

# Meeting Minutes



Meeting: FPC General Members Meeting & Annual Meeting  
Date: December 3, 2015  
Location: Partnership II, UCF Research Park  
Attendees: FPC members, guests, presenters

## Minutes

1. The meeting was called to order at 3:15pm by FPC President, Alex Fong. Alex made some brief introductions and gave a short overview of the FPC, including 2015 results and 2016 plans, and results of the election for the 2016 Board of Directors (see <http://www.floridaphotonicscluster.org/board-of-directors/index.php> for the members of the 2016 Board). Dennis Pape provided a brief overview of the 2015 financial results and 2016 budget.
2. Mr. Tom Hausken, OIDA/OSA Senior Engineering Advisor, gave a presentation on the "State of the Industry". A brief summary of a few points in his presentation:
  - Optics & Photonics supports \$78 Trillion annual global economic output.
  - Worldwide photonics production was ~\$450B/yr in 2011-2014, and ~\$425B to date in 2015.
  - The largest economic sectors in photonics are:
    - #1 – Displays
    - #2 – Solar
    - #3 – Lighting
    - #4 – Consumer Imaging
    - #5 – Biomedical
    - #6 – Communications
    - #7 – Security/Other
    - #8 – Machine Tools
  - US GDP growth in photonics has been modest, but steady at ~3%/yr
  - US Photonics employment:
    - Direct: 125K jobs in 900 companies
    - Products enabled by photonics: 385K jobs in 3,300 companies (~90% of these are SME's that produce ~20% of total US revenue)
    - ~2/3 of the companies are in California and the NE Region (PA, NY, NJ, CT, VT, NH)
  - Photonics production by global region:
    - #1 – Japan with \$88B (Solar, LEDs, Displays dominate the product list)
    - #2 – USA with \$83B
    - #3 – Korea with \$52B
    - #4 – Europe
    - #5 – Taiwan
  - Tom's view of "What's hot in photonics" right now:
    - Imaging (self-driving cars; drones & robots; augmented reality; medical imaging; night vision)
    - Sensors (mid-IR, fiber sensors, atomic clocks, biometrics, cytometry)
    - Integrated photonics (data sensors, et al)
  - US Government total R&D funding for 2016: \$76B in defense, \$68B in non-defense, and flat in future years

*The FPC is a 501c(6) nonprofit corporation whose mission is to support the growth and profitability of the Florida photonics industry through the strength of a unified voice, and to make Florida the place to go for photonics solutions.*  
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3. Mr. Dan Holladay, Director – International Consortium for Advanced Manufacturing Research (iCAMR) & Executive Director, Operations and Technology Programs, UCF/ORC, gave a talk on , “Advanced Manufacturing Technology Solutions for Next Generation Devices and Systems”. A PDF of his presentation is on the FPC website under “Events”. A brief summary of a few points in his presentation:
  - A new CEO has been named for iCAMR: Chester Kennedy, who recently retired from Lockheed Martin Corp. as vice president and chief engineer of training and logistics solutions. He has more than 30 years of increasingly progressive experience at Lockheed and also founded and served as president of his own company, CK solutions, LLC.
4. Ms. Tammie Nemecek, Director, GrowFL, gave an overview of GrowFL. A PDF of her presentation is on the FPC website under “Events”. A few of the points in her presentation are as follows:
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5. Mr. Bill Easter, CEO, Semplastics, gave a presentation on “X-MAT- A Potentially Disruptive Technology for Space Mirrors and Other Applications”. A PDF of his presentation is on the FPC website under “Events”. A few of the points in his presentation are as follows:
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6. The meeting concluded with a reception for networking, hosted by The Corridor and GrowFL. A no-host dinner was held at a local restaurant for further networking and discussions.