Photonics Link

Publication of *Photonic Society of Chinese-Americans*
Issue 0061: November 2005

1. The objectives of Photonic Society of Chinese-Americans (PSC)

The objectives of PSC are to promote friendship 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.

2005 to 2006 PSC executive officers

President: Dr. Yan Yin, YY Labs, Inc. yanyin@yylabs.com
First Vice President: Dr. Yung S. Liu, ITRI, Taiwan, liuys@itri.org.tw
Second Vice President: Dr. Ming C Wu, UCLA, CA, wu@ee.ucla.edu
Treasurer: Dr. Janice Shen, Jet Propulsion Lab,CA, Janice.shen@jpl.nasa,gov
Executive Secretary: Jane Xiao, janexiao@aol.com

Board Members:
Chairman: Dr. Owen Wu
Board Directors: Dr. Gordon Li, Dr. Haifeng Li

Advisory Board Members:
Dr. Milton Chang, Dr. H.K.Liu, Dr. R.L.Chao, Dr. Haifeng Li, Dr. Pochi Yeh, Dr. Arthur Chiou, Dr. C.C.Shih, Dr. Tingye Li, Dr. Shi-Kay Yao, Dr. Jane Yang, Dr. Gordon Li, Dr. R.S. Liu, Dr. Peter Shih, Ms. Pamela Hsiao

Forum for Photonics, FiberOptics, Communications
Opportunities in Business, Career and Investments

Editor: Jennifer Colegrove, Ph.D.
Contact: jennycolegrove@yahoo.com, 408-765-8143 (o)
Published on Websites: www.psc-a.org, www.psc-sc.org and www.eoa-psc.org. since 1990.

2. President message:

Dear members, we are approaching the end of 2005, and welcoming 2006. We select a good time and method to do this-- having our Annual Meeting in the first month of the New Year, 2006. In our annual meeting, we are going to see what new opportunities will be in front of us, and to learn good experiences from successful entrepreneurs, and have guidance from the major players of our fields.

Dr. Milton Chang, a well-known successful entrepreneur and venture capital investor of our field, will give a Keynote speech "Toward Entrepreneurship." Mr. Bob Lin from Acorn Campus, who has successfully invested and incubated many small companies, will give us a closing talk on how to lead a business, "becoming a person that others are willing to follow." We also have invited speakers from other venture capital groups, and industries, Universities to give us interesting talks on new developments in Photonics, Optics, and Communications and to explore possible business opportunities in these area in US, China, and Taiwan.

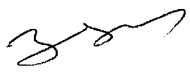
The Annual meeting will be held at SLAC Panofstky Auditorium. SLAC (Stanford Linear Accelerator Center) hosts the world's longest linear accelerator, which is 2-miles in length, and a synchrotron radiation Lab, named SSRL (Stanford Synchrotron Radiation Laboratory). Synchrotron radiation is a light source with continuous wavelength from infrared to hard x-ray, produced by high-energy electron beam making circulation in a strong magnetic field. Such special light source provides a strong tool to explore structure of materials. It, therefore, has wide applications in material science. Many interesting application programs are being carried out at SSRL, such as macromolecular crystallography, molecular environmental science, x-ray absorption spectroscopy, and more. I encourage our member to check website http://www-srl.slac.stanford.edu/users/user_admin/scientific_techniques.html to learn more about it. We will also organize a tour to some of the experimental station of SSRL for people who are interested.

At our Annual meeting, attendees will have chance to network, to talk to companies from China, Taiwan, to find opportunities there.

We will have dinner together after the Annual meeting.

At the end of 2005, I wish every one enjoy what he/she has achieved and have a successful new year.

Thanks,



Yan Yin
2005 President of PSC

3. PSC 2006 Annual Meeting Agenda

Date: January 22, 2006, Sunday
Time:
Conference: 12:30-6:00; Dinner: 6:30-9:00;
Site Visit Stanford Synchrotron Radiation Lab (SSRL)
Conference Agenda:

12:30 pm -1:00 pm Registration and networking
1:00 pm - 1:15 pm Annual Executive Officers Election
1:15 pm- 5:20 pm Annual Conference Presentation
5:20 pm - 5:30 pm Scholarship award
5:30 pm – 5:50 pm Scholarship awardees speech
5:50 pm – 6:00 pm Executive Officers election Results announcement
2006 President Installation

Distinguished Keynote Speaker:
Dr. Milton Chang, managing director of Incubic
"Towards entrepreneurship"

Distinguished Speakers:

