

FLORIDA PHOTONICS QUARTERLY

The Florida Photonics Cluster Newsletter



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FROM THE PRESIDENT



Welcome to the first edition of our quarterly newsletter! As president of the Florida Photonics Cluster (FPC), I am proud to herald this historical event. After a period of hiatus, the FPC is once again active thanks to the efforts of our board and the Florida photonics community. In particular, I want to express my gratitude for the support of the University of Central Florida's Florida Photonics Center of Excellence and the Center for Research and Education in Optics and Lasers (CREOL), both of whom provided many of the editorial and publica-

tion resources.

The FPC has so much to offer its members and the photonics community through its many networking and business development activities. Yet there is much work ahead to grow our organization to its full potential and thus serve its members even more. Participating and investing even a modest amount of time in the FPC offers tremendous dividends. It's in that spirit that I see you not only as a member but also as a partner in our collaborative efforts to grow this seminal industry in the great sunshine state we call home!

Yours,
Alexandre Fong

FLORIDA HIGH TECH CORRIDOR COUNCIL



MESSAGE FROM RANDY BERRIDGE, PRESIDENT - FLORIDA HIGH TECH CORRIDOR COUNCIL

Dear Members
of the Board,

On behalf of the Florida High Tech Corridor Council, I would like to commend the entire Board of Directors at the Florida Photonics Cluster for your efforts in revitalizing the goals and vision

of founder Bill Schwartz. With your dedication and support to FPC, together you have made some initial excellent strides in uniting the optics and photonics industry within the state.

Through your leadership, you will add to the success of the University of Central Florida's College of Optics & Photonics and

continue to garner national attention for our region.

Once again, I am pleased to congratulate the Florida Photonics Cluster on its achievements.

Sincerely,
Randy Berridge

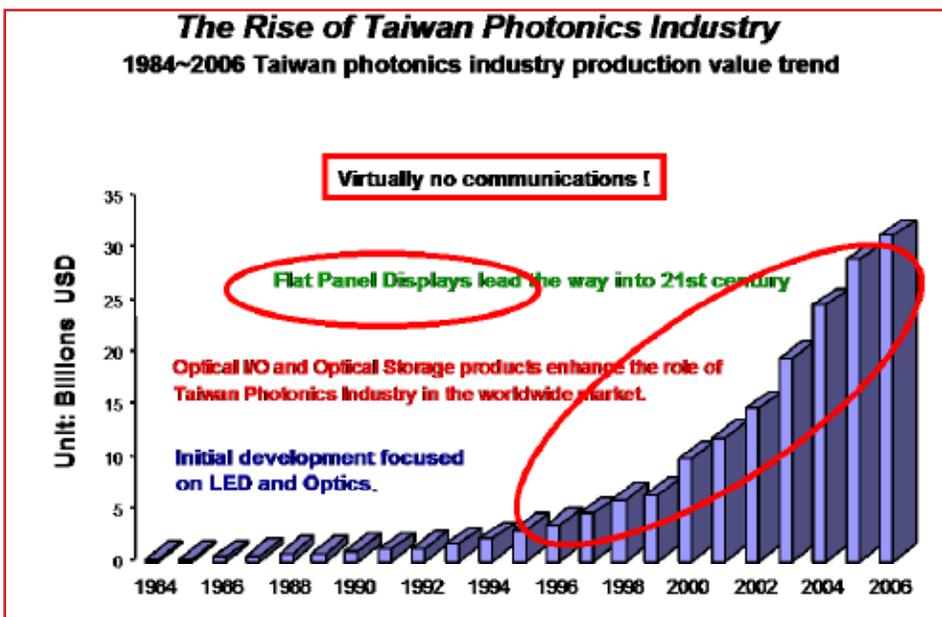
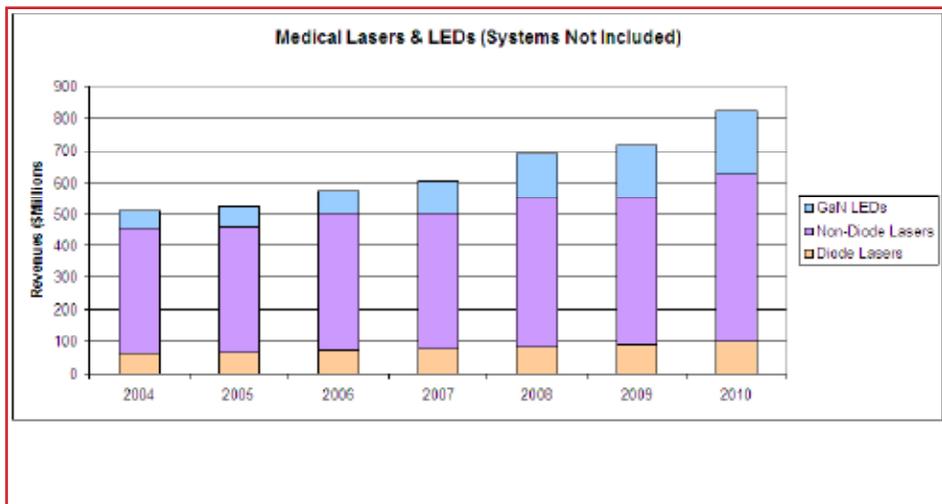
OIDA: THE RISE OF TAIWAN PHOTONICS



