



## **IPMS Nanofair-Workshop, 13<sup>th</sup> March 2008**

**09.00 am – ca. 15.30 pm**

### **Seminar on**

### **Thin layer organic devices for energy saving and production**

One of the most urgent problems of mankind is the energy consumption. About 25% of all energy consumption in the world is based on lightings. New efficient light sources are necessary to reduce the worldwide energy demand. Based on the dramatically improvements in the last years organic light emitting diodes are one very promising alternative to existing light sources. These novel thin layer devices have the potential to be the most relevant area light source in the future.

Beside efficient light generation of course also environment friendly energy sources are required. Sun power can help to solve this problem, but its energy has often to be converted into electrical power. In a few years organic photovoltaic devices will be reaching an efficiency level which makes them competitive to conventional solar cells. Due to the low-cost materials and close-to-room temperature manufacturing processes, a short energy payback time is expected. Actually this technology is in laboratory stage but shows the potential to be one important low cost solar cell technology for the next century.

### **The workshop will cover the following topics:**

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|---|-------------------|
| ▪ OLED and OPV market overview and forecast | Prof. Karl Leo    |
| ▪ High efficient OLED and OPV stacks        | Prof. Karl Leo    |
| ▪ Production technologies                   | Dr. Christian May |
| ▪ OLED for lighting applications            | Dr. Olaf Hild     |

Additionally the workshop will cover:

- Lab and clean room tour  
"Center for Organic Materials and Electronic Devices Dresden (COMEDD)"

### **Possible Visitors:**

Lighting companies, photovoltaic manufacturer, production equipment manufacturer