Generic Integration Technologies for Photonics

Eastern European workshop for research institutes, SMEs and large companies

22nd/23rd November 2012
Warsaw University of Technology, The Faculty of Electronics and Information Technology
Ul. Nowowiejska 15/19, 00-665 Warsaw

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The first day

I. Registration 8:30 – 09:30

II. Session 09:30 – 10:55 Introduction to photonic integrated circuits

1. 09:30 – 09:35 Welcome by prof. Jan Szmidt (the rector of the Warsaw University of Technology)
2. 09:35 – 09:55 WUT and IMiO presentation (Paweł Szczepański, WUT)
3. 09:55 – 10:40 Introduction to integrated photonics, generic integration technology approach, manufacturing chain, MPW runs, building blocks, JePPIX platform (Meint Smit, COBRA)
4. 10:40 – 11:00 Positioning PICs in the Photonics 21 platform (Mike Wale, OCLR)

Coffee break 11:00 – 11:30

III. Session 11:30 – 13:00 EU FP7 Projects – EuroPIC and PARADIGM

1. 11:30 – 12:10 EuroPIC & PARADIGM projects overview (Xaveer Leijtens, COBRA)
2. 12:10 – 12:30 Experience of designing on a generic foundry platform (Ronald Broeke, BBP)
3. 12:30 – 12:50 Eastern Europe Design Hub presentation (Ryszard Piramidowicz, WUT)

Lunch break 12:50 – 14:00

IV. Session 14:00 – 15:30 Generic manufacturing chain - design process and photonic CAD software

1. 14:00 – 14:45 ASPIC design presentation (Richard Penty, UCAM)
2. 14:45 – 15:30 Software for integrated photonics (simulation and design), circuit level simulators, PDAFlow (Arjen Bakker, PHX, Dominic Gallagher, PHOD, and Andrea Melloni, PoliMi/FIL)

Coffee break 15:30 – 16:00

V. Software/(AS)PIC design tutorial/demonstration 16:00 – 18:30 (PHX, PoliMi, PhoD, UCAM, BBP, WUT)
The second day

I. Session 09:00 – 10:45 Generic manufacturing chain – fabrication, measurements and packaging
   1. 09:00 – 09:30 Fabrication of photonic integrated circuits (Francisco Soares, HHI)
   2. 09:30 – 10:00 Measurement equipment and techniques (Francesco Morichetti, PoliMi)
   3. 10:00 – 10:30 Packaging of photonic integrated circuits (Bob Musk, GHO)
   4. 10:30 – 10:45 How to make business utilizing the generic foundry concept (growing of the ecosystem) (Mike Wale, OCLR)

Coffee break 10:45 – 11:15

II. Brokerage session + poster session 11:15 – 13:30
   11:15 – 11:30 Presentation of the call for participation in PARADIGM MPW runs (David Robbins, WIL)
   Brokerage (11:30 – 13:30, parallel with poster session) – there will be room for individual discussion with the PARADIGM work package leaders and representatives (focused on applications, design, software, characterization – users’ point of view)
   Poster session (11:30 – 13:30, parallel with brokerage session) – advertising posters about EuroPIC, PARADIGM, JePPiX, EEDH, IMiO and all EuroPIC/PARADIGM consortium members will be welcome to present their work.

Lunch break 13:30 – 14:30

III. Session 14:30 – 15:45 Silicon and Triplex platforms; Development of the InP platform
   1. 14:30 – 14:50 Generic integration technology on a silicon platform (Pieter Dumon, IMEC/UGhent)
   2. 14:50 – 15:10 Generic integration technology using the Triplex platform (Arne Leinse, LioniX BV)
   3. 15:10 – 15:40 New capabilities and further development of the InP platform – polarization independent devices, long-wavelength platform, new composite building blocks – pulse lasers, platform convergence (Dominik Szymański, OCLR)
   4. 15:40 – 15:45 Closing remarks (WUT)

   Formal end of the Workshop 15:45

   For interested participants extra lab tour 16:15 – 17:30