



The 14th OPTOELECTRONICS AND COMMUNICATIONS CONFERENCE

Hong Kong Convention and Exhibition Centre

13 - 17 July 2009

The 14th OPTOELECTRONICS AND COMMUNICATIONS CONFERENCE

FINAL REPORT

The 14th OptoElectronics and Communications Conference (OECC 2009) was held successfully at the Hong Kong Convention and Exhibition Centre, Hong Kong SAR from 13 to 17 July 2009. The Conference was organized by The Hong Kong Polytechnic University and co-sponsored by the IEEE Hong Kong Section and the IEEE Photonics Society Hong Kong Chapter. The IEEE Photonics Society was the Technical Co-sponsor of the Conference.

Conference Program

The Conference program consisted of 4 Workshops, 7 Tutorial Sessions, 84 Invited Talks, 70 Technical Sessions (inclusive of 1 *Poster Session*, 1 *Postdeadline Paper Session*, and 3 *IEEE Student Paper Award Competition Sessions*).

Program-at-a-glance

Below is a program-at-a-glance depicting the week-long activities of the Conference.

Monday 13 July	Tuesday 14 July	Wednesday 15 July	Thursday 16 July	Friday 17 July
Workshops	Opening Ceremony and Plenary Session	Technical Sessions	Technical Sessions and Poster Session	Technical Sessions
	Technical Sessions			
Exhibitions				
Conference Reception	Harbour Tour	Conference Dinner	Postdeadline Paper Session	

Plenary Session (Tuesday, 14 July)

3 top-notch scholars and experts on optoelectronics and optical communications were invited to give plenary presentations.

- **Future of Solar Energy**, *Professor Martin Green, The University of New South Wales, Australia*
- **Innovative and Cost Effective Optical Components for Fiber Communications**, *Professor Wen Liu, FiberHome FuHua Electric Co. Ltd., China*
- **Future Directions of Optical Communications**, *Professor Alan Willner, University of Southern California, USA*

Workshops (Monday, 13 July)

4 Workshops have been arranged on Monday, 13 July with free admission. All the Workshops were very well received.

- **Specialty Optical Fibers, Where is the Next Big Breakthrough?**
Chair: Dr Liang Dong, *IMRA America, USA*
- **Optical Fiber Sensors: Overview and Opportunity**
Chair: Dr Alexis Mendez, *MCH Engineering, USA*
- **Power LED Materials and Devices for Solid-state Lighting**
Chair: Dr Shu Yuan, *ASTRI, Hong Kong*
- **Next-generation Broadband Optical Access – Future Challenges**
Chair: Prof. Chinlon Lin, *Nanyang Technological University, Singapore*
Co-chair: Prof. L.K. Chen, *The Chinese University of Hong Kong, China*

Technical Sessions (Tuesday, 14 July to Friday, 17 July)

6 parallel technical sessions were arranged from Tuesday, 14 July afternoon to Friday, 17 July, with morning session started at 8:30 a.m. and ended by 12:30 p.m. and afternoon session running from 2:00 p.m. to 6:00 p.m.. The seven technical categories and the breakdowns of the technical sessions for each category are given in the following:

- Emerging Technologies: 2
- Optical Fiber and Waveguide Devices: 13
- Optical Networks and Broadband Access: 13
- Optical Sensors and Systems: 10
- Optical Signal Processing: 7
- Optoelectronic Materials, Devices and Modules: 11
- Transmission Systems and Switching Technologies: 9

Poster Session (Thursday, 16 July)

A poster session was held in the afternoon of 16 July. There were a total of 80 papers accepted for poster presentation.

Tutorial Sessions (Tuesday, 14 July to Thursday, 16 July)

- **Fibre- and Waveguide-based Light Processing Devices**
John Love, *Australian National University, Australia*
- **Microwave Photonics**
Jianping Yao, *University of Ottawa, Canada*
- **Ultrafast Nonlinear Optics for Signal Processing: Breaking the Terabit-per-second Barrier**
Benjamin J. Eggleton, *University of Sydney, Australia*
- **VLSI Photonics: Science and Engineering of Micro/Nano-Photonic Integration**
El-Hang Lee, *INHA University, Korea*
- **Forward Error Correction in Optical Communication Systems**
Takashi Mizuochi, *Mitsubishi Electric Corporation, Japan*

- **Photonics Modeling of Components, Systems and Networks**
André Richter, *VPIsystems, Germany*
- **Optical Coding Theory**
Wing C. Kwong, *Hofstra University, USA*

Paper Acceptance

A good number of papers have been received for the Conference and accepted papers with valid registration will be included in the IEEE Conference Publications Program (CPP). The following gives the number of papers received, and the country and the technical category breakdowns for accepted papers.

