

Current events

1. First light at SESAME

First light for the SESAME light source occurred 22 November 2017 when scientists saw the first monochromatic photons through the XAFS/XRF (X-ray absorption fine-structure/X-ray fluorescence) spectroscopy beamline. This beamline, SESAME's first to come on-line, delivers X-ray light that will be used to carry out research in areas ranging from solid state physics to environmental science and archaeology. "After years of preparation, it's great to see light on target", said XAFS/XRF beamline scientist Messaoud Harfouche. "We have a fantastic experimental program ahead of us, starting with an experiment to investigate heavy metals contaminating soils in the region." The initial research program will be carried out at two beamlines, the XAFS/XRF beamline and the Infrared (IR) Spectromicroscopy beamline that is scheduled to join the XAFS/XRF beamline in operations this year. A third beamline, in this case devoted to materials science, will come on line in 2018. "Our first three beamlines already give SESAME a wide range of research options to fulfil the needs of our research community", said SESAME Scientific Director Giorgio Paolucci, "the future for light source research in the Middle East and neighbouring countries is looking very bright!". Over the coming weeks and months as experiments get underway, the current will be gradually increased from 80 mA to the design current of 400 mA. "SESAME is a major scientific and technological addition to research and education in the Middle East and beyond", said Director General of SESAME, Khaled Toukan. "Jordan supported the project financially and politically since its inception in 2004 for the benefit of science and peace in the region".

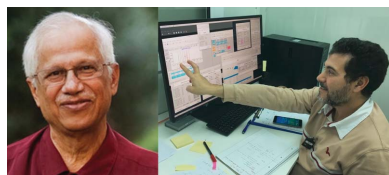


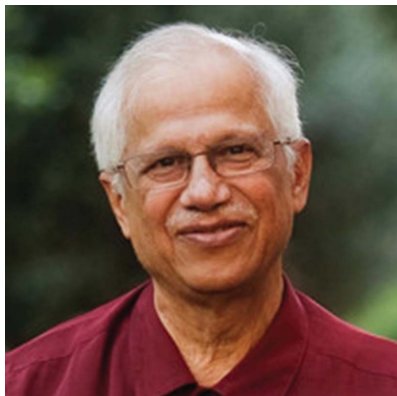
SESAME XAFS/XRF beamline scientist Messaoud Harfouche points out SESAME's first monochromatic light.

2. Dr Gopal K. Shenoy (1940–2017)

We note the passing of Dr Gopal K. Shenoy, notable materials scientist and a driving force in bringing the Advanced Photon Source (APS) to the Argonne National Laboratory, USA. Throughout his long and distinguished career, Gopal had a profound and lasting impact on synchrotron X-ray science, both in his research and in his central role in the creation and evolution of the APS.

Gopal was born in 1940 in Kasargod, India, and received his BSc, MSc and PhD degrees from the Institute of Science in Mumbai, India. His career at Argonne began in 1967 and spanned 43 years where he was a bench scientist in the Mössbauer Spectroscopy Laboratory, then a group leader for synchrotron radiation research in the Materials





Dr Gopal Shenoy.

Science Division, and a founding father of the APS when he played a leading role in formulating the need for an advanced synchrotron radiation source for the nation,

Later, Shenoy played a major role in putting together the science case for Linac Coherent Light Source, the world's first X-ray free-electron laser, at Stanford, and remained actively involved in guiding the early scientific proposals. He served on many international scientific advisory committees of synchrotron radiation facilities in the world, including the Australian Synchrotron, the European Synchrotron Radiation Facility, the European XFEL and Japan's SPring-8. His influence on the growth and impact of synchrotron radiation sources has been significant and his advice and council will be missed.