Science and Technology of Light Sources

SATelights

Newsletter Issue 10

Newsletter Contents

Editorial

Dear colleagues

In this tenth issue of SATeLightS (Science and Technology of Light Sources) the reader will find a wealth of research information in the form of bibliographic updates.

Some of the sections include titles from a **featured journal**, new **announcements** related to the listed **Events** and information regarding recently published **books**.

The familiar section of **Selected Links** is also included with news from the world of artificial light sources.

The issue also contains **samples** from the latest **Phasma Solutions publications** Electric Discharge Lamps – New Millennium Edition and Organic Light Emitting Diodes.

At the end of the issue you can find the covers of this season's publications by Phasma Solutions that are offered for free or with major discounts to the subscribers and supporters of SATeLightS.

I wish you all success with your current projects and thank you once again for your support and enthusiasm regarding the services of Phasma Solutions to the Light Sources research community.

My best regards and wishes for a creative and successful new year

Spiros Kitsinelis

April 2010

Sample of EDL

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Sample of OLED

Organic light Emitting Diodes

Pharma Solutions

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You can support this project by sending your work in titles. This includes any kind of publications and announcements. You can also forward this newsletter to your colleagues and ask them to send their email addresses if they want to be added on the email list. Any messages or material related to the field are welcomed as it is intended to create a Light Sources periodical with a wide range of topics. Any questions, suggestions or requests can be sent to the project coordinator at skitsinelis@ath.forthnet.gr

Announcements

As part of the EU supported **VAMDC database project** which is part of the FP7 "Research Infrastructures - INFRA-2008-1.2.2 - Scientific Data Infrastructures" initiative (See http://www.vamdc.org/), we will host a mini symposium entitled **"Atomic and Molecular data needs for lighting"** immediately **after the 20th ESCAMPIG** meeting in Novi Sad, Serbia (**July 17th, 2010**) to discuss atomic and molecular data needs for the lighting industry. We welcome anyone attending ESCAMPIG to attend the symposium and participate in the discussion but numbers are limited by the venue so please indicate if you plan to participate by **sending an email to Prof. Nigel Mason n.j.mason@open.ac.uk** with **Subject: Lighting at ESCAMPIG**.

The light source manufacturing industry (and lighting in general) is in the midst of an unprecedented shift in its technology focus as it seeks more energy efficient sources.
In general the systems of continuing interest are:

- Low pressure Hg-rare gas "fluorescent" lamps
- Low pressure Hg-free fluorescent lamps
- High pressure metal halide lamps
- Electrodeless high pressure metal halide lamps
- High pressure sodium lamps

Measurement and modelling of these systems therefore will continue to be of interest with the focus being to increase their performance. Such improvements will, in part, come from a better understanding of atomic and molecular species, e.g as found in metal halide lamps and quantification of their spectroscopic, transport, and thermochemical properties.

XX European Conference on the Atomic
and Molecular Physics of Ionized Gases
13 - 17 July 2010, Novi Sad, Serbia
http://www.escampig2010.ipb.ac.rs

LS12 White LED 3

LS:12
The 12th International Symposium on the Science and Technology of Light Sources
and
White LEDs 3
The 3rd 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 11th to Friday, July 16th, 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), 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 15th, 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.

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*, Affordable SSL for the developing world
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, *Carnegy 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.

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 Asia: Opportunities and Challenges”. The evening is organized by Ms. Ling Wu, the secretary general of the Chinese SSL Alliance. Among the participants is a high level Chinese delegation. More details will be made available via the conference website.
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.

Contact information

Address all conference correspondence to:
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Telephone: +31 40 2474000
Telefax: +31 40 2458195
email: congressoffice@tue.nl or ls-wled@tue.nl

