
Physics monitor

Synchrotron light in the Middle East

The synchrotron radiation from circulating particle beams, once considered an energy-sapping nuisance for high energy physics, has become a major scientific growth sector. This bright 'light', extending over a wide wavelength band, is used for a wide range of structure and materials research. The user appeal is also increasing geographically as more machines become available. Now the Middle East could soon have a synchrotron radiation source, established under the patronage of UNESCO.

The Steering Committee for Middle East Scientific Cooperation was established by Sergio Fubini in 1995 to promote contact between Israeli and Arab physicists. Its recent meeting in Uppsala, Sweden, chaired by former CERN Director General Herwig Schopper, was dominated by the idea to use the 800 MeV BESSY I synchrotron radiation source in Berlin as the basis for a Middle East Centre.

A new BESSY II machine has now commenced operations in Berlin, and although BESSY I is still fully subscribed, it will be shut down next year to save costs.

To prepare for the new project, two working groups have been set up, including scientists from Middle Eastern countries. The first group, chaired by G.-A. Voss of DESY, will look at the possibility of upgrading BESSY I to BESSY Ia and estimate the resources needed for its transport, reinstallation and operation.

The second group, co-chaired by ELETTRA (Trieste) director G. Margaritondo and H. Winick of Stanford, will identify scientific interest, explore instrumentation requirements and outline a training programme. First results from the groups will be presented at a meeting in Amman in November.

Other initiatives discussed at Uppsala included support for a Centre of Material Science in the Palestinian Territories and a meeting for young scientists at the International Centre for Theoretical Physics in Trieste.