



## OFFICIAL RESULTS Pi-ENVEX 2020 (CATEGORY: UNIVERSITY)

NO.	NAME OF SCHOOL / UNIVERSITY	TITLE OF THE INVENTION	RESULT
2	ASIA PACIFIC UNIVERSITY OF TECHNOLOGY AND INNOVATION	LOGIA: A HANDWRITING RECOGNITION APPLICATION	GOLD
9	MANIPAL INTERNATIONAL UNIVERSITY	CONTINUOUS PASSIVE MOTION (CPM) FOR FINGER/HAND REHABILITATION USING SHAPE MEMORY ALLOY (SMA)	GOLD
11	UNIVERSITI KUALA LUMPUR MALAYSIA FRANCE INSTITUTE	POST WELD LOW BLOW IMPACT TREATMENT	GOLD
13	UNIVERSITI MALAYSIA TERENGGANU	METHANATOR- ADVANCE PILOT PLANT ANAEROBIC DIGESTER	GOLD
19	UNIVERSITI PENDIDIKAN SULTAN IDRIS (UPSI)	EMOTION DETECTION USING DEEP LEARNING APPROACH	GOLD
24	UNIVERSITI TUNKU ABDUL RAHMAN	PHOTOCATALYTIC FUEL CELL FOR SUSTAINABLE WASTEWATER TREATMENT AND BACTERIA DISINFECTION SYNCHRONIZED WITH ELECTRICITY PRODUCTION	GOLD
26	INSTITUT KEMAHIRAN MARA SIK	SOLAH TRAINING KIT	GOLD
28	MANIPAL INTERNATIONAL UNIVERSITY	A LOW COST HAND/FINGER REHABILITATION TO PROMOTE CONTINUOUS PASSIVE MOTION (CPM)	GOLD
29	RIVER ENGINEERING AND URBAN DRAINAGE RESEARCH CENTER (REDAC), UNIVERSITI SAINS MALAYSIA	DR SIPHON: REMOVAL SEDIMENT IN WATER RESERVOIR	GOLD
32	UNIVERSITI PUTRA MALAYSIA	HIGH-POTENTIAL METAL ION DETECTION USING NOVEL NANOCRYSTALLINE CELLULOSE-SPR BASED OPTICAL SENSOR	GOLD
33	UNIVERSITI PUTRA MALAYSIA	A NOVEL INTEGRATED SENSOR CHIP WITH SPR SENSOR FOR RAPID DETECTION OF DENGUE VIRUS	GOLD
36	UNIVERSITI TUN HUSSEIN ONN MALAYSIA	REAL-TIME DRIVER DROWSINESS DETECTION WITH IOT MONITORING SYSTEM	GOLD



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45	UPNM	VIRTUAL REALITY (VR) TECHNOLOGY FOR MAP TERRAIN VISUALIZATION IN MILITARY	GOLD
49	UNIVERSITI MALAYSIA TERENGGANU	PUMPKIN LIP BALM FROM PUMPKIN WASTE	GOLD
51	FAKULTI TEKNOLOGI KEJURUTERAAN KELAUTAN DAN INFORMATIK	INNOVATIVE INNER LAYER OF KENAF FIBER REINFORCED FIBERGLASS/KEVLAR FOR COMPOSITE BOAT	GOLD
53	UNIVERSITI MALAYSIA TERENGGANU	INNOVATIVE DESIGN OF HYDROFOIL TOWARDS REDUCTION OF SHIP'S RESISTANCE	GOLD
63	UNIVERSITI MALAYSIA KELANTAN	DRONE-BASED REMOTE SENSING IMAGES FOR SMART MONITORING OF OIL PALM PLANTATION	GOLD
66	UMK	NSP MACHINE: INNOVATION DESIGN OF SUBLIMATION MACHINE	GOLD
69	UNIVERSITI TUN HUSSEIN ONN MALAYSIA	SOCCER CODE: A MOBILE LEARNING GAMES TO INTRODUCE COMPUTATIONAL THINKING SKILL CONCEPT	GOLD
8	MANIPAL INTERNATIONAL UNIVERSITY	THE REMOVAL OF MERCURY VAPOUR IN NATURAL GAS STREAM USING SULFUR EMBEDDED PEAT SOIL	SILVER
14	UNIVERSITI MALAYSIA TERENGGANU	POMERLIQ FERTILIZER - PHYTOHORMONE ACTIVE COMPOUND FROM PALM OIL MILL EFFLUENT	SILVER
16	UNIVERSITI MALAYSIA TERENGGANU	FAS-T BIOENZYME - PRODUCTION OF HIGH NUTRIENT CONTENT IN COMPOST AT HIGH TEMPERATURE	SILVER
17	UNIVERSITI MALAYSIA TERENGGANU	LUMINOUS: SAFE POCKET LASER	SILVER
18	UNIVERSITI PENDIDIKAN SULTAN IDRIS	AR ABLUTION: STEP BY STEP ABLUTION FOR KID USING AR TECHNOLOGY	SILVER
23	UNIVERSITI TUN HUSSEIN ONN MALAYSIA	STINGLESS BEE HONEY COMPOSITION DETECTION AND CLASSIFICATION	SILVER