Conference website: www.ls-wled.org

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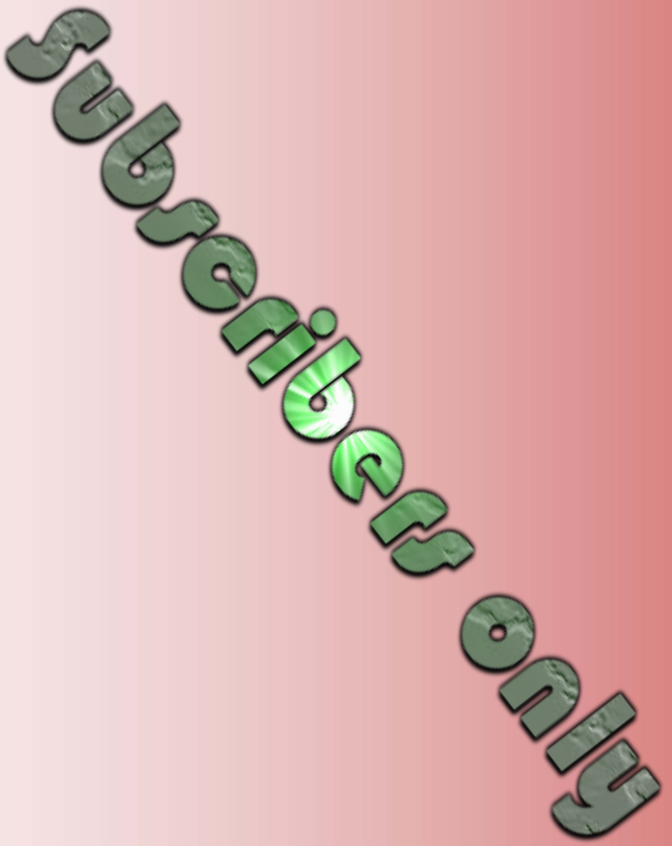
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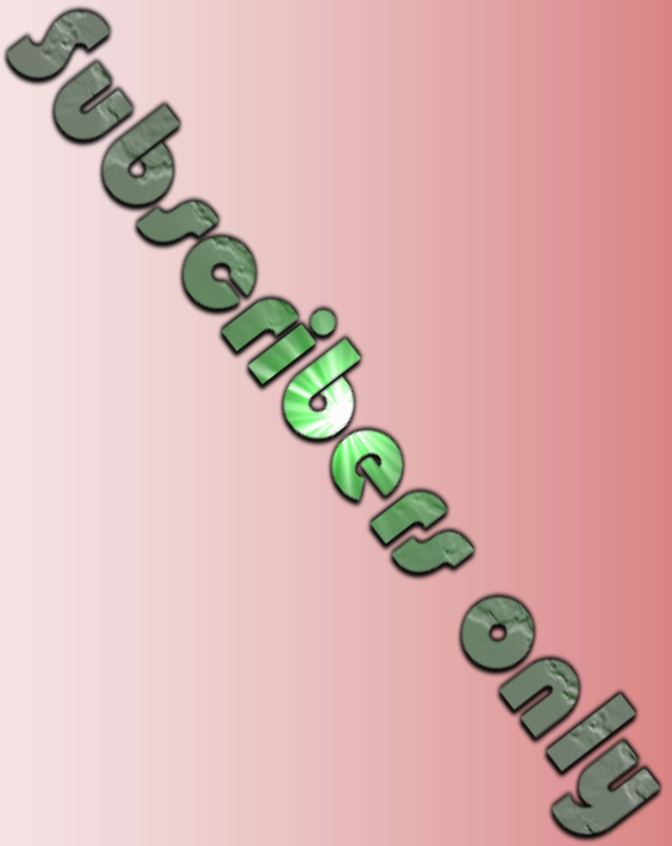
