ISA
International SSL Alliance

Address: Room 809, Block 2D, Zhongguancun IC Park, No. 9
Fenghao East Road, Haidian District, Beijing, China (100094)
Tel: 86-10-62607581
Fax: 86-10-62607258
Email: secretariat@isa-world.org
Website: www.isa-world.org

ISA
International SSL Alliance

ISA
Global SSL Award for Outstanding Industry Development
2023

Solid state lighting (SSL) began with the discoveries and inventions in the second half of the 20th century, and continuous breakthroughs were made following the widespread application of semiconductors display at the end of the 20th century. In the new century, great strides have been made in SSL, which becomes a bright new star in the optoelectronic industry.

After 20 years' efforts, manufacturing technology of semiconductors has matured with the improvement of SSL efficiency and quite a lot of advanced properties. While replacing traditional lighting, SSL has been applied to areas of "beyond lighting", such as agricultural applications, Micro-LED, LiFi smart cities, healthcare, photocuring, energy saving and emission reduction. It is foreseeable that with the concerted efforts of the industry, SSL as well as its technology and products will be extended on a larger time scale and applied in more areas. which will bringing more benefits to the world.

Current achievements and momentum in SSL can never be achieved overnight. Brilliant development is the result that built by many small successes over a long time period. Things by no means easy at the beginning, but will become more arduous subsequently. The current outstanding results of SSL are impossible without the efforts of the entire industry and the entrepreneurs. Recognizing their efforts and achievements will contribute to continue the success and entrepreneurship spirit of SSL.

In view of this, the 12th Executive Member Meeting of International SSL Alliance (ISA) decided to set up the "Global SSL Award of Industry Development Outstanding Contribution" (IDOC), and the selection will kick off in 2021. The award aims to recognize industry leaders, industrial organizations, project teams, institutions, etc. who have made outstanding contribution to the SSL development at regional and global levels within a certain time or historical period during the course of sustainable development of the global SSL.

I sincerely hope that the establishment of this award and the selection of its laureates will inspire more individuals and organizations to keep in mind of their original aspirations and mission, work hard for greater success, and inaugurate a new era of SSL.

Jianlin Cao

Jianlin Cao
President of ISA

ISA Introduction

ISA is a non-for-profit international organization consists of regional alliances, association/society, leading companies and renowned universities in global Solid State Lighting (SSL) field.

The Business of ISA members have covered the whole SSL value chain of upstream, middle stream and downstream of global SSL industry such as epitaxy, packaging application, materials and equipment, design system integration and testing etc.

The currently ISA 82 members, representing more than 4000 individuals & organizations includes major players (such as Signify, Osram, Smsung, GE Lighting, Cree, Veeco, AIXTRON etc.). The output of which covers more than 70% that of global SSL industry.

The ISA Board of Advisers consists of leading experts and academic "Founder" level experts, such as the inventors of blue LED, yellow LED, Red LED, and OLED. Amongst Professor Shuji Nakamura, the Laureate of Nobel Prize in Physics in 2014, is the Co-Chair of ISA Board of Advisors (BOA) and Professor Hiroshi Amano, the Laureate of the Nobel Prize in Physics in 2014 is the member of ISA BOA.

The major works of ISA are: provide services to promote the development and application of global SSL, standardization, annually Global SSL Industry Report, annually SSL Awards, promote international, national and regional cooperation on SSL, etc.

The Mission of ISA

Cooperation with the global resources and efforts, ISA looks forward to fostering a more appropriate "eco-system" for the health development of the global SSL and its application. Echo the needs of the society with more added value services to ISA members. Strive to improve people's living and contribute a sustainable human society.

Global SSL Award for Outstanding Industry Development

Purpose and Significance

The award was established as decided by the ISA 12th Executive Member Meeting, which aims to promote the global SSL sustainable development by recognizing the industry organizations, project teams, industry leaders, institutions, etc. that have made outstanding contributions to the SSL development at regional/global levels within a certain period of time or historical period.

