

3rd

National Industrial Innovation Award

An introduction of 2013 winners

Organizer : Ministry of Economic Affairs

Executor : Chinese Association for Industrial
Technology Advancement



Origin.

Over the past decades, Taiwan developed a solid foundation in advanced technologies. However, along with the changes in the industrial environment and rapid rise of the knowledge economy, the passive support of “technology innovation” is no longer strong enough to sustain the whole Nation’s economic development. What we need is proactive power to drive forward industrial development. With an eye to build up this power, the creativity, innovativeness, and the ability to create adding value will be critically essential. To accelerate the development of a creative culture in Taiwan, the Act for Industrial Innovation was passed in 2010. Moreover, in order to gain advantages in the global economic and investment strategies, as well as to expand the opportunities for the development of the domestic economy, Taiwan entered the Cross-Strait Economic Cooperation Framework Agreement (ECFA) and launched a series of strategic programs. With all strategies in place, the opportunity for a breakthrough in the economic development of Taiwan could be anticipated.

To further promote industrial innovation in Taiwan, the Ministry of Economic Affairs (MOEA) instituted the National Industrial Innovation Award (NIIA). With “innovation” as its main axis, the NIIA encourages Taiwan’s industries to take full advantage of the existing competitiveness to consolidate the industrial innovation and contributions generated from the technologies, services, and diverse cultures. Nomination of this award is focused on the added-values created for a better future life through innovative designs and information technology. In addition, it also encourages the development to create high added values instead of high production quantity. This award aims to identify and reward businesses/academic organizations and research institutions which have made substantial contributions to the industry and for the future in Taiwan.

The NIIA is currently the only government-sponsored program targeting industrial innovation. Nominations for the NIIA include innovators from the industry, academic institutions, and research organizations. The goal of the NIIA is to inspire the leadership of industries, commending the teams and individuals to be supporting roles of industrial innovation. Besides, the “organization category” is also set in this award together to promote cross-field cooperation.

In addition, the NIIA is designed to provide the industries and research institutions a credible platform for evaluation of the innovative competitiveness. Furthermore, the grant of award is acted as a driving force to upgrade industrial innovation in Taiwan. This platform will not only promote rational dialogue and exchange among all participating businesses, scholars, organizations, and experts, but more importantly encourage the researchers in industries, academic institutions, and research organizations to break away from the traditional technology-based thinking and move forward to develop service innovation. Through the service innovation, the value of manufacture to the added-value of service could be increased and the consolidated creativity will lead the Taiwanese industries to the blue sea.

The economy in Taiwan is going through a critical time. In order to upgrade industry development, the MOEA sincerely invites enterprises, schools, organization-sponsored research institutions and individuals to actively participate in NIIA nomination. The competition of the NIIA will be an extraordinary opportunity to evaluate the inventive competitiveness of participants with other innovators. We also expect that the outstanding innovators in the Nation will take a further step to turn the award-winning innovations into a force that drives the industries forward. In a word, Taiwan is expected to change from “a nation of manufacturing” into “a nation of innovation,” creating a new page to the “golden age.”



Nomination Catagories .

Group	Industries
Precision Manufacture	This category includes (I) metal industry, (II) electrical and mechanical industry, (III) transportation vehicles industry, (IV) automotive electrical components industry, (V) automatic control industry, and (VI) precision instruments industry and so on.
Intelligent Technology	This category includes (I) semiconductor industry, (II) IC design industry, (III) display panel industry, (IV) computer and peripherals industry, (V) communications and networking industry, (VI) mobile phone and telecommunication equipments industry, (VII) electronic components industry, (VIII) software industry and (IX) cloud computing technique industry and so on.
Living and Healthcare Technology	This category includes (I) medical and biotechnology industry, (II) healthcare industry, (III) food industry, (IV) material industry, (V) chemical industry (VI) textile and fiber industry (VII) glass and ceramics industry and so on.
Green Energy Technology	This category includes (I) solar power industry, (II) wind power industry, (III) optoelectronics and optics industry, (IV) oil and natural gas industry, (V) environmental engineering industry, (VI) green energy building materials and construction industry, and (VII) other energy-based industries and so on.
Innovative Services	This category includes (I) cloud computing service industry,(II) information service industry,(III) testing service industry, (IV) logistics and storage industry, (V) transportation service industry, (VI) legal and accounting service industry, (VII) human resource industry, (VIII) trade and retail industry, (IX) engineering consulting service industry, and (X) financial insurance industry and so on.
Cultural Innovative and Recreation	This category includes (I) cultural and creative industry, (II) digital content and publishing industry, (III) restaurant and tourism industry, (IV) intellectual properties management industry, and (V) education industry and so on.



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Reasons for Winning

Solar Applied Materials Technology started off in 1978 as a humble business that specialized in the recycling and refining of waste precious metals.

Adhering closely to its corporate development vision of “Green, Value, Future,” the company focused on consolidating its technological capabilities in “recycling and refining” and “materials.”

From its core advantages in trends, demand and differentiation, Solar Applied Materials Technology created an innovative opportunity and direction – green materials and “3R” (Reduce, Reuse, Recycle) strategies, leading to the development of its unique business model and system of green circular economy (recycling – material – application – recycling). The system has not only evolved into a foundation for corporate growth and differentiation but also serves as a platform for international competition.

Presently, Solar Applied Materials Technology has become the top domestic company dealing with the recycling of precious rare metals and sputtering targets, ranking as the world No. 1 for optical disc targets and No. 2 for magnetic recording sputtering targets, generating tens of billions of NTD in annual revenue on a yearly basis. Solar Applied Material Technology has set itself as the role model for a domestic company that has emerged as an international leading name and secured pole position in terms of technological capabilities.



Acceptance Speech

Improvements in the quality of life create opportunities for the creation of material value, and the recycling and reuse of material resources is the only way to ensure that the finite resources of the Earth do not run out. Green innovalue is Solar Applied Materials Technology Corp's strategy for the future and a commitment to sustainability.

Key Features

Solar Applied Materials Technology is a provider of diverse ICTS services for different industries with products and services covering optical discs, hard disks, semiconductors, flat panel display, LED, photovoltaic products and so forth. For ICTS involved in the cyclical reuse of resources, the company offers the following services:

- (i) Key materials required by the aforementioned industries, including sputtering targets and deposition materials by offering metals, alloys, ceramic and compound materials of high purity, low defect, balanced ingredients and appropriate structure.
- (ii) With the company's core capabilities, Solar Applied Materials Technology offers silicon, quartz, ceramic parts/components along with part cleaning/item repair services.
- (iii) Recycling and refining of solid and liquid wastes from processes involving precious/rare metals including gold, silver, platinum, palladium, ruthenium, indium, gallium, tantalum and so forth.

The company's ICTS services range from raw material supply, target production, component manufacturing & maintenance, part cleaning, recycling & refining to thin film materials, application analysis and verification along with rare/precious metal management.

Company Profile & Business Contact Information

Founded	August, 1978
Core Business	Recycling and refining of precious and rare metals; Design, development and manufacture of sputtering targets
Chairman of the board	Howard Chen
Address	No.1, Gonye 3rd Rd. , Tainan Technology Industrial Park, Tainan City, 70995 Taiwan (R.O.C)
Tel	886-6-511-0123
Fax	886-6-600-0568
Website	www.solartech.com.tw/tw/index.html

Information and Communications Research Laboratories, Industrial Technology Research Institute



工業技術研究院
Industrial Technology
Research Institute

Reasons for Winning

ITRI's Information and Communications Research Laboratories was initiated in 1990 in conjunction with government policies for technological R&D initiatives and planning for national science projects on network communication, system-on-chip, intelligent electronics, digital learning and so forth. After years of hard work, the Information and Communications Research Laboratories has successfully developed a number of competitive technologies that have produced significant results in applicable industries.

The Information and Communications Research Laboratories has brought together relevant government agencies, industry sectors and academia by integrating and channeling related resources into participation in international standard activities. In recent years, Taiwan has become an emerging player in major international standard-setting organizations, such as the 3GPP LTE/LTE-A, IEEE802.16m, MPEG, and so forth. In addition, the Information and Communications Research Laboratories also adopted a two-pronged strategy by taking part in various international bids and the prospective telematics standard to increase international exposure for Taiwan industry. From 2010 to 2012, the Information and Communications Research Laboratories has successfully received 888 patents and achieved 263 successful cases of technical transfers for domestic businesses. This has brought over NT\$ 567 million in income and has led to more than 500 investment cases pooling NT\$ 5 billion from local and foreign companies as a significant contribution to the development of Taiwan's ICT Industry.



Former Vice President & General Director, Cheng-Wen Wu

Distinguished Research Institution Innovation Award



Acceptance Speech

Value stems from need and irreplaceability. Through open-minded thinking, the Information and Communications Research Laboratories has achieved a firm grasp of the needs of industry and strived to achieve innovation with a down-to-earth approach in order to enhance the Laboratories' irreplaceability. The Laboratories also hope that the fruits and energies of relevant R&D endeavors will bring profound and lasting benefits that will eventually boost the competitiveness of domestic industry, amplify relevant social benefits while ensuring the sustainability of the environment.

Key Features

The Information and Communications Research Laboratories is committed to the development of software-centric and service-oriented chipset/ICT along with an emphasis on the strengthening of system integration capabilities. Adhering closely to ITRI's core values of innovation, integrity and sharing, the Information and Communications Research Laboratories has played an active role in advanced technology research, development of key technologies and the value-adding/industrialization of existing technologies that are required for the development of Taiwan's ICT Industry. The Information and Communications Research Laboratories primarily focuses its R&D efforts on four areas: Next Generation Communication Technologies, Broadband Convergence System and Integration Technologies, Smart Internet of Everything, and SOC and System Platform Design Technologies. Utilizing its fundamental technologies in ICT and core competitiveness for diverse applications, the Laboratories seeks to form strategic collaborations and alliances with local/foreign research institutes/companies to strengthen domestic industrial value chain and competitiveness of Taiwan's ICs, devices, systems, applications, services, and further foster economic and social benefits in Taiwan.

Company Profile & Business Contact Information

Founded	July, 1990
Core Business	ITRI's Information and Communications Research Laboratories devotes to advanced technology R&D, related industrial services, IP business management, and new venture incubation. It aims to meet the developmental needs of ICT industry and also help the industry to develop new business opportunities.
President, ITRI	Jyuo-Min Shyu
Address	No.195, Sec. 4, Chung Hsing Rd., Chutung, Hsinchu 31040, Taiwan (R.O.C.)
E-mail	iclmcom@itri.org.tw
Website	www.itri.org.tw/eng/econtent/research/research02.aspx



Reasons for Winning

Established in Taichung in 1954, Victor Taichung Machinery Works has brought innovation to the three cores of precision machinery, namely: mechanism, electrical control and software. In addition to achieving high vertical integration for casting, processing, assembly, panel beating and so forth to strengthen product stability, the company has also established service schemes such as its “Customer Value Creation Application Center” and “Lathe-mill/Five-Axis OEM Center” to offer production line planning that is the most cost-effective and suited to customers’ needs. In addition, the company has deployed ICT remote monitoring technologies to set up a precision cloud digital factory in Taichung and collaborated with major domestic manufacturers of machinery in the promotion of M-Team to foster cooperation between domestic machinery tool manufacturers and their supply chains to facilitate quality improvement for Taiwan’s machinery tool industry by paving the way towards brand value competition.

Key Features

In order to satisfy the needs of consumers, demand of sophistication and precision has grown higher and higher. Coupled with the problems of spatial limitation at manufacturers’ facilities and the difficulty of training technical staff, Victor Taichung Machinery Works saw that the market is in need of high-end machinery that is multifunctional with the capability of processing curved surfaces for the production of highly complex parts.



Acceptance Speech

Innovation and improvement; Victor Taichung Machinery Works shall adhere to the spirit of “There is no best, only better” to stay true to its vision “beginning with the end in mind” in order to create value for customers for a win-win solution.

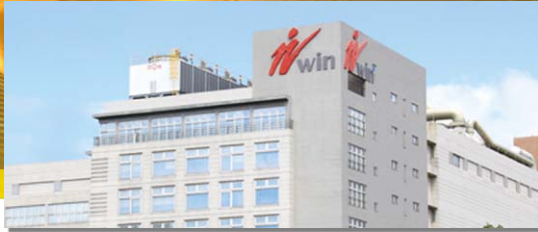
With this in mind, the company has dedicated substantial manpower and resources to the development of the Vturn-X200, a multi-tasking machine tool.

The Vturn-X200 features the functionalities of a CNC Lathe and Machining Center; for parts that require a multiple equipment lathe and machining center to produce, the Vturn-X200 is a one-stop solution that allows manufacturers to save 40% floor space. By eliminating storage and moving around of works in progress, manufacturers will be able to boost their productivity by more than 25%. Not only that, manufacturers will also benefit from less out-of-tolerance issues since there will be no need for equipment switching during processing.

In addition to satisfying customers’ needs for high-end equipment with its hardware, Vturn-X200 also comes with a number of intelligent software technologies including automatic Spindle Thermal Displacement Offset (STDO), 3D interference check (3DCHK), remote monitoring of machinery (ICT), troubleshooting, Energy Savings (ECO) technologies and so forth, rendering the Vturn-X200 on a par with the latest top-class equipment in terms of performance for different operations.

Company Profile & Business Contact Information

Founded	1954
Core Business	1. Metal machinery-CNC Lathe, milling machine, drilling machine. 2. Plastic Injection Molding machine, Rubber machinery, and accessories. 3. Machinery and accessories trading. 4. Other merchandise trading.
President	Bert M.H. Huang
Address	No.2088, Sec. 4, Taiwan Boulevard, Xitun Dist., Taichung City 407, Taiwan (R.O.C.)
Tel	886-4-2359-2101
Fax	886-4-2359-2943
Website	www.or.com.tw



Reasons for Winning

Initiated in 1999, Win Semiconductors Corp. is currently the world's largest provider of gallium arsenide (GaAs) microwave communication wafer manufacturing services with a global market share of 62.4%. Not only that, the company also ranks as the world's ninth largest pure-play wafer (including CMOS, GaAs) OEM foundry. The core of Win Semiconductor's innovation lies in its offering of comprehensive and diverse GaAs processes that not only break free from the technological and product monopolization of the existing IDM model but also facilitate industrial innovation with a diversified technological platform that provides solutions that are holistic, low-cost, high-quality and rapid. In addition to creating Taiwan's GaAs wafer OEM sector, the company's continued efforts in innovation have also opened the door to a "blue ocean" for Taiwan's semiconductor industry by serving as a benchmark for industrial innovation.



Key Features

The process of wafer bumping is mainly used to complement the application of flip-chip technologies. Flip-chip is an advanced packaging technology that involves chips face-down in order for the metallic bumps to interconnect with the substrate, and this requires the preprocess of wafer-bump manufacturing. With the advantages of better heat dissipation, improved RF performance and significant reduction on packaging area, flip-chip packaging has become an ideal solution in light of trends for electronic product

Acceptance Speech

Technological autonomy, the ambition to lead and product diversity; the only path to the "Blue Ocean" is to take the hard road that others avoid.

miniaturization and performance optimization. And as such, the technology promises significant potential for future development.

Having anticipated such trends a few years in advance, Win Semiconductors engaged itself in active investment and efforts in relevant areas to successfully develop wafer bumping process technologies for compound semiconductors as an alternative to traditional wire bond processing to offer a substantial boost to the competitiveness of customers' products. As the technology has already been successfully applied in various products with silicon semiconductors, it also functions as a vital advanced process technology for the III-V compound semiconductor industries. Presently, a number of Win Semiconductors' customers have already applied the technology in the development of new products. In the future, the company will stay true to its spirit of pursuing excellence by offering advanced wafer bumping process services of outstanding quality, stability and speed.

Company Profile & Business Contact Information

Founded	October, 1999
Core Business	Professional GaAs foundry services
Chairman of the board	Dennis Chen
Address	No.69, Technology 7th Rd., Hwaya Technology Park, Kuei Shan Hsiang, Tao Yuan Shien, Taiwan (R.O.C.)
Tel	886-3-397-5999
Fax	886-3-397-5009
Website	www.winfoundry.com



耀億工業股份有限公司
YAO I FABRIC CO., LTD.

Reasons for Winning

Established in 1973, Yao I Fabric Co., Ltd. specializes in the production and development of eco-friendly monofilament fiber products. With a global market share of 35% for tennis racket string and 11.8% for fishing line, the company has the capacity to compete on the international stage. In addition to strengthening the functionality of its existing products to instill new vitality into them and transform the traditional industry with technology, Yao I Fabric has created its original brand of “yia®” for the consideration of sustainable operations. Not only that, the company has created a Life app website, offers online services and maintains positive strategic alliances with major international companies. By accurately predicting market trends, lowering operational risks and costs to improve its market competitiveness, Yao I Fabric has become a role model of successful industry upgrade.