At the recent Florida Photonics Cluster Hospitality Event at the

SPIE Defense and Security Symposium, Opto-Electronics Industry Development Association (OIDA) Vice-President of Marketing & Business Development, David Huff provided a brief overview of OIDA and discussed his views on worldwide markets. He spoke about the growth of Taiwan's photonics industry, which has been steady through the 1990s to present as a result of its lack of involvement in the telecommunications boom of the late 1990s. David also noted the transition of many telecommunications players into the medical applications field.

He also spoke at length about the OIDA's efforts to promote optoelectronics worldwide and advance the competitiveness of its members by serving as the nexus for OE industry vision, transformation, and growth. To that end, the OIDA recently hosted an ATP conference call with NIST staffers to facilitate potential participants' proposals and issued an optoelectronics industry letter on DoC



proposed rulemaking on China exports. The FPC is an affiliate member

of the OIDA.



NEW LASER INSTITUTE DEDICATED AT UCF

A new laser technology center of excellence within The College of Optics and Photonics at the University of Central Florida was dedicated May 4 as the Townes Laser Institute, in honor of 1964 Nobel Laureate for Physics, Charles Hard Townes. Townes, who was responsible for many fundamental inventions that led to the develop-

ment of the laser. Townes also presented a seminar, speaking on "The Laser, its Origin, Development and Possible Future," and the next day received an honorary degree from UCF and spoke at a UCF commencement ceremony.

The mission of the Townes Laser Institute, funded in part by a recent \$4.5 million grant from the state of Florida to UCF's Florida Photonics Center of Excellence, is to make UCF

the premier institution in advanced laser technology in the United States. The center also will provide needed faculty and facilities in laser science and the next generation of laser technologies for medicine, advanced manufacturing tools and defense. Martin Richardson, university trustee chair and Northrop Grumman Professor of X-Ray Photonics, will be the institute's principal investigator.

NEW PHOTONICS SPECIALIZATION PROGRAM AT VALENCIA COMMUNITY COLLEGE

The Electronics Engineering Technology with specialization in Laser and Photonics program at Valencia Community College is designed to produce highly skilled technicians capable of assisting in design, operation, and servicing optics, photonics, and lasers systems and equipment.



Valencia is one of the state's top ranking community colleges and one of the few deliver-

ing an optics and lasers curriculum. The state of the art laboratory at the west campus provides students

with exceptional hands-on training and experience.

VALENCIA

Effective August 2007, Valencia will offer the Laser and Photonics Technician Technical certificate program. This program includes the basic components as identified by laser and optics industry.

The program has created an environment to enhanced and accelerated knowledge transfer between Valencia and industry. Relationships developed with local and district businesses and industry has facilitated increased student recruiting and internship opportunities.

For further information, please visit Valencia's Architecture, Engineering, and Technology Department Website at: <http://www.valenciacc.edu/west/engineering>.

