

## **PRIZE LIST OF THE**

### **48<sup>th</sup> INTERNATIONAL EXHIBITION OF INVENTIONS OF GENEVA - 2023**

#### **GRAND PRIX OF THE INTERNATIONAL EXHIBITION OF INVENTIONS OF GENEVA**

awarded by Mr. Jean-Luc VINCENT, Founding President of the Exhibition,  
to UNIVERSITE DE VERSAILLES SAINT-QUENTIN EN YVELINES, France  
for a non-toxic molecule which strengthens bees against external aggressions.

#### **THE PRIZE OF THE PUBLIC**

determined by the vote of the public to the most popular invention,  
awarded by Mrs. Caroline SIMONET, Director of the Exhibition,  
to GENIUS LOCI, Switzerland  
for connected medals to enhance heritage on a large scale.

#### **PRIZE OF THE WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO)**

awarded by Mr. Marcelo DI PIETRO PERALTA, Director of the WIPO Awards  
program,  
to Monsieur DE PABLOS ALMAZAN Rodrigo, Spain  
for a spinal prosthesis adapting to the nature of human physiology through an  
internal suspension system.

#### **PRIZE OF THE STATE OF GENEVA**

awarded by Mr. Daniel LOEFFLER, Deputy General Secretary in charge of the  
department of economy and employment of the Republic and Canton of Geneva,  
to THE HONG KONG POLYTECHNIC UNIVERSITY, Hong Kong  
for a high-efficacious myopia control spectacle lens (DISC).

#### **PRIZE OF THE CITY OF GENEVA**

awarded by Mr. Alfonso GOMEZ, vice president of the City of Geneva,  
to VIESCIBLE, Switzerland  
for lightweight ladders, easy to carry in a bag, to store and quick to deploy.

**PRIZE OF THE INTERNATIONAL FEDERATION OF INVENTORS' ASSOCIATION - IFIA**

awarded by Mr. Alireza RASTEGAR, President,

to KING ABDULAZIZ UNIVERSITY, Saudi Arabia

for a device that detects hematological disorder, depending on blood turbidity.

to THE HONG KONG POLYTECHNIC UNIVERSITY, Hong Kong

for a long-acting anti-obesity and insulin-sensitizing drug.

**INTERNATIONAL PRESS PRIZE**

awarded by Mr. Gérard SERMIER, Press Officer of the Exhibition,

to LOGHYDROGEN, Switzerland

for the HTi1 Hydrogen System, designed to reduce polluting emissions, and the consumption of all vehicles.

**PRIZE FROM THAILAND FOR THE BEST INTERNATIONAL INVENTIONS**

awarded by Professor Sirirug SONGSIVILAI, M.D., Ph. D., permanent Secretary of the Minister of higher education, science, research and innovation in Thailand,

to HANGZHOU VANGO TECHNOLOGIES, INC., China

for a phase measurement method using a communication protocol and a synchronization scheme.

to ELECTRICAL AND MECHANICAL SERVICES DEPARTMENT, THE GOVERNMENT OF HKSAR, Hong Kong

for a double-deck tram borne alert system to prevent derailment and collision.

to LUBLIN UNIVERSITY OF TECHNOLOGY, ELECTRICAL ENGINEERING AND COMPUTER SCIENCE FACULTY, Poland

for a method of manufacturing a silicon photovoltaic cell with an additional energy level in the band gap.

**PRIZE INPI - NATIONAL INSTITUTE FOR INDUSTRIAL PROPERTY - FRANCE**

awarded by Mrs. Charline FABBRO, Representative of the Exhibition for France,

to UNIVERSITE DE VERSAILLES SAINT-QUENTIN EN YVELINES, France

for a non-toxic molecule which strengthens bees against external aggressions.

### **PRIZE OF THE POLISH OF PATENTS OFFICE**

awarded by Mr. Michel SZOTA, Representative of the Exhibition for Poland,  
to PONCHIO C., NAREEJUN W., YAMAO N., Thailand

for a photoelectrocatalytic cell (PEC) saves energy innovation and cleaning water production applications.

### **KING ABDULAZIZ UNIVERSITY SPECIAL AWARDS FOR INNOVATION**

awarded by Pr. Iqbal Ismail, Student's Dean,

to HU HUI-YU, YANG SHANG-HSUAN, HSUEH HSIANG-MING, WANG HSIAO-FEN, YIH KUANG-HWAY, Chinese Taipei

for complex essential oil with sun protection function.

to HONG KONG APPLIED SCIENCE AND TECHNOLOGY RESEARCH  
INSTITUTE LIMITED, Hong Kong

for TrainLite : Small data AI learning platform for visual defect inspection.