Key Features

In addition to products including fishing line, tennis string and trimmer line, Yao I Fabric has developed a new elastic mesh product with its spinning technology. Elastic mesh is a versatile product that can be used for the manufacturing of back rests and cushions for high-end office chairs due to its thermoplastic characteristics. And as such, it is an ideal replacement material for sponge. Elastic mesh is chemical-agent free, recyclable and



Acceptance Speech

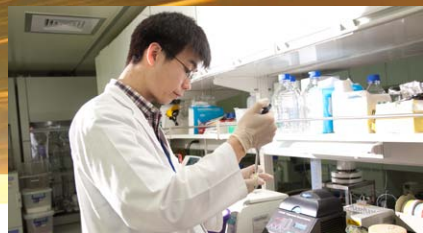
**Innovate for breakthrough with total devotion.
Lead with quality and handle with dedication.**

ventilating – traits that are all eco-friendly. Not only that, Yao I Fabric has extended its product applications to multi-functional application products for day-to-day usage. Due to the production of mono fiber with innovative functionality, Yao I Fabric has increased the usage of mono fiber, consequently turning the functional mono fiber fabric market into a market with significant niche potential for future development.

The Q-tex, Yao I Fabric's other major product, has been extensively applied in products of higher net profit (such as undergarments for women) by extending the application of Q-shion (elastic cotton) material into the domain of automobile and undergarment materials. After becoming a qualified supplier for Toyota Motor Corporation in 2008, Yao I Fabric has expanded its scale of collaboration for industrial non-woven fabric to produce materials that can be used for car seats, baby strollers, footwear and so forth. Furthermore, the company has been recognized and accepted into the supply chain of Victoria's Secret – the largest American retailer of lingerie, the company is full of growth momentum for the foreseeable future.

Company Profile & Business Contact Information

Founded	September, 1973
Core Business	Tennis String, Badminton String, Industrial Monofilament, Fishing Line, Nylon Monofilament, Trimmer Line, Elastic mesh for office chair Manufacturing processing and Export
Chairman of the board	Chao Jen Wang
Address	No.334, Sec. 6, Zhangmei Rd., Hemei Township, Changhua County 508, Taiwan(R.O.C.)
Tel	886-4-755-6111
Fax	886-4-756-2819
Website	www.yaoi.com.tw



Reasons for Winning

Golden Biotechnology Corp. (GBC) has developed a number of nutritional products featuring Antrodia as their key ingredient and has been committed to the research and development of new anti-cancer herbal medicines. In 2006, GBC discovered a new small molecule - Antroquinonol® (Hocena®, drug name) and has presently received 25 indication patents from a total of 103 countries around the world. Hocena® was approved by the US FDA for human clinical trials in 2009 and its Phase I study in Non-Small Cell Lung Cancer (NSCLC) has been completed earlier in 2013. The clinical trial of Hocena® for Phase II NSCLC has just been jointly hosted in November 2013 by the renowned medical center Johns Hopkins. Upon the completion of the Phase II clinical trial, GBC will be able to file a new drug application (NDA) with US FDA and become the first company that qualifies for the application of Ras inhibitor for cancer treatment. At the same time, GBC is actively developing Hocena® for treatment of pancreatic cancer, colon cancer, liver cancer, acute myeloid leukemia, breast cancer and so forth in the hopes of making substantial contributions to the field of new drug research, which would in turn secure the position of Taiwan's bio-pharmaceutical industry in the global arena.

Key Features

Hocena® is a breakthrough New Molecular Entity (NME) for the treatment of numerous cancers that has already received patents in 103 countries around the world and indication patents for 25 illnesses, rendering it the most representative drug invention of Taiwan. The



Acceptance Speech

Insisting on Golden Biotechnology Corp.'s founding spirit of "Exploration, Discovery, Innovation and Health," the company has continued with its research and development in medicine and biotechnological healthcare to create new formulas of Chinese medicine based on the technologies of Western medicine so that mankind can enjoy the benefits of modern technology and improve upon the quality of life.

development of this drug has taken GBC over 12 years and cost more than NT\$ 3 billion in research. The company has already completed an US FDA phase I clinical trial, with the worldwide, multinational cross institution validity test for phase II to be conducted in 4Q13 to confirm the drug's effectiveness against cancer caused by mutated Ras protein, possibly becoming a new hope as a potential cure. Johns Hopkins Medicine, the world's leading medical institution, will be the chief organization responsible for the Phase II study. GBC will conducted a clinical study in Europe in the near future. The new drug is expected to benefit patients of 35% of non-small-cell lung cancer, 45% of colorectal cancer, 90% of pancreatic cancer and 30% of acute myeloid leukemia harbor mutated Ras genes. It is anticipated to be an effective treatment that will achieve significant control of most cancers and stands as a groundbreaking advancement for Taiwan's and mankind's progress in medicine. GBC is confident that it has found the "Holy Grail" to develop Ras target therapeutic strategies for a broad spectrum of cancers.

Company Profile & Business Contact Information

Founded	September, 2002
Core Business	Biotech Service, Drug Manufacturing, New Drug Development
Group Chairman	WU, LI-YU
Address	15F., No. 27-6, Sec. 2, Zhongzheng E. Rd., Tamsui Dist., New Taipei City 251, Taiwan (R.O.C.)
Tel	886-2-2808-6007
Fax	886-2-2808-6005
Website	www.goldenbiotech.com.tw



Reasons for Winning

ENTIRE Technology was established in 2003 and the company has managed to develop and manufacture diffuser plates and light guide plates of improved energy efficiency with three innovative strategies: integration of high molecular material formula for research and application, optimization of optical structural design and improvement of precision module development technologies. Presently, the company has secured as much as 60% of the market with its diffuser plates as the world's No. 1 manufacturer for six years running. ENTIRE Technology has already achieved its short-term goals of improving its cost-competitiveness and designing eco-friendly, energy-saving processes. In the future, the company will follow market trends of display panel enlargement, thin design and diversified energy-saving illumination products by continuing to optimize optical design and adhering to the environmentally-friendly appeal of energy conservation in order to accomplish the long-term objective of lowering energy consumption.

Key Features

In order to overcome the issue of poor dimensional stability due to the water-absorbing characteristics of PMMA light guide plates produced for full-array LED backlighting and edge-lit LEDs, ENTIRE Technology became a pioneer by being the first to launch MS compound material, which has the characteristics of low water absorption, high penetration and high heat resistance to effectively reduce the cost of backlight modules



Acceptance Speech

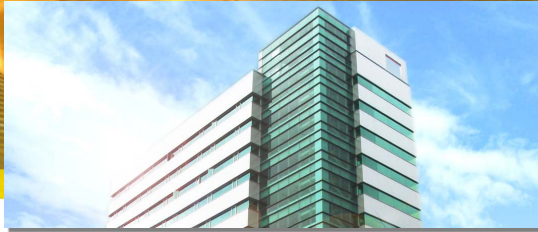
ENTIRE Technology is adept in technological integration to establish exclusive technological thresholds and values through core technologies such as "optical design," "material formula," "precision processing" and "extrusion process" to bring a win-win situation for the company and its customers.

while resolving the problems of low reliability for large dimension light guide plates. At the same time, ENTIRE Technology also offers total solutions for the optical design of diffuser plates and light guide plates by adopting an extrusion process over the conventional method of injection molding in order to produce better diffuser plates and light guide plates of higher brightness and better value.

Based on its successful experience with the extrusion process for micro-structure diffuser plates, ENTIRE Technology proposed the idea of dual-structure light guide plates (LGP) for extrusion processes by processing 2D micro-structure rollers with new roller machinery. This allows the company to create a mold for LGP with 2D micro-structure and lenticular micro-structure directly through the "roll to roll" approach during the process of plate extrusion with optical design rollers. The product then only requires confirmation of external dimensions and polishing of the light-entrance surface. This is a major improvement upon the shortcomings of performance and brightness of large dimension LGP in the past as it offers advantages of high optical efficiency. The product boasts substantial potential and advantages in the development of LGP enlargement in the future.

Company Profile & Business Contact Information

Founded	June, 2003
Core Business	Manufacturing of electronic components and plastic products
President	Huang, Jan-Feng
Address	No.12,Kung-Yeh 5th.Rd.,Ping-Zhen Industrial Park, Taoyuan Country 32459, Taiwan (R.O.C.)
Tel	886-3-262-3311
Fax	886-3-261-1022
Website	www.entire.com.tw



Reasons for Winning

Starting out from its mission of “Creating digital value with customers,” Data Systems Consulting (DSC) has oriented its services to assisting customers based on their needs; helping customers to optimize their management capabilities in order to foster close partnerships and achieve mutual, sustainable development with more than 30 years of know-how, profound experience with pertinent regulations, insight on industry trends and evolution of information technology. Presently, DSC is Taiwan’s largest ERP service provider, with cloud deployments that started with the virtual simulation of private clouds towards public cloud services through mobilization to innovate the operating models of commercial software. In addition, the company has been actively planning and constructing its Carbon Management Cloud Service in an effort to invoke customers’ attention to carbon related issues. With its high degree of innovation and fulfillment of its corporate social responsibilities, DSC has set an example as an outstanding cloud service provider for other domestic providers in Taiwan to follow.



Acceptance Speech

Data Systems devoted to constant innovation is for delivering greater success to its customers.

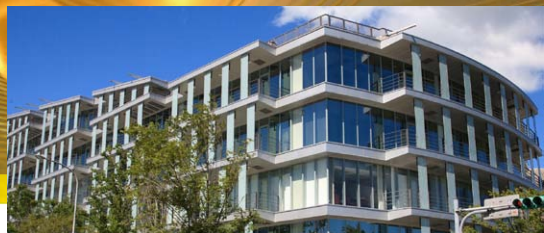
Key Features

Indicative Service is a comprehensive solution that DSC has developed from its profound experience in management for over 30 years. Featuring highly precise components such as “Indices Diagnostics,” “Indices Improvement Management Diagnostics” and “In-Depth Analysis of Indices Improvement” that assist customers in identifying core issues affecting target accomplishment or performance improvement. The solution takes into account factors such as inter-departmental correlation by creating an Issue Indicator Tree that is custom-made for the customer in order to portray a comprehensive picture of the customer’s organizational operations to facilitate quantified management of inter-departmental performance, which allows management to have a clearer grasp of the overall status of the company without having to worry about “focusing on one aspect while neglecting 10,000 other details” in management activities. Furthermore, the solution will guide corporations to allocate valuable resources to key activities in order to fully utilize potential, improve management performance and ensure generation of revenue.

DSC has already served more than 1,000 customers with its solution of Indicative Service and the company shall stay true to its mission of “Creating digital value for customers” by constantly improving upon its services in order to grow alongside with its clients.

Company Profile & Business Contact Information

Founded	1982
Core Business	Software Design Services
President	Ku, Feng-Yung
Address	No.222, Sec. 1, Zhongxing Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)
Tel	886-2-8911-1688
Fax	886-2-2912-7809
Website	www.dsc.com.tw



Acceptance Speech

With the courage to try an innovative model of operation, Lion Travel Service shall become a world-class brand name for travel services.



Reasons for Winning

Emphasizing the “Human Touch,” the Lion Travel Service Co., Ltd. strives to create an “Economy of Experience” through the symphony of knowledge, technology and cultural & creativity. Applying the “3C Operation Model”, the company successfully integrated and converged Taiwan’s existing diverse and unique culture resources and communities; therefore evolved from a simple travel agency services into a sophisticated operator of quality tour packages, delivering heterogeneous travel experiences. At the same time, the company integrates different concepts such as social network, location-base, mobile and so forth to deliver comprehensive services to consumers at different phases of their travel. By promoting holistic innovation and establishing new thinking for the traditional industry, Lion Travel Service has facilitated cross-sector symbiosis with its innovative business model of fully integrated marketing to set a new example of lifestyle innovation.



Key Features

In addition to offering comprehensive travel products and services, Lion Travel Service Co., Ltd. has also been actively developing and expanding themes for segmented tours, for example: art and cultures, sports, accommodation, delicacies, cultural innovation, entertainment, events and etc. Furthermore, the company has also set its eyes on other niche markets of potential traveler demands, such as: female travelers, MICE, tours for seniors, individual tours, small group tours and etc. Lion Travel highlights the connection between tour packages and individual experience of consumers, and inputs enormous effort to increase consumer enjoyment before, during and after trips so as to provide novel tour products that enable customers to demonstrate their preferred lifestyle and fulfill their inner needs. Not only that, Lion Travel endeavors to deliver thorough and professional travel services in a fitting and intelligent manner.

Company Profile & Business Contact Information

Founded	June, 1985
President	Jason Wang
Address	No.111, Ruihu St., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)
Tel	886-2-8793-9000
Fax	886-2-6606-5066
Website	www.liontravel.com



Reasons for Winning

Yinsh Precision is committed to the development and production of superfine locknuts. Having proactively taken part in industry-academia cooperation to cultivate research talent with solid technical skills, Yinsh Precision is also the first precision component manufacturer in Taiwan to establish its "Precision Locknuts R&D and Testing Lab" to achieve product assurance and improve product quality with high efficiency measurement methods. By utilizing "innovative international marketing strategies," the company has integrated traditional marketing with various innovative technologies such as cloud technology, interactive network marketing and so forth to successfully elevate its brand image through the deployment of multiple core strategies. Yinsh Precision has successfully ventured into the international market and distributed its products to more than 20 nations around the world to prove its potential for growth in the future.



Acceptance Speech

Through the spirit of constant innovation, Yinsh Precision strives to supply a perpetual source of momentum that will propel the company forward to sustained management in order to accomplish the ultimate goal of "construct the world with little parts."

Key Features

As the global industry of machine tools constantly evolves towards the path of high speed operation, high precision and high added-value, high-speed precision spindles have become the most crucial component. And as such, each spindle part/component must meet specific quality requirements in terms of dynamic balance. In high speed operations, the spindle generates a lateral force that causes the spindle to vibrate when rotation is unbalanced. It is important to note that when dealing with extremely fine precision processing, any vibration/noise from the spindle affects the quality of processing, with the biggest impact on surface roughness. Yinsh's SBL series is designed specifically for precision, high-speed spindles, with the entire locknut ground and adjusted precisely to HRC50 with SCM440 materials to ensure its precision and rigidity. The balanced opening of the locknut makes the task of dynamic balancing calibration easier, thereby solving the issue of spindle weight distribution by negating the need for drilled holes to reduce weight on unbalanced sides. Coupled with the "noise off screws" developed by Yinsh Precision, the products are able to eliminate the issue of shearing noise produced by spindles in high-speed rotation.

Company Profile & Business Contact Information

Founded	March, 1989
Core Business	Components and Accessories for Machine Tools, Related Export Trade Business
President	Lin, Kuo-Hua
Address	No.26, Lane 31, Chung Te 6 Rd., Sec. 1, Taichung City 40668, Taiwan (R.O.C.)
Tel	886-4-2244-7899
Fax	886-4-2245-2402
Website	www.yinsh.com



Reasons for Winning

PenPower Technology Ltd. has actively invested in the development of “intelligent human-machine interface” by adopting consumers’ needs as the basis of R&D to integrate handwriting, voice input, optical character, business card recognition etc. by vertically integrating key technologies from up and downstream suppliers. These technologies are strategically deployed for application in different PC and mobile devices to offer cross-platform, embedded recognition software solutions to effectively achieve cross-utilization of all key technologies. The approach renders PenPower products very rich in features and the company has enjoyed significant success in terms of sales and revenue. PenPower Technology Ltd. has secured a solid lead in its business card recognition technologies, with relevant technological patents generating licensing fee revenue continually. The company has also received numerous awards for its innovative products, which reflect the synergy of R&D, design, production management, product quality, market penetration and brand image, making PenPower Technology worthy of this award.

Key Features

The WorldPenScan BT is a pen-shaped, portable text scanner and translation tool that supports PC and Android platforms. The product scans text (words and sentences) and connects to PC/mobile devices wirelessly. When paired to a PC, WorldPenScan BT supports text recognition for close to 200 different languages. Coupled with the Android App WorldPenScan BT that PenPower has independently developed, the user can turn any



Acceptance Speech

Guided by the principle of “Connecting intelligence to see the difference,” PenPower endeavors to develop innovative products, revitalize the organization and optimize consumers’ user experience.

smart mobile device into a portable input generator that recognizes text of more than 20 languages. The product is designed for rapid input recognition immediately after scanning and is capable of processing up to 1,000 words per minute. The scanned and processed contents can then be directly used for various PC programs (i.e. Office Word, email software, web browser and so forth). When used with a smart phone, the user can share the scanned contents directly with others.