MARKETING SUPPORT FOR THE FPC AND ITS MEMBERS THROUGH THE METRO ORLANDO ECONOMIC DEVELOPMENT COMMISSION AND RELATED ORGANIZATIONS



Eric Ushkowitz, Director of Technology Business Development for the Metro Orlando Economic Development Commission (MOEDC), and Ed Schons, UCF Director of Community Relations and Public Affairs, spoke about the marketing resources available to FPC members at the recent event hosted by the FPC at SPIE's Defense & Security Symposium. They pointed out that the MOEDC, the Florida High Tech Corridor

Council (FHTCC), Enterprise Florida and UCF's economic development activities have a common mission for the Florida optics and photonics industry:

- Foster the expansion and growth of Florida's optics and photonics industry
 - Market Florida's optics and photonics companies worldwide
 - Communication within the business community
 - Partner with the Florida education community to enhance the optics/photonics workforce
- To accomplish this mission, the organizations utilize and respond to inputs from the industry, and that the "strength of a unified industry

voice" that the FPC provides is a great asset in focusing their efforts. They also outlined the elements of the value proposition that these resources and the FPC offer its members, including:

- Enhanced visibility for your company
- Liaison opportunity with other international photonics organizations
- Discounts (10%) on exhibit space and other special benefits at SPIE and OSA conferences
- Admission to all Florida Photonics Cluster Events
- Annual Membership Directory
- Enhanced access to service providers *please see MARKETING pg. 3*

PANEL EMPHASIZES NEED FOR SKILLED WORKFORCE AND COOPERATIVE EFFORTS WITH SUPPLIERS

Another session at the SPIE DSS FPC event was a prime contractor Q&A panel for suppliers hosted by the FPC. Mike



Dudzik, Director, Research & Technology, Lockheed Martin Missiles & Fire Control, discussed the LMMFC "Mentor Protégé" program. Through this program, LMMFC works with smaller companies to educate them and to help them qualify as an ISO-qualified supplier to LMMFC. LMMFC also provides SBIR/STTR support to help companies as a transition partner and works with smaller companies on DARPA programs.

Dan Young, Vice President Strategic Technology, DRS Optronics discussed operations in Melbourne and Palm Bay, which are mainly for manufacturing, and that only a

modest amount of R&D is done in FL at this time. Like other panelists, DRS faces challenges handling a big surge that they are experiencing in imaging systems orders and look to work with suppliers for optomechanical subassemblies. DRS is also seeking machines and operations that are capable of producing the optical tolerances required, test and measurement capabilities, senior systems and mechanical engineers and technicians.



Eric Park, Manager of E-O Systems Engineering, Northrop-Grumman Laser Systems, said that much of their needs are similar to those outlined by the other participants such as the need for optomechanical subassem-

bly suppliers and laser technicians. Eric said that some of the difficulties are those that come with DoD requirements, including procedures for inspection and Quality Assurance

A common theme that emerged from the panel was the need for workforce education development: more is needed than currently available and the battle to win the "war on talent" by attracting the best and brightest to work at the company.

With respect to growth in the DoD market, LMMFC currently sees it as flat but is looking for new products to expand its offerings and capabilities. There will likely be more COTS (Commercial Off The Shelf) developments, which means

a new supply base is likely to come in and innovation will be needed.



MARKETING from pg. 3

- An expansive resource base that includes partnerships
 - Continued emphasis on photonic- focused data collection with an annual survey
 - Assisted access to venture capital
 - Input to curriculum development in state universities and

- community colleges
- Eric and Ed concluded by outlining their legislative involvement activities aimed at representing the needs of industry in Tallahassee:
 - Past success – Elimination of the sales tax on R&D equipment
 - 2007 Session
 - Quick Action Closing Fund
 - Research Commercialization Matching Grant Program

- R&D Corporate Tax Credit
- Florida Capital Formation Act
- Sure Ventures
- Sure Ventures Commercialization Program.

PRESS RELEASES OL 771 High-speed HB-LED Measurement System

Optronic Laboratories' new OL 771 Multi-channel Spectroradiometer is based on the successful OL 770 Multi-channel



LEDs. The OL 771's electronics is

Spectroradiometer but designed specifically for high brightness sources such as today's innovative high performance

housed in one rugged, portable enclosure and features highly intuitive Windows-based software. It is available in the visible range (380 – 780 nm).

