

**The 10th Meeting of
BRICS Solid State Lighting Collaboration Working Group**

Organizer: Secretariat of BRICS SSL WG

July 12-13, 2023
(Webinar on Zoom)

Information of the Speakers

The First Session (July 12)

Keynote Speaker No.1	
	Name: Diana LU
	Title: General Manager
	Organization/Company: Unilumin Group Co., LTD
<p>Short Bio: More than 20 years working experience in global companies of Signify and OSRAM, focusing on driving innovation, standard, business breakthrough, products portfolio and lighting application. Global market view and pioneer concepts of connected, healthy and sustainable lighting. Devote to bring innovation value of lighting forward and real application to improve people’s life.</p>	
<p>Subject: Light the World with Simple Smart Solution</p> <p>Abstract: In the fast growing connected lighting world, professional control system or platform is dominated. While for most normal people, it is too complicated and expensive to sense the benefit of Smart---Interactivity. Is there any way to have Smart, Simple and Affordable solution?</p>	

To make Smart popular, here gives the definition of the simple smart solution: Simplicity, Interactivity and Affordability.

With the fast developing sensor technology, PIR and 5.8G radar sensors reach very cheap level to be populated in lighting, especially in indoor and solar application. There is a way to make the lights work simple smartly and independently. It also introduces the recent situation of sensors and looking forward the future development, even for street lighting. There are still many barriers to concur and drive it forward.

And it is the time that we cannot miss to identify Simple Smart Solution and focus our energy to promote it to bring affordable Smart Lighting Solution to the world.

Keynote Speaker No. 2



Name: Guangxu WANG

Title: Dr. Professor

Organization/Company: Nanchang Laboratory,
Nanchang University

Short Bio:

Guangxu Wang, PhD, Professor, doctoral supervisor, Deputy Director of Nanchang Laboratory, Deputy director of National Silicon-based LED Engineering Technology Research Center, Nanchang University. He is committed to the technological innovation and achievement transformation of GaN LED chips and devices with high light efficiency and high reliability on silicon substrate, and has made a number of breakthroughs in unit technology, and is one of the main contributors to silicon LED chips.

Subject: Phosphor-free LED lighting and application

Abstract:

Status and trend of LED lighting;
Progress in Si-GaN yellow-green LED;
Phosphor-Free Golden Light LED;
Phosphor-Free Clour-Mixed Light LED.

Speaker No. 3**Name: Thebano Santos****Title:** General Coordinator**Organization/Company:**
Center of Information Technology (CTI),
Ministry of Science, Technology, Innovation
and Communication, Brazil**Short Bio:**

Graduated in Physics from Universidade Federal Fluminense (1981) and Master's in Physics from Universidade Estadual de Campinas (1985). He has experience in the field of Physics and Materials Science, with an emphasis on SiO₂ and TiO₂ Sol-Gel technology; diffusion of impurities in semiconductors; physical and chemical processes in microelectronics and optoelectronics, electroemitter materials and organic semiconductors, acting on the following topics: reliability of semiconductor devices, InGaAs photodiodes, passivation of electronic components, displays (LCD-TN, OLED, FED and reflective) and solar cells (organic and hybrid). He is a Senior Technologist at the Renato Archer Information Technology Center. He was responsible for the Division of Information Displays, from 2011 to 2014 and from July 2016 to 2017. He was General Coordinator of Information Technologies from 2014 to 2016. He was Coordinator of the CTI-Tec Technological Park and Coordinator of the Open Laboratory at CTI Renato Archer from 2014 to Jan / 2019. He currently works by in the Division of Nano, Microsistems and Materials on "TFT Active-Matrix Manufacturing Process" and is responsible by Micro and Nano fabrication Open Lab.

Subject: Report on the Progress of SSL Innovation and Application in Brazil”**Abstract:**

Speaker No. 4



Name: Isac Roizenblatt

Title: Technical Director

Organization/Company: Abilux, Brazil
单位: 巴西照明产业协会

Short Bio:

Electrical Engineer, Technical Director of ABILUX, Member of IES and partner of Pro Light and Energy Consultants. Member of ISA Board of Advisors

Subject: “Development of SSL Industry in Brazil and its Market Trends”

Abstract:

Speaker No. 5



Name: Anton Chernyakov

Title: Senior Researcher

Organization/Company:
SHM R&E Center, Russian Academy of Science

Short Bio:

Anton Chernyakov is a Ph.D. of LED at Research Center of Russian Academy of Scientist. His work focuses specifically on the degradation process of LED and in particular on the study of the thermal process of LED.

Subject: “Common Problems of degradation process and reliability of LED from UV to Green”

Abstract:

Introduce the common Problems of degradation process and reliability of LED from UV to Green.