1) **Prof. YS Liu** from Taiwan "Taiwan's High-Tech Industry - Present and Future"
2) **Prof. Bai Xu,** University of Albany/Sunny, State University of New York. Topic: The key for Nanotechnology "Gold Rush"
3) **Prof. Clair Gu** (UCSC) "Applications of Nanoparticle Surface Enhanced Raman Scattering and Fiber Technology in Bio-Detection"
4) **Dr. Walter Mok,** "Characterize material (DNA, molecular..) with a new light source----synchrotron radiation"
5) **Dr. Achin Bhowmik,** Manager of Mobile Display development and enabling. "Display subsystem and technologies for Intel's mobile computer platforms"
6) **Dr. Ping Xie**, CEO of New Photonics. "Integration strategy to address today's telecommunication market need"
7) **Dr. Feijun Song,** Executive VP and CTO, SPIE fellow China Da Heng Group, **"**Introduction to China Daheng Group"
8) **Dr. Wei Gao,** CEO, Ocean Broadband Systems, Ltd "An insight look into the development of broadband market in China"
9) **Dr. Jianhui Zhou,** COM ventures, "Telecommunication industry/Optical communication from venture perspective"
10) **Mr. Bob Lin** Acorn Campus, managing member and co-founder, "Daily transformation Into Leadership"

Industry Table Display:
12:30 pm – 5:30 pm
Dinner:
7:00 pm- 9:00 pm,
Venue:
Conference: Stanford Linear Accelerator Center W. Panofsky Auditorium
2575 Sand Hill Road, Menlo Park, CA 94025
Industry Display: Lobby of SLAC Panofsky Auditorium
Dinner: Price and Place are to be decided.

Admission: Free for members, $10.00 for non-members
Language: English

Direction:

SLAC is located on 426 acres of Stanford University property, just three miles west of the main campus. The main entrance to the facility is on Sand Hill Road, just east of Interstate 280. Please see attached maps.

SLAC Entry Notice:

Show SLAC main-gate guards your pictured I.D, and tell the guards you are coming for PSC Annual Meeting, you will be allowed to enter the SLAC. **Plenty of parking is available on the site of SLAC.**

4. Speakers' Biography

Milton Chang

Milton Chang is Managing Director of Incubic, a venture fund in Silicon Valley actively investing in photonics, and in businesses related to physical and life sciences. He was CEO/President of Newport which he took public as its CEO in 1971. In 1990, he founded New Focus which went public in 2000 and was later acquired by Bookham. He currently sits on the Boards of a number of companies, including Arcturus Bioscience, OpVista, Rockwell Scientific, and YesVideo. Milton earned a BS with highest honors from the University of Illinois and MS and PhD degrees from the California Institute of Technology, all in electrical engineering. He is a Fellow of the Optical Society of America and the Laser Institute of America and is a past president of the IEEE Laser Electro-Optical Society. He has received a number of prestigious awards including the Distinguished Alumni Award from both universities. Milton shares his experience freely and writes monthly business columns for Laser Focus World and Photonics Spectra magazines. He is a member of the Committee of 100 and was recently elected a member of the Board of Trustees of Caltech.

Yong S Liu

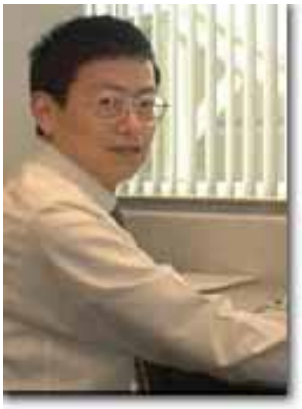
Dr. Yung S. Liu is Fellow and VP of Industrial Technology Research Institute (ITRI) in Hsinchu, Taiwan, and serves as General Director of the Opto-Electronics and Systems Labs (OES). He directs R&D programs developing the advanced technologies in the areas of optical data storage, imaging and display, 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 where he held various responsibilities managing programs in optical data communication, advanced interconnect, solid state lasers and nonlinear optical devices. He received numerous awards for his technical and management achievements including GE Managerial Award for his leadership role in high power laser technology and business development; GE Outstanding Achievement Award for his technical contribution to solid state slab lasers; 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 served various professional committee functions

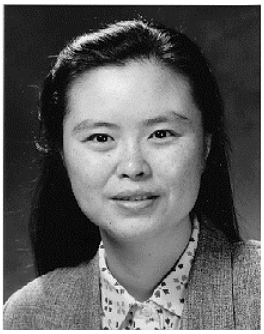
in IEEE, APS, OSA, SPIE and consulted for UN Development Program, Max-Planck Society, National Science Council of Taiwan, and ITRI. He has authored over 70 publications and holds 28 US patents. Currently, he is President of the Optical Engineering Society (Taiwan), and President of the Taiwan Optical Communication Industry Alliance (TOCIA), founded in 2001 and founder of the Solid State Lighting Industry Association (SLIA) in 2002. Dr. Liu also serves as a board member of Taiwan Electronic and Electrical Manufacturers Association (TEEMA), Chinese Physical Society and President-Elect of the Photonics Society of Chinese- American (PSC), the largest professional society of Chinese-American in photonics in USA (2005/7)

Bai Xu



Prof. Bai Xu obtained his PhD in Material Sciences from University of Paris CNRS in 1991. He is currently an Assistant Professor of University at Albany/SUNY and Senior Research Scientist of Albany NanoTech. Prof. Xu manages the MEMS program at Albany NanoTech which has a technology portfolio of optical MEMS, bioMEMS, fluidic MEMS and RF MEMS. Before joining Albany NanoTech, Prof. Xu worked at IME Singapore and I-STAT Canada where he initiated a number of MEMS development projects that led to the fabrication of MEMS micro-relays, MEMS microphone, pressure sensors, flow sensors, accelerometers and miniaturized biomedical devices. Prof. Xu served on the review panel of the National Science Foundation. He has given a number of invited talks at Intel, GE, IBM, Finisar and other universities, as well as on international technical conferences. He is currently co-chairing the MEMS fluidic I/O standardization working group sponsored by SEMI.

