

**Bern University of Applied Sciences** 

Engineering and Information Technology

Institute for Applied Laser, Photonics and Surface Technologies ALPS

Extraordinary seminary talk:

## Friday, August 31, 2012, 10:00 Pestalozzistrasse 20, 3400 Burgdorf (Gsteig), Room V005

## Thin-film structuring with ultra-short pulsed lasers on flexible and rigid substrates

## Dr. Gediminas Račiukaitis Head of Department of Laser Technologies, Center for Physical Sciences and Technology, Vilnius, Lithuania Consultant on laser technologies EKSPLA UAB

The talk will give a short presentation of the Department of Laser Technologies of the Center for Physical Sciences and Technology (CPST) and then focus on the development of laser scribing technologies for CIGS solar cells on polymer using ps- and fs- lasers.

Special attention will be given to the topics of selectivity in film removal due to spectrally controlled energy coupling as well as to the role of laser-induced self-organization processes in nano-structuring of thin metal films and laser structuring using interfering laser beams.

Other topics will be the characterization of laser scribes by diverse means and further ways towards industrial implementation of laser scribing for CIGS on flexible substrates.