Photonics Society of Chinese-Americans
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Editors: Chun-Ching Shih and Su-Miau Shih
Contact: Tel (310) 814-0318; Fax (310) 812-4975; cc.shih@ngc.com
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Content

The Photonics Society of Chinese-Americans

I. Objectives

The Objectives of PSC are to promote friendships and collaborations among Chinese-American engineers and scientists in the field of photonics so that they can enhance their professional and business contributions for better quality of life in this fast changing world.

II. Tasks

1. Expand memberships to all individuals interested to promote profession and business in the field of photonics.
2. Enhancing communication within the society by organizing technical seminars and publishing newsletters and membership directory.
3. Conducting technical and dinner meetings during major international conferences including SPIE, OPTCON, and CLEO/IQEC, for reporting and reviewing new photonics technologies and business/product developments in different parts of the world and for establishing business contacts and technical exchanges.
4. Organizing annual conferences to promote photonics education, report new progress in photonics, address future photonics marketing directions, and present Achievement Awards to key individuals in the field of photonics.

2004 PSC Executive Office

President
Dr. Owen Wu Global Communication Semiconductors, CAokwu@gcsincorp.com

First Vice President
Dr. Yan Yin YY Labs, Inc., CA yanyin@yylabs.com

Treasurer
Dr. Janice Shen Jet Propulsion Laboratory, CA Janice.shen@jpl.nasa.gov

Executive Secretary
Jane Xiao janexiao@email.msn.com

Corresponding Secretary
Jane Xiao janexiao@email.msn.com

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Dr. Peter Shih	*Ms. Pamela Hsiao*		

President's Message

Dear Fellow PSC Members and Colleagues,

Greetings to you at the end of 2004. I am sure that you are all ready for Christmas Holidays. I am very pleased to report to you the recent election result for the year of 2005.

The 1st VP is Dr. Y. S. Liu (ITRI, Taiwan)

The 2nd VP is Professor Ming Wu (UC-Berkeley)

Treasurer is Dr. Janice Shen (JPL)

Executive Secretary is Jane Xiao (Opto-Laser Devices)

I am very grateful to many past PSC officers and PSC-Southern California Chapter officers for their great assistance. Without their help, this election will be impossible.

In addition, I would like to inform you the PSC annual meeting to be held at UC-Irvine on March 6, 2005 (Sunday) from 1:00pm to 9:00pm. We have invited many well-known executives and entrepreneurs from China, Taiwan, Japan and USA to inform us ***"The Hot Business Opportunities in Today's OFC Industry".*** If you are interested in participation or presenting your company's business, please email as soon as possible to okwu@gcsincorp.com since time slot is rather limited and check our website www.psc-sc.org regularly for the further information.

Thank you for your continuous supports and have a Merry Christmas and Happy New Year.

Sincerely yours,

Owen Wu

President, PSC
okwu@gcsincorp.com

Biography For 2005 PSC Officers

First Vice President:

Dr. Yung S. Liu is Fellow and VP of Industrial Technology Research Institute (ITRI) in Hsinchu, Taiwan, and serves as General Director of the Opto-Electronics and Systems Labs (OES). He directs R&D programs developing the advanced technologies in the areas of optical data storage, imaging and display, and opto-electronics devices and components to support a rapidly growing opto-electronic industry in Taiwan. He received his Ph.D. degree in Applied and Engineering Physics from Cornell University and BS in Physics from National Taiwan University.

Prior to joining ITRI in 1998, he was with GE Corporate R& D Center in Schenectady, New York. He received numerous awards including GE Managerial Award; GE Outstanding Achievement Award; GE Patent Awards and Publication Awards. In 1998, Dr. Liu was selected by Industry Week's as one of the "50 R&D Stars to Watch" for his leadership role in a DARPA program that pioneered the technology development of high speed parallel optical interconnect using 32-channel VCSEL array in advanced digital systems. In 2003, Dr. Liu won the prestigious 10th Tung Yuen Award (東元科技獎) for his significant contribution to the advancement of optoelectronic technology in Taiwan.