In a light-weight, portable pen design, the WorldPenScan BT not only offers an input recognition function but also provides other useful features including quick word/sentence search, direct editing of scanned contents, linking to multilingual dictionaries for translation (with translation support for dozens of languages) to offer precise explanation of words/sentences and so forth. Not only that, the product also allows the user to search for more definitions of words and phrases on Google/Wikipedia/YouTube to help process documents in foreign languages with greater ease. The wireless connectivity and high mobility of the product means that the user can scan, process and translate contents anytime, anywhere to make learning or work more efficient. As a highly innovative product designed for mobile learning, the WorldPenScan BT represents a seamless integration of wireless connectivity and a smart device platform.

Company Profile & Business Contact Information

Founded	September, 1991
Core Business	OBM: PenPower Handwriter, WorldCard, WorldPenScan, Mobile Device APP Recognition Technology License: Handwriting, Voice, OCR, BCR
Chairman	Yi-Tai Tsay
Address	7F., No.47, Lane 2, Sec. 2, Guangfu Rd., Hsinchu 300, Taiwan (R.O.C)
Tel	886-3-572-2691
Fax	886-3-571-5243
Website	www.penpower.com.tw



Reasons for Winning

KO DA Pharmaceutical is the first pharmaceutical company in Taiwan to adopt the TQM system and the first manufacturer of traditional Chinese medicine to be accredited to GMP, ISO and TAF standards. In an effort to achieve IT service innovation while improving drug safety for the general public, Ko Da Pharmaceutical has taken the initiative to develop its “Electronic Barcode Check System,” and the “Medicine cabinet signal system” as measures to intercept human errors in prescriptions while improving prescription efficiency. Through operations such as assisting practitioners of traditional Chinese medicine to set up their clinics, managing TCM departments as entrusted by hospitals, the company has evolved from a manufacturing business to a service-oriented business. Having started at the top position of the Chinese medicine supply chain, Ko Da Pharmaceutical has managed to vertically integrate the “TCM pedigree and trace platform” to further elevate the safety of TCM, thereby initiating the upgrade for Taiwan’s traditional Chinese medicine sector.



Acceptance Speech

Look for shortcomings in existing things; focus, and you will always find things to improve upon. Look for new ideas from things that are new to you; pay attention, and you will always be able to innovate.

Key Features

- (i) Offers the highest quality and safe products.
- (ii) Integrates the herbal supply chain management by developing the “Chinese herbal tracing platform.”
- (iii) Customers can connect to the platform and read the information through QR Code including agricultural base, planting methods, harvesting, safety inspection, etc.

Company Profile & Business Contact Information

Founded	March, 1985
Core Business	Chinese Herbal Product Manufacturer, Other Food Manufacturer, Cosmetics Manufacturer
Chairman of the board	Chen, Yu-Chang
Address	No. 20-1, Industrial 3rd Rd., Ping-Cheng City, Tao-Yuan County 32459, Taiwan (R.O.C.)
Tel	886-3-469-6105
Fax	886-3-469-0546
Website	www.koda.com.tw



Reasons for Winning

Rhymebus Corporation specializes in the professional production of AC Motor Drive, Auxiliary Inverter, Project Design of Control System Integration. As a manufacturer of key components for emerging strategic industries and green energy electrical system integrations, Rhymebus Corporation has comprehensive, independent capabilities to handle all aspects of operations ranging from R&D design, production, manufacturing, marketing, distribution and after-sales services.

Insisting on generating no air pollution or waste water from its manufacturing processes, Rhymebus Corporation has taken steps to achieve unified waste management. Not only that, the company also utilizes regeneration technologies to recycle power consumed for process dynamic testing to generate power, thereby saving as much as 70% on power consumption. Rhymebus Corporation is also committed to the fulfillment of the green energy 3Rs (Reuse, Reduce, Recycle) philosophy by aggressively taking part in the development of energy-saving products while cutting carbon emissions with inverter technologies.

Key Features

The “R-Rider Fitness Equipment Energy Regenerating System” embodies the green energy electrical system integration developed by Rhymebus’ team. The system comes with an Energy Harvest system that can be installed on fitness equipment such as stationary bikes, treadmills, elliptical trainers and so forth by converting the kinetic energy created by user’s body motion into electrical output. In addition to serving as the driving



Acceptance Speech

Accountability: Quality first; Prioritize service, Sustainability.

Innovation: Superior technologies, Professional research&development, Pursuit of perfection.

power for the equipment in question, the remaining power that has been generated can also be returned to the electrical grid to offset overall power consumption. The system boasts over 80% power generation efficiency and comes in a uni-body design with the mechanical components built in. This removes the need for peripheral equipment that has to be connected externally and the system can be deployed individually or in multiple arrangements. The product has also been designed akin to common household appliances by using a standard 110V power plug that can relay power while transmitting information (i.e. quantity of power generated by the user) instantly for systematic collection, management and monitoring of power and exercise data. Furthermore, the system’s high power conversion efficiency means more effective prevention of increased indoor temperature and reduction of air-conditioning costs. A single unit R-Rider system generates power that is roughly equivalent to two pieces of 200W photovoltaic panels in operation and it can generate as much as 1250W of power in 10 hours of continuous operation. Rhymebus Corporation has already received an invention patent for the technology in Taiwan, China, U.K., South Korea and so forth and has engaged in domestic and foreign market promotion. The company is seeking to collaborate with relevant industries, associations, academic institutions and system operators to establish demonstration “Fitness Green Power Station.”

Company Profile & Business Contact Information

Founded	March, 1987
Core Business	AC Motor Drive, Auxiliary Inverter, Project Design of Control System Integration
General Manager	Jar-Sun Lin
Address	No. 17, 33rd, Taichung Industrial Park, Taichung City 40768, Taiwan (R.O.C.)
Tel	886-2-2359-5237
Fax	886-4-2359-5235
Website	www.rhymebus.com.tw



Reasons for Winning

Prolink Solutions is dedicated to the development of its “cloud intelligent logistics application” service and has become the first company in Taiwan to construct a logistics management platform in the Cloud. Not only that, the company is also Taiwan’s first enterprise to collaborate with Microsoft and jointly launch cloud logistics services. The logistics corporate cloud platform services as a jumping-off point for traditional logistics service providers to rapidly involve into modernized logistics businesses by enabling enterprises to integrate their up and downstream logistics service providers for joint operation. With the concept of multinational integration as the basis of design for all systems and platforms in the series, Prolink Solutions offers global operation integration services to boost customers’ international competitiveness by helping logistics operators to overcome the difficulties of bridging the world and serving as a bridge of information between Europe, the U.S. and Asia.

Key Features

The cloud logistics supply chain management system and services include iFreight, WMS, iTMS, iExpress and PO Management, VMI, Shipping Management and so forth. These cloud products that utilize Microsoft’s advanced SmartClient technologies and its Azure cloud platform have been developed by Prolink Solutions specifically for the logistics industry as a brand new, upgraded public/private cloud management system and services based on the company’s 17 years of experience in the logistics supply chain.



Acceptance Speech

Prolink Solutions shall become a strategic partner for customers through constant innovation and R&D in the pursuit of excellence and the creation of competitive advantages.



Cloud systems originated as an Internet application that has no restrictions on physical location of usage. And as such, cloud computing services not only support organizations of conglomerate/branch company structures and management requirements, but also offer a platform of internal information that is closely related to various operations to facilitate internal operations. In addition, the system also offers electronic fee reimbursement to render the process of B/L review faster, more accurate and more convenient. Not only that, all B/L, reports and statements can be directly exported into different formats (i.e. PDF, EXCEL) for transmission via email/fax over IP to achieve customer aging schedule/line of credit management. This in turn enables effective credit and fund forecasting management to achieve control over financial risks. The cloud platform supports real-time transmission of messages via SMS text on Blackberry & Android OS to allow users to make arrangements for manpower entering/exiting the warehouse, truck dispatch and so forth to reduce down-time with EDI information exchange to offer optimized management services for supply chains.

Company Profile & Business Contact Information

Founded	March, 1996
Core Business	Research & Development of Logistics Software System; Local & Overseas Trading & Consulting for Logistics Software System
President	Paul, Lin Pao Yi
Address	3F-1, No.133, Sec. 4, Minsheng E. Rd., Taipei City 105, Taiwan (R.O.C.)
Tel	886-2-5555-6689
Fax	886-2-5555-9568
Website	www.pllink.com



Reasons for Winning

With the innovative strategy of “Industry Culture–Cultural Industrialization,” Goang Shing started out as a traditional handmade paper mill but took the path of active promotion and construction to create an innovative organization and corporate environment. Not only that, the paper mill has integrated traditional cultural craftsmanship, green papermaking culture, specialty products along with a brand marketing model to showcase the unique values of the tourism factory by inheriting the culture of Taiwanese traditional industries and throwing cultural value-adding and creative design into the mix. Goang Shing has successfully added a layer of cultural depth to its products. In addition to preserving the finest qualities of papermaking culture, the paper mill has successfully created an innovative model of service operation through horizontal alliance, the creative use of different materials and development of more than 100 paper art products.



Acceptance Speech

Paper Love for Taiwan features the unique cultural and material charms of Taiwanese handmade paper to turn the notion of “Taiwanese handmade paper as one of the core elements of domestic cultural innovation development” into a new value.

Key Features

Goang Shing Paper Mill · Handmade Art/Calligraphy Paper Series:

In order to ensure product quality and establish its brand value, Goang Shing Paper Mill became a pioneer in the industry by creating a production pedigree for its handmade paper; every sheet of premium art/calligraphy paper bears either a water mark or the signature of the paper maker. This makes all artworks created on Goang Shing’s handmade paper more precious and valuable.

Paper Love for Taiwan · Natural Paper Series emphasizes:

- (i) Green concept – advocating an eco-friendly paper-making culture that emphasizes the recycling and reuse of resources, the paper mill has incorporated elements of green fashion & aesthetics in order to infuse a love of nature and the land into their handmade paper.
- (ii) Cultural value-adding — the paper mill has specifically chosen plants that symbolize Taiwan’s unique culture to produce paper that is rich with the cultural charms of Taiwan.
- (iii) Natural paper – featuring natural paper-making materials and techniques, every sheet of paper exudes natural fragrance and simplistic beauty.

Company Profile & Business Contact Information

Founded	1965
Core Business	Handmade rice paper, cotton paper, tourism factory DIY workshops, Taiwan Handmade Paper Store, Tsai Lun Paper Vegetable Store and the Taiwan Nature Paper brand
President	Huang, Huan-Chanz
Address	No.310, Tieshan Rd., Puli Township, Nantou County 545, Taiwan (R.O.C.)
Tel	886-49-291-3037
Fax	886-49-291-3038
Website	www.taiwanpaper.com.tw

Smart Health Technology Research and Development Center of National Taiwan University



Reasons for Winning

The Center integrates the core capabilities of NTU's relevant graduate schools to engage in research on intelligent healthcare technology to develop new models of integrated tele-health by creating a patient-centered, home healthcare environment and community health management system. Presently the Center has completed the construction of its tele-health platform that links clients and servers to facilitate interactions between the two parties, thereby achieving the goal of maximizing health benefits for clients and minimizing operation of costs for resource sharing at the server end. The Center has also been working with information and communication(ICT) industries to facilitate the collaboration between the healthcare and ICT industries in order to uplift the technological levels of the domestic tele-health industry. This will in turn propel Taiwan's burgeoning tele-health industry by setting a new benchmark.



Outstanding Academic Achievement in Industrial Innovation Award



Acceptance Speech

Profit of hospital should come from patients' wellness, not from patients' sickness.

Key Features

- (i) Tele-Health Care Service: Tele-Health Care Service provides 24-hour remote consultations and individualized health management. The center can also assist in managing paroxysmal or emergent situations.
- (ii) Tele-Health Platform: Tele-Health Platform facilitates interaction between patients and doctors, customizes and integrates electronic medical record from hospital, automatically triggers abnormal vital sign notification, and enhances communication between case managers. Furthermore, the center continues to develop all kinds of auto interpretation systems to assist tele-health case services.

Company Profile & Business Contact Information

Founded	June, 2011
Core Business	An innovative telehealth service system
NTU President	Pan-Chyr Yang
Address	No.7, Chung Shan S. Rd.(Zhongshan S. Rd.), Zhongzheng Dist., Taipei City 10002, Taiwan (R.O.C.)
Tel	886-2-2312-3456#65524
Fax	886-2-3322-3937
Website	www.ntu.edu.tw

Research Center of Biotechnology, Southern Taiwan University of Science and Technology



Outstanding Academic Achievement in Industrial Innovation Award



Acceptance Speech

Southern Taiwan University of Science and Technology aims to nurture competent talents in the industry by bridging academia and the real world and strives to become the best supporting institute for the industry with innovative technologies by integrating relevant resources for the construction of an engine that propels development.



生技產品技術研發中心
Research Center of Biotechnology

Reasons for Winning

Focusing on the development of edible/medicinal fungi and probiotic dietary supplements as the central theme of its research, the Research Center of Biotechnology has undertaken two major research directions of traditional Chinese herbal medicines and protein production processes as a crucial component of the Ministry of Education's plan for the development of core technological capabilities for model technological universities in order to amplify research momentum and deepen technological capabilities. In the past several years, the University and the research center have actively promoted the development of biotechnology industries by facilitating industry-academia collaboration in southern Taiwan through the establishment of the Taiwan Biotechnology Industry Alliance and the Tainan City Government SME Biotechnology Service Team. The university has adequately utilized the collective strength of the marketing team to support the development of local biotechnology industries by actively helping proprietors to apply for health food accreditation, thereby delivering outstanding results.



Key Features

With subsidies from the Ministry of Education and the University, the research center has invested more than NT\$100 million in relevant research. Presently, the center offers assistance for the development, manufacturing and technological transfer of edible/

medicinal fungi (i.e. antrodia, caterpillar fungus, chaga mushroom, meshima, etc.), probiotics (i.e. lactic acid bacteria, bacillus subtilis, butylic acid bacteria, etc.) and traditional Chinese herbal dietary supplements. In addition, the center has also developed protein production technologies based on genetic engineering and established a ton-grade fermentation mass production trial plant to offer mass production trials for biotechnology products with facilities including fermentation tank scale-up (5L~1000L) and equipment for isolation, purification, freeze drying, spray granulation, capsule filling, 300 L ultrasonic extract condensing and so forth for comprehensive trial/mass production line testing to effectively reduce costs for pharmaceutical companies. The center is also responsible for assisting businesses to apply for relevant government subsidies for and participating in relevant industry-academia collaboration to cut down on R&D costs. Not only that, but the center also assists businesses in the development of biotechnology dietary supplements by means of fungus screening, functional assessment/certification, mass production processes, determining effective and stable dosage types and so forth, along with helping proprietors to apply for health food accreditation.

Company Profile & Business Contact Information

Founded	August, 2004
Core Business	Health-care product biotechnology development and trial production processes
President	Tai, Chein
Address	No. 1, Nan-Tai Street, Yungkang Dist., Tainan City 710, Taiwan (R.O.C.)
Tel	886-6-2533131 #6924
Fax	886-6-2425741
Website	www.stust.edu.tw



Reasons for Winning

Guided by the philosophy of “ Social Corporation,” the Office has deployed a series of arts restoration and maintenance equipments along with a professional research group to offer arts preservation and restoration services. The Office devotes thoroughly to the protection of cultural assets and sets up the first Management Bank of Art Collections in Taiwan. The bank is certified by ISO 9001 Quality Management System standard. The bank is also the first domestic art restoration/preservation facility to be equipped with a TAF-certified laboratory in Taiwan. With these outstanding achievements, the office has earned the privilege of establishing QA/QC SOPs for art inspection and analysis, thereby consolidated Taiwan’s status in the fields of professional art preservation and restoration works. The office has made substantial contribution to national industrial events relative to the promotion of art collection and preservation.



Acceptance Speech

The creation of value calls for aesthetic education; the only way to create greater value is to “place equal emphasis on cultural heritage and cultural innovation.” The Office shall irrigate Taiwan with the water of art so that flowers of beauty will bloom.

Key Features

In the past, conservation and restoration of arts, culture, or places of historic are processed by traditional methods. Cheng-Shiu University office of Arts and Culture tries to set an entire database by using scientific research, inspection method, and instrument equipment. By using those dependable data, damage of the arts and culture can be lowered during conservation and restoration process.

Cheng-Shiu University office of Arts and Culture expects to propagate correct concept of restoration and conservation, and to create a trusted relationship between arts and conservators. Most of all, the office expects to feedback the expertise to the history and culture.

