

# Final Call for Papers

# LEDIA '17



## The 5th International Conference on Light-Emitting Devices and Their Industrial Applications

<http://ledia17.opicon.jp/>

**Co-located with**  
Optics & Photonics International Congress 2017 (OPIC2017)

**Sponsored by**  
Akasaki Research Center (ARC), Nagoya University

**In cooperation with**  
The Illuminating Engineering Institute of Japan (IEIJ)

Japan LED Association (JLEDS)

Optoelectronics Industry and Technology Development  
Association (OITDA)

The 125<sup>th</sup> Committee on Mutual Conversion between Light &  
Electricity, Japan Society for the Promotion of Science

The 162<sup>nd</sup> Committee on Wide Bandgap Semiconductor Photonic  
& Electronic Devices, Japan Society for the Promotion of Science

**April 19 (Wed.) – 21 (Fri.), 2017**  
**Pacifico Yokohama**  
**Yokohama, Kanagawa, Japan**

**Paper Deadline: Jan. 26 (Thu.), 2017**

## INTRODUCTION

Light-emitting diodes (LEDs) and laser diodes (LDs) have been attracting much attention for the application to solid-state lighting. In order to meet the rapid increase in the application fields, the discussion opportunities between the device developers and material scientists are required. We are pleased to announce that the 5th International Conference on Light-Emitting Devices and Their Industrial Applications (LEDIA '17) will be held at Pacifico Yokohama, Kanagawa, Japan, on April 19 - 21, 2017. LEDIA '17 provides a platform for scientists and engineers to discuss progress and future trends in the rapidly advancing science and technology of wide bandgap semiconductors for LEDs and their applications. Their applications into visible and ultraviolet LEDs and LDs are also included in the scope of this meeting. LEDIA '17 is sponsored by Akasaki Research Center (ARC), Nagoya University.

## SCOPE

LEDIA '17 covers the wide-bandgap semiconductors and LED/LD technologies in the following major topical fields;

- A. Wide bandgap semiconductors**  
Growth of GaN-based materials, oxides for LED, GaN, AlN, ZnO and their related substrates
- B. Fabrication of light-emitting diodes and its process**  
White, UV, visible and IR LEDs and LDs, including micro cavity and photonic crystals
- C. Characterization of LEDs and their related materials**  
Quantum efficiency, efficiency droop, luminescence, color conversion
- D. Industrial application of LEDs/LDs**  
Solid-state lighting, display, LED/LD integration, agricultural applications
- E. Novel materials and device structures for solid-state lighting**  
Inorganic/organic hybrid materials for solid-state lighting, quantum dot, plasmon

## INVITED SPEAKERS

The conference will be organized as invited, contributed talks and posters. The speakers of invited and tutorial talks are listed below. Some contributed papers may be upgraded to invited ones depending on the rating scores.

### Special Session

**TOPIC: “Novel Quantification Methods of Internal Quantum Efficiency (IQE) of Nitride Semiconductors”**

**K. Kojima<sup>1</sup>, H. Ikeda<sup>2</sup>, K. Fujito<sup>2</sup> & S.F. Chichibu<sup>1</sup>**  
<sup>1</sup>*Tohoku Univ.*, <sup>2</sup>*Mitsubishi Chemical Corp. (Japan)*

“Omnidirectional photoluminescence (ODPL) measurement utilizing an integrating sphere”

**S. Usami, Y. Honda & H. Amano** *Nagoya Univ. (Japan)*

“Photocurrent and Photoluminescence Measurements for InGaN Based LED”

**A.A. Yamaguchi<sup>1</sup>, T. Nakano<sup>1</sup>, S. Sakai<sup>1</sup>, H. Fukada<sup>1</sup>, Y. Kanitani<sup>2</sup> & S. Tomiya<sup>2</sup>**

<sup>1</sup>*Kanazawa Inst. of Tech.*, <sup>2</sup>*Sony Corp. (Japan)*

“Simultaneous Photo-Acoustic and Photoluminescence Measurements for InGaN Quantum Wells”