Dr. Liu is Fellow of the Optical Society of America (OSA), Fellow of PSC, Senior Member of IEEE, and a member of American Physical Society, and SPIE. He has authored over 70 publications and holds 28 US patents. Currently, he is President of the Optical Engineering Society (Taiwan), and President of the Taiwan Optical Communication Industry Alliance (TOCIA), and of the Solid State Lighting Industry Association (SLEA). Dr. Liu also serves as a board member of Taiwan Electronic and Electrical Manufacturers Association (TEEMA), and Chinese Physical Society.

Second Vice President:

Dr. Ming Wu is a Professor of Electrical Engineering and Computer Sciences at the University of California, Berkeley. His research interests include optical MEMS (micro-electro-mechanical systems), semiconductor optoelectronics, and biophotonics. He received his B.S. degree from National Taiwan University, and M.S. and Ph.D. degrees from UC Berkeley in 1983, 1985, and 1988, respectively, all in Electrical Engineering. Before joining the faculty of UC Berkeley, Dr. Wu was a Member of Technical Staff at AT&T Bell Laboratories, Murray Hill (now Lucent Technologies), from 1988 to 1992, and Professor of Electrical Engineering at UCLA from 1993 to 2004. He also held the position of Director of Nanoelectronics Research Facility and Vice Chair for Industrial Relations during his tenure at UCLA. In 1997, Dr. co-founded OMM to commercialize MEMS optical switches.

Dr. Wu has published over 380 papers, contributed 4 book chapters, and holds 11 U.S. patents. He is a David and Lucile Packard Foundation Fellow, and an IEEE Fellow. Dr. Wu was the founding Co-Chair of IEEE LEOS Summer Topical Meeting on Optical MEMS (1996), the predecessor of IEEE/LEOS International Conference on Optical MEMS. He has also served in the program committees of many technical conferences, including MEMS, OFC, CLEO, LEOS, MWP, IEDM, DRC, ISSCC; and as Guest Editor of two special issues of IEEE journals on Optical MEMS.

Treasurer:

Dr. Janice Shen graduated from Tsing-Hua University of Taiwan, and obtained her Ph.D. degree from U C Irvine. Janice has worked at Rockwell Science Center at Thousand Oaks and has been very active serving PSC. She has served as Treasurer for PSC for many years till now. Currently, Dr. Shen works at JPL as a senior research fellow.

Executive Secretary:

Ms. Jane Y. Xiao graduated from the Applied Physics Department of Beijing University of Post and Telecommunications in 1985. After that, she worked in various organizations in China contributed to the development of telecommunications business in China. In 1992, she joint Motorola China as Regional Marketing Manager and was responsible for establishing the cell phone technology and business in many rural areas of China. Jane came to the US in 1995 and worked in many technology companies in California. Currently she serves as vice president and program manager for Opto-Laser Devices, which is dedicated for the development of opto-electronics components for business machines and telecommunications industries.

PSC Annual Conference (1st Announcement 12/20/2004)

Theme: *Hot Business Opportunities in Today's OFC Industry*

Location: McDonald-Douglas Auditorium, UC-Irvine

Time: March 6, 2005 from 1:00pm – 9:00pm

Dinner Meeting: 6:30-9:00pm at China Town Restaurant (Near UC-Irvine)

The organizing committee will arrange for those companies who register in advance to introduce them to the audience

