



Florida Photonics Quarterly

The Florida Photonics Cluster Newsletter

In This Issue

[FROM THE PRESIDENT](#)

[RSVP Now! Next FPC meeting](#)

[Harnessing Light II](#)

[OIDA Connection](#)

[Small Business Defense Summit](#)

[Southeast Regional Center for Optics and Photonics Education](#)

[Florida Virtual Entrepreneur Center](#)

[WELCOME NEW FPC MEMBERS](#)

[FPC April Meeting Notes](#)

[Ranked #1 in "Workforce" in 2010](#)

[Photonics Technician Certifications Now Available!](#)

[DON'T MISS OUT!!! ENJOY THE BENEFITS OF FPC MEMBERSHIP](#)

Join Our List

Join Our Mailing List!

August 2011

FROM THE PRESIDENT - Alex Fong



In spite of its somewhat tentative nature and the rocky path it took, I think many breathed a sigh of relief when the debt ceiling debate was resolved. Still the agreement left many of the hard decisions on the table for further discussion. While there is widespread consensus amongst economists of all political stripe that the purse strings do need to be tightened and the hardship will need to be shared, the devil, as always, is in the details.

It's true that we need to take responsibility now for ensuring our future. However, we can't lose sight of the objective being just that: to make a better future for the nation and our children and their children. That won't happen if we start paring away too much of the discretionary spending that invests in science and technology that has proven return both in the short term (jobs) and long term (growth). For example, GPS, MRI, computers, pacemakers, even modern running shoes and more owe their existence to the space program. Yet we invest a modest amount in this enterprise that has created entire economies. Recently there was a great interview with Elon Musk (SpaceX) who noted that NASA's annual budget is roughly 2% of what was spent on the Wall Street bailouts.

NASA and similar investments are considered discretionary spending and are easy targets for budget cuts. While an extremely unpopular reality, there is no disputing the fact the even cutting discretionary spending entirely will not get our house in order. The fact is that the large entitlement programs and defense will need to be looked at. So therein lies the rub: will we mortgage the future for present day political expediency? Will we as a nation do the easy thing but not the right thing? Only we the people can decide.

RSVP Now: Upcoming Joint FPC-MACF Meeting, September 29

The next FPC meeting will be held jointly with the Manufacturers Association of Central Florida Thursday, September 29, 3:00pm-5:30pm followed by a networking reception, and no-host dinner for

those interested.

Program:

1. "Innovation Engineering": Mark Tellam, PE, Bytomorrow LLC
2. "MACF Overview": Sherry Reeves, Executive Director, Manufacturers Assoc. of Central FL (MACF)
3. "Overview of Harris GCSD Manufacturing": Brad Nichols, Director of Manufacturing, GCSD
4. Tour of Harris facility, reception; no-host dinner at nearby restaurant

Where: Harris Corporation, Customer Briefing Center, 1025 W. NASA Blvd, Building B, MelbourneFlorida32901

Hosted by: Harris Corporation, Florida Photonics Cluster, Manufacturers Association of Central Florida

To attend: send an RSVP email to Jim Pearson, FPC Executive Director - jpearson@mail.ucf.edu with name, company, title, and contact information. Also, indicate interest in attending a no-host dinner at a nearby restaurant after the meeting. All interested parties are welcome to attend.

Attendance is free, but total attendance is limited, so **RSVP is needed by 9 September 2011.**

Harnessing Light II - Industry Inputs Needed NOW!

The Harnessing Light II (HLII) project is an update of the report by the National Academies on the Optics and Photonics industry in the USA done in 1998 (see

http://www.nap.edu/catalog.php?record_id=6404 for a free PDF download of that report). The 1998 HL report spoke mainly to the science of optics and photonics. The HLII project needs to speak strongly also to engineering and the impact of optics and photonics on the US economy and the significant work being done in other countries in the field that will impact US competitiveness if the US does not accelerate its emphasis on manufacturing as well as R&D in optics and photonics.

The HLII project by the National Academies, "Capitalizing on Optical Science Trends and Challenges for Future Research" (COST) is sponsored by DARPA, NSF, NIST, ARO, DOE, and National Research Council Funds. The project is supported by SPIE, OSA, The IEEE Photonics Society, and USAC/ICO and The project goals are:

1. Review updates in the state of the science that have taken place since publication of the National Research Council report, Harnessing Light;
2. Identify the technological opportunities that have arisen from recent advances in and potential applications of optical science and engineering;
3. Assess the current state of optical science and engineering in the United States and abroad, including trends in private and public research, market needs, examples of translating progress in photonics innovation into competitiveness advantage (including activities by small businesses), workforce needs, manufacturing infrastructure, and the impact of photonics on the national economy;
4. Prioritize a set of research grand-challenge questions to fill identified technological gaps in pursuit of national needs and

- national competitiveness;
5. Recommend actions for the development and maintenance of global leadership in the photonics driven industry -- including both near-term and long-range goals, likely participants, and responsible agents of change.