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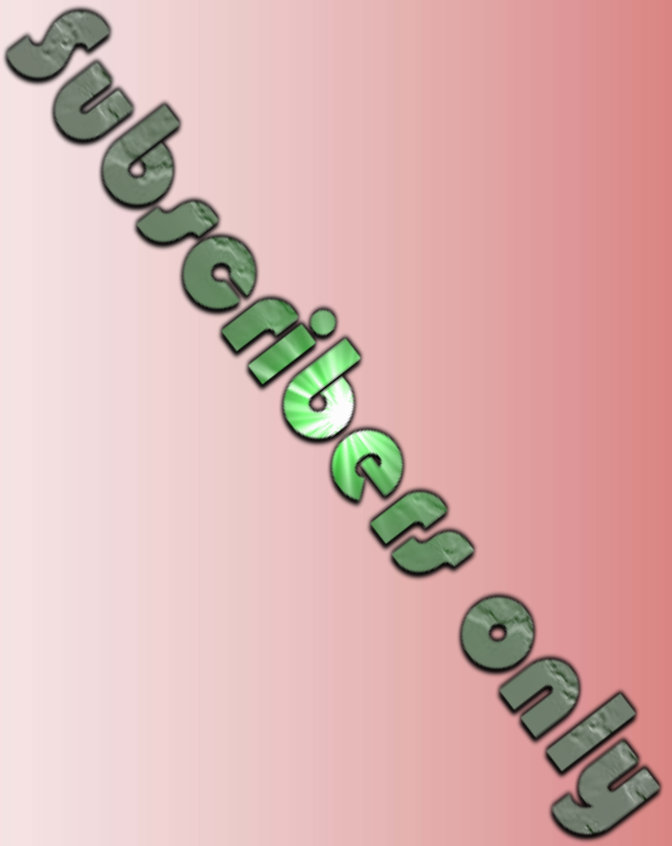
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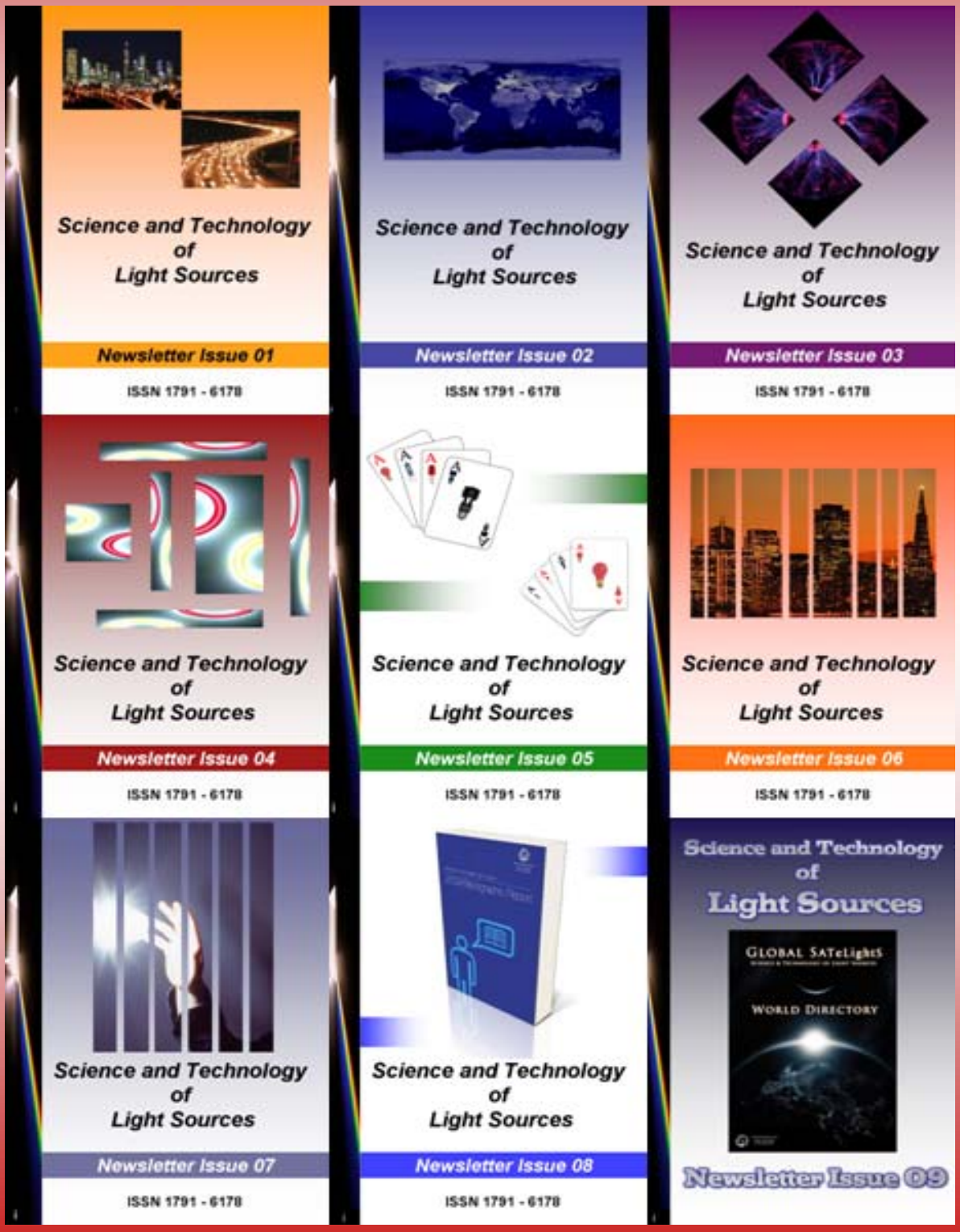

