

**International Exhibition of Inventions of Geneva 2021**  
**List of awards won by Hong Kong delegation**

	Organisation	Project	Award
1.	Nano and Advanced Materials Institute	An Elastic Copolymer Filament with Controllable Shape Memory Effect	Gold Medal with Congratulations of the Jury
2.	Nano and Advanced Materials Institute	Biocide-free, Germ-repellent Plastic Bottle for Safe Drinking	Gold Medal with Congratulations of the Jury
3.	Nano and Advanced Materials Institute	Portable and Flexible Pressure Sensor Mat for Gait Scan	Gold Medal with Congratulations of the Jury
4.	Nano and Advanced Materials Institute	Rapid Repairing Mortar Materials for Efficient Maintenance of Aging Buildings	Gold Medal with Congratulations of the Jury
5.	Nano and Advanced Materials Institute	Virtual Breathable Skin (VBS) - Bio-mimic, Non-porous Breathable Wig Cap	Gold Medal with Congratulations of the Jury
6.	Hong Kong Productivity Council	Electrically-assisted Free Forming (EAFF) Technology for Customisation of Sheet Metal Parts	Gold Medal with Congratulations of the Jury
7.	Hong Kong Productivity Council	kNOw Touch - Contactless Elevator Control Panel	Gold Medal with Congratulations of the Jury
8.	Hong Kong Productivity Council	Qoolmate x TTFIC	Gold Medal with Congratulations of the Jury
9.	The Chinese University of Hong Kong	A Novel Virus-free Anticancer Gene Therapy	Gold Medal with Congratulations of the Jury
10.	City University of Hong Kong	An Energy-free, Low-cost and High Cooling Performance Passive Radiative Cooling Technology for Building Applications	Gold Medal with Congratulations of the Jury
11.	Hong Kong Baptist University	Anti-scratch Thin Film Coating on Metal Surface	Gold Medal with Congratulations of the Jury
12.	The University of Hong Kong	Flu-based COVID-19 Vaccine	Gold Medal with Congratulations of the Jury
13.	The Hong Kong Research Institute of Textiles and Apparel Limited	Cellulose-based PFC-free Functional Surface Finish	Gold Medal with Congratulations of the Jury
14.	Precision Robotics (Hong Kong) Limited	SIRIUS - Flexible Robotic Endoscope System	Gold Medal with Congratulations of the Jury
15.	Hong Kong Applied Science and Technology Research Institute	3D High-efficiency Power Electronics Modules for Metro Train Energy Storage Systems	Gold Medal
16.	Hong Kong Applied Science and Technology Research Institute	5G and Vision-based AI Improvements for Automated Guided Vehicles	Gold Medal

17.	Hong Kong Applied Science and Technology Research Institute	Enhanced Long-distance Wireless Power Transmission Platform	Gold Medal
18.	Hong Kong Applied Science and Technology Research Institute	IoT Data Exchange Using Blockchain Technology	Gold Medal
19.	Hong Kong Applied Science and Technology Research Institute	Mobile Mission-critical Communications Terminal	Gold Medal
20.	Hong Kong Applied Science and Technology Research Institute	Smart Behaviour Analysis System	Gold Medal
21.	Hong Kong Applied Science and Technology Research Institute	Wide-bandgap-based Power Converters for Next Generation Data Centres	Gold Medal
22.	City University of Hong Kong	Aquatic Animal Postmortem Multimedia Analysis Platform	Gold Medal
23.	City University of Hong Kong	Damage-healable Antimicrobial Coating made from Natural Materials	Gold Medal
24.	City University of Hong Kong	Development of New Generation Anti-metastatic Drugs based on Endosomal Trafficking	Gold Medal
25.	City University of Hong Kong	Super Bamboo - Sustainable Structural Bamboo Materials with High Strength and Multi-function	Gold Medal
26.	City University of Hong Kong	Youth Sports Education and Management SaaS Platform based on AI & IoT	Gold Medal
27.	The University of Hong Kong	Direct Thermal Charging Cell (DTCC)	Gold Medal
28.	The University of Hong Kong	Innovative Sewage Testing Tool for SARS-CoV-2	Gold Medal
29.	The University of Hong Kong	Light-controlled Contamination-free Fluidic Processor	Gold Medal
30.	The University of Hong Kong	Ultra-strong and Ductile Steel with Low price and Easy Manufacturing	Gold Medal
31.	Electrical and Mechanical Services Department	Artificial Intelligent Nylon Optical Fibre Sensing Escalator Combs	Gold Medal
32.	Electrical and Mechanical Services Department	Building Semantic Artificial Intelligence: The Future of Automation in City Level - A Real Application in Today	Gold Medal
33.	Electrical and Mechanical Services Department	Cloud-based Predictive Maintenance System for Real-time Lift Monitoring	Gold Medal
34.	Electrical and Mechanical Services Department	Internet of Things (IoT)-enabled Smart Toilet Bowl Cleaning System	Gold Medal
35.	The Chinese University of Hong Kong	Highly Sensitive Gas Sensing and Control System	Gold Medal