Qualification of the Application

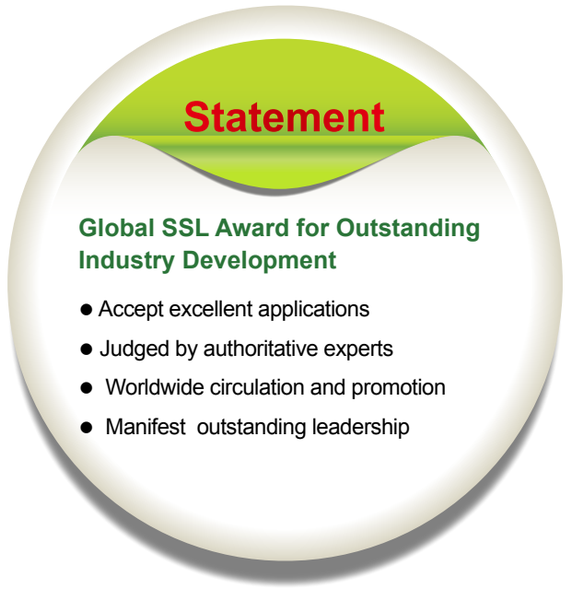
Industry organizations, project teams, industry leaders, institutions, etc. in the field of SSL who meet above criteria are all qualified to apply. The application content which has won another ISA award before is not qualified to apply this award.

Criteria for Selection

Within a certain period of time or historical period, those who have made outstanding contributions at the regional or global level and have greater influence in R&D of SSL technology, products, SSL application, standard development, and lead the developments of the SSL industry etc.

Frequency and quantity Of Selection

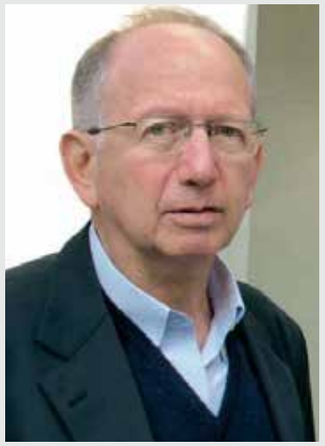
This award is given annually and no more than 5 winners per year in principle. Otherwise, it will be decided by ISA Executive Member Meeting in case of any special needs. The ISA Executive Member Meeting reserves the right not to make an award in any year.



Global SSL Award for Outstanding Industry Development

Mr. Isac Roizenblatt

Biography



Isac Roizenblatt is founder and consultant of Pro Light and Energy Consultants company, technical director of the ABILUX - Brazilian Lighting Industry Association, member of the ISA Advisory Board, coordinator of the Brazilian Lighting Standardization TC 34 comprehending Electric light sources, Lamp caps and holders, Auxiliaries for lamps and Luminaires, official Division (6) member of Photobiology and Photochemistry of CIE Brazil, coordinator of the Energy Efficiency Lighting Standards of COPANT - Pan American Standards Commission (CT152) and coordinator of SIMPOLED – Brazilian LED Lighting Symposium of ABILUX, representative of ABILUX at the Global Lighting Association and member of Illuminating Engineering Society.

Started in 1968 his professional career working for Philips Lighting in design, then in marketing, and product development in Brazil and in Latin America for 34 years, after which he opened his consultancy company in parallel of being technical director of Abilux and giving classes in two universities. He holds an Electrical Engineering degree, a degree in Business Administration, a master's degree in Energy and Environment and a PhD in Architecture and Urbanism.

