

# **Second Announcement And Call for Papers**



## **LS:12**

**The 12<sup>th</sup> International Symposium on the  
Science and Technology of Light Sources  
and**

## **White LEDs 3**

**The 3<sup>rd</sup> International Conference on  
White LEDs and Solid State Lighting**

**Auditorium, Eindhoven University of Technology (conference)**

**Philips Evoluon (Banquet)**

**Eindhoven, the Netherlands, July 11-16, 2010**

## Introduction

The **International Symposium on the Science and Technology of Light Sources** has been held regularly since 1973 and provides a unique opportunity for the worldwide community of engineers and scientists from the lighting industry, research organisations and academia to meet, present and discuss their work on light source research and development.

The **International Conference on White LEDs and Solid State Lighting** held its inaugural meeting in Tokyo in 2007, and its 2nd meeting in Taipei in December 2009. The conferences aim to provide a forum for scientists, engineers and designers to discuss all aspects of fundamental and applied research on white LEDs and SSL (Solid State Lighting) in a stimulating and informed atmosphere.

For the first time, in the period from Sunday, July 11<sup>th</sup> to Friday, July 16<sup>th</sup>, 2010 the two conferences will be held jointly in Eindhoven, the Netherlands, on the campus of the Eindhoven University of Technology. The aim is to bring these two communities, which to date have evolved separately, into contact with each other. The LS community's interests have reflected contemporary light source technology during its over 30 years history and this has resulted naturally in a growing, now significant, representation of SSL technologies (LED and OLED) in its programmes. In contrast, the WhiteLED and SSL conference community's interests have, by definition, focused wholly on the rapidly growing white LED and OLED based SSL technologies.

## Conference Organization

The LS12-WhiteLED3 conference will be held in the Auditorium of the Eindhoven University of Technology. It is organized under the auspices of the Foundation for the Advancement of the Science and technology of Light Sources, the Japanese Society for Illumination Science (JSIS), and the Eindhoven Top Technology Institute for Intelligent Lighting (TTIL).

The conference will start on the evening of Sunday, July 11, with two keynote lectures. Wednesday afternoon is kept free: attendants can then participate in laboratory visits, attend satellite events, organize meetings, or anything else to their liking. Friday at the end of the afternoon, the conference ends.

The meeting will feature keynote lectures, invited lectures, and orally presented Landmark Lectures, which are selected from the submitted contributions by the two Scientific Committees. There are no parallel sessions.

## Conference Location

The city of Eindhoven is conveniently located in the southwest of the Netherlands. The airports of Amsterdam, Brussels, and Düsseldorf are all within a radius of 150 km, and can be reached easily by public transport. The airport of Eindhoven is located at the edge of the city, and is well connected to the city centers by a dedicated bus service. It features direct flights to many cities all over Europe.

The Eindhoven University of Technology is located in the heart of the city, adjacent to the railway station. All hotels in the city center are within walking distance.

The Evoluon, the venue of the Conference Banquet, is the building pictured on the front page of this announcement. It is located at the edge of the city.

## Programme

The programme of the joint conference will be fully integrated in that each of the conference sessions will be organised around themes of interest to both communities. The full-day programmes on Monday, Tuesday, Thursday and Friday will each feature lectures originating from either community organised around the chosen themes. Wednesday's morning's session is reserved for topics important to the development of lighting science and technology in general. Wednesday afternoon is kept free, allowing laboratory and social visits, sightseeing trips, etc., to be arranged ahead of the conference banquet in the evening.

The conference programme will commence on Sunday afternoon at 16.30 with two introductory keynote lectures.

## Lectures and posters

The conference comprises keynote lectures of 50+10 minutes duration, invited lectures of 25+5 minutes, and landmark lectures, either invited or selected from contributed papers, of 10+5 minutes.

All posters will be displayed throughout the entire week of the joint conference. On each of the full programme days there will be one poster session of one hour duration in the morning, and one session of two hours at the end of the afternoon. During the afternoon poster sessions, beer, soft drinks and nibbles will be provided. Authors of posters are invited to attend their posters for the full day on which these are scheduled in the programme; on the other days poster authors are free to view and discuss the other posters. In this way, everyone attending the conference can make a personal plan for visiting posters at times when the authors will be present to answer questions.

## Call for papers

On the website of the conference, ([www.ls-wled.org](http://www.ls-wled.org)), sample files can be found for the contributed papers in both Word and LaTeX formats. The paper should be submitted as PDF. The maximum for contributed papers is two pages, but the maximum of the PDF file to be submitted is 1 Megabyte.

