“International Conference and Exhibition on Visible Light Communications 2015 - Emphasis on Image Sensor Communication”, presented by Visible Light Communications Association (VLCA) in Japan, offers a unique opportunity for researchers and developers from academia and industry to share ideas about visible light communication.

**Conference: “International Conference and Exhibition on Visible Light Communications 2015”**

Organized by: Visible Light Communications Association, Japan

Sponsored by:
- Ministry of Internal Affairs and Communications, Japan
- The Telecommunications Advancement Foundation, Japan

Under the auspices of:
- IEICE (the Institute of Electronics, Information and Communication Engineers), Japan
- IEEE ITS Society Tokyo Chapter
- Ubiquitous Communication Laboratory of Keio University SDM, Japan
- Yokohama Convention & Visitors Bureau, Japan

✧ Conference and Exhibition Chair: Emeritus Professor Masao Nakagawa of Keio University

✧ Technical Program Committee:
  - (TPC Chair) Professor Shinichiro Haruyama of Keio University
  - (TPC Vice Chair) Professor Takaya Yamazato of Nagoya University, and Academic member of VLCA
  - Professor Harald Haas, University of Edinburgh, UK
  - Professor Thomas Little, Boston University, USA
  - Emeritus Professor Mitsuji Matsumoto, Waseda University, Japan
  - Professor Dominic O’Brien, University of Oxford, UK
  - Mr. Richard D. Roberts, Intel Corporation, USA
  - Professor Zhengyuan (Daniel) Xu, University of Science and Technology of China, China

✧ Secretariat: Research Assistant Professor Shuji Suzuki, Keio University, and Secretariat of VLCA

**Location**

All events will be held at Hiyoshi Campus of Keio University: [http://www.keio.ac.jp/en/maps/hiyoshi.html](http://www.keio.ac.jp/en/maps/hiyoshi.html)

Conference: CDF room (C3S10) on the 3rd floor of Collaboration Complex Building at Hiyoshi Campus.

Exhibition: Event Terrace and Gallery on the 1st floor of Raiosha Building at Hiyoshi Campus.

Party: Faculty Lounge on the 1st floor of Raiosha Building at Hiyoshi Campus.

**Access to Hiyoshi Campus of Keio University by train:**

[Hiyoshi Campus Map](http://www.keio.ac.jp/en/maps/hiyoshi.html)

**Registration**

- Conference: 30,000 Japanese yen (25,000 yen for IEICE members).
- Exhibition: Free

Advance Program

October 25, 2015: Welcome Party

16:00 – 20:00 Registration at the entrance of Faculty Lounge on the 1st floor of Raiosha Building at Hiyoshi Campus.
18:00 – 20:00 Welcome Party at Faculty Lounge on the 1st floor of Raiosha Building at Hiyoshi Campus.

October 26, 2015: Conference, Exhibition, and Banquet

- **Conference:**
  - 08:00 – 09:00 Registration at CDF room (C3S10) on the 3rd floor of Collaboration Complex Building at Hiyoshi Campus
  - 09:00 – 09:10 Opening Remarks, Conference and Exhibition Chair, Emeritus Professor Masao Nakagawa of Keio University, Japan
  - 09:10 – 09:20 Guest Remarks, TBD, Ministry of Internal Affairs and Communications, Japan
  - 09:20 – 10:40 Technical Session 1: Image Sensor Communication, Session Chair: Professor Takaya Yamazato, Nagoya University, Japan
    - 09:20 – 09:40 Wataru Chujo, Tomoki Kondo, Ryotaro Kitaoka, Meijo University, Japan
      - “Improvement of Symbol Rate and Flicker-Free Performance of LED Visible Light Communication with Low-Frame-Rate CMOS Camera”
    - 09:40 – 10:00 Daiki Tanimoto¹, Koji Kamakura¹, Takaya Yamazato², Chiba Institute of Technology, ³Nagoya University, Japan
      - “Additional Bit Transmission Using Space Modulation in Layered Space Time Coded Visible Light Communications”
    - 10:00 – 10:20 Yuta Kawai¹, Takaya Yamazato¹, Hiraku Okada¹, Toshiaki Fujii¹, Tomohiro Yendo², Shintaro Arai¹, and Koji Kamakura¹, ³Nagoya University, ²Nagaoka University of Technology, ²National Institute of Technology, Chiba Institute of Technology, Japan
      - “Tracking of LED headlights considering NLOS for an image sensor based V2I-VLC”
    - 10:20 – 10:40 Takashi G Sato, Gabriel Pablo Nava, Yoshifumi Shiraishi, Takehiro Moriya, NTT Communication Science Laboratories, Japan
      - “Heart Rate Measurement Based on Event Timing Coding Observed by Video Camera”
  - 10:40 – 11:00 Break
  - 11:00 – 12:20 Technical Session 2: Circuits and Modulation, Session Chair: Emeritus Professor Mitsujii Matsumoto, Waseda University, Japan
    - 11:00 – 11:20 Karel L. Sterckx, Bangkok University, Thailand
    - 11:20 – 11:40 Nan Chi¹, Mengjie Zhang¹, Yiguang Wang¹, Xiaoqian Lu², ¹Fudan University, ²National Engineering Research Center for Broadband Networks & Application, China
      - “Experimental demonstration of high-speed WDM VLC systems employing high-order CAP modulation”
    - 11:40 – 12:00 Ameena Ejaz Aziz¹, Kainam Thomas Wong¹, Jung-Chieh Chen², ¹Hong Kong Polytechnic University, Hong Kong, ²National Kaohsiung Normal University, Taiwan
      - “Color-Shift-Keying Constellation-Design Case Studies”
  - 12:00 – 12:20 Atsuya Yokoi¹, Sangon Choi², Hiroki Mizuno¹, ¹Samsung R&D Institute Japan, Japan, ²Samsung Electronics, Korea
      - “A new image sensor communication system using Color Shift Keying”
  - 12:20 – 13:30 Lunch
  - 13:30 – 14:30 Invited Talks, Session Chair: Professor Yeon Ho Chung, Pukyong National University, Korea
    - 13:30 – 14:00 Invited Talk 1: Richard D. Roberts, Intel Corporation, USA
      - “Kick Starting the VLC Market via Optical Camera Communications”
    - 14:00 – 14:30 Invited Talk 2: Nobuo Iizuka, Casio Computer Co., Ltd., Japan
      - “Image Sensor Communication - Evolution, Now and Future”
    - Panelists: Yeong Min Jang, Kookmin University, Korea
      - Fahim Nawabi, Fraunhofer Institute for Communication, Heinrich Hertz Institute, Germany
      - Richard D. Roberts, Intel Corporation, USA
      - Nobuo Iizuka, Casio Computer Co., Ltd., Japan
    - Moderator: Shinichiro Haruyama, Keio University, Chairman of VLCA

- **Exhibition:**
  - 12:00 – 17:30 Exhibition of visible light communication will be held at Event Terrace and Gallery on the 1st floor of Raiosha Building at Hiyoshi Campus

- **Banquet:**
  - 18:00 – 20:00 Banquet at Faculty Lounge on the 1st floor of Raiosha Building at Hiyoshi Campus.

Contact email address: Visible Light Communications Association at [info@vlca.net](mailto:info@vlca.net)