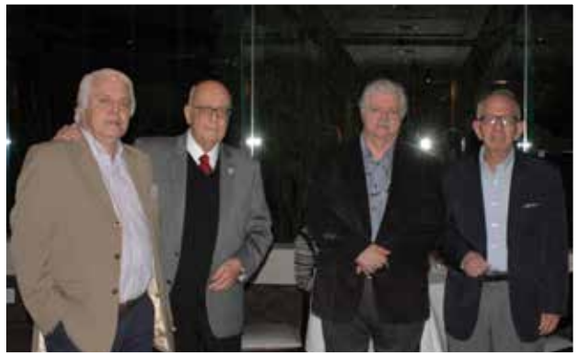
Outstanding Contribution Brief

As a designer he produced lighting projects for Brazil, for most of the countries in Latin America such as Argentina, Chile, Colombia and Mexico and a few projects around the world. He developed together with a colleague a new tubular fluorescent (T8) tube proper for the Brazilian energy net which was used all over the country and a new process to paint (T10, 8 foot) fluorescent lamp. In marketing he developed the introduction of new products in most of the Latin American countries.

He has been coordinating the Abilux Project Design Award and the Luminaire Design Award for many years and develops some technical material for the market, like for example UV equipment care during the pandemic.

An active representative member of Abilux in meetings of INMETRO the National Institute of Metrology, Quality and Technology where specialists discuss the lighting regulations for the country, and of PROCEL – National Program of Energy Savings. He helped the Government with important solutions to diminish the country energy crisis of 2001/2002. From PROCEL he got a prize in 2010 for his contributions for the country.

He did research in lighting energy saving and quality of lighting on sidewalks of cities publishing papers on the subjects.

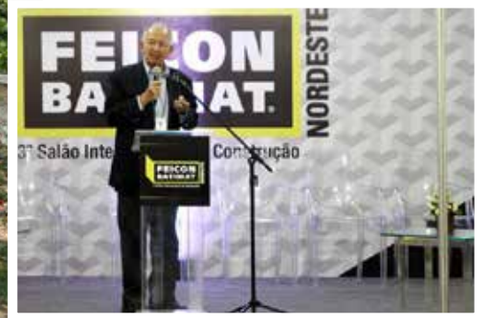


Contributes to the lighting product disposal and improvement of environment in the meetings of the National Confederations of Industries with the Government to implement new legislation.

As a teacher since 2002 he has been giving lighting classes to more than twelve thousand students in specialization courses around the country. In the last ten years has supervised students in their master and doctor degrees and participated in some boards.

He is often invited to give lectures in several types of conferences.

As a volunteer he gave special lectures in public schools for a brief period.



Juries' Comments

- Contribute to the lighting product treatment and environmental improvement.
- Supported not only Brazil Lighting Industry, but also extended his expertise to various Latin American countries. His work is specially appreciated as supported to other organizations.
- Isac Roizenblatt has made major contributions to the lighting industry in South America through a broad range of activities. Building upon a successful career in product development, his commitment to teaching, standards and international cooperation have been exemplary.
- Very impressive contributions to promote solid state lighting in Brazil.
- Main efforts in BRICS activities.
- Isac Roizenblatt is an outstanding regional leader of the lighting industry in Brazil and Latin America, head of the national association of manufacturers, developer, scientist and teacher.

Global SSL Award for Outstanding Industry Development

Mr. Jan W. Denneman

Biography

Jan Denneman is light expert, founder and chairman of the board of the Good Light Group, ambassador of the Global Lighting Association.

Over 45 years' experience in leadership roles in innovation, R&D, new business development, business management, strategy, sustainability, standards, industry relations and global multi-party cooperation. Leading innovation and marketing roles at Philips Lighting (now Signify) during the industry's transition to LED and intelligent lighting systems.

Is (co)founder of several international consortia, including the Global Lighting Association (President 2007-2017), Zhaga (Chair 2010-2016), the Connected Lighting Alliance, LightingEurope (President 2013-2017) and the Good Light Group (Chair since 2019).

The Good Light Group is a non-profit organisation (foundation) that promotes the use of good light. Good light is the right light at the right time. Good light for a healthier and happier life. It improves sleep quality, daytime fitness and mood. It also reduces eye deterioration.