Company Profile & Business Contact Information

Founded	August, 2000
Core Business	1. Process the cooperation program of the government and the business 2. Conservation and consultation of art and culture 3. Science analysis and inspection of art and culture material 4. Research the conservation space and anti-stealing system
President	Kung Jui-Chang
Address	No.840, Chengcing Rd., Niasong Dist., Kaohsiung City 83347, Taiwan (R.O.C.)
Tel	886-7-735-8800#6302
Fax	886-7-735-8927
Website	art.csu.edu.tw



Reasons for Winning

Established in 1963, the Metal Industries Research and Development Centre has dedicated itself to the long-term development of metal-related prospective and critical technologies in addition to assisting the private sector to develop high-value products and refine R&D technologies and manufacturing processes. The Center has also assisted the government in the implementation of relevant industrial development policies by actively promoting the transformation/upgrade of traditional industries, SMEs and local industries in southern Taiwan. Following the development of emerging industries, the Center has steered its focus toward organizational innovation and prospective technology development/service promotion to expand its specialization from traditional metal processing industries to include medical devices, electric vehicles, wind turbine and so forth. At the same time, the Center has integrated various resources and expertise in testing, certification, carbon footprint, innovative services, service-oriented transformation for manufacturing industries, deontology and so forth to support relevant industries to engage in the development of key products with potential/new service models, thereby accelerating the process of value-added heightening for industries. The Center has delivered exceptional performance in this regard by serving as a role model for other research institutes to follow.

Key Features

The Metal Industries Research & Development Centre has successfully developed the smallest ($\Phi 12 \times 2.5 \text{ mm}$) coin type 3-phase BLDC motor in Asia. The motor features an innovative axial magnetization design that is made possible by integrating motor components and driving circuit on a printed circuit board, which effectively reduces motor thickness while simplifying the process of motor manufacturing and assembly. The product offers the advantage of high yield percentage,



Acceptance Speech

Driven by the mission to propel industrial innovation with metal technology R&D and application services, the Metal Industries Research & Development Centre strives to play the critical role to facilitate value creation and assist metal processing industries to enhance their international competitiveness.

energy-saving and a competitive price and it is currently the best flat motor for cooling fans in ultra-thin 3C products with the best cost/performance ratio.

Incidentally, the mini fan developed specifically to work with the flat motor also has the least number of parts and components compared to other existing products on the market. In terms of parts and components, the mini fan has 25% less parts compared to offerings from major international manufacturers and the product could effectively lower assembly costs by as much as 20%. The mini fan is also the top performing product in terms of its function (wind pressure/blade thickness $\times 10$) compared to other similar products, outperforming offerings from major international manufacturers by a factor of 1.5.

With consumer products taking on the trend of becoming more compact in size, these products promise extensive scope of applications (including micro cooling fan modules, micro pump and so forth) that can effectively resolve the issue of cooling for ultra-thin NBs and projectors. The two products are expected to generate more than NT\$ 2 billion of revenue for the industry.

In recent years, the centre has focused its attention on the micro manufacturing industry by striving to establish the capabilities for design and manufacturing integration. With commercial products becoming more lightweight and compact by the day, the flat motor technologies developed by the Metal Industries Research & Development Centre will no doubt accommodate the demand for flat motors with high performance and the technology promises substantial benefit for different products that require this application.

Company Profile & Business Contact Information

Founded	December, 1963
Core Business	The research and promotion of metal related industries in development and management skills
Director	Huang, Chi-Chuan
Address	No.1001, Kaonan Highway, Nantze Dist., Kaohsiung City 811, Taiwan (R.O.C.)
Tel	886-7-351-3121#2111
Fax	886-7-351-3226
Website	www.mirdc.org.tw/

Market Intelligence & Consulting Institute(MIC), Institute for Information Industry



Reasons for Winning

The Marketing Intelligence & Consulting Institute (MIC) - a division of Taiwan's Institute for Information Industry (III) - was founded in 1987. From the beginnings to its glory days, MIC has duly recorded the path of growth and development of Taiwan's ICT industry. With the industrial research capabilities accumulated in the past, the Institute has devoted all of its efforts and resources to research on global/domestic ICT industry development and market changes. In performance of its advisory responsibilities, MIC has dutifully fulfilled its role as a Taiwan's industry think tank to offer a prospective vision and advice for the development of national industrial policies and assist professions from the industry/government/research sectors in gaining a better understanding of the global ICT industries and dynamics of market growth and opportunities with a well-designed Industry Information Database, customized consultation services and industrial consultant courses. MIC has been positioned as a valuable market intelligence provider to deliver the unique insight and perspective and has made many accomplishments worthy of recognition.

Key Features

MIC's Information Service: MIC is connecting to global research networks and has a pool of resources (including policy think tanks of different countries, a collaborative network shared with consultant companies in Europe, U.S., Japan, etc., domestic industry/government/academia/research affiliate networks covering approximately 90,000 corporate members in Taiwan and overseas). In addition, MIC also boasts its Taiwan's largest ICT



Outstanding Research Institution Innovation Award



Acceptance Speech

MIC has challenged itself to become a highly valuable market intelligence institute to provide comprehensive information and consultation services, and has been ideally positioned as a reliable and prestigious research institute to create maximum value for clients.

library to delve into diverse fields of research and provide comprehensive information analysis services.

MIC's Consultation Service: MIC has a professional research team which utilizes exclusive research approaches and methodologies to assist the government in formulating blueprints for industrial policies. With the provision of customized and effective consultation services to enterprises in various industries, MIC aims to help them develop and prosper.

MIC's Training Service: In 2000, MIC established a training institute under the development concept of "Knowledge Economy, Intelligent Navigation, Constant Learning, Innovative Thinking." The training institute has planned six major programs under the themes of "Intellectual Skills; Thoughts and Expressions; Industrial Insight; Trend Insight; Model Benchmarking; Revolution and Regeneration" to systematically help enterprises and individuals foster key competence needed in different stages of development in a step-by-step manner.

Having amassed over two decades of experience and R&D capabilities, MIC endeavors to continue constructing and reinforcing its information service, consultation service and training service in order to deliver a one-stop integrated service aligned with the interests of industry, government and academia.

Company Profile & Business Contact Information

Founded	July, 1987
Core Business	Integrated Consultation Services
Vice President & General Director	Victor Tsan
Address	9F., No. 216, Sec.2, Dunhua S. Rd., Taipei 106, Taiwan, R.O.C.
Tel	886-2-2735-6070
Fax	886-2-2732-1353
Website	www.mic.iii.org.tw

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Development of Electronic System Division, Automotive Research & Testing Center



Innovative Program

The research and development of intelligent vehicle safety systems



Reasons for Winning

In 2006, the Automotive Research & Testing Center began to develop intelligent vehicle safety systems technology in response to trends for safe, environmentally friendly and smart vehicles. In order to promote industry development and satisfy industry demand, this team has already undertaken 44 key technology transfers through direct transfers and industry alliances and also successfully developed 14 successful commercialized products for domestic and overseas OEM supply chains and automobile aftermarkets. It has also helped form seven project alliances and 30 individual industry technology development programs, with outstanding R&D results and industry service performance.

Key Features

The international automotive industry is moving toward the use of mechatronic technology to ensure vehicles are safer, environmentally friendly and intelligent. With this in mind, the Development of Electronic System Division has developed a series of intelligent vehicle safety systems, establishing a number of core development technologies including integrated electrical/electro-mechanical systems, optical design/reverse engineering, mechanical design/sensors, testing and certification. It has also completed the development of 24 key systems, promoted 44 technology transfers and 14 products.



Innovative Trailblazer of the Year



Acceptance Speech

The Automotive Research & Testing Center aspires to be “a leader in innovative automotive technology” and will continue to refine and develop technology and operational mechanisms to create a brand new future for the automobile business.

Throughout the process of technology development the team attaches a great deal of importance to technology patents (at present overseas patents account for 60% of the total). Through patent map analysis the patent protection network afforded the automotive electronics industry in Taiwan is gradually strengthened and a patent evaluation and incentive mechanism established to encourage the submission of quality patents.

From the introduction of technology to commercialization, R&D alliances are utilized to bring together upstream and downstream industries and also act as a go-between for systems manufacturers and car fleets to organize systems-loaded commercial operations, organize exchange events in response to R&D conducted by automakers with their own sources of technology, thereby enabling systems firms to bring their products to market as quickly as possible (examples include imaging products from Tung Thih Electronic Co., Ltd, Whetron Electronics Co., Ltd. and Autorad Tech Co., Ltd. and electronic parking brake systems from Fine Blanking & Tool Co., Ltd and Lioho Machine Works entering the international supply chain). In this way, own brand vehicles can be combined with more innovative products and it is estimated that by 2016 the industry will attract investment and achieve production valued at NT\$10 billion.

Team Profile & Business Contact Information

Organization	Development of Electronic System Division, Automotive Research & Testing Center
Assistant vice president	Liao Hsueh-Lung
Address	No.6,Lugong S.7th Rd.,Lugang, Changhua Country 50544,Taiwan(R.O.C.)
Tel	886-4-781-1222#7210
Fax	886-4-781-2336
Website	www.artc.org.tw

Innolux Automation Team, Innolux Corporation



Innovative Program

Innolux provides customers with one stop shopping service by employing the automatic manufacturing solution



Reasons for Winning

In 2007, Innolux established the Innolux Automation Team, with the aim of upgrading from B-to-B OEM/ODM manufacturing to a manufacturing services operational model focused on “providing customers with integrated solutions.” Based on the team’s wealth of experience and drive, an innovative operational model was proposed: touch screen one-stop service with the automatic manufacturing solution. This service will satisfy customer preference for a one-stop shopping service, utilizing industry-academia cooperation to cultivate and promote automation engineering and encouraging midstream and downstream supply chains to establish domestic optoelectronic clusters. This enhances industry added value and competitiveness in taking international orders for touch panels. It also increases employment opportunities, assists former employees to return to work in Taiwan and sets an example for the TFT-LCD panel industry.



Innovative Trailblazer of the Year



Mainland China faces rapidly rising salaries and a shortage of trained personnel. As a result, “automation is the touchstone of enterprise competitiveness” and the key to resolving labor problems and increasing company profitability.

Key Features

Innolux is the the third largest panel manufacturer in the world and the largest in Taiwan. In 2007, the Innolux Automation Team was established and with major changes in the market Innolux sought to upgrade from B-to-B OEM/ODM manufacturing to a manufacturing services model focused on “providing customers with integrated solutions.” Innolux Automation Team also evolved from being an internal support unit into Innolux’s first line service unit, providing an innovative supply chain model for the optoelectronics industry. Innolux Automation Team has focused on technical and manufacturing innovation. In addition, Chairman Tuan Hsing-Chien and Director General Wang Min-Cheng intend to expand the company’s influence in the industry, as the Innolux Automation Team has worked with academia and the government to create a cross-strait module (back-end) manufacturing with industry-government-academia alliance, which focusses on promoting Taiwan, while also encouraging back-end labor intensive industry to upgrade.

Team Profile & Business Contact Information

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N16 Development Division, Taiwan Semiconductor Manufacturing Company



Innovative Program
16nm FinFET CMOS Technology



Reasons for Winning

In order to enable the breaking edge products and system-on-a-chip (SOC), TSMC has developed the first high-density, low-energy-consumption foundry process technology independently, which will stimulate both the demand from the domestic supply chain of the semiconductor industry and the business opportunities in Taiwan. In the future, the economics of agglomeration from the use of this advanced technology is expected to dramatically increase competitiveness of the local IC design companies. This new technology will not only affirm TSMC's position as the global leader in the wafer foundry business, but also enable the wafer foundry business in Taiwan to retain its international competitive edge, a clear indicator of technological and industry leadership.

Key Features

16nm technology adopts FinFET, a breakthrough from the traditional planar field effect transistors. By using a 3-dimensional structure to construct a field effect transistor, 16nm technology achieves optimal benefits from the scaling in the size of transistors. TSMC's 16nm FinFET technology is the first in the world developed successfully by a foundry independently. It marks the arrival of the era of the high-density low-energy-consumption technology offered by wafer foundries. The innovative breakthroughs introduced in this program include:



Innovative Trailblazer of the Year



Acceptance Speech

Every new problem provided an opportunity for us to grow and learn. Each new challenge inspired us to improve our ability in coordination and cooperation. Combination of strategic innovation and seamless execution is the most solid foundation on which we accomplished mission together.

(i) Cutting edge FinFET technology: At the same level of leakage current, this technology is 35% faster than 28nm technology. At the same circuit speed, the energy consumption is reduced by more than 50%.

(ii) Immersion lithography combined with double patterning and spacer lithography to achieve a 48nm Fin pitch. As a result, this technology achieves a chip density that is about double that of the 28nm technology.

(iii) Provision of customization design services for IC design customers and joint development with strategic partners to provide "Open Innovation Platform," creating a win-win scenario.

TSMC's 16nm FinFET technology provides optimal solutions of high speed and low energy consumption for IC companies in the semiconductor industry who develop CPUs, GPUs, APUs, FPGAs, breaking edge products for internet applications and for mobile computing applications including smartphones, tablets and high-end SOCs. This highly innovative technology ensures the semiconductor industry extend the applicability of the Moore's Law.



Team Profile & Business Contact Information

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mTOR-Targeted Anticancer Drug Discovery Team, Development Center for Biotechnology



Innovative Program

mTOR-Targeted Anticancer Drug
Discovery Team at Development
Center for Biotechnology

Innovative Trailblazer of the Year



Acceptance Speech

Collaboration with Four Big Pharmas in Discovery of Novel mTOR Inhibitor as
Anticancer Drug Creates New Model of Successful Alliance.



Reasons for Winning

The team was guided by the Development Center for Biotechnology, together with a joint R&D alliance with four pharmaceutical companies—Standard Chem & PharmCo., Ltd, Yung Shin Pharm. Ind. Co., Ltd, CCPC, Intech Biopharm Ltd. As part of this project they collaborated on the development of a novel mTOR inhibitor targeted anticancer drug which can simultaneously inhibit the kinase inhibitors of mTORC1, mTORC2 and PI3K, while having the ability to enhance anticancer activity. This drug is expected to have better treatment outcomes, and attenuates side effects. The project offers an innovative collaborative model for Organization TDP (Technology Development Program) in the biotechnology and pharmaceutical sectors and the team has also promoted product industrialization, to accelerate the integration of upstream, midstream and downstream operations in the biotechnology and pharmaceutical industries.



Key Features

With the support of the Organization TPD under the Department of Industrial Technology, Ministry of Economic Affairs, the Development Center for Biotechnology became involved in the R&D of a novel mTOR inhibitor target anticancer drug and has already filed applications for patents in 17 countries, including the ROC, US and with the PCT. It has also successfully undertaken technology transfers to the R&D Alliance formed by Standard Chem & Pharm Co., Ltd, Yung Shin Pharm. Ind. Co., Ltd, CCPC and Intech Biopharm Ltd. for joint development, the best example of a new model working to Organization TDP results and enhance performance. The novel mTOR inhibitor has demonstrated an ability to inhibit the growth activity of cancer cells in lung cancer, breast cancer and prostate cancer patients, and working with the National Taiwan University College of Medicine has provided even more evidence that it inhibits activity in drug-resistant human lung adenocarcinoma tumor cells. Cooperation between industry, academia and research institutions and a willingness to learn from the experiences of each other will enhance the confidence and efficacy of the domestic biotechnology and pharmaceutical industry as it becomes involved in the independent development of new drugs.

Team Profile & Business Contact Information

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Team for development and promotion of flexible fabric supercapacitor and its applied product application, TTRI



Innovative Program

Development and promotion for flexible fabric supercapacitor and its applied product

財團法人
紡織產業綜合研究所
Taiwan Textile Research Institute



Reasons for Winning

In 2006, the team successfully developed an innovative technology that combines thin film solar energy batteries and textiles. In addition to being used as a supplementary power source for solar powered bicycle charge packs, electronic code locks and electronic fixed position devices, it can also be integrated and used with portable items such as clothing and backpacks. This light, high capacity, portable multiple power source device that can store electricity at any time, greatly increases the scope of energy products, creating real economic benefits. In June 2011, the technology received a global “R&D 100 Award,” the first time for the local textile industry. Through technology transfers and a newly established company the results and industry value created have been outstanding.

Key Features

The “flexible fabric supercapacitor” is a light thin supercapacitor that can be completely folded in half. It has a thickness of less than 0.1cm and is as thin as paper. It is mainly carried on conductive fiber textile products and differs from standard cylindrical supercapacitors in that its unit weight capacity is more than 10 times that of standard supercapacitors (a flexible supercapacitors of the same size as a traditional capacitor with a capacity of 1 farad, will have a capacity of 50 farad). In addition, the unique non-solvent electrolytes developed by this technology not only resolve the problem of



Innovative Trailblazer of the Year



Acceptance Speech

Although this team has experienced difficult times the support of the leaders of government agencies and hard work of team members has facilitated continued close cooperation with industry and made it possible to assist with the development of new markets.

environmental pollution, but also avoid the danger of explosion when used. Flexible fabric supercapacitors can be used within a temperature range of $-20^{\circ}\text{C}\sim 80^{\circ}\text{C}$, a broader scope than that of standard supercapacitors, enabling it to efficiently adapt to current extreme climate change. In June 2011, this product received an “R&D 100 Award,” more popularly known as the industry innovation Oscars. Related technology has already been transferred to an enterprise to establish a new company and in March 2013 personnel from the Taiwan Textile Research Institute’s (TTRI) supercapacitors technology TDP team joined this company, where they built a small quantity of equipment for trial runs and accepted orders as trial operations. It is expected that mass production and sales will officially begin in 2014 and forecasts suggest turnover will reach more than NT\$300 million within three years. TTRI continues to commercialize this technology and through an alliance of firms in different industries is working to jointly develop new products and achieve standardization, thereby realizing the key industry objective of an integrated industry supply chain.