Claire Gu



Claire Gu received her Ph.D. in Physics from Caltech in 1989. Then she worked as a member of the technical staff at Rockwell Science Center, and went to Penn State in 1992 as an assistant professor. In 1997, she came to UC Santa Cruz as the first Electrical Engineering faculty member, and is now a professor in EE. Her research interests include fiber optics, holographic data storage, liquid crystal displays, nonlinear optics, and optical information processing; with a current emphasis on fiber sensors using SERS (surface enhanced Raman scattering). She has published more than 170 journal and conference papers in these areas. In addition, she has co-authored a text/reference book on "Optics of Liquid Crystal Displays", and co-edited two technical books on photorefractive nonlinear optics and applications. She received a National Science Foundation Young Investigator Award in 1993. Since 2000, she has been a Topical Editor of Optics Letters. Currently she is on sabbatical in Tsinghua University, Beijing, China.

Achin Bhowmik

Dr. Achintya K. Bhowmik is a manager in the Mobility Group of Intel Corporation, where he leads Intel's mobile display technology development and enabling efforts, focusing on the display subsystem for power-performance optimized mobile computer platforms. His prior work includes microdisplay technologies, electro-optic spatial light modulation in organic nonlinear optical media, and high-speed optical communications. Dr. Bhowmik has authored 38 papers in peer-reviewed technical journals and conferences, has 26 issued and pending patents in the areas of Display Technologies and Optical Communications. He is an editorial reviewer for a number of technical journals from IEEE, OSA, and SPIE.

Ping Xie

Ping Xie has over ten years of product development experience in lasers, fiber optical components and subsystems. Currently he serves as Vice President of Engineering at NEOPHOTONICS, which recently merged with Photon Technology in Shenzhen China.

Prior joining NEOPHOTONICS, he has held position in Finisar Corporation Transwave Division as Vice President of Engineering. Prior to Finisar he was the Vice president of Passive Device Engineering at New Focus Corporation. New Focus, acquired the company Phomax that he co-founded, went IPO in 2000 on NASDAQ with a peak market cap of 6 Billion dollars. Before that he served as a product line manager and technical staff at JDS Uniphase. He has also worked as the technical staff member at Los Alamos National Lab and at Candela Laser Corporation. In 1997, Ping won the Photonic Spectra Circle of Excellence award for product development work at JDS Uniphase. Ping has more than thirty awarded and pending patents and over twenty publications to his credit.

Ping's received his PhD and MS in Applied Physics and Physics, both from the University of Michigan. He received his bachelor's degree in Electrical Engineering with emphasis in fiber optics and microwaves from Tsinghua University, Beijing, China.

Feijun Song

Feijun Song graduated from the Department of Physics of Peking University, China in 1966. He is now the executive vice president and chief engineer of China Daheng Corporation (CDHC) and the director of the board. He was the deputy director of the designing office of Beijing No.3 Optical Factory from 1968 to 1982, and the deputy director of Beijing Information Instruments Institute from 1982 to 1988. He was given the prestigious title of the “Outstanding Scientist for Achievement” by the Chinese Government in 1986 and the “Outstanding Achievement Scientist Award” by the Beijing Municipal Government of in 1988. He has been the research professor of the Chinese Academy of Sciences (CAS) since 1993, and serves as an advisor of PhD students and guest professor of several universities. He is the standing editor of the periodical “Physics”, and is also the editor of the “Series of Advanced Physics of Peking University”. He is the executive director of the Chinese Optical Society (COS), the director of the Chinese Physical Society (CPS), the Fellow of SPIE, member of OSA and IEEE. He has authored more than 70 papers and holds 9 Chinese patents. He is the author and co-author of three books.

Wei Gao

Wei Gao Co-founder/CEO of Ocean Broadband Systems, Ltd. which designs, develops, and manufactures broadband equipments to enable true “Triple Play” at very low cost. He has over decades’ telecom industry experience in technology, product development, marketing, and executive management with Salira (sold to Hitachi), Cylink (sold to Safenet), and Nortel.

Between 2000-2004, he co-founded Salira (and founded its China WOFE in 2002). As Salira’s Founder and CTO, he built the company from scratch to an international organization in US and China. He helped to raise about $43M, and led the effort to collect first hand market requirements from carriers in US, such as SBC、VERIZON、BELL SOUTH、QWEST、AT&T Broadband, and carriers in China. As Salira China’s President, he managed P&L and built China organization and created all initiatives. He led the company to have achieved broad customer traction with major carriers such as China Unicom, China Netcom, China Telecom, and China Cable Operator.