Speaker No. 6



Name: Alexander Karev

Title: Director of Science

Organization/Company:
ICG Lighting Technologies

Short Bio:

Dr. Alexander Karev has been working as Director of Science for Lighting Technologies Company, the leader of the Russian lighting market, since 2007. The Company manufactures a wide range of LED lighting equipment, with factories located in Russia, India and Spain.

The experience of scientific and practical work in the field of lighting is about 30 years and includes work at the Moscow Power Engineering University, work for the research and production company LIT - a manufacturer of ultraviolet equipment for water and air disinfection. PhD awarded for work in the development of high-pressure discharge lamps.

Subject: Russian LED Market and National Regime in the Procurement of LED Lighting Equipment

Abstract:

1. The dynamics of the domestic LED market in the Russian Federation for 2018-2022.
2. The Information on the regulation of the domestic market of the Russian Federation in order to minimize the spread of counterfeit LED products.

Speaker No. 7**Name: Shyam Sujan****Title:** Secretary General**Organization/Company:**
Electric Light and Component Manufacturers
Association of India (ELCOMA), India**Short Bio:**

Mr. Shyam Sujan has worked with Philips India Limited for 37 years in various capacities and job profiles from 1964 to 2001. He joined ELCOMA as Secretary General in 2004. Mr. Sujan, besides being an expert in Sales and marketing, is adept in quality management, productivity, HR, Process Management and productivity. He is also an ISO Certification auditor. He is a graduate in Economics from Delhi University, India. He is a Board member of various global associations like Global Lighting Association (GLA), International Solid-State Alliance (ISA), LITES Asia, Sweden Energy Agency among others. Mr. Sujan is an integral part of various Government of India committees and initiatives on Energy Efficiency, Lighting and Standardization including Chairman of the Bureau of Indian Standards (BIS) LED Standards Panel, Member of Advisory Committee for India's Bureau of Energy Efficiency (BEE), Member of Task Force for United Nation Environment Program (UNEP) en.lighten project and Director and Founding member of Electronic Sector Skills Council of India.

Subject: Vision and Prospects of India's SSL 2030 Strategic Plan**Abstract:**

Introduce the Vision and Prospects of India's SSL 2030 Strategic Plan.

Speaker No. 8**Name: RUAN Jun****Title:** Secretary General**Organization/Company:** China SSL Alliance
(CSA)

Short Bio:

Dr. Ruan Jun has been engaged in strategy research, standardization and international cooperation in the field of solid-state lighting more than 20 years. He participated in the organization and implementation of solid-state lighting and wide-band-gap optoelectronic semiconductor R&D projects and industrial planning. He serves as ISO/TC 274 committee member and China representative. He Led and participated in international cooperation R&D and standardization projects, promoted international industrial cooperation with USA, Germany, BIRCS etc. He assisted NDRC in the preparation of the "Belt and Road" Green Lighting Action Initiative, to promote international cooperation on green lighting. He has won the awards of *First Prize of National Science and Technology Progress*, *Third Prize of Beijing Science and Technology*, and *Global SSL award of Industry Development Outstanding Contribution*.

Subject: China SSL Industry in the post-pandemic era**Abstract:**

In the post-pandemic era, the global economy is at risk of recession, leading to the contraction of the demand side, overlapping the impact of the United States' restrictive policies on the origin of goods, global supply chain is accelerating the transfer to Southeast Asia and other regions. Affected by these risks, a large number of small-sized enterprises in China have closed down, and the industrial concentration has significantly increased. Leading enterprises of the industrial chain are increasing R&D and production capacity investment in high margin products such as high-quality and full-spectrum LED, LED display(Mini/Micro-LED), agricultural lighting, UV-LED. etc.

Speaker No. 9

Name: Tshepang Pheelwane

Title: Technical Lead- Lighting Technology Laboratory

Organization/Company:
South African Bureau of Standards (SABS),
South Africa

Short Bio:

Tshepang Pheelwane works in the Lighting Technology Laboratory at the South African Bureau of Standard (SABS) as a Technical Lead and SANAS Technical Signatory for Luminaires. Her role in the laboratory focuses on conformity testing and ensures that the lab complies with ISO 17025 and IEC standards. She provides testing services in accordance with safety and performance standards for a variety of SSL products.

She has participated and represented the Lighting Laboratory at the 4th Meeting of BRICS SSL Collaboration working Group in Hangzhou, China, and attended a Seminar for Standardization Officials of Africa Countries in Changzhou, China.

Subject: Development and Progress of SSL Testing Mechanism in South Africa Bureau of Standard
Abstract:

In advance of the new regulation, SABS Lighting laboratory has been preparing for the testing of LED lamps. As we evaluate the current demands and interests for LED products, developing the laboratory has been at the center of our efforts to assure capabilities and capacity.