Outstanding Contribution Brief

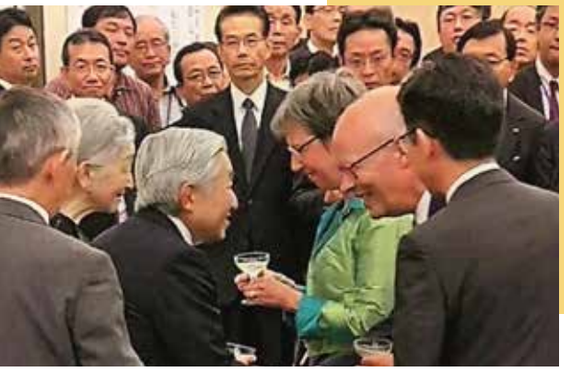
1. Philips Lighting (now Signify)

As a Masters in Physics he started in 1976 in Research and Development of Philips Lighting and worked as development manager for several lamp technologies (Fluorescent Lamps, Compact fluorescent lamps, High pressure discharge lamps, Ceramic Metal Halide and special purpose lamps) in several countries including Netherlands, Belgium and United States.

He moved into Product Management and Marketing in the early nineties and was responsible for the High Intensity Discharge (HID) business line of Philips Lighting. He introduced amongst others Ceramic Metal Halide (CDM) lamps - new to the market at the time. He also was responsible for all innovation in HID lamps for Philips globally.

In 2002, he became Vice-President of Philips and responsible for New Business Creation within Philips Lighting and started many LED activities and projects.

From 2003 till 2008 he has been the General Manager Advanced Development Lighting in Eindhoven, the Netherlands. A laboratory with over 250 engineers and responsible for all new concept and product development



in Philips Lighting, with a focus on LED systems, lighting control and light & health activities.

From 2008 till 2017, he was responsible for Sustainability, Standards and Regulations for Philips Lighting. In this role he managed Philips Lighting worldwide activities for legislation, regulations and standards. He also manages the relationships with other industries. As sustainability manager he looked after the CO2 footprint of the supply chain, green aspects of products and took strategic sustainability initiatives. From 2015 till 2018 he was Vice President of Philips Lighting for Industry Associations.

2. European industry activities

In 2001 Jan became the Philips member of the Board of Directors of the European Lamp Companies Federation (ELC) - the major discussion partner for the European Union on all issues concerning light sources and energy saving through efficient lighting. He was elected President of the ELC in 2001. ELC represented all European Lamp manufacturers and leads the setting up of the WEEE lamp collection & recycle organisations in Europe, steers the discussions banning hazardous materials from lamps and many more environmental related issues. The main focus became advising the European Union with the phasing out of inefficient lamps (incandescent, fluorescent) and lighting in professional as well as domestic applications. Jan initiated the discussions about one European lighting industry association. Early 2013, ELC merged with CELMA and he became Vice President of LightingEurope. Per 1st February 2015, he became President of LightingEurope till 2018.

Under Jan's leadership, LightingEurope created the strategic roadmap for the lighting industry that indicated the way the industry should cope with the incredible industry revolution that was taking place with the introduction of LED lighting. Many industry players saw the disappearance of the classical lighting technologies as a threat. The strategic roadmap of the industry painted the road to new opportunities, especially of a move from a mono focus on energy efficiency to also start focussing on the health and well-being opportunities of good lighting.

3. Global lighting initiatives

He took the initiative for a first Global Lighting Forum (GLF) meeting end of 2007 in Brussels. In March 2012, the GLF transferred into the Global lighting Association (GLA), a cooperation between peak lighting industry associations worldwide to determine what the industry should share and could contribute to environment, better lighting and energy and CO2 emission reduction on a global platform. This Global Lighting Association now exists of CALI (China), ELCOMA (India), NEMA (USA), LightingEurope (Europe), Lighting Council (Australia), Abilux (Brazil), TLFEA (Taiwan, China), JLMA (Japan), KILT (Korea), MELA (Middle East). In March 2012, Jan has been elected as President of the Global lighting Association. With the Global Lighting Association, he also mapped out the strategic roadmap for the industry in 2017, which is still the leading document for the priorities of the GLA.

