

Summer school on scintillation, dosimetric and phosphor materials

7-8 September 2018, CTU Prague, Brehova 7, Prague 1, Czech Republic, room no. 115

	FRIDAY SEPTEMBER 7
8.30	STUDENT REGISTRATION
9.00	SCHOOL OPENING
9.10	Martin Nikl : Scintillator materials – physical mechanism, role of defects and bottlenecks
9.55	Jan Pejchal : Single crystal scintillators – preparation technologies
10.40	COFFEE BREAK
11.00	Christophe Dujardin : Specificities of nanoscintillators: processes and applications
11.45	Anne-Laure Bulin : Nanoscintillators-induced photodynamic therapy: Overcoming light penetration for treatment of deep localized tumors.
12.30	Julien Houel : Introduction to single particle spectroscopy
13.15	LUNCH
14.30	Vaclav Cuba : Nanoparticle preparation technologies
15.15	Alice Hospodkova : Preparation and characterization of GaN-GaInN MQW
16.00	COFFEE BREAK
16.20	Karel Blazek : Company view on the R&D, technology transfer and market in the scintillation field
17.00	EXCURSION TO NANOCRYSTAL PREPARATION LAB IN CTU, BREHOVA AND CRYSTAL GROWTH LAB IN FZU CUKROVARNICKA

SATURDAY SEPTEMBER 8	
9.00	Eduardo Yukihara: The basics of TSL and OSL, differences and advantages of each, materialsR&D and trends
9.45	Petr Prusa: Dosimetric materials applications
10.30	COFFEE BREAK
10.45	V. Jary: Materials for phosphors for solid state lighting
11.30	Mikhail Brik: A review of basic spectroscopic properties of the ions with d³ electronic configurations, such as Cr³⁺ and Mn⁴⁺ for solid state lighting applications
12.15	Etiennette Auffray: Scintillating crystals for high energy and medical applications
13.00	LUNCH
14.15	Marco Pizzichemi: Principle of PET and some examples of PET developed within Crystal Clear Collaboration
15.00	Jiri Janda: Scintillation and dosimetry materials in military applications
15.45	Anna Vedda: Characterization of defects in scintillators and phosphors
16.30	<i>General discussion and conclusions</i>
17.00	CLOSING OF THE SCHOOL