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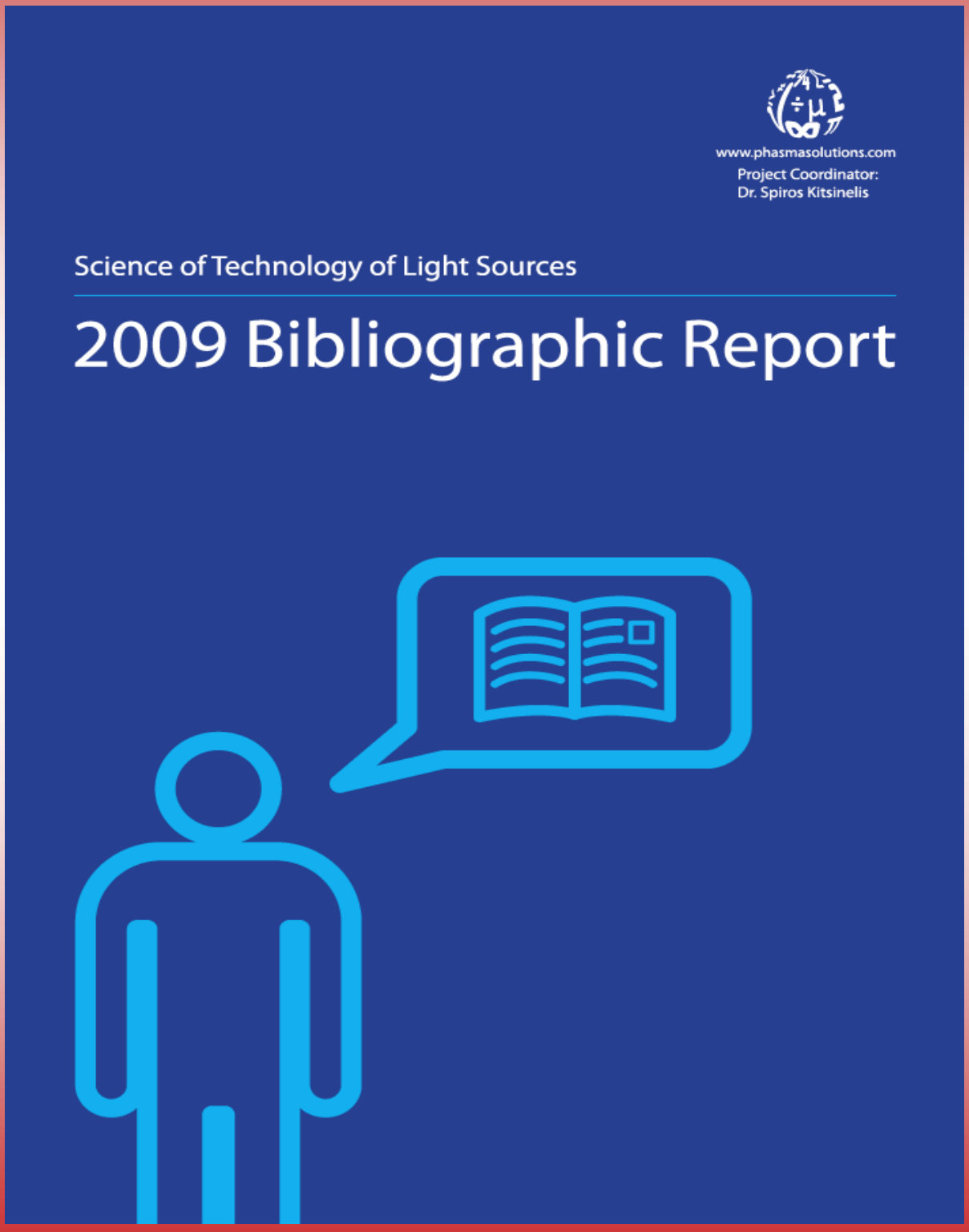