Team Profile & Business Contact Information

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AlN-LED Group, Chemical Systems Research Division, Chung-Shan Institute of Science and Technology



Innovative Program

AlN Wafer for 3D LED Technology



Reasons for Winning

This group has actively promoted the industry use of aluminum nitride (AlN) and through an industrial technology development program seeks to integrate downstream, midstream and upstream operators, and taking highly thermal conductive aluminum nitride technology as a foundation establish an aluminum nitride technology industry chain. In 2011, the group launched “the first 8 inch wafer level AlN LED package in the world” together with high power AlN LED lighting fixtures, successfully combining AlN technology and industry, resulting in new products that efficiently promote the industrial application of AlN technology. Based on the impetus of national defense technology development, green energy products have also been developed, creating enough industry value to serve as a model.

Key Features

“AlN Wafer for 3D LED Technology” combines AlN wafer packaging technology and AlN 3D packaging technology and integrates the technology in the development of high power LED light modules. Because AlN possesses the characteristic that combines insulation and high thermal conductivity its heat dispersion efficiency is more than seven times better than that of aluminum oxide. As such, AlN packaging has the clearest impact on the heat dispersion benefits of high power LED and can therefore greatly increase the use life and performance of LED lights relative to that of aluminum oxide packages. AlN packaging can increase the life of LED by 6,000-7,000 hours while resolving heat dissipation issues

Innovative Trailblazer of the Year



Acceptance Speech

Thank you for the support of the Ministry of Economic Affairs and the invaluable work of team members in developing wafer level AlN. Our work has generated impressive benefits for industry and helped local firms to refine the technology they use.

currently facing the development of high power LED.

The team adopts a high temperature and high pressure manufacturing process to develop high density AlN ingots, which makes it possible through slicing and polishing technology to produce several slices of wafer level AlN substrates in one process. The conforming product rate of package production is high with good density and thermal conductivity. Package dimensions can be produced in a range of 4-8 inches and in the future there are plans to produce 12 inch AlN wafer packages. AlN wafer package technology can be introduced in technologically advanced domestic semiconductor manufacturing processes, thereby reducing development costs for firms and making development work more attractive.

The team has also established TAV (Through Aluminum Nitride Via) technology which makes AlN packaging part of the development of 3D packaging. AlN 3D LED technology is an example of AlN 3D technology combined with the LED packaging process, its advantage being the manufacture of double-sided circuits and a reduction in the size of the LED lighting module, so that a discrete chip can achieve high brightness. At present, the team has already developed a single 10W chip high brightness 3D LED AlN light source module.

Team Profile & Business Contact Information

Organization	Team for development and promotion of AlN wafer technology and AlN 3D LED application
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Mechanical and Systems Research Laboratories, Industrial Technology Research Institute



Innovative Program

Electric Propulsion System
Technology of Vehicle



工業技術研究院
Industrial Technology
Research Institute

Reasons for Winning

This team has sought to develop a wide range, high efficiency motor and power electronic unit integrated design and basic verification tool technology, thereby avoiding the losses and bottlenecks associated with driver power components switching, using a shared vehicle platform to bring together industry, academia and research institutes to promote vehicle themed joint academic-research cooperation, while working to train industrial technical personnel.

Through a long term cooperation R&D model which focuses on establishing technology, a comprehensive domestic foundation for vehicle electrical propulsion was established and that technical eco system has already successfully upgraded the performance and quality of domestic motor/driver products, entering the electric vehicle supply chain, the results standing as a clear example for other fields.

Key Features

Where the propulsion systems of electric cars differ from electric propulsion systems used by traditional industry is that they operate under conditions of high fluctuating load and high fluctuating environmental temperature, while also needing to meet the stringent automotive requirements such as high quality and low vibration noise. How to establish a vehicle propulsion module integrated with design and verification technology is the challenge faced in seeking to enter this high value added vehicle supply chain.



Fundamental Industrial Technology Development Award



Acceptance Speech

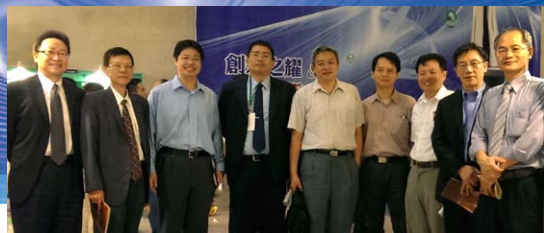
Establishing a foundation of basic electrical propulsion system technology is an excellent catalyst for innovation in the automobile industry.

The electric propulsion technology established wide range, high efficiency motor and power electronic unit technology, as well as an integrated design for motor, driver and verification tool technology. Of these, the wide operating area high efficiency motor and driver technology included high flux density V-shaped magnetic topology technology used in motors and driver wide range high efficiency power module soft-switching technology. Moreover the integrated motor and driver design and verification tool technology also includes optimized multiple coupled simulation technology and virtual whole vehicle verification and diagnostic platform technology.

The team successfully integrated personnel training, technical R&D and a shared product development platform, establishing a complete vehicle electrical propulsion fundamental technology framework that did not previously exist. A total of five shared vehicle platforms, a shared basic curriculum at 12 top/model universities, 14 companies and five vehicle research institutes in Taiwan and overseas helped with R&D, resulting in the development and performance enhancement of 19 electric vehicle propulsion products of 12 companies.

Team Profile & Business Contact Information

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Innovative Program

Advanced semiconductor 28/20 nm implanter technology development

漢民

Hermes Epitek

Reasons for Winning

This team adopts a model of cooperation between industry, academia, and research institutions. Hermes-Epitek Corp. develops advanced, 28nm and beyond ion implantation equipment from ion beam simulation to design to application. This equipment together with advanced research on annealing technology at National Cheng Kung University/National Nano Device Laboratories, and 28nm and beyond advanced ion implantation high volume production process development at TSMC, forming an industry, academia, and research institution innovation system. The company has successfully developed the first indigenously designed and manufactured, forward-looking semiconductor equipment for advanced ion implantation application. The equipment has already successfully entered volume production, the first step to self-sufficiency of critical semiconductor equipment technology. This technology also helps in elevating the domestic supply chain capability in key semiconductor equipment components and symbolizes intensive development in industrial foundation technology.

Key Features

This project was headed by Professor Wen-Shi Lee of the Department of EE of National Cheng Kung University and Vice President Daniel Tang of Hermes-Epitek Corp. They jointly executed the project entitled “Advanced semiconductor 28/20nm ion implantation technology development - High technology forward-looking technology development project of Central Taiwan Science Park, National Science Council, Executive Yuan.” Hermes-Epitek Corp. was responsible for developing the advanced ion implanting

Fundamental Industrial Technology Development Award



Acceptance Speech

“Cooperate and innovate, create value.” This project presents ion implantation equipment designed and manufactured by Chinese talent. The company looks forward to sharing the results of its research and development with semiconductor equipment users around the world.

equipment technology. Professor Wen-Shi Lee and National Nano Device Laboratories were responsible for developing 28/20nm annealing technology. These individuals and entities jointly conducted ultra shallow junction ion implantation fundamental research with the following individuals at TSMC: RD Director, Simon Jang; Deputy Director, T.L. Lee; MTC Director, C.H. Chen; Deputy Director, C.M. Yang; Manager, N.H. Cheng; Fab 12 Director, P.H. Chen; Deputy Director, M.D. Chen; Fab 14 Director, Y.L. Wang; Manager, K.W. Chen; Fab 15 Director, Y.H. Liaw; and Deputy Director, S.A. Wu. Hermes-Epitek Corp. and TSMC jointly conducted the 28/20nm ion implantation high volume manufacturing development. The team accomplished the following: (i) the first indigenously designed and manufactured ion implantation equipment in Taiwan, which is committed for high volume production at TSMC and UMC and fulfill the first step towards self-sufficiency of key semiconductor equipment; (ii) Increasing the market competitiveness of ion implantation systems produced by Hermes-Epitek and fostering component vendors in Taiwan to achieve 70% domestically produced key components; (iii) Developing low temperature microwave annealing technology to meet the demand of next generation annealing and activation processes; and (iv) creating a long-term model of cooperation between industry, academia, and research institutions, cultivating IC technology talent, and creating a new world of prospects for Taiwan’s semiconductor-related industry.

Team Profile & Business Contact Information

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Material and Chemical Research Laboratories, Industrial Technology Research Institute



Innovative Program

The Innovation Service Model For
Hosiery Industry



工業技術研究院
Industrial Technology
Research Institute

Reasons for Winning

The Material and Chemical Research Laboratories, Industrial Technology Research Institute helped the hosiery industry create a “Hosiery Industry Guidance” team and develop functional products such as anti-bacterial fiber and mosquito-repelling fiber. The team also combines culture, creativity and design to develop functional and high-value products. The team connects itself with local tourism resources and integrates industry culture and tourism, turning Shetou Township, Changhua County, into a development center of the hosiery industry. This project has boosted business activities and name recognition of the region, and the result is added variety for the hosiery industry and competitiveness in the market. These measures help the vitality of the industry, the activities of the local economy, and the employment rate of the region.



Key Features

“The hometown of hosiery is Shetou” – under international competition arising from globalization, this adage has faced daunting challenges. The Industrial Technology Research Institute responded to government policy and revived an underused public facility in Shetou Township. The team on this project integrates local industry, government, academia, and research institutes to form a cooperation platform. The achievements are: developing anti-bacterial fiber and mosquito-repellent socks with technology value adding; helping companies engage in innovation value-adding on graphics, packaging, and brand

Model of Local Industry Innovation Award



Acceptance Speech

The service team of the Industrial Technology Research Institute creates more deep-rooted service value with eight innovation service models to implement diffusion of service value: technology value adding, design value adding, talent training and talent reserves, award of an MIT smile mark, the completion of a hosiery industry region, brand marketing, B2C and B2B marketing models, and implementing resource integration.

logo with design value adding; and implementing industry upgrade with innovative service models such as the “Made in Taiwan” MIT smile mark and B2B and B2C marketing. Regarding the design talent gap in the industry chain, the team introduced students from Tainan University of Technology to intern and find jobs in this industry. The model is also hailed as an example of success in cross-ministry cooperation between the Ministry of Economic Affairs and the Ministry of Education. On May 16, President Ma Ying-Jeou posted a message on Facebook lauding the success of this team, “... Shetou is not only the hometown of hosiery by now, it is also the “wellspring of design.”

The guidance team then performed a secondary revitalization and created a “Fun in Hosiery Hall,” helping the industry expand from B2B marketing to a B2C marketing service model. The team has also connected with local tourism resources and created the concept of “The hometown of hosiery is Shetou, and good hosiery is found at the Fun in Hosiery Hall.” The Hall is a key promotion item for the “three industries, four transformations” policy in 2012. It is also a focus promotion item of the “2+2 service model” mentioned by Minister Shih of the Ministry of Economic Affairs. The team aims to achieve “localization of the industry and tourism-orientation of the industry” through the efforts of all stakeholders.

Team Profile & Business Contact Information

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Southern Industry Service Division, Institute for Information Industry



Innovative Program

Promoting the innovation and growth of central and southern industry



Reasons for Winning

The Institute for Information Industry Southern Industry Service Division acts as an agent that promotes innovation and R&D mechanisms for local industries. The Service Division not only helps form a digital content industry cluster, but also helps industry development in Central and Southern Taiwan and uses ICT value-adding to transform industries into examples of the “three industries, four transformations” policy. The Service Division deserves credit for instigating innovation and growth among industries in central and southern Taiwan. Examples of success are: the Kaohsiung Software Technology Park, which has become the first cloud service cluster in Taiwan; Application of energy-saving systems in farming, forestry, fisheries, and animal husbandry industries in southern Taiwan; and guidance for local specialty industries that focus on travel and leisure. The results are measureable and worthy of praise.

Key Features

The Institute for Information Industry Southern Industry Service Division has adopted information value-adding to drive regional innovation and development, guiding corporations in central and southern Taiwan to use information and communications technology or government subsidies to upgrade and transform themselves, and helping enterprises to invest in R&D to develop innovative applications that will form the core value of enterprises. To help industries upgrade and transform themselves, this team has a systematic guidance process that helps enterprises assess the marketability and maturity of

Model of Local Industry Innovation Award



Acceptance Speech

The Service Division guides corporations in the innovative adoption of information and communications technologies and spurs innovation and growth of corporations in central and southern Taiwan.

their products and offers help when these enterprises lack the proficiency in information and communication technology to develop innovative services.

As the service capacity for information and communication services in central and southern Taiwan is rather inadequate, the team is eager to invite information service providers to invest and set up locations in central and southern Taiwan and accelerate the pace of the formation of new software industry clusters. With the technical service capacity brought in by information service providers, the transformation of industries in central and southern Taiwan will accelerate and shape a new industry mode and produce regional economic growth.

In recent years, the team has also actively helped the government implement the “Three Industries Four Upgrading” policy – Science and Technicalization in Servicing, Internationalization in Servicing, Servitization in Manufacturing, Specialization in Conventional Industries. The team has introduced capacity into information and communications services, guided industries to innovate value-added applications, helped industries improve operational efficiency, lower costs and improve service quality, guided the service and technology industries to engage in cross-industry cooperation, and further applied for government subsidies to help develop new services, new products, and new operational models.

Team Profile & Business Contact Information

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Innovative Program

Intensive Jiou Fen, through promoting tea culture, ceramics and painting-Asian's Gold Town fascination has been reappeared



Reasons for Winning

Jiou Fen Tea House holds the conviction of “deep cultural immersion and giving back to the community” and uses its local advantage to develop a sales platform that offers tea, pottery, graphic art products and cultural and creative products. It combines the ceramics culture of Taiwan to develop innovative products with unique features and creates innovative products that can be looked at, felt, and tasted.

By managing the business location, the business creates opportunities for this industry through the preservation and innovation of local industries. The business does not appeal to commercialized sensation and has not changed its initial mission due to its commercial surroundings. It has a goal to become a benchmark for local cultural and creative industries.

Key Features

The “Jiou Fen Tea house,” founded in 1991 on Chungchishan Street in the hillside town of Jiou Fen, was the first tea house in Jiou Fen and the only tea house located in an old house with a hundred years of history. It is a pioneering bellwether in the local market and the key to creating the revival of business in Jiou Fen. Under the leadership of Hung Chih-sheng, the team leader, the local influence of Jiou Fen Tea House is growing, and the tea house takes “Developing Jiufen, exerting the influence of its tea, pottery, and graphic arts – the attraction of a gold-mining town in Asia is reborn” as its goal, in the hope of combining Taiwan’s competencies with local culture, so that this hillside in Northern



Acceptance Speech

Our team upholds the conviction of “deep cultural immersion and giving back to the community” and takes “intensive investment of resources into Jiufen and exerts the influence of tea, pottery, and graphic arts.” The team uses the power of the cultural and creative industries and associates itself with local culture, so that this hillside town in northern Taiwan can impress the world.

Taiwan can impress the world.

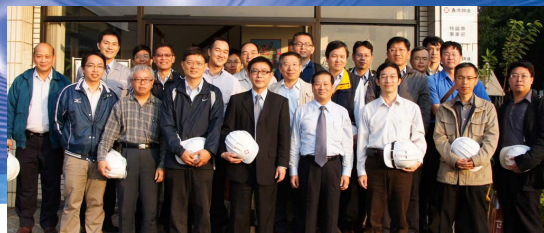
This team continues to involve itself in the development of local cultural and creative industries in Jiou Fen. Over the years, the team has continued to make use of its advantages. Local industries of Jiou Fen have sharp images, such as the sentimental scenery of a hillside town, intense local culture, history of the mining industry, cherry blossoms in the springtime, and Taiwanese tea. Before Jiou Fen Tea House was founded, however, these images were only vague impressions or only existed in memories. As a result, for the innovation of local culture carried out by Jiou Fen Tea House, any action was a brand-new attempt in the hillside town of Jiou Fen. Therefore, when Hung Chih-sheng, the team leader, entered the vacant town of Jiou Fen to begin these unprecedented undertakings, his actions shook the town that was sound asleep back then.