Between 1996-2000, he was principle engineer at Cylink Corp., where he was responsible for security and network management for encryption products, such as ATM, Frame Relay, X25, T1/E1 and VPN.

Between 1993-1996, he was senior engineer at Nortel, where he was responsible for designing and implementing first ever commercial SONET/OC192 transmission products, with focus on system platform including bringing up all hardware boards and building control plane inside Multi-Processor Multi-Card Network Element (up to 64 cards in 4 shelves).

In 1985, Mr. GAO graduated from Department of Computer Science and Engineering at Tsinghua University in Beijing, China. He also studied for Master and Ph.D. in Computer Science at Institute of Software in 1985-1988 and at Institute of Computing Technology in 1988-1990, both of which are part of Chinese Academy of Sciences, Beijing, China.

Jianhui Zhou

Jianhui is an EIR at ComVentures, a Palo Alto, CA -based venture capital firm specializing in early-stage investments in the communications market currently with $1.5B under management. At Comventures, he is focusing on China-related investments in the broad communications space.
Jianhui joined ComVentures earlier in 2005 from Ciena Corporation where his last role was Vice President and General Manager for Ciena's China operation. He was based in Beijing for two years responsible for managing all aspects of Ciena's business in China. Prior to the China assignment, he was Vice President of Product Management at Ciena in San Jose, CA. He joined Ciena in 2002 following its acquisition of ONI Systems, where he held several senior management positions in R&D, Business Development and Product Management.
In his earlier career, Jianhui spent several years at Bell Laboratories, Lucent Technologies in Holmdel, NJ, where he was a senior R&D manager playing a key role in developing Lucent's optical networking products, and received the prestigious Bell Labs President's Gold Award.
Jianhui holds BS and MS in Applied Physics from the Beijing University of Posts and Telecommunications, and a Ph.D. in Applied Physics from the California Institute of Technology. He has published numerous technical papers, holds several U.S. and international patents, and speaks frequently at industry conferences and forums.

Bob Fu-Yuan Lin

Bob Lin is the co-founder of **Acorn Campus**, a $125 million seed round VC fund in US and China. He is also the founder of **Multi-Dimensional Venture Partnership,** a cross border angel venture fund. In addition to extensive angels and corporate investment expertise with multiple IPOs, he also has more than 20 years of international business start-up, marketing, and management experiences. He was well known for launching investment for **Avanti** (IPO '95 25x), **AltiGen** (IPO '97) and **LightLogic** (Sold to Intel for $400M '01 for 100x). He was an early investor in **Vertex Network** (Sold to Mitel for $200M '99, 20x), and **MPS** (IPO '04 30x). He was also the co-founder of **Pine Photonics** (sold to Hitachi/Opnext '03). With Acorn, Bob's investments include **AFOP** (IPO '00), **Rapidstream** (M&A, '02), and **Axis** (Sold to Verisity for $80M '03), **Nanoamp** (IPO scheduled '05), and **Fortinet** (IPO scheduled '05)
Bob also serves on the board, presently and in the past, of **Pine Photonics** of California; **Atonics , Santrum, Greatland Electronics,** and **Luxnet,** of Taiwan; **EPIN** and **Henbang** in China.

Bob is also the author of two top selling books in Asia **"Find Your Way To Success & Happiness**" in 2003 (Top seller of the year) and **"Creating Value to Differentiate"** in 2004 (Honored with the National Level Golden Book Award). He is also the leading columnist for the largest business/investment newspaper in Taiwan **"Economic Daily News", "Commercial Times", "e-TechVantage**" magazine and **"Business Next"** Magazine. His 3rd book **"Build a Successful Career from Where You Are"** will be launched late '05. He is also a famous cartoonist with regular comics strips on **China Times** newspaper and **Manager Today** magazine. He plays guitar and piano for a popular band **"SouthernBreed"** in Asia during the 60's and is reviving the rock music performing hobby with **"Silicon Valley Band**" these days.

Bob is now the Vice Chairman and Board member of **Monte Jade Association of Silicon Valley** and will be Chairman in '06. Bob was the Chairman in Chinese Association of International Trade (CAIT) two years in a row, and a Board member of **Taiwanese Chamber of Commerce** twice. He has also served both as the Commissioner and the Chairman of **Santa Clara County – HsinChu County Commission**. Bob has a MSEE degree from University of California at Santa Barbara. He has been very active in community services.

5. Sponsorship Order Form

PSC 2006 Annual Meeting Sponsorship Order Form

Company Name	
Address	
Contact person	
Telephone	
E-mail	
Web address	

Please mark your selection for the sponsorship you are ordering.

Sponsorship	Description	Price	Total
☐ Platinum	Sign noting sponsorship One page description of your company within conference brochure Interaction with participants Free EOA membership Display your company brochures and products In the meeting hall, a table will be reserved for your display	$500/ea	
☐ Gold	Sign noting sponsorship One page description of your company within conference brochure Interaction with participants Free EOA membership	$400/ea	
☐ Silver	Sign noting sponsorship Half page description of your company within conference brochure Interaction with participants Free EOA membership	$200/ea	
Total			

Please fax your order to 734-939-6049, attention to Yan Yin, or e-mail your order to yanyin2003@gmail.com. Please make check payable to EOA/PSC. Thanks.

