

IHRS NANONET COURSE

Polymers in Microelectronics and Optoelectronics Applications

Lecturer	Dr. Anton Kiriy and Prof. Dr. Brigitte Voit (IPF Dresden)
Dates	25-27 August 2014
Location	IPF Dresden (Hohe Str. 6), Seminar Room BioBau (MBC)
Content	The course covers polymers (including some synthetic aspects and basic requirements and properties) for microelectronic and organic electronic applications (Photoresins and photoresists, dielectrics, high temperature stable polymers, conjugated polymers, applications in printing technologies, integrated circuits, OFETs, OLEDs, organic photovoltaics).

Detailed agenda

Monday, 25 August 2014

- 09:00 - 10:30 (1) General introduction in polymers in communication and microelectronics and optoelectronic applications (B. Voit)
- 10:30 – 11:00 *Break*
- 11:00 – 12:30 (2) Photoresists and high performance polymers as dielectrics in conventional microelectronic applications (B. Voit)
- 12:30 – 13:30 *Lunch break (at IPF)*
- 13:30 – 15:00 (3) General aspects and synthesis of organic semiconductors (A. Kiriy)

Tuesday, 26 August 2014

- 09:00 - 10:30 (4) OLEDs/PLEDs (A. Kiriy)
- 10:30 – 11:00 *Break*
- 11:00 – 12:30 (5) OFETs (A. Kiriy)
- 12:30 – 13:30 *Lunch break (at IPF)*
- 13:30 – 15:00 (6) Organic/polymer-based Solar Cells (Anton Kiriy)
- 15:00-
16:30/17:00 (7) Visit to the labs: synthesis and characterization

Wednesday, 27 August 2014

09:00 - 10:30 (8) Thin film and order characterization for functional organic films (E. Bittrich)

10:30 – 11:00 *Break*

11:00 – 12:30 (9) Modelling of organic semiconductors (O. Guskova)

12:30 – 13:30 *Lunch break (at IPF)*

13:30 – 15:00 (10) Single molecules electronics / DNA approaches (Anton Kiriya)