The three major industry values created by the team are as follows:

- (i) By continuous innovation, the business successfully transforms itself into an art, leisure, and tourism industry business.
- (ii) The business helps “MIT” products from Taiwan enter markets overseas and created global shopping services.
- (iii) The unique tea tableware that combines art and culture and creativity is integrated with practicality.

Team Profile & Business Contact Information

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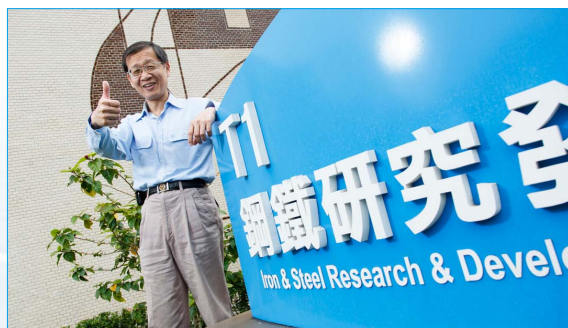
Innovative Program

R&D Alliance Project for High Efficiency Motors



Reasons for Winning

In this project, China Steel Corporation teamed up a motor R&D alliance with its downstream steel industry partners, such as motor core stamping companies, motor system manufacturers, academic units, and research institutes aiming at enhancing value of the motor industry chain in Taiwan. With optimization the conventional motor cores and integration with new design technologies, eight IE2 high-efficiency motor cores for public use and five value-added, high-competitiveness motor products had been successfully developed, which can effectively improve the overall efficiency level of relative motor applications. Related results not only stimulated the robust growth and raised the value of the motor industry in Taiwan, but also greatly contributed to energy conservation and carbon reduction.



Key Features

In light of climate change and global warming issues, energy saving and CO₂ emission reduction are the most crucial challenges we are facing today. According the statistics, electricity consumption in motors make up half of more than 200 billion kWh of power generated in Taiwan each year. If the efficiency of motors all in Taiwan can be generally raised 1%, a huge power saving about one billion kWh, or the equivalent of 630,000 metric tons of CO₂ emissions, can be impressively achieved. For this reason, China Steel Corporation teamed up a motor R&D alliance with its downstream steel industry partners, such as motor core stamping companies, motor system manufacturers, academic units,



Acceptance Speech

We combined the advantages of Taiwan's motor industry chain and develop high-efficiency motors with high-grade electrical steel. By doing so, we can expect to improve the competitiveness of this industry and contribute to energy savings and carbon reduction.

and research institutes aiming at enhancing value of the motor industry chain in Taiwan. China Steel was responsible for developing two non-oriented electrical steels with low iron loss graded as 50CS230/35CS210 and two high magnetic flux products graded as 50CS600H/50CS4770H. Based on those new materials, the stamping companies or motor manufactures collaborated with research experts to process integrated design, such as motor structure optimization, electro-magnetic coupled analysis, heat transfer reduction, and motor driver matching.

After combining the advantages of R&D resource, members of the alliance completed eight IE2 high-efficiency motor cores which can effectively improve the overall efficiency level of relative motor applications. The alliance also developed three value-added motor products driven by a domestic 32-bit motor control IC, include duplex-cylinder DC inverter rotary compressor, handy electric chain hoist and dry vacuum pump. They even more built two kinds of the small wind-driven generators and its energy grid connecting technology for niche market. These innovative products not only came out as bright spots in the industry and leaders in the market, but also contributed greatly to energy savings and carbon reduction. In total, this project instigated NT\$ 14.708 billion in new investment, added NT\$ 6.79 billion in annual sales, and created 165 jobs. This project stimulated the robust growth and raised the value of the motor industry in Taiwan.

Team Profile & Business Contact Information

Organization	China Steel Corporation / CHILO INDUSTRIES CO., LTD. / CHUN YUAN STEEL INDUSTRY CO., LTD. / LEN MUNG ELECTRIC CO., LTD. / RECHI Precision Corporation / Nuvoton Technology Corporation / HANBELL PRECISE MACHINERY CO., LTD. / Cheng Day Machinery Works Co., Ltd. / TECO ELECTRIC & MACHINERY CO., LTD.
Vice President	Shyi-Chin Wang
Address	No.1, Chung Kang Rd., Hsiao Kang Dist., Kaohsiung 81233, Taiwan (R.O.C.)
Tel	886-7-802-1111
Fax	886-7-802-2511, 886-7-801-9427.
Website	www.csc.com.tw

TEX TILE ENTERPRISE CO., LTD.
GIOVANNI CO., LTD. YIN LE CO., LTD.
Graduate Institute of Exercise & Sport Science, National Taiwan Normal University
Taiwan Textile Research Institute



Innovative Program

Ultra-high Gauge, Multi-functional
light-weight shape wear fabric



Reasons for Winning

This project is dominated by Tex Tile Enterprise. With cooperation of the alliance, members effectively integrated ultra-high gauge, low-stress comfortable fabric, ergonomic design, apparel pattern, and sewing techniques to achieve industry integration synergy, promote the advancement of the firms' technology and products. The focus of the innovation is developing elastic fabrics with ultra-high gauge technology to raise wicking and sweat-dispersion. Based on medical engineering studies, this alliance will design fabrics with support and protection functions needed for human activities, technological innovation, and market leadership.



Technology Development Program of the Year



Acceptance Speech

With our initial goal of developing Taiwan's textile industry, we continue to develop fabrics that are top of the world.

Key Features

Tex Tile Enterprise developed ultra-high gauge, low-stress comfortable fabric that produces micro-climate regulation effects and maintains the convection of the air in layers close to the skin, so that sweat and warm air flow out from the holes, and the constancy of temperature and humidity of the body is maintained.

Giovanni Co., Ltd. developed a yoga suit according to ergonomics and introduced concepts such as stature reforming and athletic protection. By wearing comfortable, highly elastic material and fabric structures, the company wishes to offer adequate protection and support for the body. Yin Le Co., Ltd. developed high density and diverse material (different stress levels) apparel patterns and sewing techniques for light-weight shape wear fabric that adjusts the shape of the body by using the stress that comes from overlapping one type of fabric upon another.

Team Profile & Business Contact Information

Organization	TEX TILE ENTERPRISE CO., LTD.
President	Huang Guo Peng
Address	No.123-1, Minsheng Rd., Dayuan Township, Taoyuan County 337, Taiwan (R.O.C.)
Tel	886-3-385-9968
Fax	886-3-384-3076
Website	www.textiletwn.com.tw

Computer Vision Research Center, National Chiao Tung University



Innovative Research Program Construction of Vision-Based Intelligent Environment(VBIE)



國立交通大學
National Chiao Tung University

Reasons for Winning

The project is focused on the long-term development of computer vision technologies which are crucial to intelligent video surveillance. To enhance the applicability of such technologies in realistic urban areas, intelligent surveillance systems, each integrating technologies for human/car monitoring or/and event analysis, have been developed. Among them, one prominent system was constructed for the Hsinchu Science Park which not only establishes an environment for video surveillance in the area, but also applies technologies of cloud computing and storage for effective integration of the developed video surveillance technologies. In addition, through the organization of an industrial liaison program as a platform for information exchange, and the participation in the international standard conferences, the know-how of software development and system integration established by the project has helped domestic companies in related fields to move from hardware manufacturing to the development of value-added software/system products, enhancing the global competitiveness of the industry in Taiwan.

Key Features

This project was granted to the Computer Vision R&D Center at National Chiao Tung University, which has established the largest cross-campus research team in the history of academia in Taiwan. The project gathered near 30 top-notch professors and over 100 R&D technical research members to work on developments of smart surveillance systems, as well as other applications, based on computer vision technologies.

The eight-year project has yielded abundant achievements: (i) developing 156 core



Technology Development Program of the Year



Acceptance Speech

This project is an integration of Taiwan's academic experts, focusing on creation of intelligent and automatic systems and having developed a massive world-leading bank of video surveillance technologies.

technologies (including 102 transferrable ones); (ii) earning NT\$ 39.658 million in 75 technology transfers and inducing about NT\$ 340 million of industrial investments; (iii) obtaining 31 patents with 12 of them licensed to the industry; and (iv) cultivating 36 PhDs and 246 master students for the industry, and published 396 academic papers with topics on cutting-edge technologies. In addition, the project has established an "Industrial Liason Program of VBIE (Vision-based Intelligent Environment) Technologies" and sent newsletters to its members on a monthly basis. Every year, the project holds technology transfer seminars, creating frequent interactions with the industry. Five task forces with respective missions have also been established in this project, including market research, patent positioning, technical-indicator survey, system integration, and technology transfers and commercialization. They have achieved substantial results to promote the effectiveness of the research works in the project. The project members have also actively participated in international activities, such as conferences/exhibitions of SecuTech, ICME, PSIVT, IEEE-SMC, and ICONIP, to demonstrate the competitiveness of their R&D achievements.

Major benefits of this project include: (i) greatly enhancing the capability, and reducing the needed time, of commercialization of advanced technologies for industry, (ii) lowering the risk of developing new products and creating additional product values, and (iii) improving international competitiveness of the industry. Additionally, the project also helps developing more talents, and assists the government to set industry standards, to make Taiwan a powerhouse of visual surveillance applications in the world.

Team Profile & Business Contact Information

Organization	Computer Vision Research Center, National Chiao Tung University
Chair Professor	Wen-Hsiang Tsai
Address	Rm. 608, MIRC., No.1001, Daxue Rd., East Dist., Hsinchu City 300, Taiwan (R.O.C.)
Tel	886-3-573-1763
Fax	886-3-573-0785
Website	cvrc.nctu.edu.tw

R&D team, MIRDC



Innovative Program

The high value dentistry implants the innovation research and development and the medical supplies industry serves four years to plan



Reasons for Winning

The project team used existing research capacity of the MIRDC and concentrated its efforts on the development of dental implants. The R&D team also invited firms related to this industry to join the project. By clinical consulting, the team developed pre-surgical planning before teeth implant, post-surgery information, and integrated digital dental information system. The development of this system instigated the transformation of domestic traditional industries and met requirements mandated by law on medical materials. The products successfully received sales permits, turned STSIPA into a production base of medical equipment with featured technology, and created a new market for traditional industries.

Key Features

With the development of a medical materials industry cluster in mind, the project focuses on two sub-categories: R&D of dental implants and industry service platform. For the dental implant sub-category, the research team accomplished the following developments according to dental implant clinical needs and market trends: design technology for implant systems (titanium dental implant for immediate tooth implant, one-piece ceramic dental implant for gum beautification, abutment for the beautification of front teeth), functional surface treatment (healing of soft and hard tissues, osteodifferentiation and mineralization technologies) smart implant surgery planning and simulation software,



Technology Development Program of the Year



Acceptance Speech

The research team pursues the following mission for its development: "controlling the characteristics and development trends of products with high added-value; using the industry service platform to extend our service to the whole island of Taiwan and creating an integrated industry chain, and developing models for the incubation of new industries."

bite force measurement device, bone graft collection device, ceramic teeth with natural teeth color, and the research of composit injection molding technologies. The ultimate goal of the research team is providing advantages such as a convenient surgical processes, improved patient satisfaction, and short post-surgery recovery time.

In terms of the industry service platform, the research team's technical contracting service focuses on the cosmetic medicine industry, including the industry value chain, technical current condition, global related patents, key technology, and the list of major competitors overseas. The team is also developing innovative medical material for dental, orthopaedic, and microsurgery fields and implementing concepts created by medical doctors. The team is assisting medical equipment marketing groups with companies such as Alliance Global Technologies to expand international distribution channels of domestic medical supplies and equipment. The overall goal is motivating corporations to invest and build factories in the Kaohsiung Medical Equipment Industry Park, form a comprehensive industry cluster, and raise the competitiveness of our country's medical equipment industry.

Team Profile & Business Contact Information

Organization	R&D team for The high value dentistry implants the innovation research and development and the medical supplies industry serves, MIRDC
Chair Professor	Chih-Lung Lin
Address	Rm. 608, MIRC., No.1001, Daxue Rd., East Dist., Hsinchu City 300, Taiwan (R.O.C.)
Tel	886-7-351-6247
Fax	886-7-352-6042
Website	www.mirc.org.tw

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Shan-Shan Chou
Chairman, WaterPark
Environment Corporation

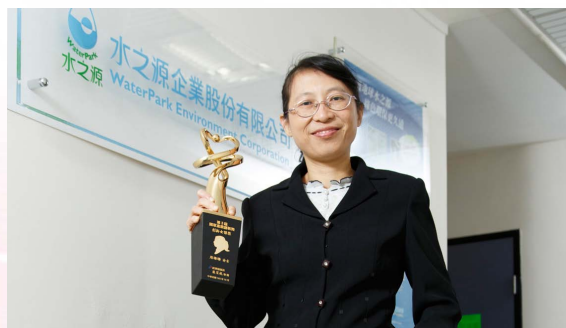


Reasons for Winning

In the 22 years that Ms. Shan-Shan Chou has worked at the Industrial Technology Research Institute (ITRI), she has been relentless in her promotion of environmentally-friendly industry, particularly in her leadership of teams researching biological, membrane and other environmental technologies related to water and wastewater treatment and reuse. Such technologies have been used in more than 50 plants and patents licensed to more than 30 environmental engineering companies, expanding into an international marketing network. Ms. Chou has also presided over technological applications and services as a member of ITRI's Public welfare Committee, which has involved leading the team in the use of industrial waste water technology in Disaster Relief Water Purification Systems and in the wastewater treatment plant of Da Ai Village, the first example of charity technology at ITRI, showcasing the ability of industrial technology to make some contribution to social welfare.

Acceptance Speech

I would first like to thank ITRI Director Hsu Chueh-min for his consideration. It was he who gave me the opportunity to head up technological applications and services under ITRI's Public Welfare Committee. He was also the one who encouraged me to establish ITRI's first ever spin-off environmental engineering company, WaterPark Environment Corporation, and that allowed me to go from being Division Director at ITRI to a company



Words of Wisdom

Contentment, gratitude, understanding and forgiveness; appreciate, cherish and cultivate blessings. Focus on others before oneself; excellence is achieved by being mindful.

chairperson. There is simply not enough time to list all those who have helped me along the way, though of course the support I have received from my family has been most important. My husband, Wang Chih-yuan, is always there to offer spiritual support and help around the home. I would also like to thank my son, daughter, mother and mother-in-law for their understanding.

In truth, I accept this award as a representative of the R&D team in ITRI's Water Technology Division. It is only by pooling the wisdom and efforts, team work and unshakeable spirit of my colleagues that we have been able to implement the results of our research into full-scale treatment processes in the industry setting and even export overseas, enabling us to make some small contribution towards conserving valuable water resources. In addition, I also need to thank Taipower Chairman Mr Huang Chung-chiu, because he introduced me to the international Tzu Chi International Humanitarian Aid Association something beyond work that I find deeply satisfying.

Biography

Company	Industrial Technology Research Institute (before)
Education	Ph.D. National Chiao Tung University (1995-1999) M.S. National Central University (1988-1990) B.S. National Taiwan University (1983-1987)
Experience	Chairman, WaterPark Environment Corporation (2013-present) Division Director, Material and Chemical Labs & Green Energy and Environment Labs, Industrial Technology Research Institute (ITRI) (2006-2013) Manager, Center for Environmental, Safety & Health Technology Development, ITRI (1990-2006)
Awards	Awards for outstanding young engineers (2002), the Chinese Institute of Engineers (grant interview by President) Year awards for the outstanding contribution to industries in research and promotion, ITRI(1992, 1995, 2000, 2004, 2005, 2007, 2012)



Susan Chen
Director, Production
Planning Division of Taiwan
Semiconductor Manufacturing
Company

Words of Wisdom

Stay Hungry, Stay Foolish.

**Reasons for Winning**

Ms. Susan Chen has worked at Taiwan Semiconductor Manufacturing Company (TSMC) for more than 20 years, in which time she has served in research and development, customer services, enterprise process integration and production planning. This professional experience has enabled Ms. Chen to work tirelessly and achieve leading innovation and improvement programs, human resource development, promotion of industry-academia cooperation and enhancement of the competitiveness of the national semiconductor supply chain. Examples include, planning and leading the “Tapeout integrated platform,” “Tapeout B2B,” and “Intellectual Property Integrated Guarantee Mechanism,” which promote the seamless linking of chip design and wafer production in the industry chain. Such programs have made an outstanding contribution to enhancing the competitiveness of the domestic semiconductor industry.

**Acceptance Speech**

I am deeply honored to receive this award from the judges, but this affirmation is not mine alone, rather it belongs to everyone who has worked with me in numerous teams over the years. In the two decades I have worked at TSMC I have continually faced new tasks and challenges and every task has brought with it unexpected difficulties and new problems. In addition to providing a perfect opportunity for self examination, such experiences also showed me that even as when one reaches the end of one's rope, collective brainstorming

offers an opportunity to turn things around. This explains why there are so many like-minded colleagues at TSMC and their ability to implement the company's core values.