- **Contributed Papers**
 - Submission: 444
 - Accepted: 360 (Oral – 280; Poster – 80)
 - Acceptance rate: 81%
- **Postdeadline Papers**
 - Submission: 21
 - Accepted: 7
 - Acceptance rate: 33%
- **Invited Papers**
 - Submission: 84

Accepted Papers (breakdown by country)

Invited and Accepted Contributed Papers			
Australia	30	Israel	1
Belgium	1	Italy	3
Canada	8	Japan	93
China	71	Malaysia	3
Denmark	6	Portugal	1
France	2	Korea	41
Germany	7	Singapore	10
Hong Kong	59	Spain	1
Hungary	1	Taiwan	53
India	6	The Netherlands	3
Iran	2	UK	12
Ireland	2	USA	28
Total			444

Accepted Postdeadline Papers	
Australia	3
China	1
Germany	1
Hong Kong	1
UK	1
Total	7

Accepted Papers (breakdown by technical category)

Technical Category	Invited Paper	Accepted			Total
		Oral	Poster	Postdeadline Paper	
Emerging Technologies	3	11	2	0	16
Optical Fiber and Waveguide Devices	12	74	36	1	123
Optical Networks and Broadband Access	19	52	10	1	81
Optical Sensors and Systems	14	39	8	0	61
Optical Signal Processing	10	26	7	2	43
Optoelectronic Materials, Devices and Modules	16	39	7	1	63
Transmission Systems and Switching Technologies	10	39	10	2	61
<i>Total</i>	<i>84</i>	<i>280</i>	<i>80</i>	<i>7</i>	<i>451</i>
<i>Grand Total</i>	<i>84</i>	<i>360</i>		<i>7</i>	<i>451</i>

Registration

The registration fee (HK\$5,500 for regular or on-site registration and HK\$2,000/HK\$1,600 for students) includes admission to all technical sessions, a program book, a CD-ROM proceedings and admission to the Conference Dinner (except for students who opt for the registration fee of HK\$1,600).

- Pre-registration: 445
- On-site registration: 23
- Total registration: 468

IEEE Student Paper Award Competition

The Student Paper Award Competition was sponsored by the IEEE Photonics Society. Students ought to be the first author giving an oral presentation of their accepted paper in the Conference in order to enter the competition.

The competition received an overwhelming response from students. In total 103 papers were received and 17 finalists were selected to give a presentation to compete for the award. 3 presentation sessions took place on 14 and 15 July with panel judges comprising of IEEE Photonics Society representative Prof. Lawrence Chen from McGill University and members from the 7 Technical Sub-Committees.

Finally 6 students were selected for the “OECC 2009 IEEE Best Student Paper Award”. All the 6 award winners were invited to the Conference Dinner to receive a Certificate and the cash prize of HK\$1000 (USD130) in person. All the other 11 finalists were given a Certificate of Merits.

Corporate Sponsorship

The Conference received great support from the following corporate sponsors.

- 1 Diamond Sponsor:
 - Nextrom Oy

- Bronze Sponsors:
 - Amonics Limited
 - BASAS Microelectronics
 - Luster Lightwave Co., Ltd.
 - Micron Optics
 - Specrys Ltd.
 - QEQest.com

Exhibition

An exhibition took place from 14 to 16 July in conjunction with the Conference. A total of 4 booth exhibitors and 7 tabletop exhibitors showcased their cutting edge technologies and the latest applications at this excellent occasion.

- Booth Exhibitors:
 - Amonics Limited
 - Nextrom Oy
 - Photonic Group of NICT, Tokyo (2 booths)
 - Yangtze Optical Fiber & Cable Ltd.

- Tabletop Exhibitors:
 - A & P Instrument Co., Ltd.
 - Alnair Laboratories Corporation
 - Dymek Company Ltd.
 - Micron Optics
 - PriTel Inc.
 - Santec
 - Southern Photonics Ltd.

Get Together Activities

A series of social activities were also organized for the Conference participants for networking and exchange.

- Conference Reception (Monday, 13 July)

- Harbour Tour (Tuesday, 14 July)

- Conference Dinner (Wednesday, 15 July)

With these activities, the OECC 2009 demonstrated to the participants Hong Kong's world-class facilities and hospitality services, as well as the rich cultural heritage of this Asia's World City.

Further Information on the Conference

Further information on the Conference can be found from the Conference website at <http://www.oecc2009.org>.

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