Speaker No. 10

Name: Jiajie Fan

Title: Youth Researcher

Organization/Company: Fudan University

Short Bio:

Dr. Fan is a Youth Researcher at the Academy for Engineering & Technology and Shanghai Engineering Technology Research Center for SiC Power Device, Fudan University, China. He received the Ph.D. degree in Industrial and Systems Engineering at The Hong Kong Polytechnic University, Hong Kong, China. His main research interests include Wide bandgap power electronics packaging and reliability modeling, Prognostics and health management.

Subject: Accelerated Testing Method for LED Lighting Product

Abstract:

By current reliability testing methods, the claim of such long lifetime operation requires an expensive and long period qualification test which restricts the development of LED industries. In this study, based on an exponential-form degradation model with Arrhenius acceleration assumption, we develop an accelerated luminous flux depreciation test method. This proposed method reduces the test time from 6000 hours to 2000 hours, without the assistance of LM-80 test report of the LED sources nor the solder temperature. A number of numerical simulation and validation experiments on various LED lighting products show that the qualification results obtained by the proposed method agree well with those given by the Energy Star requirements.

The Second Session (July 13)

Speaker No. 1



Name: Fujun WEI

Title: Product Management Senior Director

Organization/Company: Signify, China

Short Bio:

Fujun joined Signify (formerly Philips Lighting) in 2010, currently leads Indoor Product Management team in Division Digital Solutions, covering Greater China and Growth Markets regions. Fujun holds Master degree of Engineering and Master degree of Business Administration.

Subject: Human Centric Lighting

Abstract:

Better light, better life. That's the principle behind human centric lighting, a range of solutions that help people stay aligned with circadian rhythms, and illuminate the way to better health, brighter moods, and sharper focus.

Speaker No. 2



Name: Peter Resca

Title: Director of Marketing Center

Organization/Company: Inventronics

Short Bio:

Peter Resca is the Technical Marketing Director for Inventronics and is responsible for identifying and developing the company's broad portfolio of LED drivers and Lighting Controls. Based in Boston, Massachusetts, Mr. Resca manages the Global product offering for Inventronics, a leading manufacturer of LED drivers for the solid-state lighting market. He has a BSEE from Worcester Polytechnic Institute and an MBA from the University of Massachusetts. He began his career designing power electronics and has more than 20 years' experience in power and lighting with roles leading Engineering Development, Sales, Operations and Marketing.

Subject: Market Trends in Commercial and Industrial Lighting

Abstract:

The presentation will highlight significant vertical segments of the commercial and industrial lighting market and the trends within those spaces.

Speaker No. 3



Name: Sudeshna Mukhopadhyay

Title: Vice President and Strategic Consultant

Organization/Company: Havells India Ltd.

Short Bio:

Sudeshna Mukhopadhyay, is a graduate Electrical Engineer from Jadavpur University, Kolkata- India and holds a Masters degree in the same discipline from Connecticut USA. Known industry expert in lighting applications with 36 years of extensive global experience in lighting technology, application, design, global project management, in India and Asia Pacific region.

She is the ex-Head of Philips Lighting Design Centre and Lighting Academy in Indian Subcontinent and Asia Pacific Region. Currently works as Vice President and Strategic consultant to Havells India Ltd. Well recognized by the Lighting fraternity in India and overseas, she teaches lighting applications at leading institutes in India. Member in various committees in Bureau of Indian Standards, National Lighting Code. Has been an active member and contributor in framing and writing the lighting chapters in Green Building Codes of GRIHA, IGBC, ISHRAE, CII-Energy Council, Fellow of the Indian Society of Lighting Engineers, Member of IESNA and Associate Member of IALD.

Subject: Environmental Wellness and Responsible Lighting – Social Context**Abstract:**

The presentation would dwell on the importance of having a environmental lighting policy in India and its social impact.

Speaker No. 4**Name: Shuai GAO**

Title: Senior Engineer, Expert in the Smart Building Energy Efficiency and Low Carbon Operations Certification Programme, Member of the Science Education Working Committee of the Illuminating Engineering Society of Beijing

Organization/Company: Tongheng Heming Lighting and Acoustics Institute Co.,Ltd.

Short Bio:

His main research direction is light environment, which includes photo biological safety, landscape lighting design and interior lighting design.

He has participated in and completed lighting projects such as the Olympic Tower in Beijing Olympic Park, Chang'an Street Lighting Improvement, Wuhan Military

Games, indoor and outdoor lighting of the demonstration building in Gui'an Ecological Civilization Innovation Park, and technical consultation on urban lighting improvement in Xiamen. He has assisted the Changzhou City Lighting Management Office in a number of plan approval projects.