At all levels of management in industry, there are nearly always more men than women and the semiconductor industry is no exception. I would like to take this opportunity to encourage more women to join the industry, there is no need to be held back by gender or to make too many compromises in work, they just need to have the courage to express themselves and to communicate in rational terms and they can achieve much at work.

In addition to thanking from the bottom of my heart my immediate superiors at TSMC for training, guiding and supporting me and the colleagues I have worked with for so many years, I would also like to give a special thanks to thank my parents, husband and son for the support and encouragement that have always given me. Without them by my side, I would not be here today. Thank you.

Biography

Education	M.S. National Tsing Hua University (1987-1989)
	B.S. National Tsing Hua University (1983-1987)
Experience	Director, Taiwan Semiconductor Manufacturing Company (2013-present)
	Deputy Director, Taiwan Semiconductor Manufacturing Company (2007-2012)
	Department Manager, Taiwan Semiconductor Manufacturing Company (2003-2007)
	Manager, Taiwan Semiconductor Manufacturing Company (1997~2002)
	Member of Technical Staff, Taiwan Semiconductor Manufacturing Company (1994-1996)
	Research & Development engineer, Taiwan Semiconductor Manufacturing Company (1991-1994)
	Process Development engineer, Winbond Electronics Corp. (1989-1991)

**Tzu-Ling Karen Tseng**

Senior Director,
Biomedical Technology and Device
Research Laboratories(BDL),
Industrial Technology Research
Institute (ITRI)

Words of Wisdom

Have a dream and do something that you love.



工業技術研究院
Industrial Technology
Research Institute

Reasons for Winning

Ms. Tzu-Ling Karen Tseng has over 20 years of diverse research experiences in basic and applied biomedical science in Taiwan and US. In 2003, she returned back to Taiwan and join ITRI. Her considerable research experience brought together researchers from different fields at ITRI. Over the past decade, Ms. Tseng has been focus on biomarker development for disease diagnostics, including autoimmune, liver and kidney disease. Working with opinion leader clinicians in Taiwan to develop preventative measures and early detection biomarkers has already produced impressive results in the field of liver fibrosis, HCC, and diabetes nephropathy. She continues to work on the commercialization of products in an effort to optimize the potential of such work by helping as many patients with liver and kidney diseases as possible. This in turn will help to develop a biomarker testing service industry for highly complex chronic illnesses and cancer management in Taiwan.

**Acceptance Speech**

Regardless of changes in my management position, I have maintained an active interest in research of disease biomarkers since I joined ITRI. With the support of the Ministry of Economic Affairs, the biomarker development program I headed was a systematic program of a kind rarely seen in Taiwan with clinical research that focused on actual clinical product needs. The successful development of disease markers requires integrated inter-disciplinary research and my experience with inter-disciplinary and large scale

clinical research allowed me to quickly integrate the technology needed and lead the team as we conducted research into specific disease biomarkers. Innovative biomarker research requires close cooperation between researchers in different fields and clinicians, as part of a process that is akin to a relay that starts with the collection and delivery of samples from patients in hospitals, moves on to scientists at ITRI who use genome technology to explore the development of a related verification reagent and concludes with large-scale clinical verification. Each element of this process is interconnected, so that mistakes at any stage could result in losses or irreparable damage to earlier work. I would also like to say that I am extremely proud to have been involved in such scientifically challenging research that will enhance human health and has considerable commercial value.

Biography

Education	Ph.D. in Genetics, State University of New York, Stony Brook, NY, USA
	EMBA, National Cheng-Chi University, Taiwan
	M.S. in Genetics, National Yang-Ming University, Taiwan
	B.S. in Life Science, National Taiwan University, Taiwan
Experience	Industrial Technology Research Institute (ITRI), Taiwan
	Senior Director, BDL, ITRI. (2011~present)
	Deputy General Director, BEL, ITRI. (2008~2011)
	Division Director, Molecular Biomedical Technology Division, BEL, ITRI (2005~2007)
	Deputy Division Director, Molecular Biomedical Technology Division, Biomedical Engineering Research Laboratories (BEL), ITRI. (2003~2005)
	National Institute of Health (NIH), MD, USA
	Fellow, National Cancer Institute (1999~2002)
	Cold Spring Harbor Lab, NY, USA
Awards	Graduate Research (1993~1998)
	NIH Fellows Award for Research Excellence in Genetics-Human 2002
	ITRI / BEL: The Best Innovation 2006
	ITRI: The Best Publication 2007
	ITRI: Award for Research Excellence 2010
	ITRI: The Excellent Patent Award 2011
	MOEA: The Excellent Project Award 2011



Bowei Lee
Chairman and CEO,
LCY Group

Words of Wisdom

“Fail early, fail often, in order to succeed.”
“Get off your comfort zone, think differently.”



Reasons for Winning

Mr. Bowei Lee attaches great importance to the sustainable development of the chemicals industry and has participated in influential industry leading and educational organizations, playing an important role in guiding the industry onto the right developmental path. In response to the trend towards increasingly environmentally-friendly international markets and industries, there has been more focus on low carbon emissions and energy saving, continued R&D into composite materials and a focus on developing low pollution, differentiated and high value-added special use chemical products, helping realize the government policy of developing a value-added petroleum industry. In addition, Lee also recognizes the importance of a green working environment and has promoted green factories, the embracing of “green” core values, focusing on eco⁺ prosperity and the general promotion of a greener approach to life, thereby realizing the idea of green chemistry.



Acceptance Speech

I would like to thank the organizers and jury panel for awarding me the Ministry of Economic Affairs' National Industrial Innovation Award. Winning the important award is a huge affirmation not only for myself but also recognizes all the hard work and innovation undertaken over a period of more than 20 years by the LCY Group and its R&D teams. I would like to share this special honor with everyone of my hard working colleagues, this is for them as much as for me.

In the future, LCY Group will continue to pursue industry innovation, applying steadfastness, innovation, team-work and leadership in management philosophies and nurturing talent. This is the best way to promote industry transformation, while actively implementing corporate social responsibility and thereby making a more positive impact on the society.

Biography

Education	MBA in Stanford University, USA (1980-1982)
	M.S. & B.S. Chemical Engineering, MIT, USA (1975-1979)
Experience	CEO and Chairman, LCY Group (2004-present)
	Found TPSI Corp. (2007)
	Chairman, LCY Group (2004)
	Found LCY Technology (1997)
	CEO, LCY Group (1990)
	LCY Group (1982)
Awards	Chevron Research Company (1979)
	2012 Awarded as 100 MVP Managers of Taiwan, Manager Today
	2012 Awarded as Entrepreneur of the Year, Ernst & Young
	2007 Awarded as the professional leader award from TCIA
	2005 Awarded as excellent director from CNFI
	1982 Research “Hydrocarbon Sweetening Process” received CHI certification in Belgium, Germany, Australia, France, England, Netherland, South Africa and Japan.



Shou-Jen Kuo
Superintendent,
Changhua Christian Hospital

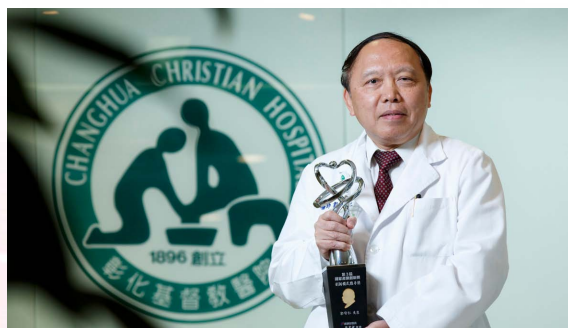
Words of Wisdom

Working as a team to create the better future. Love, Integrity and Innovation. Integration, Cooperation and Teamwork. A better governance of teamwork will create success and prosperity.



Reasons for Winning

During his five years as superintendent of Changhua Christian Hospital, Dr. Shou-Jen Kuo has successfully integrated creative and ingenious ideas, combined information and communications technologies with medical regulations to create an innovative model. He also restructured the organization to facilitate technological modernization and promote healthcare management, consequently to enhance operational efficiency and enable the rapid growth of Changhua Christian Hospital. Moreover, he emphasized to apply information and communications technologies into hospital management system, such as to introduce of an electronic diabetes management system and develop of the long-distance diabetes healthcare e-hospital. The service has expanded to global wide and makes Changhua Christian Hospital become one of the most competitive hospitals among 22 medical centers in Taiwan. The innovative operational model of the Changhua Christian Hospital achieved the outstanding contribution in both healthcare sectors and civil societies.



Acceptance Speech

The conspicuous achievement was contributed by entire Changhua Christian Hospital medical professionals and staffs' efforts to construct an excellent E-healthcare environment. The model can be duplicated, shared and spread to the world. It's also the mission of the hospital "Changhua Christian Hospital Goes Out, The World Walks In."

Biography

Education	Kaohsiung Medical College, Kaohsiung, Taiwan(1976~1970)
Experience	<p>Superintendent, Changhua Christian Hospital (2008.01~ present)</p> <p>Medical Reviewer of Global Budgets and Expenditure Limits, Bureau of National Health Insurance Healthcare, Department of Health, Executive Yuan (2003 ~ present)</p> <p>Commissioner of Medical Technology, Medical Review Committee, Department of Health (2008 ~ present)</p> <p>Commissioner, Global Budgets and Expenditure Limits Committee, Bureau of National Health Insurance Healthcare, Department of Health, Executive Yuan (2008 ~ present)</p> <p>The 21st Vice Chairman, Taiwan Hospital Association (2011~ present)</p> <p>Commissioner of SNQ National Quality and National Biotechnology and Medical Care Quality Award Review Committee (2010~present)</p>
Awards	<p>Assisting Changhua Christian Hospital to pass the JCI Accreditation. (2008)(2011)</p> <p>14th Outstanding Alumni of Kao-Hsiung Medical University (2010)</p> <p>Assisting Changhua Christian Hospital to pass the International Service Quality Award by Rheinland, Germany. (2010)(2012)</p> <p>Leading Changhua Christian Hospital to pass the College of American Pathologists Accreditation in Department of Laboratory Medicine, Department of Pathology and Department of Genetics Medicine and Reproductive Medicine Center respectively. (2010)</p> <p>Assisting Changhua Christian Hospital to Reward the Gold Medal of Taiwan TrainQuali System by Bureau of Employment and Vocational Training. (2012)</p> <p>Leading Changhua Christian Hospital to reward the National Training Quality Award - Large Business Gold Medal Award (2013, May)</p> <p>Leading Changhua Christian Hospital to reward the WHO-HPH Global Model Award and the Health Promotion Hospital Global Model Award (2013, June)</p>



Ming-Chu Wang
Superintendent,
National Taiwan University
Hospital, Chu-Tung Branch

Words of Wisdom

Tears shed when sowing seeds turn to cheers at harvest time.
If I reflect and find myself to be right, then I will push on even in the face of an army of 1,000,000.



Reasons for Winning

As a deputy superintendent of National Taiwan University Hospital and head of the Planning and Development Office, Dr. Ming Chu Wang completed the rebuilding of operating theaters of the hospital after fire within



102 days which make a lot of patients safer during surgical operations. From 2009-2012, he also completed an integrated medical services model that included cardiology and vascular medicine and cardiovascular surgery and innovative information and communication technology applications in NTUH Cardiovascular Center. In this project, he utilize the information and communication technology to facilitate connection and communication between patients, nurses and doctors to greatly improve the service quality and made the high quality cardiovascular care in NTUH more friendly and considerate for the patients and families. Moreover, innovative information and communications software and platforms provide doctors, nursing staff, patients and family members with the best quality services.

The automation of the medical laboratory and the whole process from the sampling of blood specimen to the completion of laboratory report was another major achievement made by Dr. Wang. He integrated information and communication technology, lead a team to rewrite a new Laboratory information System to change and automate the interface for sampling of patients' specimen. This new system and automation process greatly shorten the waiting time for patients in outpatient department and improve the efficiency and accuracy of the laboratory results.

Acceptance Speech

My personal belief is "Innovation comes from demand." Therefore, the most important foundation for innovation is to listen carefully to the first line users, fully understand their demands and identify

the interests of all parties involved. With the same values in mind, it would easy to achieve consensus and then which way would be the best to promote innovation and reduce resistance. Over the past five years I have received much help from my many colleagues at National Taiwan University Hospital. We have hundreds of meetings and finally reached a lot of consensus and then we proposed an innovative model to complete important projects, including the rebuilding of the operating theaters at NTU Hospital in 2009, the establishment of the NTU Hospital Cardiovascular Center in 2011, which marked an innovation in terms of medical care processes in combination with lean hospital design and the use of information and communication technology features. In 2012, the whole medical laboratory and blood sampling and examination processes were restructured in a way that not only greatly reduced the time patients had to wait for blood taken, but also introduced an online procedure for the laboratory reports. I would say that the most important element about the completion of these major projects is the establishment of a core set of values that prioritize patients, demonstrate concern for colleagues and respect patients' family members. Once there is a shared set of values it is easier to solve problems and conflicts that may arise because of different interests between different departments during the progress of any project. I would like to thank everyone who has helped with me over the years to promote innovation in the field of medical care. This award is for you all.

Biography

Education	EMBA, National Taiwan University College of Management
	Ph. D, National Taiwan University College of Medicine, Institute of Clinical Medicine BS, National Taiwan University College of Medicine
Experience	Superintendent, National Taiwan University Hospital(NTUH), Chu-Tung branch since Aug, 2013
	Professor, Department of Anesthesiology, National Taiwan University College of Medicine, since Aug, 2006
	Visiting Staff, Department of Anesthesiology, NTUH, since 1992
	Vice superintendent, NTUH Oct, 2008 – Jul, 2013
	Director, Office of Planning and Development, Jul, 2008 – Jul, 2013
Awards	Director, Cardiovascular Center, (NTUH) Feb, 2012 – Jul, 2013
	Secretary of Medical Affairs, NTUH Aug, 2005 – Oct, 2008
	Director, Center of Quality Management, Aug, 2005 – Oct, 2008
	Best Manager SuperMVP, by Manager Today, 2010
Awards	Best Physician, by Taipei Medical Society, 2011
	Top 5 best CIO of China, Taiwan, Hong Kong, by CEO CIO, 2012



Su, Yen-Kun
President,
Kun Shan University

Words of Wisdom

Humbly view the world and thank others.
Think positively even in the face of adversity.
Be optimistic even after a big setback.



Reasons for Winning

Mr. Su, Yen-kun has a diverse academic and career background, with technical achievements in the field of semiconductor devices and optoelectronic devices with academic and industry applications. Su is currently President of Kun Shan University and has been instrumental in guiding the transformation of the university with impressive results. From 2007-2011, the Department of Education evaluated the performance of the university in three areas: seeking funding for industry-academia projects and efficiency, breadth of participation in industry-academia projects and results of intellectual property creation and application benefits. In 2007, 2008, 2009 and 2011, Kun Shan University was ranked the No. 1 private university in Taiwan. In 2010, it was ranked



Acceptance Speech

I feel honored and excited to receive this honor at the 3rd National Industrial Innovation Awards and would like to thank the National Science Council, Ministry of Education and Ministry of Economic Affairs for funding my various research projects. Such funding has allowed me to lead staff and students at Kun Shan University in terms of both academic research and industry-academia cooperation. By working together towards a shared goal we have been included in the Ministry of Education's "Teaching Excellence Program" for nine consecutive years and this year received the honor of being designated a model science and technology university. More notably Kun Shan University is not only the No. 1 private university in the country but has also surpassed many public science and technology universities in terms of number of projects, total value, participation of

teachers and students, patents and technology transfers.

In recent years, industry in Taiwan has been impacted by changes in the global economy which have made growth difficult. This made me realize that the development of industry requires innovation and breakthroughs, pooling the wisdom of the many and hard work in the fields of technology and product development, with innovative key patents. Industry can only hope to upgrade with ideas, technology and products that are forward looking and fresh.

SRI International President Curtis R. Carlson once said that the development of industry in Taiwan faces three major crises, shortage of talent, industry transformation, distribution of R&D funding and execution bottlenecks. However, facing huge challenges is also an excellent opportunity for transformation and innovation. The talented individual nurtured in school needs to carefully consider the demands of industry, so that industry is better able to find innovative talent. In this sense, the adjustment of industry structure is no longer limited to ODM/OEM work, because even when R&D funding is insufficient, it is still possible to make breakthroughs and achieve results that are perhaps smaller scale but nonetheless impressive. It is hoped that the cooperation between industry, government, and academia will make it easier to resolve problems related to cultivating talent, industry transformation, and R&D, thereby finding a way of overcoming the difficulties that the industry currently faces.