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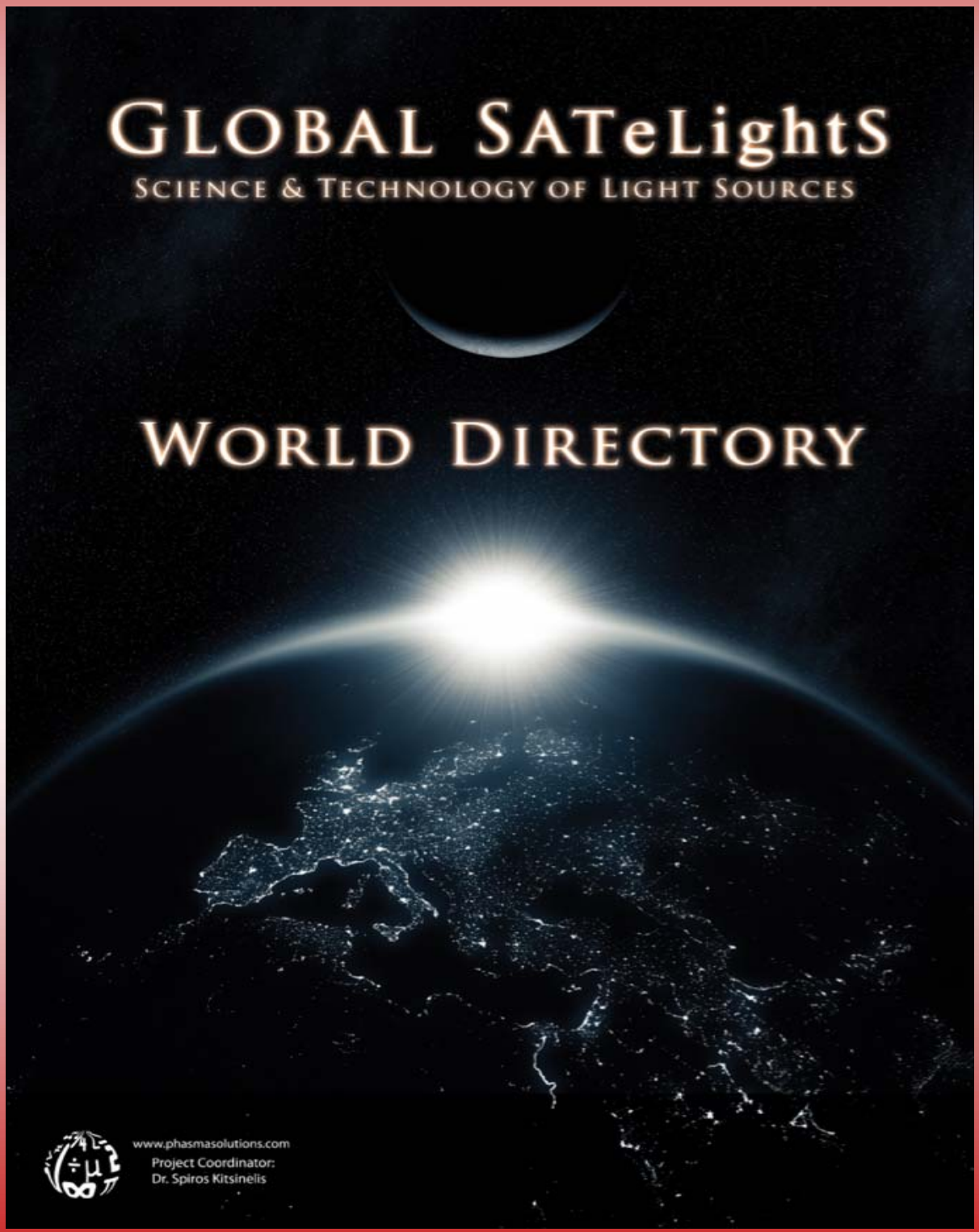


