

Abstract

PETRA III as a third generation synchrotron source allows realizing new experimental methods. The MiNaXS beamline P03 is dedicated to a micro and a nanofocus end-station. To the 2 existing CRL, the plan is to install two additional ones. The CRL3-system consists of a vacuum tank, a lens-exchanger with two train units and piezo driven motors and a Hexapod for alignment in the beam. At the train units are stacks of 1D BeCRL (1,2,4,8,16,32) to decouple horizontal and vertical focusing. The control of the piezo motors is done by an SPS and the separately moving train units by a normal stepper motor controller. CRL3 will allow for a focal distance of 600 mm with a small beam size below 3 μm , being especially adapted to complex in-situ setups [*, **, ***]. The CRL4 system will consist of two SpaceFab vacuum stages where on each one a "step shaped" arrangement of lenses is located, one for horizontal and one for vertical focusing. This is done to parallelize the beam shape and thus obtain a higher flux for the three downstream CRL systems and the nanofocus end station. We will present the technical challenges as well as the current status of both new CRL-station.