Biography

Education	Ph.D. in Electrical Engineering, National Cheng Kung University, R.O.C. (1979)
	M.S. National Cheng Kung University, R.O.C. (1973)
	B.S. National Cheng Kung University, R.O.C. (1971)
Experience	President, Kun Shan University (2007~now)
	Dean, Department of Academic Affairs, NCKU (2001~2007)
	Director General, Department of Engineering and Applied Science (1998~2001)
Awards	OSA Fellow (2014)
	SPIE (International Society for Optics and Photonics) Fellow (2012)
	IEEE (Institute of Electrical and Electronics Engineers) Fellow (2007)



Ru-Gun Liu

Academician/ Deputy Director,
OPC Tech. II & Nano Patterning
Process Foundation, Nano Patterning
Technology Division of Taiwan
Semiconductor Manufacturing Company



Reasons for Winning

Mr. Ru-Gun Liu established and leads a Computational Lithography Technology team at TSMC, successfully developing the decomposition of Double-Patterning Technology (DPT) and its design rules, Optimal Pattern Correction technology (OPC), Resolution Enhancement Technology (RET) and Layout Patterning Check technology (LPC). Particularly, the unique innovative double-patterning design rules successfully linked 20nm IC design with sophisticated double-patterning technology to achieve a design breakthrough, successfully developing 20nm semiconductor design and manufacturing processes, which also represent a major step towards 16nm and 10nm. This technology has forward-looking innovative applications and great potential, enabling TSMC to lead the world, while having a concrete impact and making an important contribution to the development of the IC industry.



Acceptance Speech

Having won the Key Technology Innovator Award I would like to share the honor and joy of this moment with all my colleagues working in TSMC R&D, particularly all the members of the Computational Lithography Technology team. From being pioneers in a certain field at the very beginning to becoming No. 1 in the world, this honor is exactly a testament to all our hard work over the past decade or so. It also once again showcases the TSMC R&D spirit whereby we challenge the limits of technology “by constantly

Words of Wisdom

“Take advantage of youthful ambitions.” “Always innovate and be tireless in pursuit of breakthroughs.” “Mutual respect, mutual trust, and mutual help.”

innovating and tirelessly making breakthroughs.” Our Vice President Burn Jeng Lin has encouraged members of the R&D Nano Patterning Technology team to embrace “mutual respect, trust and help” so that a twinkling idea can be transformed into the great innovation, with the objective being group success and honor and that is the direction in which we always keep following. Finally, I would like to give grateful thanks to Executive Vice President and Co-Chief Operating Officer, Shang-Yi Chiang, Vice President Burn Jeng Lin, Directors Yao-Ching Ku, Antony Yen and Tsai-Sheng Gau for assistance and guidance over many years. Indeed, the help of Tsai-Sheng and my colleagues Wen-Chun Huang, Cheng-Kun Tsai and Chih-Ming Lai has enabled me to overcome many low points at work. I would also like to thank my parents and family for everything they have done for me, their encouragement and the understanding is the vital supports for me to focus my efforts on work with knowing that everything at home is in good hands. Finally, a specific thanks to my beautiful wife, Ms. Cheng-Fang Huang, for choosing to spend her life with me. Having her by my side through all the late nights is definitely the best wonderful grace in my life.

Biography

Education	Ph.D. in Chemical Engineering, National Central University (1995)
	B.S. in Chemical Engineering, Chung Yuan Christian University (1989)
Experience	Taiwan Semiconductor Manufacturing Company R&D Deputy Director (2011-present)
	Taiwan Semiconductor Manufacturing Company R&D Section Manager, Manager, Department Manager (2000-2011)
	Electronics Research & Service Organization (ERSO) of the Industrial Technology Research Institute (ITRI) Engineer, Section Manager (1998-2000)
	Synchrotron Radiation Research Center Associate Research Scientist (1995-1998)



Key Technology Innovator Award



Jason Liu

Deputy Director,
Industrial Technology Research
Institute / Mechanical and
Systems Research Laboratories

Words of Wisdom

Over my past 25 years of service, I have committed myself to working enthusiastically, proactively and perseveringly to carry out various tasks with a Great Learning-inspired wisdom of determination, calmness, steadiness, deliberation and attainment in the pursuit of technological and industrial development.



工業技術研究院
Industrial Technology
Research Institute

Reasons for Winning

Mr. Jason Liu developed “ultra silent vacuum cleaning” and a smart cleaning robot that “mimics human behavior” that are key technological breakthroughs. The main technological indicators are international competitiveness, the silent operation of the product, cleaning effectiveness and power saving functionality. At the same time, the intellectual property breakthrough protects the industry, enabling licensing and providing guidance to firms for mass production, thereby promoting the establishment of a cleaning industry in Taiwan. The combination with international distribution also makes it possible to market core technology around the world, stimulating an international trend towards smart and silent cleaning. This in turn has established an international position of importance for Taiwan in related products and technology, making it an ODM/OEM base, with international firms investing and new records for global market share. In this way, Taiwan is once again set to become the best in the world.



Acceptance Speech

This award represents not only an honor for all members of the R&D team that came up with the smart, silent cleaning robot, but also marks the beginning of our further efforts to use technology to make life better.

With the goal of obtaining a new way of household management, we set out to work on the development of an environmentally-friendly robot cleaner using smart cleaning

technology that imitates human behavior and utilizes high quality, ultra silent vacuum cleaning technology. As a result of our efforts, we have produced a robot that can help people to maintain a clean and comfortable environment.

Meanwhile, we have endeavored to promote the mass production of our product with the use of intellectual property rights and technology transfers, thus working to establish a new-generation cleaning industry in Taiwan. To date, Taiwan has seen the number of local firms involved in this industry rise from one to more than eleven, increasing its share of the global market by 200% and making Taiwan an international base for ODM/OEM in this area.

Furthermore, we have progressed towards industrial internationalization with our product now being sold worldwide, allowing international cleaning robot manufacturers to use our technology and modules. We greatly appreciate this opportunity to introduce people to a new way of life, and share the honor in helping to create a new industry and increase the international visibility of Taiwan.

Biography

Education
Ph.D. in Mechanics, National Tsing Hua University (2004~2011)
M.S. National Chiao Tung University (1993~1996)
B.S. Tamkang University (1982~1986)

Experience
Deputy Director, Mechanical and System Lab. / ITRI (2007~2013)
Technology Consultant (2006~2013)
Department Manager, Mechanical and System Lab. / ITRI (2000~2006)
Lead Engineer, Mechanical and System Lab. / ITRI (2004~2013)
Adjunct Assistant Professor of National Tsing Hua University (1997~2013)

Awards
The 2010 National Invention and Creation Award: Inventor Golden Award
The 2008 INPEX Invention Gold Medal Award of Merit (Pittsburgh, PA USA)
The 2005 National Invention and Creation Award: Creation Golden Award
The 2004 National Tsing Hua University Teaching Award
The 2003 Ministry of Economic Affairs, R.O.C. High Grade Technology Award
The 2002 Chinese Society of Mechanical Engineers Outstanding Youth Engineer
The 2001 Ministry of Economic Affairs, R.O.C. Excellent Project Award

**Jui-Ching Chen**

Deputy Group Manager,
Medical and Pharmaceutical
Industry Technology and
Development Center

Words of Wisdom

One Team, One Dream.

Only by remaining humble and focused can be innovative, make breakthroughs and create miracles.



財團法人醫藥工業技術發展中心

Reasons for Winning

In PDC, Dr. Jui-Ching Chen has conducted innovative R&D into new drugs, with a team that focuses on botanicals and has already achieved a number of notable successes in the field of drug development. These include clinical trials for the botanical anti-depressant PDC-1421 and the botanical anti-tussive PDC-748. Dr. Chen has eight first inventor patents (pending), has published 23 articles, participated in five projects to develop botanical drugs and completed four IND packages, while establishing multiple platforms (a pharmacology and toxicology platform and a systemic botanical drug development platform). An irritable bowel syndrome botanical drug development program conducted by Dr. Chen has also entered the technology transfer contract stage, with many of the results having concrete and future potential benefits for the industry.

**Acceptance Speech**

To receive the National Industrial Innovation Award is a great honor and I would like to thank the Ministry of Economic Affairs and the judges for their support. I would also like to take this opportunity to thank the teachers who helped me at school and the superiors I have worked under professionally for all they have taught me. I specially mention my colleagues at the Medical and Pharmaceutical Industry Technology and Development Center for all their hard work from the manufacturing stage to analysis and activity screening, because it is their assistance that made this achievement possible. As such, this

award belongs to each and every member of the Botanicals R&D team.

In addition, although the Youth Innovator Award is presented to individuals, it remains the product of a lot of hard work by members of the R&D team. Most importantly, I must thank my parents, husband and daughter for the unwavering support they have always given me. I would not be here today without your full backing and encouragement.

Furthermore, the PDC Botanicals R&D team has adopted the slogans “One Team, One Dream.” and “Botanicals, Taiwan No. 1” to promote botanical drugs from Taiwan on a more global stage. I also firmly believe that the encouragement this award represents will mark an important starting point for future efforts as I work with like-minded colleagues to develop new drugs.

Biography

Education	Ph.D. in National Taiwan University (2002-2007)
	B.S. in National Taiwan University (1997-2001)
Experience	Deputy Group Manager, Medical and Pharmaceutical Industry Technology and Development Center (2011- present)
	Research Fellow, Medical and Pharmaceutical Industry Technology and Development Center (2008- present)
	Postdoctor, National Taiwan University, College of Medicine, Department of Pharmacology (2007-2008)
Awards	Ministry of Economic Affairs, Department of Industrial Technology- Technology Development Programs Awards - Most Promising Newcomer Award (2011)
	National Taiwan University, College of Medicine- Outstanding Research Paper Award -Ph.D. Student Honorable Mention (2009)
	1st Asian Pacific Pharmaceutical Symposium-Taiwan Pharmacy Student Deputy (2001)
	National Taiwan University-Presidential Award (1997, 1998)

**Wei-Yuan Cheng**

Manager,
Display Technology Center,
Industrial Technology Research
Institute

Words of Wisdom

Innovation does not happen overnight, it requires the courage to experiment, fearlessness in the face of difficulties, perseverance and knowledge together with a passionate team, only then will the opportunity for innovation present itself.

**Reasons for Winning**

Mr. Wei-Yuan Cheng specializes in display technology and established the first Electrowetting Display R&D team in Taiwan, while developing the world's first colored dual mode electrowetting display application for smart windows. He is also the fourth most prolific patent holder in the electrowetting field in the world and leads the team in technological development and patents. The EWD components and institutional technology Cheng developed received about NT\$90 million from the government for two stage technological transfer, and has market potential with potential extended benefits from applications in a wide range of areas. Cheng has already applied for 82 patents for 32 items and the full deployment of this technology is beneficial to the formation of industrial clusters, its establishment showcasing Cheng's innovativeness.

**Acceptance Speech**

I am incredibly honored to have been chosen to receive a National Industrial Innovation Award and would like to thank the judges and the people I have worked under over the years for giving me the opportunity and space to hone my skills. As a result, I have had much invaluable experience at work and would also like to thank all the members of the team for their hard work, because without their hard work and passion we would not have achieved all that we have. Finally, thank you to my family and wife for always being there and supporting me. It is only with their support from behind the scenes that I have been able to focus so much of my attention on work.

I first became involved with research into this technology when my boss at the time gave me the opportunity to attend school in the US where I was able to work with others and learn much. After returning to the company, I looked for ways to transfer what I had learned to the company's equipment manufacturing. But, in trying to do so, I encountered many technical bottlenecks and setbacks. Ultimately, it was only with the assistance of colleagues that I was gradually able to overcome these problems and that experience made me more aware than ever of the importance of "teamwork." As part of the process of technological development I not only had to resolve technical bottlenecks I also had to consider technological applications and exports, which made me consider the applicability of technology from a different point of view and way of thinking.

Innovation involves not only overcoming technical problems, but also creating technological applications. In the future, I will continue to contribute my competencies and hope to continue working with the same team as we seek to create new business opportunities for industry.

Biography

Education	Ph.D. in Chemical Engineering, NTUST, Taiwan (1989-1993)
Experience	Manager, DTC, ITRI(2011-present) Project Manager, DTC, ITRI (2010-2011) Deputy Manager, DTC, ITRI(2008-2010) Researcher, DTC, ITRI(2006-2008) Researcher, MCL, ITRI(2005-2006)
Awards	Outstanding research award/ITRI Outstanding young Engineer/Chinese institute of Engineers The exploration research award/Pan Wen Yuan Foundation



Chih-Hsin Ko

Program Manager,
Exploratory Technology Development-1
Program, Advanced Transistor Research
Division of Taiwan Semiconductor
Manufacturing Company

Words of Wisdom

Always stay curious and maintain a passion for knowledge. View each problem from multiple perspectives and do not be discouraged by the outcome. Learn from each defeat, because every one contains the seeds of one's next success.



Reasons for Winning

Mr. Chih-Hsin Ko has conducted research to the development of semiconductor devices for more than a decade. Moreover, the components and manufacturing technology he has developed have been written about in important international journals and papers such as those from International Electron Devices Meetings (IEDM) and Very Large Scale Integration Meetings (VLSI). The technology has also been used and praised by major domestic semiconductor firms. Several of Ko's important technical papers have been included in the IEDM's top five annual papers and the VLSI's top 10 annual papers, with a total of 62 papers published in meeting periodicals. In the field of semiconductors Ko has been awarded 161 patents in the US, ROC, Singapore, China and South Korea and has a further 122 patent applications either awaiting confirmation or in the process of being written.



Acceptance Speech

I would like to thank my parents for the upbringing they gave me; my Ph.D. advisor Professor Su, Yen-Kun for everything he taught me about academia and how to learn. I have also greatly benefitted from the guidance offered by TSMC director Clement Wann and other superiors over the years, so whenever I encounter setbacks during experiments I am now able to remain optimistic and focus on resolving the problems one step at a time. Receiving the National Industrial Innovation Award - Youth Innovator Award is a huge honor for me and the beginning of a new type of responsibility. In the future, I will continue to focus on new innovations in the hope of making further contributions to the improvement of society.

Biography

Education	Ph.D. in Electrical Engineering, National Cheng Kung University, (1999~2003)
	M.S. in Electronic Engineering, Chung Yuan Christian University, (1997~1999)
	B.S. in Electronic Engineering, Chung Yuan Christian University, (1993~1997)
Experience	tsmc-ATRD-ETD1 / program manager (2013~now)
	tsmc-ATRD-ETD1 / manager (2010~2013)
	tsmc-EXR-ETD1/ technical manager (2005~2010)
	tsmc-CTO-ETD1/ principal engineer (2002~2005)
Awards	2012 Excellent Young Engineers Award, CIE Awards (granted by the Chinese Institute of Engineers)



Ted Wen-Tai Hsieh

Deputy Director,
Innovative DigiTech-Enabled
Applications & Services Institute,
Institute for Information Industry

Words of Wisdom

When all means are exhausted, a change becomes necessary and once the change has been made, a solution emerges.

Reasons for Winning

Mr. Ted Wen-Tai Hsieh has spent 10 years researching smart content analysis and applied technology R&D, developing innovative social network big data analysis (Social EventRadar) technology. This enables industry to use social network information in a “timely” manner that “transcends geographical boundaries” and allows it to “understand consumer trends at home and abroad.” The PaaS framework facilitates the establishment of an online community information intermediate industry that develops related smart applications. Over the last five years Ted and his team have undertaken 23 technology transfers and more than 100 brand enterprises continue to use services derived from enterprise reputation analysis. In the future, they will continue working with both domestic and overseas academia and industry to establish a large international enterprise Social Intelligence Co-Lab with the ability to compete globally.



Acceptance Speech

Thanks to my parents for teaching me to be accommodating.

Thanks to my bosses for telling me to “aim high.”

And special thanks to my colleagues for helping me put my ideas into practice.

Biography

Education

Ph.D.c in MIS, National Taiwan University (2006~)
M.S. National Taiwan University of Science and Technology (1999~2001)
B.S. Chinese Culture University (1996~1999)

Experience

Deputy Director, Innovative DigiTech-Enabled Applications & Services Institute (IDEAS), Institute for Information Industry (III)(2010~present)
Supervisor, Innovative DigiTech-Enabled Applications & Services Institute (IDEAS), Institute for Information Industry(III) (2008~2009)
Acting Supervisor, Innovative DigiTech-Enabled Applications & Services Institute (IDEAS), Institute for Information Industry(III) (2006~2007)
Program Manager, Advanced e-Commerce Institute, Institute for Information Industry(III) (2003~2006)
R&D Engineer, Advanced e-Commerce Technology Laboratory, Institute for Information Industry(III) (2002~2003)

Awards

32 patent certification (7patents in USA, 4 patens in China, 3 patents in Japan, 1 patents in Korea and 17 patents in Taiwan)

**MOEA strives to promote industrial innovation in Taiwan
to infinity and beyond!**

National Industrial Innovation Award (NIIA)

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