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SESAME – A light source for the Middle East¹

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Developed under UNESCO and modelled on CERN, SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East) is an international research centre in construction in Jordan, enabling world-class research while promoting peace through scientific cooperation. Its centerpiece, a new 2.5 GeV 3rd Generation Electron Storage Ring (133m circumference, 26nm-rad emittance, 12 places for insertion devices), will provide intense light from infra-red to hard X-rays. The Council (Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestinian Authority, Turkey), provides the annual budget. Concrete shielding is complete, and a staff of 21 is installing the refurbished 0.8 GeV BESS Y I injector system, a gift from Germany. The facility can serve 25 simultaneous experiments. Beamline equipment has been provided by Daresbury (UK), the Helmholtz Assoc. (Germany), the Swiss Light Source, LURE (France), the Univ. of Liverpool, Elettra (Italy) and US labs. Jordan has contributed \$3.3M, in addition to a building and land. The EU has contributed \$4.8M. Commitments confirmed by Members look set to provide most of \$35M needed to complete construction of the ring and 3 beamlines. A training program has been underway since 2000. See www.sesame.org.jo

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