36.	The Chinese University of Hong Kong	PhotoAir: Measuring Indoor and Outdoor PM2.5 with a Mobile Phone	Gold Medal
37.	The Chinese University of Hong Kong	Self-powered Smart Watch and Wristband enabled by Embedded Generator	Gold Medal
38.	The Hong Kong Polytechnic University	CareCoatex™: A Biomaterial-based Core-shell Particles for Safe and Effective Antibacterial and Antiviral Applications	Gold Medal
39.	The Hong Kong Polytechnic University	Smart City Platform: A Comprehensive System for Spatial Data Infrastructure	Gold Medal
40.	The Hong Kong Polytechnic University	Smart Monitoring System for Urban Tree Management	Gold Medal
41.	Nano and Advanced Materials Institute	Flexible Self-powered Insole for LED Shoes	Gold Medal
42.	Nano and Advanced Materials Institute	High Performance Air Purifier Using Plasma Driven Nanofibrous Catalyst without Ozone Emission	Gold Medal
43.	Nano and Advanced Materials Institute	Ultra-durable Anti-fog Nano-coating	Gold Medal
44.	The Education University of Hong Kong	Online Assessment System for Individual Scores (OASIS)	Gold Medal
45.	The Education University of Hong Kong	Portable Interactive Meditation Mirror	Gold Medal
46.	Hong Kong Baptist University	Quality Control Markers for Use in Herbs Authentication	Gold Medal
47.	Hong Kong Baptist University	Therapeutic Inhibitor for Epstein-Barr Virus (EBV)-associated Cancers with Responsive Optical Imaging Function	Gold Medal
48.	The Hong Kong Research Institute of Textiles and Apparel Limited	Cultivation of Aniline-degrading Bacteria to enhance Textile Dyeing Wastewater Treatment	Gold Medal
49.	The Hong Kong Research Institute of Textiles and Apparel Limited	Soft Electrochromic Yarns with Low Operating Voltage	Gold Medal
50.	Hong Kong Productivity Council	Circulating Bed Biofilm Reactor for Carbon Capture from Sewage	Gold Medal
51.	Hong Kong Productivity Council	Hybrid Laser Energy Deposition and Milling Technology	Gold Medal
52.	Sino Innovation Laboratory Limited	CoolJet	Gold Medal
53.	Sino Innovation Laboratory Limited	Mobile Indoor Air Quality (IAQ) Robot	Gold Medal

54.	Logistics and Supply Chain MultiTech R&D Centre	Electronic Wristband and Monitoring System for Hong Kong's "StayHomeSafe" Home Quarantine Support Solution	Gold Medal
55.	Application Technology Company Limited	A.I. Smart Pole for Underground Pipe Damage Prevention	Gold Medal
56.	Blue Pin (HK) Limited	Dolphin - Effective Indoor Positioning Service	Gold Medal
57.	Cytomics Limited	Personalised Vaccination with Direct B-cell Assay	Gold Medal
58.	Intelligent Precision Micro-Systems Limited	GetAMask - A Robotic Mask Dispenser	Gold Medal
59.	The Lam Foundation	Nanotech Solar Wave Luminescent Tube	Gold Medal
60.	Shenzhen Ficus Technology Holdings Limited	"Anticounterfeit + Lottery" Solution for Consumer Product Protection	Gold Medal
61.	Tung Hing Automation Investment Limited	Smart Pressure Control Polishing Machine (DJ-RAP)	Gold Medal
62.	Hong Kong Applied Science and Technology Research Institute	5G O-RAN Base Station with Frequency Domain Signal Extraction Technology	Silver Medal
63.	Hong Kong Applied Science and Technology Research Institute	Advanced Digital Circuit Breaker for Energy Efficient Direct Current Buildings	Silver Medal
64.	Hong Kong Applied Science and Technology Research Institute	Advanced Mobile Energy Technology for Scalable and Safe Energy Storage for Smart Robotics Applications	Silver Medal
65.	Hong Kong Applied Science and Technology Research Institute	AI Quality Assurance System for Smart Manufacturing	Silver Medal
66.	Hong Kong Applied Science and Technology Research Institute	Apparatus and Method for Virtual Walkthrough Generation	Silver Medal
67.	Hong Kong Applied Science and Technology Research Institute	Apparatus for Measuring Objects in 3D Scenes	Silver Medal
68.	Hong Kong Applied Science and Technology Research Institute	Compact Non-mechanical Light Detection and Ranging (LIDAR) Beam Steering System	Silver Medal
69.	Hong Kong Applied Science and Technology Research Institute	Document Auto-summarisation	Silver Medal
70.	Hong Kong Applied Science and Technology Research Institute	ElectroStatic Discharge Protection Solutions for Advanced CMOS FinFET Process for 5G Applications	Silver Medal
71.	Hong Kong Applied Science and Technology	Improved Multi-beacon Wireless Indoor Positioning System	Silver Medal