### Invited Speakers

**Z. Sitar** *North Carolina State Univ. (USA)*

“Advances in AlGaIn-Based Laser Diodes”

**Y.G. Park** *Seoul National Univ. (Korea)*

“Growth and Optical Characteristics of GaN-based LED on Cavity-Engineered Sapphire Substrate”

**C. Durand** *CNRS (France)*

“Multi-Color Flexible LED Based on Nitride Nanowires”

**Y.H. Cho** *KAIST (Korea)*

“Classical and Quantum Light Generation Using Nano- and Micro-Structured Nitride Semiconductors”

**T. Araki** *Ritsumeikan Univ. (Japan)*

“Evaluation of Nitrides Semiconductors Using Terahertz Time-Domain Spectroscopic Ellipsometry”

**T. Kageyama<sup>1</sup>, M. Sugawara<sup>3</sup> & Y. Arakawa<sup>1,2</sup>**  
<sup>1</sup>*NanoQuine, The Univ. of Tokyo*, <sup>2</sup>*IIS, The Univ. of Tokyo*, <sup>3</sup>*QD laser (Japan)*

“Recent Progress in Quantum Dot Lasers”

**M. Krames** *ARKESSO, LLC (USA)*

“Status and Prospects for Wide Bandgap LEDs / Lasers and Their Applications”

**T. Oshima** *Saga Univ. (Japan)*

“Growth and Characterization of (Al,Ga)<sub>2</sub>O<sub>3</sub>-Based Alloy and Heterostructures”

### Tutorial Lecturer

**A. Uedono** *Univ. of Tsukuba (Japan)*

“Study of Point Defects in Nitrides and Oxides by Means of Positron Annihilation”

## PROGRAM

The conference has invited, oral and poster session. The OPIC reception will be held at the evening on 19<sup>th</sup> April. This timetable is tentative, so that latest information on the conference will be presented on the Web site:

<http://ledia17.opicon.jp/>

LEDIA '17 (Tentative program at a glance)

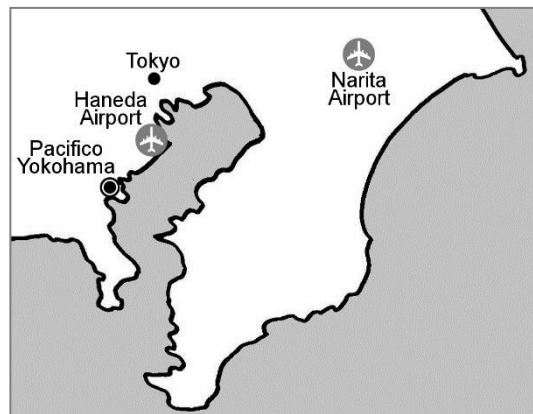
	Apr. 19(Wed.)	20 (Thu.)	21(Fri.)
9:00		Invited	Invited
10:00			
11:00		Oral Session	Oral Session
12:00			
13:00	Opening	Lunch	Lunch
14:00	Special Session	Oral Session	Invited
15:00	Oral Session		Oral Session
	Break	Break	Break
16:00		Poster Session	Oral Session
17:00	Oral Session		Tutorial
			Closing



## LOCATION OF CONFERENCE SITE

### From overseas

The LEDIA '17 takes place at Pacifico Yokohama, Yokohama city, Kanagawa prefecture, JAPAN. Yokohama city, the center of Kanagawa prefecture is located south of Tokyo. Pacifico Yokohama is conveniently located about 40 min. from Haneda Airport\* and 90 min. from Narita Airport\*\*. Airport Limousine Bus directs to Pacifico Yokohama is available.



\*) From Haneda Airport  
Keikyu Bus (40 min.)

<http://www.keikyu-bus.co.jp/keikyu-bus/airport/guide.html>

\*\*) From Narita Airport  
AirportLimousine (90 min.)