He also took initiatives to create new alliances for the creation and promotion on LED and connectivity standards as Chair of the General Assembly of Zhaga and member of the Board of Directors of The Connected Lighting Alliance.

4. Health and well-being by good light

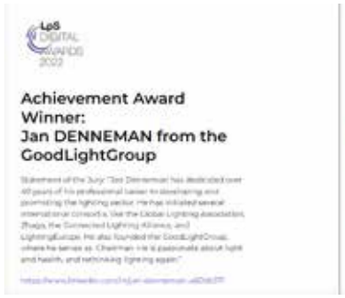
Since 2018, after his retirement from Philips, Jan is still very active in the lighting world, with publications and presentations.

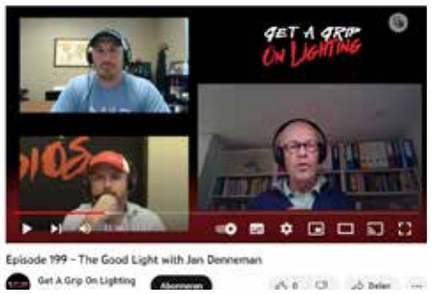
In 2019, he took the initiative and is founder of the non-profit, non-governmental organization Good Light Group

and is chair of the Board.

The Good Light Group promotes the use of good light. Good light is the right light at the right time. Good light is beneficial for a healthier and happier life. It improves sleep quality, daytime fitness and mood. It also reduces eye deterioration.

Jan sees this as the largest opportunity for innovation and growth: focus on the health and well-being aspects of more than five billion people with a daytime indoor activity. They will be significantly helped with light that supports their biological systems, which is not the case with almost all current indoor lighting solutions.





Juries' Comments

- Jan Denneman is a legendary figure in the global lighting industry. An outstanding organizer of many associations and projects that have brought development and improvement. An active participant and leaders of the world's leading associations, who had a great influence on the transition to LED lighting.
- Over 45 years' experience in leadership roles in innovation, R&D, new business development, strategy, sustainability, standards, industry relations and global multi-party cooperation.
- I have known Jan Danneman for more than 12 years and know his ability in conducting various events concerning the Lighting Industry technology and support in writing special papers concerning policy decisions for global requirement by various countries by used. He is still going strong & we hope his contribution to the industry will go a long way.
- Mr. Denneman not only led the world largest lighting company, he led Global Lighting Association over ten years and also Zhaga and Lighting Europe, and his contributions as the global leader in solid state lighting over the years have been so impressive.
- Has long involvement, especially re European manufacturing, etc.
- Jan Denneman has played a leading role in the global lighting industry for many years, adapting well to evolving technology. My only reservation is that the impact of the Global Lighting Association has been restricted almost entirely to its members and not the wider industry.

Global SSL Award for Outstanding Industry Development

Prof. Jiangen Pan

Biography

Jiangen Pan, Professor Senior Engineer, is the President and Chief Scientist Officer(CSO) of EVERFINE Corporation. He is an official member of the Division 2 (Div. 2, Physical Measurement of Light and Radiation) of the International Commission on Illumination (CIE). Moreover, he serves as the Vice Director of the Technical Committee on Lighting of Standardization Administration of China (SAC), i.e. SAC/TC224 and Vice Director of the Technical Committee on Optoelectronic Measurement Standardization of SAC, i.e. SAC/TC487. Meanwhile, he is also Vice Chairman of the China Illuminating Engineering Society (CIES), Chairman of the Illuminating Engineering Society of Zhejiang (ZIES), and Vice Chairman of the Optical Society of Zhejiang (OSZJ).

