



AIM PHOTONICS FALL 2016 MEETING

October 31-November 2, 2016

BUILDING AN INDUSTRY: PART II

NAVIGATING THE INTEGRATED PHOTONICS TECHNOLOGY TRANSITION

Co-Organized By:

AIM Photonics Institute • The MIT Microphotonics Center • INEMI

MIT Media Lab, E14, 6th Floor, 75 Amherst St., Cambridge, MA (Oct. 31-Nov. 1)

MIT Campus, Room 6-104, 182 Memorial Drive (Rear), Cambridge, MA (Nov. 2)

WHO SHOULD ATTEND?

Integrated Photonics Professionals, Faculty, Students

Companies engaged in or entering the Integrated Photonics Marketplace

AIM Photonics Members

THE TECHNOLOGY TRANSITION TO INTEGRATED PHOTONICS

**Technology Transitions are built on a foundation of i) competency,
ii) vision, iii) prototypes, and iv) supervening applications.**

MONDAY, OCTOBER 31 *(MIT Media Lab)*

SESSION 1: COMPETENCY

The workforce originates from two industries: low volume photonics for communication and computing and high volume integrated circuits. What necessary skills are missing?

The AIM Workforce Needs Assessment: skills and timelines

- presentations and industry panel
Education Content and Delivery
- tutorials from the AIM instructional set: photonic materials and devices, design, and silicon photonics

SESSION 2: VISION

Integrated Photonics System Roadmap

Defining key applications and challenges to high volume manufacturing

- presentations by AIM MCE and KTMA leadership

ROADMAP WORKSHOP

*Joint breakout sessions of the Education, Workforce, Professional Society
Affiliates, AIM MCE/KTMAs and Roadmap TWGs*

NETWORKING RECEPTION AND POSTER SESSION



TUESDAY, NOVEMBER 1 *(MIT Media Lab)*

SESSION 3: PROTOTYPES

Technical Presentations

Foundry options for monolithic, 2D and 3D Hybrid Integration

- The AIM MPW Platform
- Integrated Photonic Subsystems
- Monolithic Electronic-Photonic Integration

SESSION 4: SUPERVENING APPLICATIONS

Data Centers – HPC – Automotive – IoT

What are timelines and prospects for cross-market platforms?

- Automotive: LIDAR and Cabling
- On-Board Interconnection: Joint Development Consortium Models
- Chemical and Biological Sensing

SESSION 5: INTEGRATED PHOTONICS ROADMAP

Roadmap Workshop Report Back

Navigating the Integrated Photonics Technology Transition

- IPSR Roadmap draft updates: TWG reports
- Workforce Roadmap: education ramp and workforce projections

PANEL DISCUSSION

Reviewing the ramps of the Workforce, Manufacturing and Markets

- Evaluation of integrated photonics supply chain preparedness

WEDNESDAY, NOVEMBER 2 *(MIT Campus, Room 6-104)*

MORNING SESSION: THE MASSACHUSETTS INTEGRATED PHOTONICS MANUFACTURING SUPPLY CHAIN

- *Education and Workforce Development*
- *Commercial engagement in Integrated Photonics Markets*

AFTERNOON SESSION: AIM ACADEMY ADVISORY COUNCIL MEETING