6. PSC 2006 Executive Officers Election Announcement

On January 13, 2001, at 1:00 pm, at SLAC Panofsky Auditorium, before our meeting, there will be an election for PSC 2006 Board members. Please submit your nomination for candidates to 2005 PSC Board to the e-mail address of liuys@itri.org.tw or yanyin2003@gmail.com.

The Current Executive Office of PSC 2005:

President: Dr. Yan Yin, YY Labs, Inc. yanyin@yylabs.com
First Vice President: Dr. Yung S. Liu, ITRI, Taiwan, liuys@itri.org.tw
Second Vice President: Dr. Ming C Wu, UCLA, CA, wu@ee.ucla.edu
Treasurer: Dr. Janice Shen, Jet Propulsion Lab,CA, Janice.shen@jpl.nasa,gov
Executive Secretary: Jane Xiao, janexiao@aol.com

According to by-law, First Vice President of 2005 will be the President of 2006, the Second Vice President of 2005 will be the First President of 2006.

Please nominate candidates for the second vice president, treasure, and executive secretary for PSC 2006 executive office.

We need to receive nomination before December 31, 2005.

7. Bor-Uei Chen Scholarship Award Program

The Photonics Society of Chinese-Americans
Announcement
The Eleventh 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 eleventh scholarship award will be presented in the 2006 PSC Annual Meeting in Menlo Park, California, on January 22. 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 **December 15, 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.

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)	
2005:	Hsu-Feng Chou (UCSB)	Chao-Yuan Chen (NCTU, Taiwan)	

In 2006, 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, resume, 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

8. Key dates:

November 1, 2005	Announcement on *Photonics Link* & websites
December 15, 2005	Deadline for receiving nomination materials
January 2, 2006	Review by the PSC Scholarship Committee
January 6, 2006	Announcement and notification of winners
January 22, 2006	Scholarship awarded at the Annual Meeting (Menlo Park, 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 comments (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 December 15, 2005,
to: Chun-Ching Shih, cc.shih@ngc.com , 1517 Via Fernandez, Palos Verdes Estates, CA 90274, USA

9. Abstracts

Milton Chang

Towards entrepreneurship

What can one do to become prepared for entrepreneurship?
It is daunting enough for a young professional to develop a career plan, because the future is very difficult to predict in today's rapidly changing environment. A more realistic approach to deal with uncertainty is to stay flexible by approaching work as a learning opportunity to gain broad experience, to acquire transferable skills, and to build a strong reputation and in doing so, enabling entrepreneurship. The speaker will draw upon his observation of successful managers and entrepreneurs and discuss a set of skills and attitudes to acquire that can enhance one's likelihood to succeed. This would include the kinds of jobs to look for, the professional skills required to run a business, and attitudes that build relationships. He will also describe a start-up model that is realistic for a first-time entrepreneur.

Yong S Liu

Taiwan's High-Tech Industry - Present and Future

In May 16, 2005 issue of Business Week, Taiwan was featured as the cover story with title, "Why Taiwan matters? The global industry couldn't function without it.. ." Taiwan is now the world top producer of IC foundry (world market share: 70%), IC packaging (36%), notebook PC (72%),LCD monitor (68%), cable modem (66%), PDA (79%), WLAN (83%),CD/DVD disc(80%) and number 2 producer of LCD panels (35%), servers (33%),DSC (34%) and LED (23%). With increasing competition from China, India, Korea and others, the question is, "will Taiwan matter in the future?". This presentation describes some of the recent development in high-tech industry in Taiwan and discuss challenges that Taiwan faces today. The talk addresses in particular some of the issues in the optoelectronics industry; an industry that PSC members have made significant contribution to the early development.

Bai Xu

Tools: The key for Nanotechnology "Gold Rush"

While the enormous potential in nanotechnology and micro-electro-mechanical systems (MEMS) has not been fully materialized, MEMS devices, with the success they already enjoyed in established high volume, commercial markets such as accelerometers, pressure sensors, inkjet print heads, and digital micro-mirrors, will aid in new miniaturized devices and systems as well as lower the costs of existing devices. MEMS is the quickly growing field of using IC processing and other micromachining techniques to integrate sensors and actuators with logic circuits. MEMS technology is ideal for the fabrication of microfluidic circuits for fluidic handling. Microfluidic Integrated Circuits (Fluidic ICs) for the reaction and analysis of chemical and biochemical reagents are expected to transform the chemical and biomedical research and commercial efforts within the next decades in the same way that semiconductor integrated circuits have revolutionized electronics.
This presentation will be focusing on the current topics in the development of nanotechnology and MEMS technology. After a brief overview of the College of Nanoscale Science and Engineering at University at Albany/SUNY, a few project examples will be used to introduce our MEMS program. These examples include optical MEMS devices, Nanoimaging cantilevers, Cell-based chips, polymer MEMS chips, and microfluidic management systems. Given the importance of micro/nano mechanical and fluidic phenomena in the fusion of Nanotech, Biotech and Infotech, MEMS provides important tools to address the bottlenecks in realizing Feynman's vision of nanotechnology.

