MAX IV IS READY TO MAKE THE INVISIBLE VISIBLE

21 June 2016, 13:08:55 when the sun peaked in the sky above the facility, it was finally time for the long-awaited formal inauguration of the brightest synchrotron light source in the world; MAX IV Laboratory. The ceremony took place inside the experimental hall with more than 500 staff, funders, stakeholders and guests present, as well as the Swedish King and Prime Minister.
See: https://www.maxiv.se/about-us/public-media/inauguration-live-streaming/

By closing door no. 7 to the 3 GeV storage ring Director Christoph Quitmann, Prime Minister Stefan Löfven and the King marked the facility ready for operation. Photo: Kennet Rouna

The inauguration goals for the 3 GeV storage ring were met and surpassed. As of October, the maximum stored current in the 3 GeV storage ring is 198 mA. Top-up injections, albeit still with closed shutters, are being used to maintain a constant level of the stored current. Despite ongoing vacuum conditioning a current-lifetime product (I*τ) of 3 A h has already been reached. So far results install confidence that the technological solutions employed in the MAX IV 3 GeV storage ring are sound and effective.

During summer shutdown three additional insertion devices have been installed which will allow commissioning of new beamlines on the 3 GeV storage ring during fall and winter. The transfer line from the linac to the 1.5 GeV storage ring has also been installed during summer shutdown.

Beam commissioning in the 1.5 GeV storage ring resulted in a stored beam 30 September. A stored beam of 1.6 mA have been achived, and commissioning is expected to last well into next year. During next shutdown the first two narrow-gap chambers and EPUs will be installed, thus enabling commissioning of the first beamlines on the 1,5 GeV storage ring during 2017.
Live machine status: http://status.maxiv.lu.se/

BioMAX is currently completing the hardware installation with an MD3 micro-diffractometer (Arinax, France), an Eiger 16M hybrid pixel detector (Dectris, Switzerland) and a high throughput sample changer (Irelec, France) with a capacity of more than 400 cryogenic samples. It will also support automatic exchange of crystallization plates for in-situ diffraction using the MD3. First beamline commissioning results look promising with good data collection statistics. Improving the performance is ongoing in preparation for user operation starting in 2017.
BioMAX: https://www.maxiv.lu.se/accelerators-beamlines/beamlines/biomax/

The NanoMAX team have aligned a full Fresnel Zone Plate focusing setup (Fresnel lens, central stop, order-sorting aperture) and reached a sub-micron beam spot. After some stability tests, the first absorption image from a coarse TEM-grid was collected, and the first diffraction data from a Fresnel Zone Plate test sample. These data show that high mechanical stability can be reached even using a temporary not optimised setup, and are an encouraging starting point for further optimisation of the beamline.
NanoMAX: https://www.maxiv.lu.se/accelerators-beamlines/beamlines/nanomax/

MAX IV