SPIE, the international society for optics and photonics, has posted a survey accessible on the blog www.HarnessingMinds.org to collect input. You can also view the results of an earlier industry survey taken this spring by SPIE.

The committee working with the National Academies can be found at <http://www8.nationalacademies.org/cp/committeevue.aspx?key=49336>.

The committee is seeking as much input from industry as possible by the end of November 2011. To provide your input to their work, go to

<http://www8.nationalacademies.org/cp/projectview.aspx?key=49336>. Keep in mind in making your inputs that the report will be addressing mainly a non-technical audience.

FPC and OIDA Get Connected



Sharing many common objectives, the Florida Photonics Cluster (FPC) and the Optoelectronics Industry Development Association (OIDA) have each joined the other association. OIDA is a Washington DC-based, non-profit association that promotes optoelectronics, and earlier this year became a division of The Optical Society (OSA). OIDA members include leading providers of optoelectronic solutions, as well as universities and research institutions. OIDA serves as the voice of industry to government and academia, acts as liaison with other industry associations worldwide, and provides a network for the exchange of ideas and information within the optoelectronics community. The FPC and OIDA have started sharing information resources and communicating on matters of mutual interest, including recent discussions with the new OIDA Executive Technical Director, Ganesh Gopalakrishnan (photo above).

Orlando Small Business Defense Procurement Summit



The City of Orlando, Orlando Regional Chamber of Commerce, Metro Orlando Economic Development Commission and the Department of Defense hosted an event that brought together small businesses, prime contractors and government officials to the Rosen Shingle Creek on August 8, 2001 in a forum to help small businesses explore contacting opportunities with the defense industry and federal contracting agencies. The event was opened by Mayor Buddy Dyer and Senator Bill Nelson and featured a talk from Ashton B. Carter, Under Secretary of Defense and Acquisition,

Technology and Logistics, key government and industry discussion panels, networking sessions and matchmaking sessions.

Attendance was strong there was insight given on partnering with prime contractors and universities, new procurement processes introduced by the government and pledges of support for small business.

Southeast Regional Center for Optics and Photonics Education

Indian River State College has been awarded a grant by the National Science Foundation to plan the creation of the Southeast Regional Center for Optics and Photonics Education for technicians. The main goal of this center is to increase the number of qualified photonics technicians produced by the colleges of the region. To accomplish this goal the center seeks the cooperation and advice of the photonics employers of the region in creating training programs suited to the local industrial needs. The regional center also seeks the influence of employers in encouraging the creation of photonics programs in colleges with presently no photonics course offerings. The center can provide the curriculum and training for college or high school instructors, and any other assistance needed when establishing new photonics programs.

If you have not received an email requesting your inputs via a brief survey to the planning activity, or if you have questions or would like to contribute to the planning for this center, please contact Dr. Chrys Panayiotou, cpanayio@irsc.edu, (772) 462-7621.

Florida Virtual Entrepreneur Center (FLVEC)

The Florida Virtual Entrepreneur Center (www.flvec.com) is a free web portal designed to connect entrepreneurs with business support organizations, programs and service providers who can support their new or growing business.

Entrepreneurs: Navigating the VirtualEntrepreneurCenter is easy and free. Are you starting a business? How about expanding an existing operation? Considering relocating? By simply selecting any of these topic areas and many others, you will instantly be connected with local, state, regional and national resources, programs and service providers who can support all of your business needs.

Business Owners & Service Providers: If you are a local business or service provider offering business-related products and/or services meeting the needs of entrepreneurs and/or businesses, you can register your company with the VirtualEntrepreneurCenter at no cost. Once registered you can upload your company information to the online web portal and become a resource for other businesses.

Major funding and support for the FLVEC is provided by the Florida High Tech Corridor Council (FHTCC - www.floridahightech.com). The FHTCC is also a member and strong supporter of the Florida Photonics Cluster.

WELCOME NEW FPC MEMBERS!

The FPC is delighted that 11 new members have joined the association in 2011. Information on these new members as well as on the 40 continuing members is available on the FPC website at <http://www.floridaphotonicscluster.com/florida-photonics-members/index.php>. The following is a list of the new members:

1. American Photonics, Bradenton, FL
2. Florida Institute of Technology, Melbourne, FL
3. LaserStar Technologies Corp, Orlando, FL
4. Optigrate, Orlando, FL
5. Opto-Alignment Technology, Indian Trail, NC
6. Optoelectronics Industry Development Assoc. (OIDA), Washington, DC
7. Optonetic, Orlando, FL
8. Pangolin Laser Systems, Inc., Orlando, FL
9. Semiconductor Devices USA, Melbourne, FL
10. SPIE, Bellingham, WA
11. Sunrise Optical, Sunrise, FL

FPC Meeting April 4, 2011

GENERAL DYNAMICS
C4 Systems

Trusted. Core to Edge.