Claire Gu

Applications of Nanoparticle Surface Enhanced Raman Scattering and Fiber Technology in Bio-Detection

The demand for sensors for detecting chemical and biological agents is greater than ever before, including medical, environmental, food safety, military, and security applications. At present, most detection or sensing techniques tend to be either non-molecular specific, bulky, expensive, relatively inaccurate, or unable to provide real time data. Clearly, alternative sensing technologies are urgently needed. Recently, we have been working on a novel sensor based on nanoparticle surface enhanced Raman scattering (SERS) and fiber technologies for chemical, biological, and environmental detection. The sensor will be highly sensitive, molecular specific, reliable, label-free, non-invasive, inexpensive, easy to produce commercially using existing technologies, compatible with existing lasers and detectors, and applicable to a large number of molecules of interest. This is made possible by the unique sensor architecture based on a combination of specially prepared fibers and novel SERS substrates, where SERS provides the high sensitivity (10^6-10^{15} enhancement factor), molecular specificity, and applicability to a wide range of compounds, while the novel shaped fiber provides the flexibility, compactness, reliability, low cost, and ease of production.

Achin Bhowmik

Display subsystem and technologies for Intel's mobile computer platforms

Mobile computing devices are currently going through a phase of rapid advancement and proliferation. Intel is at the forefront of the mobility wave, leading with power-performance optimized platforms based on the Intel® Centrino™ Mobile Technology. With an ever-expanding array of new usage models, mobile performance, wireless connectivity, extended battery life, and sleek form factors are being increasingly recognized as the key vectors of mobility. In this talk we will focus on Intel's leadership efforts in the display subsystem and associated technologies towards enabling power-performance optimized mobile computer platforms.

Ping Xie

Integration strategy to address today's telecommunication market need

In today's telecommunication market, especially in FTTH market, customers require good service at rock bottom cost with no compromise in product performance and quality. In this talk, I would like to elaborate on NEOPHOTONICS integration strategy to address these requirements. Specifically, we leverage our PLC integration platform to produce "system on a chip" type of devices at a fraction of the cost of traditional discrete optics. Further, we integrate Silicon Valley high technology and China low cost manufacturing to provide best cost performance to our customers. In addition, a global sales force is integrated with a global engineering and customer support team to provide superior service. Details and examples will be given at the talk.

Feijun Song

Introduction to China Daheng Group

The history, construction, subsidiaries and revenue of China Daheng Group (CDHC) is introduced. A detailed description of Daheng Optics is given, including its of-the-shelf products, OEM and custom design capabilities, R/D projects as well as its development of DLP light engines.

Jianhui Zhou

Communications Market from Venture Perspective

The presenter will approach the topic of communications markets from his unique perspective as a former technologist, operating executive, and presently a venture capitalist. He will cover the market drivers, technology advances and investment opportunities in the broad communications space, with an emphasis on telecommunications, optics, and China, three areas in which the presenter's experience is deeply rooted.

Bob Lin

Daily transformation Into Leadership - 12 Non-MBA Lessons

In this post-Internet Era, leadership can no longer be established through or depending on the artificial position, hierarchical structure, or the unique information that one possesses. Bob Lin would explore his views on the daily transformation of any entrepreneurs from any position into natural leaders. As reflected in his 3rd best selling book "Build Your Career From Where You Are", Bob would offer 12 simple steps to help each person to naturally transform themselves into leaders with TRUST and SINCERITY. - Becoming a person that others are willing to follow. The 12 steps are the simple and natural behavior modifications that he has published over two years on the leading newspaper and received great responses and praises from mass readers.

10. PSC-EOA Seminar Activities Report

The following information is provided by Yalan Mao.

September:

Speaker: Dr. Cheng-chung Shih(施 振 強 博士),
CEO/President, Capella Microsystems Inc.
Title: Optical Electronic Application ins your daily life
Time: September 10, 2005; 10:00am – 12:00 noon
Abstract:
The light revolution has brought many optical electronic applications into our daily life. From telecommunication at 10Gbit and WDM to traffic light in every intersection, we have seen more and more optical electronic technology been implemented all over the places. The trick of optical technology and where is the industry is moving forward will be discussed.

Speaker Biography:
Cheng-chung Shih is the CEO/President of Capella Microsystems Inc. Capella microsystems is a fables Analog IC design company specialized in fully
integrated optical sensor for highly portable optical storage and communication devices.

