## 30<sup>th</sup> Youth Science Conference (YSC)

RGS SMP Projects						
S/n	Name of Students	RGS Teacher Advisor	Project Title	Achievement		
1	JESSYN OH JIA XIN (S3-08), AMELIA TAY JUEY OON (S3-11) and LUO XINDI (S3-12)	Ms Cheong Szu Chuang	Posture detection for geriatric physiotherapy applications	Distinction		
2	YU YOURAN SERENA (S3-07), ALEENTA QUEK ZI LE (S3-12) and DENG SIQI (S3-14)	Ms Cheong Szu Chuang	Investigating the effects of environmental stress on biofilm formation in <i>E.coli</i>	Distinction		
3	KATE ISABELLE ONG (S3-06), CLARA TONG RUI SZE (S3-07) and LEE SIO HUANG (S3-09)	Ms Carmen Hoo	Stereocontrolled synthesis of functional cavitands	Distinction		
4	VARADHA RAJ HARSSHITHA (S3-07), STEFFI-ANNA LIM (S3-06) and TAN YING XI (S3-10)	Ms Cheong Szu Chuang	Protein aggregation in amino acids	Merit		
5	CHIEU LE XUAN (S3-14), MICHELLE KHOO HUI SIN (S3-14) and SOH PING LYNN (SU BINGLIN) (S3-10)	Ms Cheong Szu Chuang	Posture detection for therapy application in the paediatric population	Merit		
6	AVA KRISTEN TAN (S3-11), B AARADHANA (S3-08) and NANDINI GUPTA (S3-01)	Ms Cheong Szu Chuang	Technical and economic analysis of electrolyser systems: Modelling, life cycle cost assessment, and calculator GUI for sustainable hydrogen production	Merit		
7	RANITA BERNADETTE D'SOUZA (S3-05), TAY YEE TENG, GWYNETH (ZHENG YITING) (S3-11) and VANISHA KRISHNA (S3-01)	Ms Carmen Hoo	Investigation of factors affecting the efficacy of microplastic removal via electrocoagulation	Merit		
8	LEE TING XUAN CHANELLE (S3-13), XIAO YUXI (S3-08) and CHEN SI RUN (S3-12)	Ms Carmen Hoo	Determination of the optimum concentration of carrageenan (Irish moss)-based edible coating in extending of shelf-life of strawberries	Merit		
9	PRUDENCE SARAH HALL (S3-14) and CHOE KAH NING, CELESTE (CAO JIANING) (S3-11)	Ms Cheong Szu Chuang	Generative adversarial networks is an important enabler of large language models	Participation		
10	KLARISSE NG SHEE CHIN (HUANG SHIQING) (S3-12) and CHAI CHANG XUAN CHERYL (S3-12)	Ms Carmen Hoo	Investigating the mechanisms underlying RNA editing of Cav1.3 in the suprachiasmatic nucleus	Participation		

	RGS School-Based SMP Projects						
S/n	Name of Students	RGS Teacher Mentor	Project Title	Achievement			
1	CHARLENE POH QING WEI (S2-03), LI PENGFEI (S2-03) and TAN YUROU, JASELLE (S2-03)	Dr Lim Ai Khim	Investigating the effect of duration of heat treatment of vegetable oils on the locomotion and cognition in Alzheimer's disease Drosophila	Distinction			
2	HARINI GUNASEKARAN (S2-06), CHEN ZIXIN (S2-06) and ELENA WIDJAJA (S2-06)	Dr Lim Ai Khim	A study on the mechanism of Lactobacillus as an effective treatment for Alzheimer's disease	Distinction			
3	CALLY SIM ZHI YA (S2-06), DU YILIN (S2-03) and ZHUANG YIYI, ISABELLE (S2-09)	Dr Prama Sundari	Investigation on mechanical properties of bioplastic by biowaste	Distinction			
4	GUO YUEYANG (S3-13) and ANG ZI TING (S3-14)	Mr Chan Sau Siong	Lowering PM2.5 levels using air filters made of nanocellulose synthesized from corn husk	Distinction			
5	SOPHIE WONG YING XUAN (S2-02), ALYSSA TEE XI MING (S2-02) and TAN JIA YUN (S2-02)	Dr Lim Ai Khim	The effect of N-acetyl-cysteine supplementation on locomotive function of Drosophila melanogaster	Merit			
6	SAANVI SAREPAKA (S2-12), KOO YUN YE (S2-12) and YEO JUEN MIEN, KEIRA (S2-12)	Dr Prama Sundari	Investigating the effect of peanut and pistachio shells on the growth of cress	Merit			
7	LEI RUINING (S3-09) and IFZA NASIM (S3-04)	Dr Lim Ai Khim	Investigating the effect of Lion's Mane mushroom on Alzheimer's disease	Participation			
8	LIM RUI EN ASHLEY (S2-04), KYRA LEE (S2-04) and LIU XINMENG (S2-04)	Dr Prama Sundari	Research on ability of mango starch to produce bioplastic as alternative packaging material with the addition of glycerol and chitosan as plasticiser	Participation			
9	CLARA KHO (S3-06) and LAKSHANA RAJADURAI (S3-06)	Mr Chan Sau Siong	Developing a silver nanoparticle Infused filter out of sustainable materials to oxidise formaldehyde most effectively	Participation			