal, modular and adaptable software for satellite TT&C.	Participation
7	KANG MIN WEI (S3-07), CHEAH KAI RU KENDRA (S3-11) and CHEN LING FEI (S3-12)	Mr Shaun De Souza	Engineering	Investigation of the effects of mass loading on electrochemical performance and electrode stability.	Participation
8	CERISE MAH RUI SZE (S3-04), LIU YILIN (S3-14) and RITA KAUR VAIDYANATH (S3-14)	Ms Carmen Hoo	Chemistry	Sustainable fragrance encapsulation: Biomaterial-based solutions for green consumer products.	Participation
9	KOAY PEI (S3-01), LIM XYZEE (S3-07) and VICTORIA LIM KAI ROU (S3-12)	Ms Carmen Hoo	Computer Science	Economic and environmental assessments of battery energy systems as an alternative to diesel generators in maintenance operations.	Participation

RGS SB-SMP Projects					
S/n	Name of Students	RGS Teacher Mentor	Category	Project Title	Achievement
1	BALAKRISHNAN HEMA (S2-01), WANG XINYUE SELINA (S2-01) and CAI YONGXIN (S2-10)	Mr Ong Wei Jian	Chemistry	The effect of pretreating different fruit peels as substrates for <i>E.coli</i> K-12 bacteria on the voltage generated in microbial fuel cells (MFC).	Distinction
2	CHLOE OH JIA'EN (S2-05), JEMMA HUI UY (S2-13) and LEE CHUN WEI KYRA (S2-13)	Mr Ong Wei Jian	Biology	Investigating of the effect of different microbes and different fruit waste substrates on the voltage produced in microbial fuel cells (MFCs).	Distinction
3	HONG MIN, ETENIA (FANG MIN) (S3-02), NGUYEN DO LINH CHI (S3-02) and NG KAI LIN, GWEN (S3-09)	Dr Lim Ai Khim	Biology	A study on modified intermittent fasting as an effective treatment for Alzheimer's disease.	Distinction
4	OWYONG HSIAO-HANN ALEXIS (S3-09), ELENA WIDJAJA (S3-10) and WU YANNI (S3-12)	Dr Lim Ai Khim	Biology	A study on the mechanism of <i>Lactobacillus</i> to ameliorate locomotive and cognitive decline brought about by Alzheimer's disease (AD).	Distinction
5	TAN YUROY, JASELLE (S3-06), LI PENGFEI (S3-12) and CHARLENE POH QING WEI (S3-13)	Dr Lim Ai Khim	Biology	Investigating the effect of the amount of HNE in vegetable oils on the progression of AD in <i>Drosophila</i> .	Distinction
6	CHIA XIN HUI, EVELIN (S2-01), CHOY SUM YING GENEVIEVE (S2-01) and VAISHNAVI HARIHARAN (S2-01)	Ms Deborah Rajaratnam	Chemistry	Assessing the UV-filtering properties of flavonoid-rich foods for potential sunscreen applications.	Merit
7	ARULBERCHMANS ALICE MABEL (S2-02), PUKALANDHI YAAZHINI (S2-02) and ALAPATI VAISHNAVI (S2-03)	Dr Prama Sundari	Chemistry	Effect of concentration of oil and additives on the foamability and anti-bacterial property of the soap.	Merit
8	LI RUITONG (S2-11), REYA PANCHMATIA (S2-11) and TAN JING YING, TIFFANY (S2-11)	Dr Prama Sundari	Biology	Effect of asphaltum punjabianum supplementation on mitochondrial dysfunction and cell proliferation in Schneider 2 cell lines.	Merit
9	GWENDOLYN NG (S2-01),	Mdm Cindy Tiong			

	ZHENG JIAYU (S2-01) and LOH YAN JUN (S2-10)		Chemistry	Synthesis and characteristics of composite fabrics using sugarcane bagasse-derived nanocellulose and natural fibers.	Merit
10	TAN SHI QI, NATALIE (S2-07), ANANYA (S2-13) and AVERY PEK ZHI WEN (S2-13)	Mrs Irene Allan	Environmental Science	Photocatalytic degradation of crude oil in artificial seawater.	Merit
11	HENG SHI YA VALENCIA (S2-05), NG QIAN LIN KYLENE (S2-05) and TAN QINGHAN (S2-05)	Ms Deborah Rajaratnam	Chemistry	Comparative study of the UV filtering potential of genera in the Malvaceae family.	Participation
12	CHEN YUXUAN (S2-01), KOTHANDARAMAN RASHMITA (S2-01) and NG JING RU (S2-06)	Ms Deborah Rajaratnam	Food Science	Balancing texture and nutrition: Optimizing the oat-to-tapioca flour ratio in bubble tea pearls.	Participation
13	SOH TING XUAN (S2-04), TAN KE SHU (S2-04) and WONG XUAN LIN ALICIA (S2-06)	Ms Deborah Rajaratnam	Chemistry	Investigating the UV filtering potential of plant extracts for sunscreen applications.	Participation
14	CAYLEE VALENCIA KHO (S2-01), THEN CHING LING, SOPHIE (DENG JINGNING) (S2-04) and ZHOU YUNJUN (S2-07)	Mr Ong Wei Jian	Chemistry	Investigation of the effect of different electron mediators on the performance of microbial fuel cells (MFCs).	Participation
15	NATARAJAN JANSITHA (S2-04), LIM ZI XUAN (S2-07) and SHI XINTONG (S2-07)	Mr Ong Wei Jian	Biology	Investigation of the effect of different types of bacteria on the voltage generated by the microbial fuel cell (MFC).	Participation
16	AMELIE GOH YUAN QING (S2-04) and MIKO KANG JIA QI (S2-11)	Mr Ong Wei Jian	Chemistry	Investigation of the performance of olive oil and sodium ethanoate as substrates for microbial fuel cells through electricity generated.	Participation
17	BETA HONG YIK TONG (S2-05), WANG SHUXIAO (S2-05) and WANG SHUYI JASMINE (S2-05)	Dr Prama Sundari	Environmental Science	Investigation of the properties of biobricks derived from different types of lignin.	Participation
18	NIVEKA RUTH LIM TAO ZI (S2-06), TAY MING XUAN (S2-07) and AURELIA RANEE LIM TAO XIU (S2-13)	Dr Prama Sundari	Biology	Investigating the use of phytogetic compounds and saponins to make a eco-friendly waste oil soap with antimicrobial properties to treat <i>E.coli</i> .	Participation

19	NG XIN HUI, NICOLE (S2-02), CAREY YAP FU YUN (S2-09) and ISABELLA CHEN ZHIYAN (S2-09)	Dr Prama Sundari	Chemistry	Effect of sucrose and citrus peel extraction on the lather, pH level and odour of soap made from waste cooking oil.	Participation
20	NG ZI XUAN, KYRA (S3-01), HENG XUAN NI VERA (S3-11) and EMMA XU QIAO YAN (S3-14)	Dr Lim Ai Khim	Biology	Effects of N-acetylcysteine on the progression of Alzheimer's disease.	Participation