### **PRIZE OF THE HONG KONG DELEGATION**

awarded by Dr. Andrew YOUNG, Representative of the Exhibition for Hong Kong,

to UNIVERSITY OF HA'IL, Saudi Arabia

for robust detection of atrial fibrillation based on data generated electrocardiogram signals.

to FUANGROD TODSAPORN, LERTSATITTANAKRON SARUN, Thailand

for a remote breast cancer screening test using cloud-based 3D ABUS.

to K-DEFENSE CO., LTD, South Korea,

for decompression technology applied to the "pressure regulator" of the SCBA.

### **INTERNATIONAL STRATEGIC TECHNOLOGY ALLIANCE GLOBAL INNOVATION AND INVENTION AWARD - ISTA**

awarded by Pr. Andrew YOUNG, Director associate (Innovation) Sino Group,

to NOWVA ENERGY CO., LTD., China

for horizontal circulation fluidized bed combustion.

to KING ABDULAZIZ UNIVERSITY, Saudi Arabia

for platform using deep learning and AI that uses different medical scans to diagnose a large number of diseases.

**PRIZE OF THE HONG KONG POLYTECHNIC UNIVERSITY**

awarded by Pr. Andrew YOUNG, Director associate (Innovation) Sino Group,  
to S. ALGAYAN ALHANOF, Saudi Arabia,  
for SMART-AID detects emotions in children via their facial expressions.

**PRIZE ALI & HOMA - BEIJING NORMAL UNIVERSITY**

awarded by Mrs. Caroline SIMONET, Director of the Exhibition,  
to Mr. KALVANDI SEYED MOSHEN, Iran  
for building safe buildings against earthquakes.

to Mr. ANVARI ARSALAN, Iran  
for reducing the speed of trailers on the road gradient without using the brakes.

**SWISS AUTOMOBILE CLUB PRIZE - ACS**

awarded by Mr. David TAJI, President of the Jury,  
to Mr. BUCHANAN Niger, United Kingdom  
for a progressive limited slip differential compact and low cost.

**PRIZE OF THE SPIRIT OF ENTERPRISE offered by the Circle of the Leaders of Enterprises - CDE**

awarded by Mrs. Enza TESTA-HAEGI, President,  
to Mr. Vincent CALABRESE, Switzerland  
for replacement of the hairspring as a return organ of the balance wheel adaptable to all portable watches.

**INDUSTRIAL DESIGN PRIZE**

awarded by Mr. Claude BRULHART, President for Swiss Romande (French-speaking part of Switzerland) - Swiss Design Association,  
to LOPKERD PRTTIPOEN, PHATTANAWASIN SRISAK, Thailand  
for automatic blinds improving solar protection in buildings.

**THE FRANCISCO GARCIA CABRERIZO PRIZE - SPAIN**

awarded by Mr. Jose Luis de CASTRO HERMIDA, Representative of the Exhibition for Spain,  
to Mr. DE PABLOS ALMAZAN Rodrigo, Spain  
for a spinal prosthesis adapting to the nature of human physiology through an internal suspension system.

**PRIZE OF THE FRENCH-SWISS CHAMBER OF COMMERCE AND INDUSTRY**

awarded by Mrs. Charline FABBRO, Representative of the Exhibition for France,  
to ULTRACADE INDUSTRIES, France

for active solar solution for facades that combines energy performance and aesthetics.

**PRIZE OF THE ITALIAN CHAMBER OF COMMERCE FOR SWITZERLAND**

awarded by Mr. Stefano LORENZONI, Representative of the Exhibition for Italy,  
to Mr. Manuele CAVALLI, Italy

for Solar Tracker active on two axes, installable in water.

**PRIZE OF THE TECHNICAL UNIVERSITY OF CLUJ-NAPOCA OF ROMANIA**

awarded by Prof. Radu Ioan MUNTEANU,

to THE HONG KONG POLYTECHNIC UNIVERSITY, Hong Kong

for a lightweight surveillance camera with ultrawide vision.

to BOSTAN Viorel, ILCO Valentin, MELNIC Vladimir, MARTINIUC Alexei, VARZARU Vlad,  
Moldova

for TUMnanoSAT flight model nanosatellite.

**PRIZE OF THE FIRST INSTITUTE OF INVENTORS AND RESEARCHERS IN ISLAMIC REPUBLIC OF IRAN**

awarded by Mr. Hossein VAEZI ASHTIANI, Head of International Relations,

to YISHENNA BIOTECHNOLOGY (SHANGHAI) CO., LTD., Chinese Taipei

for probiotics from a special white orchid that stimulate the body to produce hyaluronic acid.

to LUKESIC JOSIP, PENIC ANDREJ, Croatia

for EduGarden, completely autonomous plant cultivation tool.