It is planned that all contributed papers are submitted via the conference website following the opening of this facility on the site on December 15<sup>th</sup>, 2009. Two templates for the Contributed Papers and Invited Papers will be provided, one in MS-Word, the other in LaTeX. The papers should be converted to PDF format before submitting. Following the receipt of a contribution, it will be sent to members of the LS-12 International Scientific Committee and the WhiteLED-3 Programme Committee for refereeing, a process that will be coordinated by the LS12-WhiteLED3 Refereeing Manager. Approximately one week after submission of a contribution, the corresponding author will be notified on the acceptance status which may include in its outcomes, if recommended by referees, a request for re-editing.

Deadline for paper submission is March 15, 2010.

## Topics of the conference

- Reviews of lighting science and technology
- Lamp and luminaire design
- Modelling and simulation (optical, thermal, electronic, plasma)
- Novel light source technologies
- Diagnostics
- Driver design
- Environmental aspects, including energy efficiency, life cycle issues and green technologies
- Standardization
- Light source quality and metrology
- Phosphors and other light source related materials
- Biological effects of light: including human perception and mesopic vision
- Special lighting applications: including automotive, medical applications and horticultural

## Invited Lectures

The keynote lecturers of Sunday Evening, July 11, will be:

- Wim van den Hoek, *Museum 'Philips Incandescent Lamp Factory of 1891'*: Notes on the history of incandescent lamps
- Dave Irvine-Halliday, *University of Calgary*, Light-up the word: LEDs for under-development counties

The combined International Scientific Committees of the two conference have agreed on the following invited speakers (in alphabetical order):

- Kanji Bando, *Nichia Corporation*, High-luminous efficacy of white LEDs
- Dietrich Bertram, *Philips Lighting*, OLED current status
- Francis Dawson, *University of Toronto*, Ballasts and drivers for conventional and solid state light sources
- Robin Devonshire, *the University of Sheffield*, The competitive technology environment for LED lighting
- Anil R. Duggal, *GE*, Roll-to-roll OLED
- Gary Eden, *University of Illinois*, Microplasmas for lighting
- Liisa Halonen, *Helsinki University of Technology*, New CIE mesopic photometry – impacts on the use of white light in outdoor lighting'
- Joop Hendricx, *Philips Lighting*, Next generation CDM lamps
- Joep Jacobs, *Philips Lighting*, Drivers for OLEDs
- Marco Käning, *Osram*, Hg Free HID lamps
- Junji Kido, *Yamagata University*, High-performance organic white LEDs
- Michael Kneissl, *Technical University of Berlin*, UV LED's
- Walter Lapatovich, *Osram Sylvania*, Electrodeless technology overview
- Wu Ling, *China Solid State Lighting Alliance*, Status and development of SSL in China
- Scott Matthews, *Carnegie Mellon University*, Life cycle assessment
- Andy Monkman, *Durham University*, OLED Technical challenges and the chemistry involved
- Michele Muccini, *CNR Italy*, Organic light emitting field effect transistors
- Joost van der Mullen, *Eindhoven University of Technology*, Plasma modelling for light sources
- Kristian Rackow, *INP Greifswald*, Emitter erosion in fluorescent electrodes
- Mark Rae, *Lighting Research Center, Rensselaer Polytechnic Institute*, Light, health and well-being
- Masaru Sasaki, *Koito*, Automotive lighting with LEDs
- Kunihide Tachibana, *Ehime University*, Plasma diagnostics
- Paul Wade, *International Energy Agency, Paris*, Energy consumption for lighting
- Robert Withnall, *Brunel University*, New phosphors
- C.C. Yang, *National Central University Taiwan*, LED light extraction and optical modelling

## Social events

On Monday evening, from 18:00, a welcoming get-together party with drinks and nibbles will be held in the Main Hall of the Auditorium of the Eindhoven University of Technology. The party will kick-off with a 30 minute organ concert in the main hall by the Eindhoven University of Technology Titular Organist, Jan Verschuren.

The conference banquet (included in the conference fee) will be held on Wednesday evening in the Evoluon (see *the photograph at the beginning of this announcement*). This is a landmark building on the outskirts of Eindhoven, which has served as a museum for science and technology until 1989, and is now used as a conference centre. Buses will transport delegates between the University campus and the Evoluon and, following the banquet, return them to their respective hotels.

## Industrial Forum

During the conference, an industrial forum will be organized. This forum will feature several invited contributions from the lighting industry. The topic will be: *current challenges in lighting systems in view of the rapid developments in solid state lighting*.

## Satellite events

Several satellite events will be organized in conjunction with the conference:

- A visit to several test beds, developed by the Eindhoven Top Technological Institute on Intelligent Lighting
- A discussion forum on “Challenges in Intelligent Lighting”, chaired by prof. Emile Aarts (Philips)
- A discussion forum on “Human perception of lighting systems”, chaired by Dr. Yvonne de Kort (TUE)
- A theme evening entitled: “SSL Development in China: Opportunities and Challenges”. A high level Chinese delegation headed by Ms. Ling Wu, the secretary general of Chinese SSL Alliance, will give three presentations covering important subjects such as the strategy and overview of SSL innovations in China, Chinese SSL industry and business development trends, Chinese SSL standards and testing effort, etc. A panel discussion will also be held so that audiences will have chance to engage directly with the government, academia and business leaders of Chinese SSL community.