An FPC meeting was held April 4, 2011 at General Dynamics C4 Systems (GDC4S). The program had three presentations:

- "Advances in Video Technology: Can They Adversely Affect Your Bottom Line?" Presented by Arte Tedesco, President of Monkey Fist Productions in Orlando. <http://www.videoproductionorlando.org/>
- "Update on Southeast Region Employer Council", Dr. Chrys Panayiotou, Professor & Dept Head, Electronics Engineering Technology, Indian River State College, and partner of OP-TEC: National Center for Optics & Photonics Education. www.op-tec.org
- Overview of General Dynamics C4S and EDGE®. The EDGE® Innovation Network is a collaborative initiative that enables EDGE® members from industry and academia, with government input, to work together to speed delivery of new technologies and innovative capabilities to warfighters and first responders.

Following a tour of the EDGE® facilities at GDC4S, the attendees enjoyed a reception and networking; hosted by GDC4S and the FPC.

Florida Ranked #1 in "Workforce" in 2010

An annual ranking of the 52 US states in 10 categories by CNBC put Florida as #1 in the Workforce category. Florida also was ranked #13 in "Technology & Innovation", #17 in "Access to Capital" and #28 overall in the average of the 10 categories. All of the rankings are on the web at www.cnbc.com/id/37516047. In addition to the CNBC ranking, the quality of Florida's talent and

its workforce programs, led by Workforce Florida and its regional centers, has been recognized throughout the state and nation. Here are some other recent Workforce Florida accolades:

- Top Performing Workforce Development and Training State, Enterprising States
A report of the U.S. Chamber of Commerce and the National Chamber Foundation
- No. 4 in the Nation for Workforce Training Programs, 2010
Business Facilities Workforce Training Leaders

Congratulations go to Workforce Florida and their 24 Regional Workforce Boards for these recognitions of their fine programs. Workforce Florida funded the Photonics Technician Certification program proposed by the FPC and administered by CREOL at the University of Central Florida, and Workforce Central Florida funded the Photonics Certificate program proposed by the FPC and managed by the Continuing Education Department at the University of Central Florida. The FPC Executive Director, Dr. Jim Pearson, was an active participant in both contracts. Both of these contracts have been concluded, but the programs they developed are continuing.

Photonics Technician Certifications Now Available!

The Photonics Technician Certifications developed by the FPC with the support of many other organizations are now available from ETA-International (<http://www.etainternational.org>). Two categories of certification - Photonics Technician and Precision Optics Technician - are in place, each of which have 2 subcategories. See http://www.eta-i.org/stand_alone_certifications.html and scroll to "Fiber Optics and Data Cabling" to view the criteria and learn more about the certifications, which are the first ones in the US for photonics technicians, with the exception of the fiber optics technician categories that ETA-I has had for several years.

JOIN THE FPC TODAY!



[Enjoy the benefits of FPC membership!](#)

[Why Join FPC? To Make Money!](#)

Benefits of FPC Membership:

- 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 all 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 start from over \$300 (10' X 10' booth) and \$600 (10' X 20' booth).
- Discount of \$300 to the membership rate with the Industrial Affiliates Program of the University of Central Florida's CREOL, The College of Optics and Photonics
- Admission to all Florida Photonics Cluster Events 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

[Join FPC today and enjoy the benefits of membership!](http://floridaphotonicscluster.com)
[For more information, visit floridaphotonicscluster.com.](http://floridaphotonicscluster.com)

-
[The Florida Photonics Cluster \(FPC\) Website now accepts donations, member dues, and other payments through Card Systems, Inc. \(http://www.cardsystems.com\)](http://www.cardsystems.com)

Card Systems is a fast, convenient and safe way to make online purchases and transactions via credit card. Note that submission of a membership application is still required for new applicants joining the FPC, and for updating renewing memberships. A link is provided from the new FPC website.

Greetings FPC Members and Friends,

The Florida Photonics Cluster is designed to support the growth and profitability of the Florida photonics industry through the strength of a unified voice to make Florida the place to go for photonics solutions.

The FPC is dedicated to enhancing the industry through effective collaboration by bringing together the knowledge, expertise, and service that each of its members organizations has to offer.

FPC Goals

- Foster the expansion and growth of Florida's optics and photonics industry by partnering with economic development organizations, the state universities, and community colleges, and local and state governments.
- Market Florida's optics and photonics companies worldwide.
- Facilitate and provide a means of communication within the business community.
- Partner with the Florida education community to enhance and develop a competent statewide optics and photonics-based workforce.
- The FPC is a 501c(6) not-for-profit corporation, registered with the Florida State Division of Corporations.

[For more information, visit www.floridaphotonicscluster.com today!](http://www.floridaphotonicscluster.com)

Sincerely,

Alexandre Fong, President
Florida Photonics Cluster

Jim Pearson,
Executive Director