Preliminary Invited Speakers List

1. Dr. Lee Xu, General Manager, Intel (US)
2. Dr. Hong Hou, VP and GM, Emcore (US)
3. Dr. Winston Way, CTO, Opvista (US)
4. Dr. Rang-chen Yu, VP, Fiberxon (China)
5. Dr. Shoa-Kai Liu, Sr. Advisor, Rustic Canyon Ventures (US)
6. Dr. Yan Sun, Former CEO, Onetta (US)
7. Dr. Dick Chen, CEO, Archcom Technology (US)
8. Mr. Bernard Leung, President, Photonic Manufacturing Service (Hong Kong)
9. Dr. Peter Shih, Executive Director (PIDA, Taiwan)
10. Dr. Y. S. Liu, Director General (IRTI, Taiwan)
11. Dr. Z.Y. Huang, CEO, Photon Technology, Inc. (China)
12. Dr. David Chen, Distinguish Technical Member, MCI (US)
13. Dr. Hongyu Deng, Photonic Group Manager, Finisar (US)
14. Dr. H.C. Lee, VP JDSU (US)
15. Dr. Shoichi Hanatani, Sr. Director, Hitachi (Japan)

Registration:

Conference Only $30 per person (Student $15)
Dinner Only $30 per person
Total: $50 per person for conference and dinner (Student $30)

Seating is very limited (first come, first serve), please register as early as you can.
1st deadline: January 31, 2005

For registration: Please contact Secretary General
Jane Xiao [janeyxiao@email.msn.com]

Mail your registration and fee to the following address
Pay to the order of PSC
Attention: Treasurer/Dr. Janice Shen (TSAE-PYNG J SHEN) [tjs@s383.jpl.nasa.gov]
Mailing address: PO box 2011, RHE, CA 90274

Organizing Committee:
Owen Wu (Co-Chair), Norman Kwong (Co-Chair), Chin C. Lee (Co-Chair), Allen Fann (Co-Chair), Shikay Yao, Janice Shen, Yang Yang, Jane Yang, C. C. Shih, Peter Shih, Pamela Hsiao, Y. S. Liu, Ming Wu, HK Liu, Jane Xiao

Registration Form

Company	
Name	
Title	
Tel	
E-mail	

Please contact PSC Secretary General: Jane Xiao, E-mail: janeyxiao@email.msn.com

Directions

From North:

b. Take I405 south or I5 south
c. Exit at Jamboree road
d. Right on Jamboree
e. Left on Campus Drive (few miles).
f. Right on East or west Peltason/Berkeley drive
g. Reach Los Trancos Drive. Turn right into parking lot 18A. Meeting will be held in building 311.

From South:

b. Take I405 or I5 north
c. Exit at Culver Drive
d. Left on Culver Drive
e. Right on Campus Dive
f. Left on East or west Peltason Dive
g. Reach Los Trancos Drive. Turn right into parking lot 18A. Meeting will be held in building 311

The Photonics Society of Chinese-Americans

Announcement

The Tenth Bor-Uei Chen Memorial Scholarship Award

***Chun-Ching Shih*, Chair**

On behalf of the Bor-Uei Chen Memorial Scholarship Committee, I am pleased to announce that the tenth scholarship will be awarded in the 2005 PSC Annual Meeting in UC Irvine, California, on March 6. The Committee is now accepting nominations of qualified candidates from any **sponsoring PSC members**. You can copy the nomination form on the next page for your own use and attach any supporting document to demonstrate candidate's achievements in academics and research. Form is also available on PSC web sites: (*www.psc-a.org*) (*www.psc-sc.org*) or (*www.eoa-psc.org*) or send your request directly to me at **cc.shih@ngc.com**. The nomination deadline is **January 21, 2005**. Any nominations received after this date will not be considered. The committee will appreciate your cooperation because we are following a very tight schedule. Here are some highlights about this memorial scholarship:

1. The purpose of this scholarship is 1) to honor Dr. Bor-Uei Chen for his contributions in photonics and his services to the photonics community; 2) to recognize outstanding graduate students in the field of **optical communications** and **photonic devices**.