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25	UNIVERSITI TUNKU ABDUL RAHMAN	ADVANCED PHOTOCATALYTIC TECHNOLOGY FOR PALM OIL MILL EFFLUENT DEGRADATION WITH SIMULTANEOUS BIOGAS GENERATION	SILVER
27	UMK	DOUBLE AUGER TYPE POWDER FILLING MACHINE (SERVE MOTOR) WITH STAINLESS STEEL	SILVER
30	INSTITUT PENDIDIKAN GURU KAMPUS SULTAN MIZAN	HISTOPOLOGY	SILVER
31	UNIVERSITI PENDIDIKAN SULTAN IDRIS	FLOOR-IT-RIGHT: FLOORBALL AUGMENTED REALITY BASIC SKILLS APPLICATION	SILVER
34	UNIVERSITI PUTRA MALAYSIA	INCORPORATION OF GOLD-TYROSINASE IMMOBILIZED GRAPHENE OXIDE COMPOSITE THIN FILM WITH SURFACE PLASMON RESONANCE FOR THE DETECTION OF PHENOL	SILVER
37	UNIVERSITI TUN HUSSEIN ONN MALAYSIA	IOT-BASED QUEUE MONITORING SYSTEM USING CAMERA	SILVER
40	UNIVERSITI TUN HUSSEIN ONN MALAYSIA	IOT-BASED TRAFFIC LIGHT DAMAGE NOTIFICATION SYSTEM	SILVER
47	MANIPAL INTERNATIONAL UNIVERSITY	THE REMOVAL OF $Fe^{2+}$ AND $Cr^{6+}$ IONS FROM MINING WASTEWATER BY BIOSORPTION USING MODIFIED PEAT SOIL SUPPORTED WITH MICROORGANISMS NAMELY ESCHERICHIA COLI AND ASPERGILLUS NIGER.	SILVER
48	APPLIED OPTICS UPM	WASTE TO WEALTH: ZNO-SIO <sub>2</sub> COMPOSITE DERIVED FROM WASTE COCONUT HUSK ASH (CHA).	SILVER
52	UNIVERSITI MALAYSIA TERENGGANU (UMT)	ORALLY ADMINISTERED CHEMOTHERAPEUTIC DRUG	SILVER
54	UNIVERSITI MALAYSIA TERENGGANU	INNOVATIVE DESIGN OF A TRIM-TAB TOWARDS COMFORTABILITY SEAKEEPING PERFORMANCE	SILVER
56	FACULTY OF MARITIME STUDIES, UNIVERSITI MALAYSIA TERENGGANU	THE INTERDEPENDENT THEORY FOR NATIONAL SOVEREIGNTY TOWARD ILLEGAL FOREIGNERS	SILVER



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64	UMK	SME ENTREPRENEURIAL INNOVATION INDEX	SILVER
1	ASIA PACIFIC UNIVERSITY OF TECHNOLOGY & INNOVATION	ARGUS: CRIME DETECTION MOBILE APPLICATION	BRONZE
3	ASIA PACIFIC UNIVERSITY OF TECHNOLOGY AND INNOVATION	FLOW, THE FLOOD 8: YOUR VIRTUAL FLOOD ASSISTANT CHATBOT	BRONZE
10	UNIVERSITI KEBANGSAAN MALAYSIA	LACTOBACILLUS F25 – A PROMISING PROBIOTIC ISOLATED FROM MALAYSIAN STINGLESS BEE HONEY	BRONZE
15	UNIVERSITI MALAYSIA TERENGGANU	DEVELOPMENT OF BLACK SOLDIER FLY (HERMETIA ILLUCENS) LARVAE PRODUCTION TECHNIQUE AS AN ALTERNATE FISH FEED IN AQUACULTURE DIETS FOR MUD CRAB (SCYLLA SERRATA)	BRONZE
50	UNIVERSITI TUN HUSSEIN ONN MALAYSIA	REAL TIME MONITORING SYSTEM FOR AQUATIC SURFACE CLEANING ROBOT	BRONZE
55	UNIVERSITI MALAYSIA TERENGGANU	FOOD WASTE MANAGEMENT IN KENYIR LAKE, WITH SMART SOLAR POWERED COMPOST BIN BY USING ARTIFICIAL NEURAL NETWORK	BRONZE
57	FACULTY OF MARITIME STUDIES, UNIVERSITI MALAYSIA TERENGGANU	THE DRAFT FORMULATION OF STANDARDIZED HALAL CATERING LEGISLATION FOR VESSEL OF MALAYSIAN FLAG	BRONZE