1999 IEEE Workshop on Charge-Coupled Devices and Advanced Image Sensors

June 10-12, 1999
Karuizawa Prince Hotel, Karuizawa, Nagano, Japan

Sponsored by IEEE Electron Devices Society

In cooperation with:

The Institute of Image Information and Television Engineers(ITE)
NHK Science & Technical Research Laboratories
NEC Silicon Systems Research Laboratories

Welcome to Karuizawa

Welcome to the 1999 IEEE Workshop on Charge-Coupled Devices and Advanced Image Sensors in Karuizawa, Nagano, Japan. The purpose of the workshop is to discuss resent research results, provide in-depth discussion of common technical issues, and stimulate thinking about new research directions and activities.

This workshop is the seventh in a series that started in 1986 in Harriman, New York USA followed by Harriman, New York, USA in 1990(2nd), Waterloo, Ontario, Canada in 1991(3rd) and 1993(4th), Dana Point, California, USA in 1995(5th) and Bruges, Belgium in 1997. Now it is well established that it continues in various locations on a biannual basis. This, the 7th Workshop, is the first time to be held in Japan, where most of image sensors are being produced.

The 1999 Workshop is sponsored by the IEEE Electron Devices Society in cooperation with the Institute of Image Information and Television Engineers(ITE), NHK Science & Technical Research Laboratories, and NEC Silicon Systems Research Laboratories.

The Workshop on CCD and AIS is truly an international workshop. This time 20 papers of the 65 accepted papers are from North America, 17 papers from Europe, 24 papers from Asia and 4 papers by intercontinental collaborations. The program includes 17 papers on CCD, 36 on CMOS, active pixel sensors and smart sensors, 6 on non-visible sensors and 6 on common technical issues.

The Walter Kosonocky Award is started for the memorial of the great contribution to CCD and image sensors by Dr. Walter F. Kosonocky, who passed away on November 2, 1996. The first Walter Kosonosky Award is awarded during the 1999 Workshop on CCD and AIS.

On behalf of 1999 IEEE Workshop on Charge-Coupled Devices and Advanced Image Sensors Committee, we would like to thank the workshop committee members for their rewarding job they have done in planing and organizing the 1999 Workshop on CCD and AIS. The authors are commended for their interesting papers. The participants are welcome for their contribution to the exciting and interesting discussion.

Nobukazu Teranishi
General Chairman

1999 IEEE Workshop on Charge-Coupled Devices and Advanced Image Sensors

Organizing Committee

Nobukazu Teranishi (General Chairman, NEC Corporation, Japan)
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Kazuya Yonemoto (Sony Corp., Japan)

PROGRAM

1999 IEEE Workshop on Charge-Coupled Devices and Advanced Image Sensors

Thursday, June 10

Session 2. CMOS Image Sensors (I)

Chairman J. Nakamura (Olympus)

12:10 LUNCH

Session 3. CMOS Image Sensors (II)

Chairman B. Dierickx (IMEC)

6:10 pm -9:00 pm **POSTER VIEWING,** RECEPTION

Session 5. CMOS Image Sensors (III)

Chairman P. Wong (IBM)

9:55 COFFEE BREAK

Session 6. Non-Visible Image Sensors

Chairman D. McGrath (MIT)

Session 9. Discussion Session

Chairman E. Fossum (Photobit)

6:10 pm -7:20 pm

7:20 pm -9:30 pm DINNER

Saturday, June 12

Session 10. Walter Kosonocky Award

Chairman Albert Theuwissen (Philips)

8:15 am -8:45 am **Walter Kosonocky Award Presentation**

Session 11. CMOS Image Sensors (V)

Chairman P. Denyer (VVL)