The organizers welcome any additional suggestions for Satellite events that could be entertained around or during the conference. Those interested can forward their ideas to the organizers.

# Committees

## Conference chairs of the joint LS12-WhiteLED3

Prof.dr.ir. G.M.W. Kroesen	Eindhoven University of Technology
Prof.dr. T. Taguchi	University of Yamaguchi, Japan

## LS-12 co-chairs

Prof.dr. ir. M. Haverlag	Philips Lighting
Prof.dr. K. Tachibana	Ehime University, Japan

## WhiteLED-3 co-chairs

Prof.dr. I.T. Ferguson	Georgia Institute of Technology, USA
Prof.dr. C.C. Yang	National Taiwan University, Taiwan

## Local Organizing Committee

Prof.dr.ir. G.M.W. Kroesen	Eindhoven University of Technology (Chair)
Prof.dr.ir. M. Haverlag	Philips Lighting (Secretary)
Dr.ir. H.J. Gielen	Philips Lighting (Treasurer)
Prof.dr. P. Awakowicz	Ruhr-University Bochum
Prof.dr. R. Coehoorn	Philips Research
Dr. R Geens	Havells Sylvania
Dr. D. Eissler	OSRAM-OS
Dr. U. Hechtfischer	Philips Research
Dr. H.T. Hintzen	Eindhoven University of Technology
Dr. C. Hoelen	Philips Lighting
Prof.dr. J.J.A.M. van der Mullen	Eindhoven University of Technology
Prof.dr. C. Ronda	Philips Research
Prof.dr. G.Q. Zhang	Delft University of Technology and Philips Lighting
TU/e Congress Office	Eindhoven University of Technology

## **International Symposium on the Science and Technology of Light Sources**

### **International Committee**

R. Devonshire	Sheffield University, UK (Chair)
G. Zisis	Laplace Laboratory, Toulouse University, France (Secretary)
E. Arnold	Heraeus Noblelight, Germany
T. R. Brumleve	APL Engineered Materials, Inc. USA
J. T. Dakin	GE Lighting, USA
M. Haverlag	Philips Lighting, Netherlands
M. Jinno	Ehime University, Japan
J. Lawler	University of Wisconsin, USA
L. Brock	OSRAM Sylvania, USA
M. Q. Liu	Fudan University, China
J. Maya	Consultant, USA
H. Schöpp	INP Greifswald, Germany
C. Stewart	Welch Allyn Inc, USA
J. Stocks	SLI Lighting Ltd, UK
T. Taguchi	University of Yamaguchi, Japan
Y. Yuge	Consultant, Japan

## **International Conference on White LEDs and Solid State Lighting**

### **International Committee**

T. Taguchi	University of Yamaguchi, Japan (Chair)
I. Ashdown	Philips, Canada
S.P. den Baars	UCSB, USA
R. Devonshire	Sheffield University, UK
I.T. Ferguson	Georgia Institute of Technology, USA
G.M.W. Kroesen	Eindhoven University of Technology, The Netherlands
V. Haerle	OSRAM-OS, Germany
M. Jinno	Ehime University, Japan
J. Kido	Yamagata University, Japan
W. Ling	SSL Alliance, China
M. Liu	Fudan University, China
Y. S. Liu	National Tsing Hua University, Taiwan
Y. Luo	Tsinghua University, China
S.K. Min	Kyung Hee University, Korea
S. Nakamura	UCSB, USA
N. Narendran	Rensselaer Polytechnic Institute, USA
F. Orito	MCC, Japan
W.N. Wang	University of Bath, UK
C.C. Yang	National Taiwan University, Taiwan
Y.M. Yu	KOPTI, Korea
G. Zisis	LAPLACE, France

## Important dates:

Opening of paper submission and refereeing	December 15 <sup>th</sup> , 2009
Deadline for paper submission	March 15, 2010
Deadline for early registration	April 12, 2010

## Registration

	Before April 12, 2010	After April 12, 2010
Regular delegate	€ 500	€ 600
Student	€ 300	€ 400

The registration fee covers lunches during the conference days, all conference materials, one copy of the proceedings, coffee or tea during the breaks, the get-together party and the conference banquet.

Registration for the conference will be possible via the conference web site [www.ls-wled.org](http://www.ls-wled.org) from January 1st, 2010.

## Contact information

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**Conference website:** [www.ls-wled.org](http://www.ls-wled.org)