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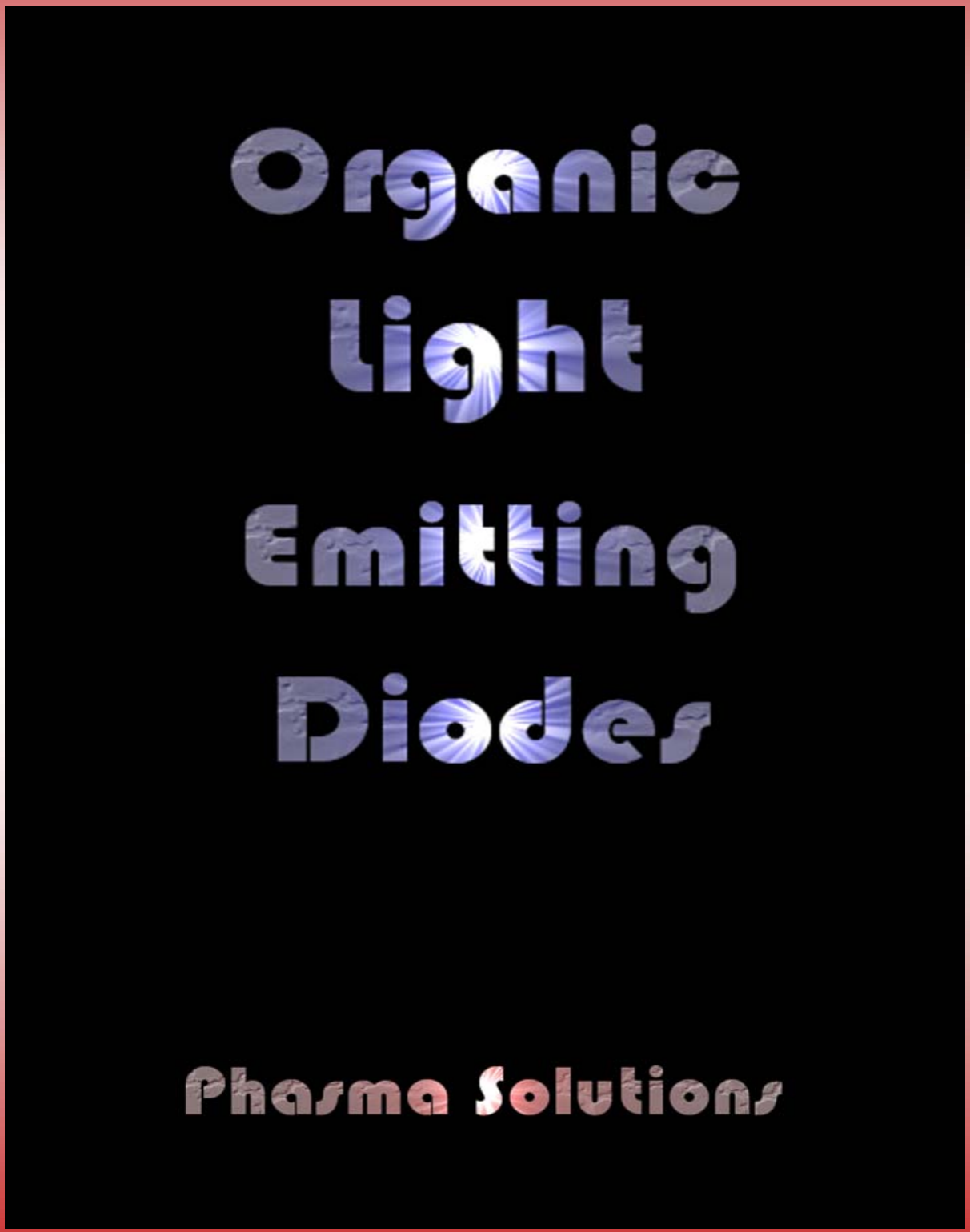

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