<http://www.limousinebus.co.jp/en/>



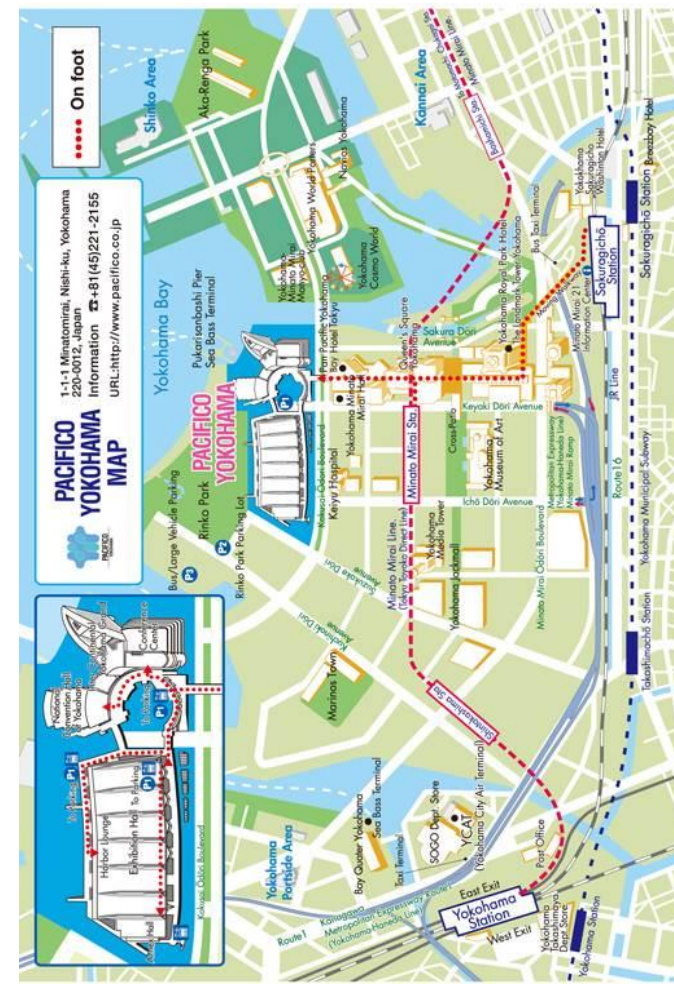
### Access from the nearest stations

- 1. Minato Mirai Line:** 3-minute walk from "Minato Mirai Station"
- 2. JR or Subway Line:** 12-minute walk, 7 minutes by bus or 5 minutes by taxi from "Sakuragicho Station"
- 3. Sea Bass (boat):** 10 minutes from "Yokohama Station"

### Pacifico Yokohama

1-1-1 Minato Mirai, Nishi-ku, Yokohama 220-0012, Japan

<http://www.pacifico.co.jp/english/>





## SUBMISSION OF PAPERS

**Abstract deadline: January 26, 2017.**

Authors will be requested to submit **1-2 page** abstract written in English, within a frame of 17 cm x 24 cm. The abstract will be included in both the paper-based and the electronic version of the abstract book.

Original papers that have not been previously presented and that describe new technical contributions to the areas covered by the technical descriptions in the aforementioned scope will be accepted for presentation.

Papers should be submitted electronically, **no later than January 26, 2017**. A detailed instruction and the paper template are available from the following Web site:

[http://paper.opicon.jp/ledia\\_paper/](http://paper.opicon.jp/ledia_paper/)

## POST DEADLINE PAPERS

A limited number of post deadline papers will be accepted for presentation at post deadline sessions. Latest significant results obtained after the regular deadline are most welcome. The deadline for submission of the paper is **February 28, 2017**.

## OFFICIAL LANGUAGE

The official language of LEDIA '17 is English.

## ORAL PRESENTATIONS

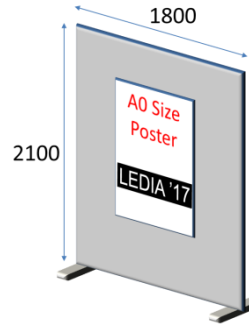
The time allotted to each presentation will be:

Invited Talks: 25-minute talk + 5-minute discussion.

Contributed Talks: 10-minute talk + 5-minute discussion.