2. A scholarship committee, appointed by the PSC Board of Directors, is responsible for making announcements, conducting fund raising, and overseeing the selection process. The members of the Scholarship Committee include

Chun-Ching Shih (Chair)	Chinlon Lin	Hsing Kung
Tingye Li	J.Y. Ray Chen	Arthur Chiou
Pochi Yeh	Bob Lin	Shui-Lin Chao
Hua-Kuang Liu	Chi H. Lee	C. L. Tang

3. Each year, the Committee will issue a call for nomination in the winter issue of *Photonics Link*. The committee will determine and oversee the review process of applications and make recommendations to the PSC Board of Directors for final approval. The winner or winners will be announced on a latter issue of *Photonics Link*.

4. The selection of scholarship winners will be based on the merit of candidate's research work, which must be documented by technical publications or conference presentations and supported by strong recommendations from the candidate's sponsor and advisor.

5. The scholarship award consists of an award certificate and a check of $1,000. The amount of scholarship and the number of winners may vary, and the Committee reserves the right to make any changes as necessary. The winners in past years include:

1995: Lih-Yuan Lin (UCLA)	Jerry Chen (MIT)	Yan Sun (Stanford)
1996: Li-Ping Chen (UCLA)	Yongan Wu (Stanford)	Wei-Chiao Fang (UIUC)
1997: Wenhua Lin (UMBC)		
1998: Xiaonong Shen (UCSB)	Jianhua Zhao (UCSB)	
1999: Ming Li (Rensselaer)	Alan Yuan-Chun Hsu (UIUC)	
2000: (No Recipients)		
2001: Xiaomin Jin (UIUC)	Sheng-Kwang Hwang (UCLA)	
2002: Shuo Tang (UCLA)		
2003: How-Foo Chen (UCLA)	Chih-Hao Chang (UC Berkeley)	
2004: Fan-Yi Lin (UCLA)	Shun-Der Wu (Georgia Tech)	

In 2005, the Committee plans to select one or two award winners.

6. The scholarship will be awarded annually and presented at the PSC Annual Meeting. The winners will be invited to give a short presentation about his/her research. They should make every effort to attend the Annual Meeting.

7. All applications (nomination form, recommendation letter, and other supporting materials) should be submitted to the Chair of Scholarship Committee at the following address before the deadline. Electronic submission is preferable.

Dr. Chun-Ching Shih
cc.shih@ngc.com
(310) 814-0318 (Office)
1517 Via Fernandez
Palos Verdes Estates, CA 90274
(Due to year-end company shutdown, I will not be able to access my e-mail from 12/24/2003 to 1/2/2004).

7. Key dates:	**December 1, 2004**	Announcement on *Photonics Link* & websites
	January 21, 2005	Deadline for receiving nomination materials
	January 28, 2005	Review by the PSC Scholarship Committee
	February 4, 2005	Announcement of winner on *Photonics Link*
	March 6, 2005	Scholarship awarded at the Annual Meeting (UC Irvine, California)

The Photonics Society of Chinese-Americans

Dr. Bor-Uei Chen Memorial Scholarship Award
Nomination Form
(Attaching a brief resume to this form is recommended)

Full name of nominee _____

Date of birth _____ Place of birth _____

Address _____

Tel _____ Fax _____ e-mail _____

School attending _____

Department _____

Major research areas _____

Degree program _____ Year expected to receive the degree _____

Thesis title (if any) _____

Thesis advisor (if applicable) _____

School of undergraduate _____

Major in undergraduate _____ Graduation year _____

Papers & Patents* _____

Honors & Awards*_____

* Attach a separate sheet if necessary

Other comment (such as special projects, outstanding research achievements, etc.)

_____

Sponsor's name _____ Tel _____

Address _____

Sponsor's signature _____ Date _____

Return this nomination form, together with supporting information, no later than January 21, 2005,
to: Chun-Ching Shih, cc.shih@ngc.com , 1517 Via Fernandez, Palos Verdes Estates, CA 90274, USA

PSC Member Honored

(*Optics and Photonics News*)

Prof. Shun Lien Chuang is one of the two recipients of OSA's prestigious Engineering Excellence awards for 2004. He received the award at Frontiers in Optics, OSA's 88th Annual Meeting, in Rochester, New York, in October.