COMPANY SPOTLIGHT – OPTRONIC LABORATORIES



Founded in 1970 by two NIST scientists, Optronic Laboratories has enjoyed a worldwide reputation as a leader and innovator in the field of optical radiation measurement, consistently providing accurate, repeatable measurements in the UV-VIS-NIR-IR wavelength ranges for research, academia, industry and the military. From the character-

ization and compliance of the most sophisticated NVIS instrumentation to tanning beds, Optronic Laboratories offers both standard and custom products and services to satisfy the most demanding light measurement applications

FLORIDA PHOTONICS CLUSTER MEMBERS

AlphaLaunch

<http://www.alphalaunch.com/>

Analog Modules, Inc.

<http://www.analogmodules.com/>

**Florida High Tech
Corridor Council**

www.floridahightech.com

Harris Corporation

<http://www.harris.com/>

High Tech Photonics

www.HT-PhotonicsUSA.com

LaserPath Technologies

<http://www.laserpathtech.com/>

LightPath Technologies

<http://www.lightpath.com/index.html>

Lockheed Missiles & Fire Control

<https://mfcbastion.external.lmco.com/missilesandfirecontrol/default.htm>

Metro Orlando Economic Development Commission (EDC)

<http://www.orlandoedc.com/>

Opnext, Inc.

<http://www.opnext.com/>

Optronic Laboratories, Inc.

<http://www.olinet.com>

Ray Williamson Consulting

<http://www.ray-optics.com/>

**UCF CECS, Dept of
Engineering Technology**

www.research.ucf.edu

UCF College of Optics and Photonics

www.creol.ucf.edu

The UCF Office of Research & Commercialization

www.research.ucf.edu

University of South Florida

www.usf.edu

VLOC

<http://www.vloc.com/vlochome.htm>

PHOTONICS COMMUNITY EVENTS

Americas Competitive- ness Forum

This program, sponsored by the US Dept of Commerce, will be in Atlanta, Georgia on June 11-12. For full information, go to <http://trade.gov/competitiveness/acf/>

SPIE Optics + Photonics (SPIE Annual Meeting)

Dates: 26 - 30 August 2007
Location: San Diego, California, USA
Exhibition Dates: 28 - 30 August 2007

SPIE Optics East

Dates: 9 - 12 September 2007
Location: Boston, Massachusetts, USA
Exhibition Dates: 11 - 12 September 2007

Frontiers in Optics 2007/ Laser Science XXIII

(OSA Annual Meeting)
Dates: 16-20 Sept 2007
Location: San Jose, CA USA
Exhibition Dates: 18-19 Sept 2007

ICALEO 2007

Dates: 29 Oct – 1 Nov 2007
Location: Orlando, FL USA
Exhibition Dates: 30 October 2007



Why Join the FPC?

MAKING MONEY STARTS WITH A GOOD CONNECTION.

BENEFITS OF MEMEBERSHIP:

- Identify common needs and interests
- Leverage to develop opportunities through joint efforts, pooled resources and knowledge
- Regional, Statewide, National and International Reach
- Small, Medium, Large Corporations, Academe and Government Benefit!

FPC MEMBERSHIP BENEFITS INCLUDE:

- The strength of a unified industry voice, providing a platform for local and state legislative support
- Visibility for your company through FPC's website, marketing literature, and trade show displays with member spotlight on companies and products and opportunities to participate in state and national sales and marketing efforts
- Liaison opportunity with other international photonics organization such as other photonics clusters (Arizona, Rochester, UK), scientific societies (OSA, SPIE) and industry trade organizations (OIDA).
- Networking opportunities through annual and regional membership meetings
- Discounts (10%) on exhibit space and other special benefits at SPIE and OSA conferences. Typical benefit per show starts from over \$300 (10' X 10' booth) and \$600 (10' X 20' booth).
- Discounted membership rate with the University of Central Florida's CREOL Industrial Affiliates Program
- Admission to all Florida Photonics Cluster Events – for all your employees – included in membership
- Access to service providers that can assist your company with the actions that are necessary for sustaining your business such as banks, suppliers, and professional marketing, communications and legal services organizations at preferred rates
- An expansive resource base that includes partnerships with Enterprise Florida, area economic development organizations, the Florida High Tech Corridor Council, and CREOL to provide access to incentives and business development programs and research
- Assisted access to venture capital and opportunities to help develop Florida photonics companies into worldwide participants
- Opportunities to participate in the curriculum development in state universities and community colleges and advanced access to Florida's best and brightest students and the additional ability to recruit nationwide through the FPC website

For full information on the FPC and an application form, go to <http://www.floridaphotonicscluster.com/>