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## **S E M I N A R**

on

### **Semiconductor Physics and Nanotechnology**

**Mo, 04.04.2022, 11:15 Uhr,**

**Seminar in  
person in the Physics lecture hall or via Zoom**

### **“Real-time Monitoring of Thin Film Growth by means of Simultaneous X-ray Scattering and Photoluminescence”**

Dr. Nada Mrkyvkova, Department of Multilayers and Nanostructures, Institute of Physics,  
Slovak Academy of Sciences, Bratislava, Slovakia

The development of defect analysis for inorganic semiconductors in the past century paved the way for the success story of today's electronics. By analogy, defect analysis plays a critical role in developing and improving devices based on organic molecular semiconductors or hybrid semiconducting materials. In this talk, I will review our recent progress in this field by utilizing a combined technique of wide-angle X-ray scattering (GIWAXS) and photoluminescence (PL). In particular, I will focus on the combined application of real-time GIWAXS and PL during thin-film deposition of (i) molecular layer, (ii) hybrid perovskite layer from solution, and (iii) hybrid perovskite layer grown in a vacuum.

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#### **Zoom – Link:**

<https://zoom.us/j/92411009605?pwd=RjJlM0t4aTlNRnFDM3kzV0llndnd4dz09>

Meeting-ID: 924 1100 9605

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