	Research Institute		
72.	Hong Kong Applied Science and Technology Research Institute	Improving User Data Delay and Throughput Experiences for Cellular System over High Latency Backhaul	Silver Medal
73.	Hong Kong Applied Science and Technology Research Institute	Instant and Non-contact Determination of Materials Concentration in Solutions	Silver Medal
74.	Hong Kong Applied Science and Technology Research Institute	Interconnect Technologies for Electronic Circuit Fabrication and Through-Silicon-via Technologies for IC Integration	Silver Medal
75.	Hong Kong Applied Science and Technology Research Institute	Low-capacitance Transient Voltage Suppressor for Mobile Electronic Surge Protection	Silver Medal
76.	Hong Kong Applied Science and Technology Research Institute	Smart Water Data Analysis	Silver Medal
77.	Hong Kong Applied Science and Technology Research Institute	Zero Knowledge Proof Hardware Accelerator	Silver Medal
78.	The Education University of Hong Kong	CanPro - Data-driven Cantonese Pronunciation Practice through Common Daily Expressions	Silver Medal
79.	The Education University of Hong Kong	Drug-Related Attentional Bias in Drug Abusers and Rehabilitated Drug Abusers	Silver Medal
80.	The Education University of Hong Kong	Innovative Indoor Air Quality Monitoring and Education Kit	Silver Medal
81.	The Education University of Hong Kong	Tree Assessment for Life Education (TALE) Project	Silver Medal
82.	The Education University of Hong Kong	Utilisation of Waste Residues as Resources in Producing Sustainable Construction Materials	Silver Medal
83.	The University of Hong Kong	A Nanofibrous Composite Membrane Air Filter	Silver Medal
84.	The University of Hong Kong	A Soft Underwater Manipulation System	Silver Medal
85.	The University of Hong Kong	Microfluidic Platform for Metastasis Detection and Drug Discovery	Silver Medal
86.	The University of Hong Kong	MR-safe Actuation System	Silver Medal
87.	The University of Hong Kong	Universal Fracture Healing Accelerator for External Fixators	Silver Medal
88.	Hong Kong Productivity Council	Defect Recognition Support System (DRSS) for Aircraft Exterior	Silver Medal
89.	Hong Kong Productivity Council	From Heart to Eyes then on Fingers - Redefine Jewellery with AI and Robotics	Silver Medal

90.	Hong Kong Productivity Council	In-building Sewer Mining for Urban Water Management	Silver Medal
91.	Hong Kong Productivity Council	Smart Prison - Video Analytic Monitoring System	Silver Medal
92.	Hong Kong Productivity Council	Smart Road Studs	Silver Medal
93.	Nano and Advanced Materials Institute	High-flow Nanofiber Water Pitcher to Remove Microplastics, Cysts, Bacteria, Viruses and Heavy Metals	Silver Medal
94.	Nano and Advanced Materials Institute	Quick-out Deep-in Anti-Pollution Skincare with Herbal Ingredients	Silver Medal
95.	Nano and Advanced Materials Institute	Smart Protection Materials for Ski	Silver Medal
96.	Nano and Advanced Materials Institute	Ultrasound NanoBubble Cold Brew Coffee and Tea Machine	Silver Medal
97.	Nano and Advanced Materials Institute	Visible Light Triggered Secret Inks for Anti-counterfeit	Silver Medal
98.	The Hong Kong Research Institute of Textiles and Apparel Limited	A Novel Separation Method of Disentangled Textile Fibres	Silver Medal
99.	The Hong Kong Research Institute of Textiles and Apparel Limited	Bionic Functional Footwear for Pregnant Women	Silver Medal
100.	The Hong Kong Research Institute of Textiles and Apparel Limited	Carbon Dioxide Capturing Cellulosic Materials	Silver Medal
101.	The Hong Kong Research Institute of Textiles and Apparel Limited	Sleeping Comfort System for Identification of Comfort Zone	Silver Medal
102.	City University of Hong Kong	IPA Guide for Visually Impaired Learners	Silver Medal
103.	City University of Hong Kong	Magnetic Microrobotic System for Precise Cell Delivery in Vivo	Silver Medal
104.	City University of Hong Kong	Neural Motor Prosthesis Prototype for the Restoration of Motor Function in Spinocerebellar Ataxia by Closed-loop Deep Brain Stimulation	Silver Medal
105.	Logistics and Supply Chain MultiTech R&D Centre	Delivery Robot with End-to-end Navigation Policy	Silver Medal
106.	Logistics and Supply Chain MultiTech R&D Centre	Next InsurChain	Silver Medal
107.	Logistics and Supply Chain MultiTech R&D	Seamless Navigation in Urban Environment	Silver Medal

