

On FEL in Ryn

The International Workshop on X-ray Diagnostics and Scientific Application of the European XFEL was held in Ryn in the Eastern North of Poland on 14th – 17th February 2010. It was the sixth in a series of workshops for the instrumentation and applications of the upcoming European X-ray Free Electron Laser (XFEL). This workshop was dedicated to the photon pulse diagnostics: coherence, energy spectrum, duration and arrival time measurements. Main challenges were defined during the introduction lectures on the FEL's light generation and its properties. The most emphasized ones were: single shot measurements, high intensity of the pulses, and the necessity to preserve the main pulse properties. Although the discussion was focused on specific case of the XFEL diagnostics, many of the proposed solutions will be valid for other short wave FELs. As a result of the workshop list of applicable techniques was established. Most of them will require further work, for which scientific collaborations have already been set up.

The operant topics were completed with lectures on the scientific applications of x-ray coherent beam. (The detailed programme can be found at the webpage http://www.xfel.eu/events/workshops/2010/x_ray_diagnostics_and_scientific_application_workshop/). It was a way to popularize short-wavelength FELs – the world's leading X-ray lasers – in the Polish scientific community

and, further to join the scientific collaboration in the very interesting field of x-ray laser light interactions with matter. It is especially important in the perspective of the Polish membership in the European X-ray Free Electron Laser. It was announced that in April 2010 Polish Parliament approved the Convention concerning the Construction and Operation of a European X-ray Free-Electron Laser Facility, signed by government in November 2009. It formally enables the participation of Poland in the XFEL company and the participation of Polish technicians and scientists in international team carrying this intriguing project out.

The Workshop was accompanied with a parallel seminar on the scientific program, users needs, accelerator and undulator options for planned Polish free electron laser, POLFEL. This first meeting open for a broad Polish scientific community, demonstrated, in particular, an interest in using short pulses in visible range to study de-excitation processes in luminofors, scintillators and biological molecules. An initiative has been taken to establish a consortium dedicated to POLFEL construction.

*Krystyna Lawniczak-Jablonska,
Robert Nietubyć,
Ryszard Sobierajski*

XFEL Workshop.

photo by Dominik Rybka.





POLFEL Semina.

Photo by Dominik Rybka.



Zapowiedzi wydawnicze

Wydawnictwo Naukowe UAM planuje w najbliższym czasie wydanie podręcznika „Krystalografia dla biologów” pióra prof. Mariusz Jaskólskiego. Książka, która jest serią wykładów przedstawiających zarówno zagadnienia metodyczne krystalografii białek jak i zarys biologii strukturalnej, powinna wypełnić dotkliwą lukę w polskojęzycznej bibliografii tych zagadnień.