



The supervisory board of the Kestcells Project announces the Seminar FUB-04:

Dates: 10.6. 2015

Place: Helmholtz-Zentrum Berlin for Materials and Energy
Department Crystallography, Germany

Growth and characterization of Kesterite compound semiconductors

$\text{Cu}_2\text{ZnSn}(\text{S},\text{Se})_4$ (CZTSSe) are abundant and environmentally friendly thin film absorber materials. A recent conversion efficiency of nearly 13% has been produced on kesterites CZTSSe based thin film solar cells.

Some of the recent studies in the field of growth and characterization of $\text{Cu}_2\text{Zn}(\text{Sn},\text{Ge},\text{Si})(\text{S},\text{Se})_4$ will be presented and discussed. Main attention will be paid to transport, luminescence and spectroscopic ellipsometry measurements. The conductivity mechanisms, the complete set of parameters describing the properties of the localized holes as well as values of acceptor activation energies, the band edge transitions and higher lying interband transitions are determined.

Program

14:00 – 14:40	Part I
14:40 – 15:00	<i>Break</i>
15:00 – 15:45	Part II
15:45 – 16:15	Conclusions and discussion

Speaker:

Prof. Dr. Ernest Arushanov, Academy of Sciences of Moldova, Institute of Applied Physics