Introduction of Light Source Development in China

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Currently, there are three synchrotron radiation facilities in operation in China, Beijing Synchrotron Radiation Facility (BSRF: Energy 2.2GeV, circumference 200m), Hefei Light Source (HLS: 0.8GeV, 66m), and Shanghai Synchrotron Radiation Light Source (SSRF: 3.5GeV, 432m). There are also four free electron laser facilities (Shanghai, Hefei, Chengdu and Dalian) in operation in China.



FIGURE 1. Hefei Advanced Light Facility (HALF) under construction, in Hefei, Anhui.

In recent years, construction of fourth-generation light sources has been progressing, with the High Energy Synchrotron Radiation Light Source (HEPS, 6GeV, 1360m, Beijing) and Hefei Advanced Light Source (HALF: 2.2GeV, 480m, Fig. 1) being constructed. Test use has already been carried out at HEPS. In addition, plans for synchrotron radiation sources are underway in Wuhan, Jinhua, and Guangdong Province. In this presentation, I would like to give the latest information on the development of synchrotron radiation sources and free electron lasers in China, as far as I know, focusing on the HALF and Jinhua, in which I am currently involved.