

First results of early experiments at PAL-XFEL

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Pohang Accelerator Laboratory (PAL) has successfully completed the commissioning of its x-ray free electron laser facility, PAL-XFEL, in 2017. It achieved saturation of FEL down to 0.1 nm and over 1 mJ/pulse at 9.7 keV. It provides extraordinarily stable FEL beam to three experimental stations, X-ray scattering and spectroscopy (XSS), Nano crystallography and Imaging (NCI) and Soft x-ray scattering and spectroscopy (SSS) with timing jitter between pump laser and probe FEL of about 20 fs (RMS). Since June 2017 PAL-XFEL provides general users with its beamtime and 20 experiments have been carried out in the year. Ultrafast x-ray scattering and spectroscopy on solids, femtosecond liquidography, coherent imaging, and femtosecond crystallography are among those experiments. In this talk, current status of PAL-XFEL and some results of these experiments will be presented.