He has participated in projects such as the construction of a lighting design technical service platform based on quantitative control, the guidelines for the provision of standards for the acquisition of business premises by the National Development Bank, the construction of an application display and experience centre based on integrated innovation in semiconductor lighting, and the study of lighting in art galleries and museums by the Ministry of Culture.

He has participated in the preparation of a number of standards, such as “Urban public facilities services-Basic information of intelligent streetlight”, “Methods for the evaluation of art museum lighting”, “Standard for lighting design of interior decoration”, “Landscape lighting effect quantitative control guide” and “Technical specification for Landscape lighting control systems”.

Subject: Digital management and application of urban lighting

Abstract:

Under the global background of low-carbon energy saving and informatization construction, a digital management platform for urban lighting based on lighting simulation technology is being studied.

It can be applied to the whole project flow, including planning and design, construction management, and operation and maintenance, to realise the whole process of digitally assisted decision making for lighting projects.

Speaker No. 5



Name: Yandan LIN

Title: Professor

Organization/Company: Fudan University

Short Bio:

Dr. Lin Yandan, professor at the School of Information Science and Technology, Fudan University, engaged in research on the relationship between light environment and visual safety, efficiency and health, and applied to transportation and human centric lighting.

Subject: “Innovative LED Automobile Lighting Application”**Abstract:**

Introduction of the recent development, trends and challenges of automotive lighting.

Speaker No. 6

Name: Junkai LI

Title: CEO/Professor


Organization/Company: Zhejiang Gilon Technology Co.,Ltd

Short Bio:

Senior engineer, senior expert in IEC and ISO international standards, recipient of the IEC1906 Award, and a provincial-level leading talent in Zhejiang Province. He has been engaged in research on precision optoelectronic detection, electronic displays, and photobiological technology for nearly 20 years, has formulated more than 30 international standards, and has won the second prize of Zhejiang Province Science and Technology Award.

Subject: LED Display Technology and its International Standardization**Abstract:**

Discuss the key issues related to LED display technology based on its characteristics, and introduce the latest trends in international standardization in this field.

Speaker No.7	
	Name: Alexander Karev
	Title: Director of Science
	Organization/Company: ICG Lighting Technologies
<p>Short Bio: Dr. Alexander Karev has been working as Director of Science for Lighting Technologies Company, the leader of the Russian lighting market, since 2007. The Company manufactures a wide range of LED lighting equipment, with factories located in Russia, India and Spain.</p> <p>The experience of scientific and practical work in the field of lighting is about 30 years and includes work at the Moscow Power Engineering University, work for the research and production company LIT - a manufacturer of ultraviolet equipment for water and air disinfection. PhD awarded for work in the development of high-pressure discharge lamps.</p>	
<p>Subject: Assessment method of the LED luminaries by the level of light pollution</p> <p>Abstract: A method for estimating the LED luminaries by the level of light pollution and the calculated indicator of this parameter are proposed. The analysis of the range of outdoor lighting fixtures of the Lighting Technologies Company was carried out in terms of the value of their light pollution indicator. The expediency of including this parameter in the luminary's specification is shown.</p>	

Speaker No. 8	
	Name: Georges Blum
	Title: Executive President
	Organization/Company: Brazilian Association of the Lighting Products Importers (Abilumi)

Short Bio:

Georges Blum is the Executive President of Abilumi (Brazilian Association of Manufacturers and Importers of Lighting Products). With over 30 years of experience in the Lighting segment, his career includes passages at Osram and Sylvania, as Quality Manager and Product Engineer, respectively, by Empalux, where he served as Technical Manager, and later Technical Consultant in Lighting, and Certification of several products at Inmetro. Georges Blum is a Production Engineer, graduated from the FEI (Faculty of Industrial Engineering) and in Business Administration from the FGV / PEC.

Subject: Situation and Trends of SSL in Brazil**Abstract:**

Introduce the Brazilian importation data of 2022 and the market trend for 2023.

Speaker No. 9

Name: Benliang LI

Title: Director of photoelectric inspection department

Organization/Company: Guangdong Dongguan quality supervision testing center

Short Bio:

Li Benliang, male, senior quality engineer, Ph.D. in testing and instrumentation, works in Dongguan Quality Supervision and Testing Center of Guangdong Province, and is currently the deputy director of the National Center, director of photoelectric inspection department, leader of ISA TCS WG19 working group and member of the standard expert group of the National Semiconductor Lighting R&D and Industry Alliance.

Subject: Application of LED lighting technology in fishery fishing**Abstract:**

The PPT briefly introduces the development of LED lighting technology, explains the application prospect of LED lighting technology in offshore fishing, introduces the technology and standardization of LED fishing lamps, and introduces the new trends and technological innovations of LED lighting technology in fishery fishing.