Prof. Chuang, an OSA Fellow, received his bachelor's degree from National Taiwan University and his doctoral degree in optical engineering from the Massachusetts Institute of Technology. In 1983, he joined the Department of Electrical and Computer Engineering at the University of Illinois, Urbana-Champaign, where he is currently a professor. He was recognized for his contributions in the area of fundamental theories of strained quantum-well lasers and physics of optoelectronic devices.

Congratulations!

PSC-EOA September 2004 Seminar

Yalan Mao

Title: **My entrepreneur experience: SDL and Pine Photonics**
Time: 10:00 am, Saturday, 09/11/04
Location: Stanford University CIS Building (Center for Integrated Systems), # 101 (Cypress auditorium)
Speaker: Dr. Hsing-hsien Kung
Fee: Member free, $10 for non-member, $5 for student

Abstract:
The speaker will share his entrepreneur experience with two start up companies: SDL and Pine Photonics. SDL was a optical component company. It was founded in 1983 based on a high power semiconductor technology and was grown into a successful optical communication company before JDSU acquisition in 1999. Pine Photonics was founded in 2000 to meet a market need of 10 Gbps Transceiver for datacom industry. After acquired by Opnext in 2003, it has been growing as industry starts to recover. Two start-ups were founded and grown in two entire different industry environments. The speaker will make some comparison and discuss key factors to make a start-up successful.

Speaker Bio:
Hsing-hsien Kung received a BS degree from National Cheng Kung University, an MS degree from University of Texas at Austin, a Ph.D from UC Berkeley, all in Electrical Engineering. He also received a MBA degree from Santa Clara University.

From 1974 to 1978, he was with Optoelectronics Division of Hewlett Packard, in the development of GaAsP visible LED and GaAlAs infrared emitters and laser diodes. He was appointed the manager of the infrared emitter development and manufacturing in 1979. In 1983, Dr. Kung joined SDL Inc. as a co-founder and VP, manufacturing. He has led a successful effort to transfer XEROX Palo Alto Research Center laser technology and has established a complete semiconductor laser manufacturing facility and organization. SDL has successfully IPO in 1995 and become a world leading optical communication company. In 1997, he joined American Xtal Technology (AXT) as a Sr. Vice President, Business Development. In 1999, he co-founded Luxnet Corporation. In 2000, he co-founded Pine Photonics Communication and served as President/ CEO until its merge with Opnext Inc. Currently, he serves as Sr. VP of Opnext. He also serves on the boards of several optoelectronics companies.

Dr. Kung has participated in several technical committees and meetings in Taiwan, including Chairman of Electro-Optics Section in the National Development Seminar in 1983. Since 1983, he has actively involved in organizing Overseas Chinese Electro-optics workers to support the activities of the Electro-Optics Science and Technology Committee of National Science Council. He was former President of the Photonics Society of Chinese-Americans and a board member and past President of Chinese American Economic and Technology Development Association. Currently, he is Vice Chair of Monte Jade Science and Technology Association (West Coast).

In 1997, he was awarded Distinguished Alumni Award from Northern American National Cheng Kung University Alumni Association. In 1999, he received Paul Harris Fellow from Rotary foundation. In 2000, he received the Dragon Award from Chinese American Voter Education Committee. In 2001, he was selected to participate in class 13 of American Leadership Forum Silicon Valley. In March 2001, he has received a Partnering for Education award from The National Council of Negro Women, Northern California Sections. In December 2001, Margaret and Hsing have received Century Culturists award from DeAnza College. In 2002, he received Asian American Hero 2002 award from County of Santa Clara.