Professor Pan used to be a main lecturer on photometry and colorimetry in Zhejiang University. Later he resigned from his teaching position and founded EVERFINE Corporation. Professor Pan and his research team particularly focus on the research of measurement technology and standardization of solid state lighting, intelligent optoelectronic detection, electromagnetic compatibility test, and infrared and ultraviolet radiation measurement. He has led multiple projects funded by the National 863 Program, the National Science and Technology Support Program, the National Major Scientific and Technological Special Project, as well as major scientific and technological research projects at the provincial and municipal levels. They have successfully overcomed several world-class technological challenges in the field of SSL measurement. Professor Pan holds over 60 patents in China, the United States, and

Germany, some of which have received the "China Patent Excellence Award." He has published over 100 papers in core journals and professional magazines. Moreover, he has led and participated in the drafting of more than 50 international and domestic standards in the field of SSL and optical radiation measurement. For his exceptional contributions, Professor Pan has been twice awarded by CIE Board of Administration, and received various honors such as "National Outstanding Science and Technology Worker", "Top Ten Promoters of International Standardization", "Excellent Science and Technology Talent in the Chinese LED Industry" and the "Outstanding Contribution Award for Standardization."

Outstanding Contribution Brief

As the President and CSO of EVERFINE Corporation, Professor Jiangen Pan has consistently focused on cutting-edge technologies in optoelectronic measurement worldwide. He is dedicated to addressing the industry's pressing challenges and contributing to the healthy and efficient development of the global solid state lighting industry.

1. Technology Breakthroughs: Solving Measurement Challenges in Solid State Lighting

Since 2004, Professor Jiangen Pan and his team have undertaken multiple technology research projects, including national 863 Program projects, National Science and Technology Support Program projects, and Major Science and Technology Projects in Zhejiang Province. The research has focused on measurement methods for SSL devices and products, as well as the development of measurement equipment. To date, they have applied more than 350 patents and published over a hundred papers. Their work has successfully overcomed key technological challenges in optoelectronic measurement of SSL, and a series of high-performance measurement instruments have been developed. Their innovations have filled gaps in the field of SSL evaluation methods and measurement equipment.

Among these, EVERFINE HAAS-2000 High Accuracy Array Spectroradiometer and GO-R5000 Full-field Speed Goniophotometer have been widely adopted by third-party laboratories and SSL product manufacturers. These

instruments not only have received numerous honors, including the China Patent Excellence Award, National Key New Product, National Independent Innovation Product, and China Patent Excellence Award, but also performed exceptionally well in international inter-laboratory comparison, that the optical and electrical measurement values were highly consistent with the mean values of core international laboratories.

In recent years, Professor Pan's team has been closely focused on the development needs of SSL. They continuously research and develop measurement technologies for the applications frontier technologies, such as ultraviolet and infrared radiation, horticulture lighting, and Micro-LEDs. In 2022, EVERFINE Corporation was honored as a national "Little Giant" Enterprise (specialized and sophisticated enterprises that produce new and unique products) awarded Ministry of Industry and Information Technology, and one of the top five equipment manufacturer in China lighting industry. Additionally, EVERFINE was also re-evaluated and recognized as a National Intellectual Property Demonstration Enterprise.

2. Standard Innovation: Filling the Gaps in SSL Standardization both at home and aboard

Professor Jiangen Pan actively engages in international academic and standardization work through organizations such as the International Commission on Illumination (CIE), the International Electrotechnical Commission (IEC), and the Illuminating Engineering Society of North America (IES). Additionally, he is the Vice Director of SAC/TC 224 and SAC/TC 487. Over the years, he has consistently driven the development of international and domestic standards for SSL. Up to the present, Professor Pan has led or participated in the development of more than 50 standards, ensuring the normalization of the SSL market and promoting the healthy development of the industry.

In 2007, he led the draft of the first group technical specifications, LB/T 001-2007 "Measurement Method for Integral LED Road Lights". Building upon this, he led the development of the first Chinese national standard GB/T 24824-2009 "Measurement Methods of LED Modules for General Lighting", which was one of the earliest national standards globally released for measuring LED products. This standard remains in use today and is widely referenced by numerous other standards. It has become one of the most widely implemented standards in testing and recognition laboratories for LED products. Drawing upon the experience gained from these standard developments, Professor Pan led the CIE R2-42 reportship on "Measurement Methods for LED Lamps", which provided the pre-research for the related international standards, based on which, the first international measurement standard for semiconductor lighting, CIE S 025:2015 "Test Method for LED Lamps, LED Luminaires, and LED Modules" was successfully developed. Professor Pan was one of the drafters of the standard and he continues to play as a major contributor during its ongoing revisions.