	Centre		
108.	Electrical and Mechanical Services Department	Air Filter 2.0 - Smart Energy-saving Air Filter Technology	Silver Medal
109.	Electrical and Mechanical Services Department	Fibre Optic Temperature Sensing System for Predictive Monitoring of Electrical Distribution Network	Silver Medal
110.	Electrical and Mechanical Services Department	Non-intrusive Data Analytics System for Adaptive Intelligent Condition Monitoring of Lifts	Silver Medal
111.	The Chinese University of Hong Kong	Harvesting Energy from Walking Human Body	Silver Medal
112.	The Chinese University of Hong Kong	Soliste - A Social Listening System for Understanding Your Customer	Silver Medal
113.	The Hong Kong Polytechnic University	A Smart All-electric Antilock Braking System (ABS)	Silver Medal
114.	The Hong Kong Polytechnic University	Biomimicking Photocrosslinkable Nanocomposite Bone Graft	Silver Medal
115.	Automotive Platforms and Application Systems R&D Centre	MiniMover - Autonomous Delivery Mover	Silver Medal
116.	Automotive Platforms and Application Systems R&D Centre	Swappable Battery - Low Platform Electric Minibus	Silver Medal
117.	Hong Kong Baptist University	Portable Body Motion Analyzer for Elderly Fall Risk Assessment	Silver Medal
118.	Blue Pin (HK) Limited	IoT Micro-location System (IMS) enabled Guest Services Robot (GSR)	Silver Medal
119.	InnoSpire Technology Limited	WeSee Smart Glasses	Silver Medal
120.	Koln 3D Technology (Medical) Limited	Omni-clamp	Silver Medal
121.	Llewellyn and Partners Company Limited	BIM Warehouse - The Next Generation of Digital Estate Ecosystem	Silver Medal
122.	Queen Elizabeth Hospital	Emergency Cricothyroidotomy Simulator	Silver Medal
123.	The Chinese University of Hong Kong	Dementia Screening in 30 Seconds with Automated Digital Drawing Platform	Bronze Medal
124.	The Chinese University of Hong Kong	Intelligent Magnetic Anchored and Guided Endoscope for Minimally Invasive Surgery	Bronze Medal
125.	The Chinese University of Hong Kong	QuickCAS: An Easy-to-use Analysis System for Quick Detection of Infectious Pathogens in Clinical Samples	Bronze Medal
126.	City University of Hong Kong	A Microfluidic Biosensing System for Effective Cancer Diagnostic and	Bronze Medal

		Screening	
127.	City University of Hong Kong	Electronic Cane Grip instrumented with Thermal Haptic Feedback	Bronze Medal
128.	City University of Hong Kong	The Golden Calf	Bronze Medal
129.	The Hong Kong Polytechnic University	Liverscan: Palm-sized Real-time B-mode Ultrasound Imaging Guided System for Liver Fibrosis Assessment	Bronze Medal
130.	Hong Kong Productivity Council	Smart Protective Shoe for Bunion Surgery Recovery	Bronze Medal
131.	Nano and Advanced Materials Institute	Multi-use Nano Mask	Bronze Medal
132.	Carmel PAK U Secondary School	Bio-bandages with Bio-dressings	Bronze Medal
133.	Ambopteryx Biosensing Limited	Physical Fitness Monitor	Bronze Medal
134.	Shun Tak Fraternal Association Yung Yau College	Super Tree Glue	Bronze Medal
135.	S.K.H. Li Ping Secondary School	Hydraulimb - Battery-free Micro Hydraulic Powered & Thermal-sensitive Artificial Hand for Amputees	Bronze Medal
136.	Tang Long Hin Michael	Smart Green Screen Behold Infinity	Bronze Medal