PSC-EOA October 2004 Seminar

Yalan Mao

Title: **What lies ahead for optical passives in an access oriented fiber optics market – Migration from DWDM to CWDM and FTTH**
Time: 10:00 am, Saturday, 10/9/04
Location: Stanford University CIS Building (Center for Integrated Systems), # 101 (Cypress auditorium)
Speaker: Dr. Yao Li
Fee: Member free, $10 for non-member, $5 for student

Abstract:

We begin by discussing the trend of the on-going optical networking migration from transport-heavy to access-heavy environment and describe the optical hardware requirement differences of DWDM, CWDM and FWDM dominant devices for passives. Impacts from major changes of active component requirements in terms of wavelength stabilization and power consumptions will cause passive component makers to shift device design and process concepts to cope with increased cost and performance pressures. To cope with these challenges, we illustrate our views on how CWDM passives will evolve and what FTTH passives have to do to stay on top of this network migration curve. As an example, we will discuss AFOP's product roadmap to address various challenges in CWDM and FTTH passive areas.

Speaker Bio:

Dr. Yao Li received his B.E. degree in Instrumentation Engineering from the Beijing Polytechnic University, Beijing, China, in 1982. He received his M.S. and Ph.D. degrees in Electrical Engineering from the City University of New York (CUNY) in 1984 and 1987, respectively.

From 1987 to 1991, he was on faculty at Dept. of Electrical Engineering at CUNY, first as an Assistant Professor, and later as a tenured Associate Professor. He spent the next eight years at the NEC Research Institute, Princeton, NJ, a premium corporate research organization where he was first a research scientist and later a lab director for Optical Interconnection Research. From August 2000 to April 2002, he joined the Phaethon Communications, Fremont, CA, a venture-capital-backed start-up company, as an engineering director responsible for developing FBG-based tunable chromatic dispersion and PMD compensation technologies. Since April 2002, he has been serving as the Chief Technologist at Alliance Fiber Optic Products (AFOP) at Sunnyvale, CA.

In Dr. Li's professional career, he has published more than 100 referred journal papers, delivered over 30 invited and many other regular conference talks. He has been twice serving as a conference program chair and many times as a program committee member for various international conferences. Dr. Li also guest-edited five special issues for several world renowned technical journals, including Applied Optics, Optical Engineering, and IEEE Proceedings. He has been granted 21 U.S. patents with others pending. Dr. Li is an elected Fellow of both the Optical Society of America (OSA) and the International Society of Photo-optical Instrumentation Engineers (SPIE). He is also a Senior Member of Institute of Electric and Electronic Engineers (IEEE).

PSC-EOA November 2004 Seminar

Yalan Mao

Title: **Survey and Comparison of HDTV Display Technologies**
Time: 10:00 am, Saturday, 11/13/04
Location: Stanford University CIS Building (Center for Integrated Systems), # 101 (Cypress auditorium)
Speaker: Mr. David McDonald (Director of Technical Marketing, eLCOS Microdisplay Technology)
Fee: Member free, $10 for non-member, $5 for student

Abstract:

High definition television (HDTV) is developing rapidly. More "on the air" broadcasting is available and there are a significant number of satellite sources available. Newer display technologies are being positioned to replace the CRT as the display of choice for this new type of programming. The presentation will survey the HDTV display market and provide comparisons of a selection of display technologies, including DLP, plasma, LCD and LCOS (rear projection). Some background on the origins of LCOS in the photonics industry will be provided.

Speaker Bio:

David McDonald is currently Director of Technical Marketing at eLCOS Microdisplay Technology, a liquid crystal on silicon (LCOS) micro-display company based in Sunnyvale CA and Hsinchu Taiwan. Mr. McDonald has extensive experience in the LCOS industry and has been responsible for both component and system level development. Previously Mr. McDonald was a senior program manager at Displaytech, Inc., where he was responsible for a single panel projection project and for management of relations with vendors of critical technology components. At Compaq Computer Corporation he was responsible for Intellectual Property management within the Advanced Engineering Group and later was manager of the micro-display development group in a special project. Mr. McDonald is retired from the US Air Force Reserve where he flew fighters for a number of years. He has Bachelor of Science in Physics and Master of Science in Computer Science degrees from Georgia Tech.