**PRIZE OF THE RESEARCH AND INNOVATION TEAMS - IRAN**

awarded by Mr. Masoud SHAFAGHI, Director,

to ZAKLAD ELEKTRYCZNY ANDRII KAPATSII, Poland

for road pavements with interchangeable elements.

to SOCIAL WELFARE DEPARTMENT OF MALAYSIA, Malaysia

for an apparatus for stabilizing the handling of liquid foods.

**PRIZE OF THE CHINESE DELEGATION FOR INVENTION AND INNOVATION**

awarded by Mr. LIN Songtao, General Secretary of the Delegation,

to ABDULELAH KHOJA, Saudi Arabia

for monitoring and controlling system of kWh consumption to ensure power to critical equipment.

to AL DAWSARY MONA MOHAMMED AND EL NAJAR DOAA, Saudi Arabia

for an investigation of the effect of Elettaria cardamomum extract on hepatosplenic toxicity and lung allergic response du to carrageenan treatment.

to THE UNIVERSITY OF HONG KONG, Hong Kong

for Glance & Focus, a video analysis system to detect incidents.

to THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY, Hong Kong

for methods and compositions useful for assessing a subject's cognitive performance and risk of developing Alzheimer's Disease.

### **PRIZE OF THE SAUDI ARABIAN DELEGATION**

Awarded by Dr. Mohammed ALI ALGHAMDI, Chef of the Delegation,

to EKGASIT S., LERTVACHIRAPAIBOON C., AMORNKITBAMRUNG L., TANEERAT M.,  
Thailand

for a glittering, plate-shaped bio-calcium carbonate.

to TSINGHUA UNIVERSITY, China

for flamelet progress variable model for supersonic combustion.

to THE CHINESE UNIVERSITY OF HONG KONG, Hong Kong

for a powerful and wearable artificial muscle

to STATE GRID SHANGHAI MUNICIPAL ELECTRIC POWER COMPANY; TSINGHUA  
UNIVERSITY, China

for high-precision phasor measurement unit in intelligent distribution network.

to HANGZHOU INNOVATION INSTITUTE OF BEIHANG UNIVERSITY, China

for an eagle-inspired dexterous aerial robotic manipulator

### **PRIZE OF THE ITALIAN DELEGATION OF THE EXHIBITION**

awarded by Mr. Stefano LORENZONI, Representative of the Exhibition for Italy,

to Mr. Gualtiero CROZZOLI, Italia

for differential or greenhouse rollers on converging elliptical tracks.

### **PRIZES OF THE TAIPEI INTERNATIONAL INVENTIONS EXHIBITION**

awarded by Dr. David W.F. HUANG, cultural and economic delegation of Taipei,

to NATIONAL MARINE FISHERIES RESEARCH INSTITUTE, Poland

for a method and device enabling effective simultaneous bilateral descaling of  
fishes.

to NAJAFIMEHR HAMZEH, Iran

for the signature printer which can automatically print the signature after it has been  
put through the panel.

to KING ABDULAZIZ UNIVERSITY, Saudi Arabia

for date palm tree biomass-based hydrogel for the storage of water.

to VCLEAN MARANG DISTRICT COUNCIL, Malaysia

for adjustable loader that can carry out cleaning work using hydraulic system.

**PRIZE OF THE MALAYSIAN DELEGATION**

awarded by Dr. WAN MANSHOL, President and Representative of the Exhibition for Malaysia,

to HSIEH CHIN-HSING, HSIEH TSUNG-HSIEN, CHEN MING-KUN, Chinese Taipei  
for a water filter containing graphene and other products.

to THE UNIVERSITY OF HONG KONG, Hong Kong  
for Glance & Focus, a video analysis system to detect incidents.

**PRIZES OF THE KOREAN INVENTION PROMOTION ASSOCIATION - KIPA**

awarded by Mr. Yoo Tae Soo, Vice-president,

to CHEN CHIH-MING et aléa, Chinese Taipei  
for laser scanning technology measuring different surfaces.

to CITY UNIVERSITY OF HONG KONG, Hong Kong  
for eco-engineered tiles made of low pH eco-friendly concrete.

**ARCA SPECIAL PRIZE OF THE UNION OF CROATIA INVENTORS**

awarded by Mr. Igor DUJMOVIC, Representation of the Exhibition for Croatia,

to DELAVARI DOSAR ASMA, Iran  
for a device allowing to cool the PCR tube holder.

**PRIZE OF THE POLISH INVENTORS AND RATIONALIZERS ASSOCIATION**

awarded by Mr. Michel SZOTA, President and Official Representative of the Exhibition for Poland,

to ESLAMI MAJID, FADAE NAHID, Iran  
for an apparatus for monitoring die-casting process.

to KOREA ENERGY, South Korea  
for system that pushes the lost coal by taking the disc into the wire rope in the circular pipe.