Dr. Shih possesses a Ph.D. and M.S.E.E. from the University of California at Berkeley as well as a B.S.E.E. in Communications Engineering, from the National Chiao-Tung University in Hsin-Tsu, Taiwan. Cheng-chung was the founder and CEO/President of
Allayer Communications which was found in 1997 to deliver high bandwidth network silicon solutions to enable All Layers of Internet Communications.. Allayer
generated revenue in its first year and having a revenue yearly run rate at 20 million in 2000. At the end of 2000, Allayer communication merged with Broadcom at the end of 2000 for market value of 300 million dollars. Within Broadcom, Cheng-chung was the
Managing Director of Broadcom Asia Design Centers. Before Allayer communication, he served in Allied Telesyn, LevelOne Communications, Rockwell Semiconductor. Dr. Shih is an expert in CMOS and mixed-signal digital/analog ASIC design as well as communication standards and systems. Since 1992, he has served on the IEEE 802.3 Ethernet Standards Committee. He holds 12 communications technology patents. He is also the 2005 Chairman of Monte Jade West Science and Technology Association.

October:

Speaker: Mr. Wing Chung (锺有荣), Director of Product Engineering of Optoma Technology, Inc
Title: Digital Light Processing (DLP) projection technology update
Time: October 08, 2005, 10:00 am ¨C 12:00 noon.
Abstract:
Digital Light Processing (DLP) technology has evolved quickly in recent years. In just a few years, DLP products performance has increased up to 5 times, while cost of DLP products have decreased about 6

times! The reasons why DLP technology trend is not changing according Moore's Law prediction and how the DLP technology may change in the next one two years will be discussed.

Biography:

Wing Chung (锺有荣)is the Director of Product Engineering of Optoma Technology, Inc. Optoma Technology, Inc designs and sells a wide range of DLP projectors and DLP TVs. Wing was graduated with a Electronic Engineering BS degree at Hong Kong Polytechnic in 1981. He has 24 years experience in the R & D field. Before joining Optoma, Wing was the Engineering Manager of Bondwell Industrial Co. Inc. in 1989 and Engineering Manager of QuickShot Technology Inc in 1994 and Director of Remotec Technology Ltd.Wing is directly involved in the design of DLP TVs, DLP projectors and testers. He holds one granted patent and is applying 5 patents related to DLP projector products.