## POSTER PRESENTATIONS

In addition to regular oral presentation sessions, poster presentation session will be planned to stimulate detailed explanation and discussion. The size of the poster board is 180 cm in a width and 210 cm in a height. We recommend the authors to use A0 size (84.1 cm in a width, 118.9 cm in a height) paper/cloth to prepare their posters. Necessary tools for pinning the posters will be provided.



## PAPER AWARD

A few papers will be selected for the "Paper Award" for young researcher. Around 10 papers will be nominated for the award based on the program committee's ratings of the abstracts. The paper award will be judged from their presentations and announced at the closing to be held on the last day. (April 21, Friday).

## EXHIBITION

OPTICS & PHOTONICS International Exhibition 2017 will be held simultaneously on April 18 (Tue)-21 (Fri) at Pacifico Yokohama.

## OPTICS & PHOTONICS INTERNATIONAL CONGRESS 2017 (OPIC 2017)

Eleven international conferences are going to be held simultaneously. By registering for LEDIA '17, you can participate in all international conferences.

ALPS'17 (The 5th Advanced Lasers and Photon Sources)

BISC'17 (Biomedical Imaging and Sensing Conference 2017)

CLES/LANSA'17 (Conference on Laser Energy Science)

HEDS2017 (International Conference on High Energy Density Science 2017)]

ICNN2017 (International Conference on Nanophotonics and Nanooptoelectronics)

IP'17 (Information Photonics 2017)

LDC'17 (Laser Display and Lighting Conference 2017)

LNPC'17 (Light driven Nuclear-Particle physics and Cosmology)

LSSE2017 (Laser Solution for Space and the Earth)

OMC'17 (The 3rd Optical Manipulation Conference 2017)

XPOT'17 (International Conference on X-ray optics, detectors, sources, and their applications 2017)

## REGISTRATION

### Registration Fees (Membership \*)

	Before/On Mar. 21, 2017	After Mar. 22, 2017
Conference (General)	JPY55,000	JPY60,000
(Student, Retiree)	JPY18,000	JPY21,000

\*) Member of organizer, sponsor and cooperative societies

### Registration Fees (Nonmember)

	Before/On Mar. 21, 2017	After Mar. 22, 2017
Conference (General)	JPY65,000	JPY70,000
(Student, Retiree)	JPY21,000	JPY23,000

### Registration includes

- Access to the Plenary Sessions on April 19, 2017, all the other conferences and exhibition from April 18 to 21, 2017.
- A printed copy of OPIC2017 program and a copy of the conference abstract that you have registered.

\*Note: Conference registrants can purchase extra copies of other Conference abstracts for JPY3,000 each.

\*\*\*) Online registration will be started in December 15, 2016.

<http://opicon.jp/registration/online-registration/>



## PAYMENT

Payment should be made by no later than April 10, 2017. Payment Method will be by Credit Card or PayPal through online. On-site registration is available, but very limited. We recommend the online payment in advance.

## ACCOMMODATION

Accommodation information has been provided by OPIC. Please access below web site.

<http://opicon.jp/travel/accommodation/>

## CANCELLATION

No refund will be made for cancellations for any reason. If the registered participant is unable to attend, a substitute participant may be allowed provided prior notification is made to the OPIC2017 Secretariat by March 1, 2017 or a copy of OPIC2017 program booklet and the conference abstracts of your choice will be mailed to the registered address upon request.

## PASSPORT AND VISA

All foreign visitors entering Japan must possess a valid passport. Participants from countries required a visa to enter Japan should obtain one from his/her nearest Japanese embassy or consulate in due time. Please contact workshop secretary for requesting documents to be issued by the conference for visa application (invitation letter, etc.),

\*) Visa support will be given only to those whose papers are accepted for paper/poster presentations.

\*\*) For information about Japanese visas, please visit

<http://opicon.jp/travel/information/>

## FURTHER INFORMATION

The latest information on the conference will be presented on the Web site:

<http://ledia17.opicon.jp/>

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*(Secretary of Executive Committee)*

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