Furthermore, Professor Pan led the draft of CIE 239:2020 "Goniospectroradiometry of Optical Radiation Sources", which is the first CIE publication led by an expert from mainland China. This standard has been referenced in multiple international standards and technical documents.

3. Undertaking Social Responsibility: Promoting International and Domestic Technological Exchange and Advancement

Professor Jiangen Pan serves as an official member of the CIE D2, Vice Chairman of the CIES, Chairman of the ZIES, and Vice Chairman of the OSZJ. In addition to his official roles, he actively utilize these platforms to foster academic and standardization work, promoting international and domestic technological exchange.

Professor Pan has contributed as a member of the scientific committee and organized CIE academic conferences for several CIE conferences. Notably, the conference organized by his team, the CIE 2012 Lighting Quality and Energy Efficiency Conference, was a great success and received high praise from participants from China and abroad. This event effectively facilitated the integration and development of China's lighting industry with the global landscape. Almost every year, Professor Pan's team presents technical reports at CIE conferences, and EVERFINE Corporation consistently sponsors CIE congresses and domestic academic seminars, showcasing the latest advancements in optical radiation measurement technology on prestigious international and domestic stages.

Furthermore, leveraging the platform of the Secretariat of the Subcommittee 3 on Measurement of Light and Radiation of TC224 of Standardization Administration of China (SAC/TC224/SC3), EVERFINE Corporation frequently organizes national-level technical seminars. These seminars focus on discussions related to the measurement of trending topics in the industry. Such initiatives facilitate the synchronous development of testing technology in line with SSL industry demands.

Juries' Comments

- Very involved in China and increasingly in international, especially through the CIE.
- Jiangen Pan is the creator of the production of an excellent, high-quality and affordable line of photometric devices. Thanks to the company's products, thousands of factories in the world have been able to control the quality of LED products for reasonable money.
- Make a breakthrough in standard measurement technology.
- Mr. Jiangen Pan has done an excellent job in undertaking research in various instruments used for R&D for Lighting Products. Besides, his teaching document has been well appreciated for his contribution to the industry. His contribution to work for the benefit of Industry is impeccable.
- Measurement technology is a critical part of the lighting industry. Jiangen Pan has an excellent record of research in measurement techniques and in the development of national and international standards. Through the company that he founded he was successful in converting his research into valuable products that are used in many laboratories across the world.
- Among his many outstanding achievements as the industry leader to advance technology for testing and measurement for solid state lighting, Prof. Pan's outstanding contributions in CIE over the last twenty years are well recognized and appreciated in CIE.

Global SSL Award for Outstanding Industry Development

2023 AOID Jury Panel

Evgeny Dolin

Past Director General of LED and LED-based Systems Manufacturer's Non-profit Partnership (NPRPSS) of Russia

Guoqi Zhang

Professor of Delft University of Technology

Co-Chair of ISA Board of Advisors

Isac Roizenblatt

Technical Director of the Brazilian Association of the Lighting Industry (ABILUX)

Member of ISA Board of Advisors

Ling Wu

President of China Advanced Semiconductor Industry Innovation Alliance (CASA)

Member of ISA Council of Management

Norman Bardsley

CEO of Bardsley Consulting

Chief Analyst of ISA

Shyam Sujan

Past Secretary General of the Electric Lamp and Component Manufacturers Association of India (ELCOMA)

Warren Julian

Emeritus Professor, University of Sydney

Past President of Illuminating Engineering Society of Australia and New Zealand (IESANZ)

Member of ISA Council of Management

Yoshi Ohno

PhD., NIST Fellow, National Institute of Standards and Technology, USA

Past president of CIE

Member of ISA Board of Advisors

Chairman of ISA TCS