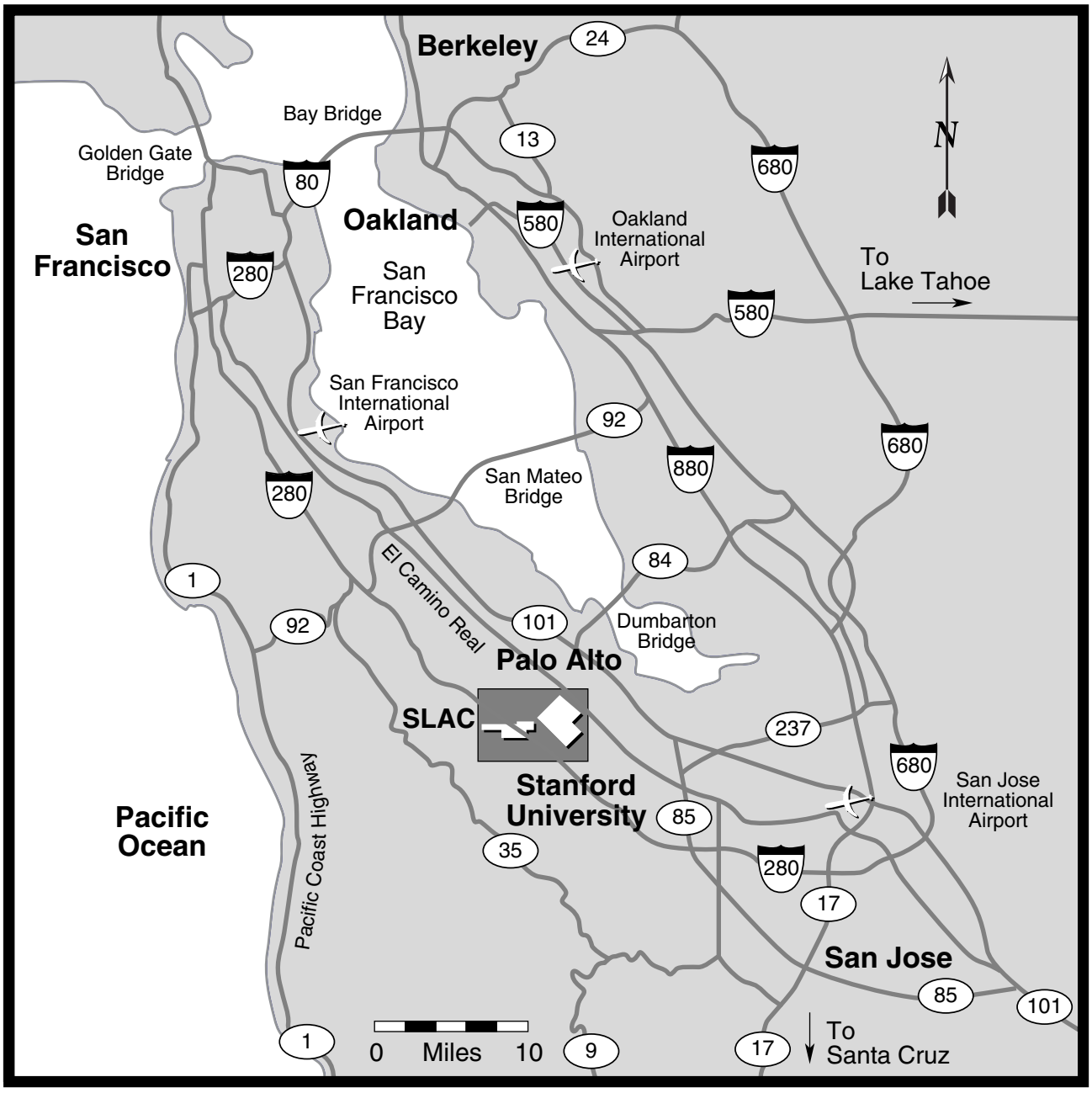
Photographer: Rensue Wong

November

Speaker: Dr. Chung -Ching. C. Yang (楊鎮清博士), HP Labs.

Title: Nano Crystal Hybrid Emissive Display

Date: 11/12/005



San Francisco Peninsula Area Map

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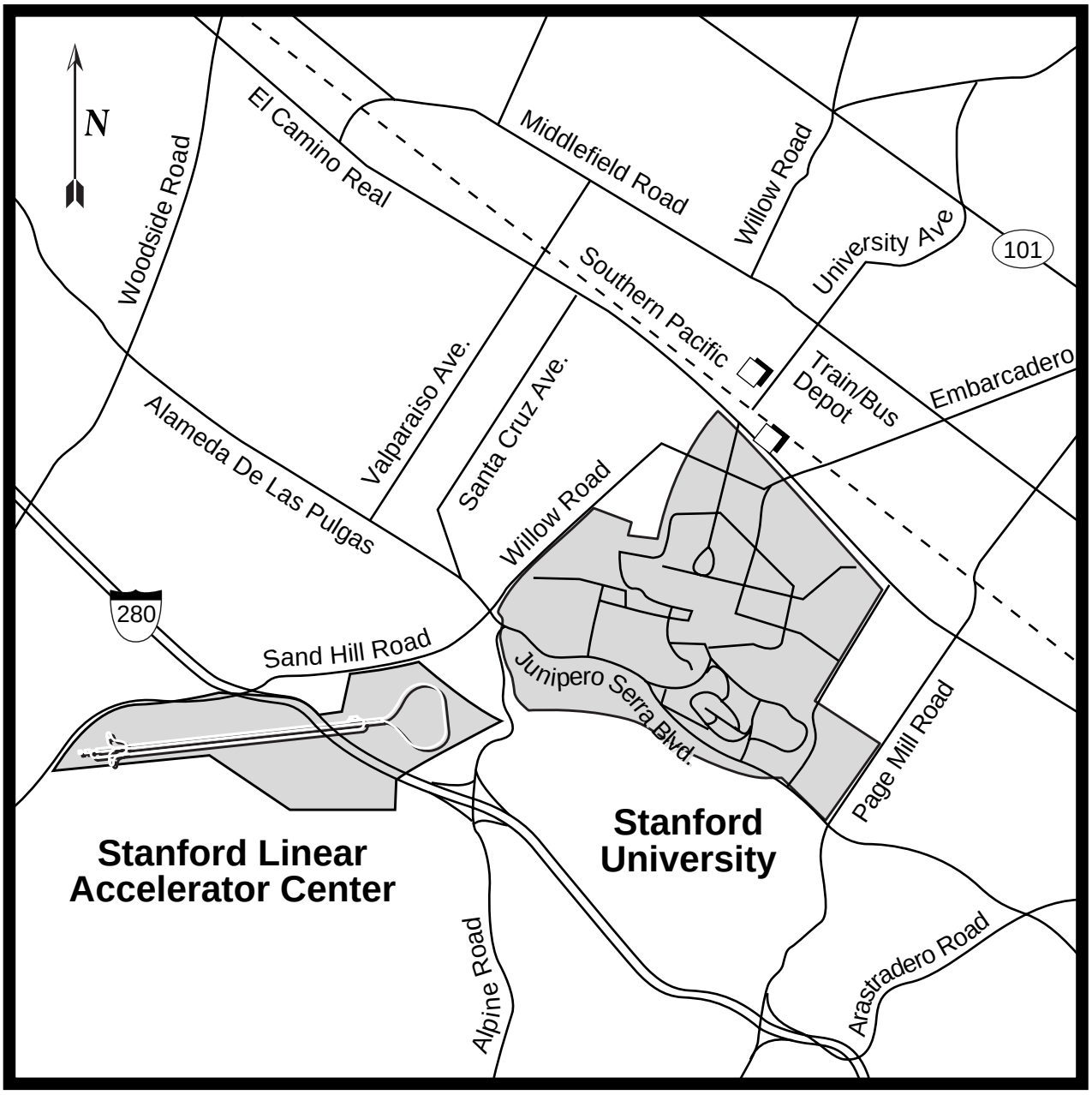

Stanford Area Map

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